

Volume 77, Issue 3: Summer 2025

Message from the TPHA President: Public Health: A Lifelong Commitment to Service and Community

Lynette Williams, BSN, RN (2025-2026)
Texas Public Health Journal 2025;77(3):2-3

Commissioner's Comments: Measles Makes a Comback

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2025;77(3):3-4

Poison Control

12th Annual Pills and Thrills that Kill! Toxicology in Review, El Paso, Texas, April 2-3, 2025 Mathias B.

Salvador Baeza, PharmD, DABAT, FACCT
Texas Public Health Journal 2025;77(3):5-6

Book Review

On Call: A Doctor's Journey in Public Service by Anthony Fauci, MD c. 2024

Vivienne R. Heines, MPH, CPH
Texas Public Health Journal 2025;77(3):7

Brief Report

Diabetes Prevalence, Food Insecurity, and Health Behaviors in Rural and Urban Texas Counties

Rachel DeGroot, BS; Grace Fosu MA, MS; Diana Vargas Gutierrez, PhD; Gipsy Bocanegra, PhD; Billy U. Philips Jr, PhD, MPH
Texas Public Health Journal 2025;77(3):8-13

ABSTRACT

Background: Food insecurity and other health behaviors are now recognized as contributors to the development and control of diabetes, but few studies have mapped these metrics at a county or state level, especially in Texas. This is particularly important because Texas has a sizable diabetes burden, has one of the largest rural populations in the United States, and has a food insecurity rate far above the national average. Therefore, this study reviewed these health behaviors in the context of rural and urban counties to aid in understanding diabetes in Texas. **Methods:** This study reviewed publicly available online data from 2018 to 2021 on diagnosed diabetes, food insecurity, obesity, binge drinking, smoking, and physical inactivity for all counties in Texas. Data were from the Centers for Disease Control and Prevention (CDC) PLACES project and County Health Rankings and Roadmaps (CHR&R). The counties were classified as urban or rural. Descriptive analysis, statistical tests (Mann-Whitney U test and independent t-test), and basic geospatial analysis were used to assess the data collected. **Results:** On average, rural counties had higher rates than urban counties for diagnosed diabetes (12.8% vs. 11.9%), food insecurity (15.3% vs. 14.2%), physical inactivity (30.7% vs. 28.1%), and obesity (38.5% vs. 37.0%). Differences between the rural and urban groups were statistically significant for diagnosed diabetes ($U = 5338.5$, $p < 0.001$), food insecurity ($U = 5541.5$, $p = 0.002$), physical inactivity ($U = 4519$, $p < 0.001$), and obesity ($U = 5085$, $p < 0.001$). There was no statistically significant difference between rural and urban counties with respect to binge drinking ($U = 6630$, $p = 0.284$) and smoking ($t(252) = 6.129$, $p = 0.086$). **Conclusions:** Understanding the overlap of diabetes prevalence, food insecurity, and health behaviors is important for designing meaningful initiatives to improve health. A wide range of federal and state programs are administered at the county level. Looking specifically through the lens of urban and rural counties can help to better understand statewide differences.

Original Public Health Research

Descriptive Study of Congenital Syphilis in West Texas

Katherine Lakey; Ashlyn Anderson; Gabriella Smalligan; Katherine Wells, MPH; Tiffany Torres, MPH; Sebastian Nino-Penaloza; E. Oluwakemi Ogunjimi, MD
Texas Public Health Journal 2025;77(3):14-19

ABSTRACT

Background: Congenital syphilis (CS) has emerged as a growing public health crisis. Syphilis transmission from mother to fetus during pregnancy can lead to severe outcomes for infants, including stillbirth, low birth weight, and developmental delays. This study examined the process of screening and treatment within the care cascade for CS and identified opportunities to improve prevention. **Methods:** This is a retrospective descriptive study of CS in West Texas. A chart review of electronic health records of CS infants and associated mothers was performed for January 2015-December 2023. The number of cases, demographics, social history, trimester at diagnosis, and penicillin G shot series completion was collected. **Results:** A total of 93 CS cases were included. The number of CS cases increased by 1,200% from 2015 to 2023, with a sharp rise beginning in 2020. Among affected mothers, 48.4% were Hispanic/Latina, 22.6% Non-Hispanic White, and 7.5% Non-Hispanic Black. Most (72.0%) were covered by Medicaid. Maternal syphilis was diagnosed in 9.7% of cases in the first trimester, 25.8% in the second, 26.9% in the third, and 35.5% at delivery. Treatment of the mother with Penicillin G was categorized as never treated (16.1%), inadequately treated (51.6%), or adequately treated (19.4%). Among neonatal outcomes, 1.1% were fetal deaths, 25.8% were preterm births, and 18.2% were low birth weight deliveries. **Conclusions:** The alarming increase in CS cases in West Texas underscores the need for targeted public health interventions to improve prenatal care and syphilis treatment. Addressing barriers to care, enhancing treatment protocols, and expanding screening efforts are critical steps in reducing CS incidence and improving maternal and neonatal health outcomes in the region.

Describing the Texas Landscape of Obesity Interventions – Who, What, and Where: An Environmental Scan Using Scoping Review Methodologies

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Texas Public Health Journal 2025;77(3):20-25

ABSTRACT

Background: Obesity is and has been a leading problem in the United States and in Texas for many years. Practitioners and researchers across Texas and beyond are creating and implementing interventions to support body mass index (BMI) reduction and healthy lifestyle improvements, and this work is pivotal for affecting positive change. The objective of this study was to describe obesity prevention activities (populations of concern, geographies, etc.) and to serve as a springboard for future research to identify policy and intervention gaps in activities as well as to highlight aspects of the work linked with making these efforts sustainable. **Methods:** An environmental scan was performed using scoping review protocols to examine behavioral, environmental, and policy interventions designed to reduce BMI and increase physical activity and/or fruit and vegetable intake and their stated effectiveness in Texas. Researchers sampled two health literature databases covering significant amounts of health promotion interventions for studies published during 2012- 2017 meeting certain search criteria pertaining to obesity, outcome variables related to BMI or weight change, independent variables related to physical activity and/or healthy food intake, and with a sample from Texas. **Results:** The scoping review resulted in 30 articles meeting inclusion criteria. Findings show that most of these studies took place in the Houston area (46.4%). A majority of these studies pertained to the Hispanic population (56.7%). Children (66.7%) were the primary focus of these interventions. Three-fourths of these interventions pertained to both males and females (75.0%). More than half (56.7%) of the studies focused on low-income residents, and most (83.3%) centered on behavioral and educational interventions that lasted a median of six months. Most efforts were externally funded (73.3%) and used at least one external organizational partner. **Conclusion:** This investigation found that large proportions of studies of obesity prevention efforts published during 2012- 2017 that included Texas populations pertained to behavioral interventions, Hispanics, school-aged children, Houston residents, and those of low-socioeconomic status. Further examination of other databases as well as grey literature should be included in future research efforts.

Barriers to Nonfatal Overdose Reporting Among Nontraditional Responders and Reporters

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Texas Public Health Journal 2025;77(3):26-31

ABSTRACT

Background: Only a small proportion of nonfatal overdoses are captured through existing surveillance systems. People who use drugs (PWUD) who directly witness or experience nonfatal overdose incidents and frontline workers, including harm reduction coalition (HRC) staff (e.g., peer support specialists and outreach teams who work with PWUD), can inform and provide a more comprehensive understanding of nonfatal overdoses. The objective of this study was to explore reporting methods and barriers to reporting nonfatal overdose incidents among non-

traditional reporters. **Methods:** Using a snowball sampling approach, 20 HRC staff were recruited, and semi-structured, in-depth interviews were conducted on barriers that HRC staff and PWUD experience in reporting nonfatal overdoses. Interviews were deductively coded in NVivo 12, and code reports were reviewed for themes. **Results:** PWUD and HRC staff experience multiple barriers to reporting nonfatal overdoses. HRC staff noted a lack of capacity to collect overdose surveillance data. Along with PWUD, HRC staff also faced a lack of accessible reporting mechanisms, fear of legal repercussions, and a perceived lack of benefit of reporting. PWUD noted barriers centering on challenging life circumstances and stigma from health care providers. **Conclusions:** Collecting overdose data in real-time from nontraditional reporters and responders has the potential to significantly improve existing overdose surveillance efforts that rely on data from the health care system and marginalize populations who do not access emergency medical services and hospital services following an overdose. Better data can help public health practitioners identify areas of greatest need and aid decision-makers in developing policies to address drug overdose. However, the people closest to drug overdoses encounter multiple barriers to reporting. These barriers can be addressed by engaging communities of nontraditional reporters and by creating awareness of the importance of overdose reporting and how these data can better support their outreach efforts and service to their community. Resources should be allocated to increase the capacity among HRC staff and other non-traditional reporters to collect data.

Differences in Stress and Predictors of Stress over the COVID-19 Pandemic

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Texas Public Health Journal 2025;77(3):32-39

ABSTRACT

Background: Research examining the impact of the COVID-19 pandemic on the stress levels of college students is limited or inconclusive. This study explores differences in self-reported perceived stress levels and their predictors among students at private colleges in Houston, Texas, during the COVID-19 pandemic. **Methods:** This study used data from the COVID-19 Stress, Physical Activity, and Nutrition Effects on Students online survey conducted in Fall 2020 and Fall 2022. Measures included demographics, food security using the Food Security 6-Item Short Form, and stress levels using the 10-item Cohen Perceived Stress Scale. Analyses included descriptive statistics, Chi-square tests, t-tests, and linear regression analyses. A total of 231 students (Fall 2020=119; Fall 2022=112) participated. **Results:** Stress was significantly lower in Fall 2022 than in Fall 2020 ($p<.001$). In Fall 2020, age, socioeconomic status, and weight change were significant predictors of stress ($p<.001$). In Fall 2022, gender and food security status were significant predictors of stress ($p<.001$). **Conclusion:** The study's findings hold significant implications for government and university policies in addressing stress levels of college students, especially those of more vulnerable populations.

Volume 77, Issue 2: Spring 2025

Message from the TPHA President: What do Disneyland, West Texas, New York, and New Jersey have in common?

Lisette K. Osborne, RN/NCC-E, MSN, ECPA, CHEP, FTPHA (2024-2025)
Texas Public Health Journal 2025;77(2):2-3

Commissioner's Comments: Before the Storm

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2025;77(2):3-4

Poison Control

Kissing Bug (Triatoma) Exposures Reported to Poison Centers

Mathias B. Forrester, BS; Megan Beus, MD, CSPI
Texas Public Health Journal 2025;77(2):5

Silica Gel Ingestions by Dogs Reported to Poison Centers

Mathias B. Forrester, BS; Jeanie Shawhart, PharmD
Texas Public Health Journal 2025;77(2):6

Database Review

Publicly Available Database: Consumer Product Safety Commission SaferProducts.gov

Mathias B. Forrester, BS
Texas Public Health Journal 2025;77(2):7-8

Book Review

Genesis: Artificial Intelligence, Hope, and the Human Spirit by Henry A. Kissinger, Craig Mundie, Eric Schmidt c. 2024

Carol A. Galeener, PhD
Texas Public Health Journal 2025;77(2):9

Brief Report

Workforce Analysis of Community Health Workers: A Glimpse at Central Texas

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Texas Public Health Journal 2025;77(2):10-14

ABSTRACT

Background: Community health workers (CHWs) are becoming increasingly visible as vital healthcare workforce members who address health disparities in disadvantaged communities. However, despite growing literature on CHWs' effectiveness in providing outreach, health education, and behavioral interventions to underserved communities, little is known about the perspectives of CHWs and CHW stakeholders and their impact on workforce sustainability. The objective of this study was to provide the current workforce characteristics of CHWs living in Central Texas. **Methods:** In this workforce analysis of certified CHWs living in Central Texas, an online survey of CHWs (n = 130) was used. **Results:** Forty-two percent of the online survey sample were employed as CHWs, and 58% became certified through experience (grandfathering) rather than a training course. Issues around role definition, compensation, certification, training, and job satisfaction were described, and implications for future research, policy development, and sustained compensation were discussed. **Conclusions:** Further research is needed to support sustainable reimbursement and training that link competencies to workforce frameworks to advance CHW workforce development.

Dog Encounter Fatalities in Texas

Mathias B. Forrester, BS; Jeanie Shawhart, PharmD
Texas Public Health Journal 2025;77(2):15-18

ABSTRACT

Background: Each year, approximately 4.5 million people in the United States (US) are bitten by dogs, with some of these incidents resulting in fatalities. This study aims to examine and describe the characteristics of dog encounter-related fatalities in Texas. **Methods:** Dog encounter fatalities in Texas during 1999- 2023 were identified by searching the US Wide-ranging Online Data for Epidemiologic Research (WONDER) Multiple Cause of Death website for fatalities with International Classification of Diseases - Tenth Revision (ICD-10) code W54 (Bitten or struck by dog) listed in the multiple cause of death. **Results:** Of 1,164 total dog encounter fatalities in the US, 110 (9.5%) occurred in Texas. Of the Texas fatalities, 9.1% occurred during 1999-2003, 20.9% during 2004-2008, 19.1% during 2009-2013, 16.4% during 2014-2018, and 34.5% during 2019-2023. Among the decedents, 28.2% were aged 0–4 years, 14.5% were 5–44 years, 26.4% were 45–64 years, and 30.9% were 65 years or older. Males accounted for 52.7% of the decedents, while females made up 47.3%. The majority of the decedents (85.5%) were of White race, with 24.5% identifying as Hispanic or Latino. **Conclusions:** Texas accounted for almost 10% of all dog encounter fatalities in the US. The highest number of dog encounter fatalities in Texas was during 2019-2023. The highest number of decedents were aged 65 years or older, followed by aged 0-4 years. The findings of this study can help identify specific segments of the Texas population at higher risk of dog encounter fatalities. This knowledge can inform targeted interventions by both government authorities and individuals to effectively reduce these risks.

Original Public Health Research

Retail Cashiers' Preparedness for Tobacco 21 Implementation: Survey Results from El Paso County, Texas
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Texas Public Health Journal 2025;77(2):19-24

ABSTRACT

Background: Prior to the federal Tobacco 21 (T21) law, Texas had enacted its own T21, which included exemptions not found in the federal version, potentially creating confusion for retailers. Cashiers at tobacco and vape shops are responsible for age verification to comply with T21 regulations. This study focuses on cashiers' training for T21 rules, their knowledge of Minimum Legal Sales Age (MLSA) requirements, and the frequency of underage purchase attempts in El Paso County, Texas, to better understand T21 implementation on the ground level. **Methods:** An intercept survey of cashiers was conducted of all 739 permitted tobacco retailers and vape shops in El Paso County, Texas. Surveys took place from September 2021 to September 2022. **Results:** Out of the 49 cashiers who responded to the survey (6.5% response rate), the majority (95.9%) had received T21 MLSA training. More than half of these cashiers (51.1%) received their training through instructor-led sessions. All respondents correctly identified the legal age for purchasing tobacco or vaping products as "21" years, and most of them showed a solid grasp of MLSA rules. The majority (75.5%) of cashiers reported that they encounter underage individuals attempting to buy tobacco or vaping products. **Conclusions:** This study reveals that, in El Paso County, cashiers are well-equipped to comply with T21 sales regulations. This is particularly crucial since more than 75% of cashiers encounter attempts by underage individuals to make tobacco and vaping product purchases.

Perspectives of Texas School Nurses on Barriers to Providing Sexual and Reproductive Health Education and Resources to Teens

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Texas Public Health Journal 2025;77(2):25-29

ABSTRACT

Background: Teenagers recognize school nurses as accessible and credible sources of sexual and reproductive health information. As of September 2021, Texas parents must provide written consent for their child to receive any instruction regarding sexual health. Prior to this statutory change, parents had the option of opting-out or removing their child from sexual health instruction. This study aimed to examine barriers that middle and high school nurses encounter when providing sexual health information and resources to youth. **Methods:** A 35-question written survey was administered at a state-wide school nurse organizational meeting. **Results:** Of the 43 school nurses that completed the survey, most reported that they felt they had an impact on the content and delivery of sexual health information at their school. Most school nurses believed that parents/community and district or school board policies are barriers that prevent the presentation of medically accurate, age-appropriate sexual health information at their schools. Congruent with their experiences, most school nurses believed that contraceptive options, sexually

transmitted infections (STIs), healthy relationships, consent, sexual harassment/assault, sexual orientation, gender identity, and inclusivity for lesbian, gay, bisexual, transgender, and queer youth were of high interest to their students. **Conclusion:** School nurses have been identified as potential sources of information for public health sexual education. This study shows that most school nurses feel competent and equipped to give sexual health information but feel that sexual health education is restricted by parents/communities, district or school board policies, campus administration, and lack of trained teachers. According to the school nurses, birth control options, STIs, healthy relationships, and sexual harassment/ assault were topics of high interest to students.

Effects of Missing Data on Estimates of COVID-19 Ethnic Disparities in Bexar County, Texas

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Texas Public Health Journal 2025;77(2):30-36

ABSTRACT

Background: In the United States, the COVID-19 pandemic has been reported to disproportionately impact minority populations such as Hispanics. However, high proportions of missing race and ethnicity data in surveillance databases present a considerable challenge to quantifying ethnic disparities in diseases of public health significance. **Objectives:** 1) To investigate whether Hispanics in Bexar County, Texas, bear a disproportionate burden of COVID-19 infection and mortality. 2) To determine the impacts of missing ethnicity data on disparity estimates. **Methods:** COVID-19 data for Bexar County (February 2020 - May 2023) were obtained from the Texas National Electronic Disease Surveillance System. Potential impacts of missing ethnicity data on ethnic disparities in case and mortality rates were investigated with sensitivity analysis, using RStudio and Microsoft Excel. **Results:** Of the 702,949 cases reported, 25.65% lacked ethnicity data. Among the 522,617 (74.35%) cases with complete data (ethnicity, gender, and age), Hispanics comprised 65.75%, with age-adjusted rate (AAR) ratios of 1.28 (females) and 1.23 (males) compared to non-Hispanics ($p < 0.05$). Sensitivity analysis demonstrated considerable ambiguity in quantifying this excess burden, including the theoretical possibility of an inverse disparity. Among the 6,234 COVID-19 deaths reported, 5,430 (87.10%) had complete data. Hispanics comprised 63.15%, with mortality AAR ratios of 1.78 (females) and 1.69 (males) compared to non-Hispanics. Sensitivity analyses demonstrated a minimum of 25% excess Hispanic mortality. **Conclusion:** Bexar County data are consistent with national findings that COVID-19 disproportionately impacts Hispanics. Sensitivity analysis demonstrates that the high proportion of missing ethnicity data impairs quantification of this disparity, particularly among cases. **Public Health Significance:** Even after a federal mandate that race and ethnicity be reported and with a similar requirement in the Texas Code, race and ethnicity data continue to be missing in high proportion. This compromises the quantification of ethnic disparities that is necessary to manage existing and evolving diseases.

Public Health Activity Highlights

Mathias B. Forrester, BS

Texas Public Health Journal 2025;77(2):37-39

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Message from the TPHA President: Texas Public Health Association Strategic Planning

Lisette K. Osborne, RN/NCC-E, MSN, ECPA, CHEP, FTPHA (2024-2025)
Texas Public Health Journal 2025;77(1):2

Commissioner's Comments: Responding Rapidly When Foodborne Illness Strikes

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2025;77(1):3

Poison Control

Tea Tree Oil Exposures Involving Humans Reported to Texas Poison Centers

Mathias B. Forrester, BS; Anelle Menendez, MD, CSPI; Lizbeth Petty, MPH, CPH; Brett Roth, MD
Texas Public Health Journal 2025;77(1):4

Canine Tea Tree Oil Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS; Jeanie Shawhart, PharmD
Texas Public Health Journal 2025;77(1):5

Database Review

The University of Texas Health Science Center at Houston, School of Public Health

Trudy Millard Krause, DrPH
Texas Public Health Journal 2025;77(1):6

Book Review

The Singularity is Nearer, by Ray Kurzweil c. 2024

Carol A. Galeener, PhD
Texas Public Health Journal 2025;77(1):7

Brief Report

"A Good Walk Spoiled" Spoiled: Golf-Related Bites and Stings Treated at United States Hospital Emergency Departments

Mathias B. Forrester, BS
Texas Public Health Journal 2025;77(1):8-12

ABSTRACT

Background: In 2023, 45 million Americans aged six years and older played golf both on-course and off-course. There are approximately 15,500 golf courses in the United States (US), of which 900 are in Texas. Thousands of people are treated at US hospital emergency departments (EDs) for golf-related injuries each year. Among these injuries are animal bites and stings. The objective of this study was to examine the pattern of golf-related bites and stings reported to US hospital EDs. **Methods:** Cases were golf-related bites and stings reported to the National Electronic Injury Surveillance System (NEISS) during 2000-2023. The NEISS collects consumer product-and activity-related injuries treated at approximately 100 US hospital EDs. From these cases, national estimates of golf-related bites and stings were calculated. **Results:** There were 217 golf-related bites and stings treated at a sample of US hospital EDs during 2000-2023, resulting in a national estimate of 11,023 such injuries. Insects and arachnids accounted for 85.4% of the estimated golf-related bites and stings. By three-month period, 13.1% of the estimated bites and stings were treated in January-March, 21.4% in April-June, 43.4% in July-September, and 22.1% in October-December. Patients aged 60 years and older accounted for 51.6% of the estimated golf-related bites and stings, and 79.7% of the patients were male. The most commonly reported diagnoses were anaphylaxis (26.0%), edema (22.2%), rash (16.9%), cellulitis (15.7%), and erythema (14.4%). The patient was treated or examined and released from the ED in 90.0% of the estimated injuries. **Conclusion:** Golf-related bites and stings most frequently involved insects and arachnids. The injuries were seasonal, with over 40% treated in July-September. Most of the patients were 60 years or older, and the majority of patients were male. Insights from this data could inform the development of targeted interventions aimed at minimizing golf-related bites and stings in the future.

The Impact of a Master of Public Health Degree on a Physician's Career: A Multi-Center Study

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Texas Public Health Journal 2025;77(1):13-17

ABSTRACT

Background: Getting a Master of Public Health (MPH) degree is a common way physicians advance their medical career and has been increasing in popularity. There appears to be no literature investigating opinions about the Doctor of Medicine (Doctor of Osteopathic Medicine) [MD(DO)]/MPH dual degree. In this study, information was collected from current doctors who earned an MPH degree about their usage of MPH knowledge, their thoughts on getting the degree, and improvements to the MPH curriculum. These data could provide valuable guidance for future medical students and physicians. **Methods:** Anonymous surveys were sent to physicians with an MPH degree at four medical schools in Texas and Arizona. The survey was promoted through X (formerly Twitter) and within the American Public Health Association (APHA) member society. **Results:** A total of 58 responses were collected. Respondents completed their MPH degree most often during medical school (35.1%) or after residency (35.1%). Over half of respondents reported using their MPH every day (58.6%) compared to about 15.5% who reported they rarely or never use their MPH. Over 60% of MD(DO)/MPH respondents practiced primarily in urban settings. Further, more than 60% of respondents reported they “often” or “very often” used their MPH for leadership/management or advocacy policy development. **Conclusion:** Public health professionals serve a critical role in improving and maintaining health services among the general population. Based on the results of this study, insight was gained into how MPH knowledge provides value to physicians during their practice and the benefit of this degree for future medical students.

Original Public Health Research

Assessing the Need and Implementation of Health Literacy Testing for New Gynecologic Oncology Patients in West Texas: A Prospective Pilot Study

Bayley Richardson; Ashlyn Anderson; Katherine Lakey; Leigh Hickham; Naresh Sah, PharmD; Chinnadurai Mani, PhD; Komaraiah Palle, PhD; Mark Reedy, MD
Texas Public Health Journal 2025;77(1):18-24

ABSTRACT

Background: Health literacy is the ability to locate, comprehend, and utilize health information for informed decision-making, which is essential for favorable health outcomes. This study explores health literacy levels among women seeking care at a university-affiliated gynecologic oncology clinic in West Texas and examines demographic factors influencing health literacy levels. **Methods:** Between September 2021 and November 2021, women at a Lubbock, Texas, university-affiliated gynecologic oncology clinic were screened for health literacy using the Rapid Estimate of Adult Literacy in Medicine - Short Form (REALM-SF). Demographic data, including age, race, insurance, education, language, and corrective lens use, were collected. **Results:** The study included 44 patients, with mean age 53.00 years. The mean REALM-SF score was 5.52, indicating a seventh- to eighth-grade reading proficiency level. Significant disparities in health literacy were observed based on race, primary language, and education level. Hispanic women, Spanish primary language speakers, and those with education below high school exhibited lower health literacy scores. No significant associations were found with insurance type, employment status, or corrective lens use. **Conclusion:** The study highlights the need for tailored interventions to improve health literacy, particularly among at-risk demographic groups. Addressing these factors can bridge health literacy gaps, promote equitable access to health information, and improve health outcomes.

Effects of Heat Waves and PM_{2.5} Air Pollution on Emergency Medical Services Call Volume in San Antonio, Texas

Lisa K. Zottarelli, PhD, MPH; Shamatanni Chowdhury, MBBS; Xiaohe Xu, PhD; Thankam Sunil, PhD, MPH
Texas Public Health Journal 2025;77(1):25-30

ABSTRACT

Background: San Antonio, Texas, has long, hot summers and an increasing problem with air pollution. This study examined the relationship between heat waves at three heat index thresholds, along with air particulate pollution from fine particulates (PM_{2.5}), and emergency medical services (EMS) call volume during the five hottest months of the year in San Antonio. **Methods:** A total of 648 days, from 2015 to 2018, were included in the analysis. Daily EMS call volumes were obtained from the city of San Antonio. Heat waves and heat index calculations were based on daily temperature and humidity data obtained from the United States National Oceanic and Atmospheric

Administration National Centers for Environmental Information. PM2.5 data were collected at multiple sites across San Antonio by the United States Environmental Protection Agency (EPA). Two negative binomial regression models with time-stratified case-crossover were performed for each of the three heat wave heat index thresholds, 90 degrees Fahrenheit (°F), 95°F, and 100°F. **Results:** The analysis of heat alone and heat along with PM2.5 showed significant and positive associations between the heat index at the 90°F and 95°F thresholds and the number of EMS calls, holding the seasonal effects constant. Although, at 100°F, the effect of the heat wave on EMS call volume was not statistically significant, PM2.5 was significantly and positively associated with an increase in EMS call volume. **Conclusions:** Scientific findings suggest a correlation between the dyads of increased frequency of heat waves and poor air quality with disease condition and compromised well-being in many towns and cities in the United States and beyond. Consequently, this study examines and attempts to demonstrate the impact of health waves in combination with air pollution on public health using the city of San Antonio as a pilot.

Sexual Violence in Rural West Texas: An Assessment of the Texas Department of Public Safety Incident Reporting Data

Sarah Neal Horne, MPH, MPA; Grace McCrea; Jyntre Millsap; Sean Daly; Grant Tekell; Andrew Wagner; John Garza, PhD; Christopher Piel, MD, FACEP
Texas Public Health Journal 2025;77(1):31-38

ABSTRACT

Objective: Sexual violence remains a forefront topic in public health across the United States. Its prevalence varies across different geographical settings. The objective of this study was to assess and compare the prevalence of sexual violence in both urban and rural West Texas counties. **Methods:** A retrospective population-level cohort study was conducted utilizing the Texas Department of Public Safety (DPS) Crime Report, which is updated annually on the website <https://www.dps.texas.gov/section/crime-records/crime-texas>. Sexual assault and rape incidence rates were collected from 93 West Texas counties from the years 2017-2021. Five-year average incidence rates were calculated for each county. The included counties were further categorized into rural and urban subgroups based on Office of Bureau Management (OMB) classification. **Results:** Rural West Texas counties were found to have a lower rate of reported sexual assault than urban West Texas counties (5.01% and 7.76%, respectively). Rural counties were also found to have a lower reported rape incidence rate of 3.34% compared to the urban county rate of 6.24% ($p < 0.0001$), with 18 of the rural counties reporting a rate of zero offenses. The rural county of Loving was found to have the highest average annual rates of sexual assault and rape, with 42.8 and 14.6 per 10,000 persons, respectively. **Conclusions:** This study suggests that the prevalence of sexual violence reporting is lower in rural West Texas counties than in urban West Texas counties, consistent with prior studies. These findings identified the highest sexual violence at-risk areas of West Texas. Public health leaders should consider these regions when planning interventions and allocating resources. Future studies on targeted analysis of rural-specific confounding factors are necessary to adequately assess the needs of these underserved regions.

Hot Topic

Artificial Intelligence in Public Health

Mathias B. Forrester, BS

Texas Public Health Journal 2025;77(1):39

Volume 76, Issue 4: Fall 2024

Message from the TPHA President: Texas Public Health Association Updates

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Texas Public Health Journal 2024;76(4):2-3

Commissioner's Comments: Making a Difference on Congenital Syphilis

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Texas Public Health Journal 2024;76(4):3-4

Poison Control

Pediatric Melatonin Ingestions Reported to Texas Poison Centers

Mathias B. Forrester, BS; L. Rachel Harvey, RN, CSPI; Maria Hinojosa, PharmD, CSPI
Texas Public Health Journal 2024;76(4):5-6

Melatonin Ingestions by Dogs Reported to Texas Poison Centers

Mathias B. Forrester, BS; Teisha Ray, PharmD, CSPI; Jeanie Shawhart, PharmD
Texas Public Health Journal 2024;76(4):7-8

Database Review

Publicly Available Database: Occupational Safety and Health Administration Establishment Specific Injury and Illness Data (Injury Tracking Application)

Mathias B. Forrester, BS
Texas Public Health Journal 2024;76(4):9-10

Book Review

***The AI Playlist*, by Eric Siegel**

Carol A. Galeener, PhD
Texas Public Health Journal 2024;76(4):11

Brief Report

Attempted Suicides Reported to the Texas Poison Center Network from 2018 through 2023

Teisha Ray, PharmD, CSPI; S. David Baker, PharmD, DABAT
Texas Public Health Journal 2024;76(4):12-15

ABSTRACT

Reported attempted suicides and deaths in the United States have shown an alarming increase in recent years. Moreover, it is widely believed that the COVID-19 pandemic had a profound impact on the mental health of people across all age groups. This study examined attempted suicides reported to the Texas Poison Center Network from 2018 to 2023, focusing on any changes that occurred during the COVID-19 pandemic. For patients aged 6-12 years and 13-19 years, the annual number of attempted suicides reported to the Texas Poison Center Network increased each year from 2019 to 2021 and then decreased in 2022 and 2023. In contrast, for patients aged 20 years and older, the annual number of attempted suicides decreased from 2019 to 2021 and then increased in 2022. Despite limitations in reporting and substance inclusion, this study emphasizes the ongoing need for research to evaluate reported suicide trends before, during, and after the COVID-19 pandemic.

Mowing-Related Bee and Wasp Sting Patients Treated at United States Emergency Departments

Mathias B. Forrester, BS
Texas Public Health Journal 2024;76(4):16-20

ABSTRACT

Background: Bee and wasp (including hornet and yellow jacket) stings can cause various adverse effects that range from relatively mild-moderate, such as burning pain at the sting site, erythema, and edema, to allergic reactions, like nausea or vomiting, urticaria, difficulty breathing, swelling of the throat and tongue, weak and rapid pulse, dizziness, syncope, anaphylaxis, and possibly death. Bee and wasp stings can occur under many circumstances, including while people do yardwork, such as mowing lawns and fields. The study objective was to describe

mowing-related bee and wasp sting patients treated at United States (US) emergency departments (EDs). **Methods:** Data were obtained from the National Electronic Injury Surveillance System (NEISS), a database of consumer product-related injuries collected from a representative sample of approximately 100 US hospital EDs. Mowing-related bee and wasp stings during 2000-2023 were identified, and the distribution of estimated mowing-related bee and wasp stings was determined for various factors. **Results:** A total of 957 patients with mowing-related bee and wasp stings treated at a sample of US hospital EDs were identified, resulting in a national estimate of 47,636 stings. Multiple stings were reported in 58.9% of the estimated incidents. The patient age distribution was 0.0% 0-5 years, 0.2% 6-12 years, 6.2% 13-19 years, 9.5% 20-29 years, 17.1% 30-39 years, 22.9% 40-49 years, 19.7% 50-59 years, 13.2% 60-69 years, 9.3% 70-79 years, and 1.7% 80 years or older; 74.2% of the patients were male, and 25.8% were female. The most commonly reported diagnoses were 31.0% anaphylaxis, allergic reaction, or general reaction; 17.7% edema; 10.5% urticaria; 7.1% erythema; and 5.8% dyspnea, difficulty breathing, or shortness of breath. The patient was treated or examined and released in 95.6% of the estimated incidents. **Conclusion:** The majority of patients with mowing-related bee and wasp stings treated at hospital EDs involved multiple stings. Most patients were aged 30-59 years, and the majority were male. Most patients were treated or evaluated and released from the ED.

Original Public Health Research

The Moderating Influence of Community Social Support on the Association Between Adverse Childhood Experiences and Persistent Feelings of Sadness Among Adolescents in Texas

Hilary Ansah, MS; Heather Mayfield, MS; Vanora Davila, MPH

Texas Public Health Journal 2024;76(4):21-27

ABSTRACT

Background: Adverse childhood experiences (ACEs) have long-lasting effects on adolescents' mental health, impacting their ability to form healthy relationships and lifestyles later in life. Social support may act as a resource that helps adolescents cope with stress and provides a sense of community, support, and hope. However, few studies have explored the moderating role of perceived community social support on the impact that ACEs have on poor mental health among adolescents in Texas. **Methods:** The 2021 Texas Youth Risk Behavior Surveillance System (YRBS) survey data were used to address this gap. Unadjusted and adjusted bivariate and multivariable logistic regression models were used to examine the association between self-reported ACEs and feelings of sadness, adjusting for sociodemographic variables, and assessing community social support as a potential moderator.

Results: The sample included 1,259 students (49.8% female). Overall, 87.4% of Texas adolescents experienced one or more ACEs, 50.1% of students reported past-year persistent feelings of sadness, and 42.1% of Texas adolescents reported perceived community social support. The top three most reported ACEs were verbal abuse (65.3%), followed by physical abuse (37.6%) and household mental illness (33.0%). Total ACE score was found to be associated with feelings of sadness in both crude (odds ratio [OR] = 1.63, 95% confidence interval [CI] = 1.49-1.78) and adjusted (aOR = 1.60, 95% CI = 1.47- 1.74) models. While the magnitude of the odds of persistent feelings of sadness was higher among those who reported no community social support (aOR = 1.68, 95% CI = 1.51-1.87) compared to those who received community social support (aOR = 1.47, 95% CI = 1.30-1.67), there was no significant difference between the groups. **Conclusions:** The results suggest that community social support may impact the relationship between ACEs and adolescent's emotional well-being; however, more research is needed to determine this effect.

Portrayal of Chronic Non-Communicable Respiratory Conditions in Newspapers: A Viewpoint From Texas, USA

Rifat Afrin, MS; Mumtahina Obaid, MS; Gayle Prybutok, PhD, MBA, RN; Victor R Prybutok, Ph.D., CQE, CQA, CMQ/OE, PSTAT®

Texas Public Health Journal 2024;76(4):28-33

ABSTRACT

Background: The substantial exposure to chronic non-communicable respiratory diseases in news coverage impacts readers' understanding of the situation's seriousness. Hence, in the context of Texas newspapers, this study explores the coverage of non-communicable respiratory disease issues. **Methods:** News articles were gathered spanning from January 2020 to April 2022 to investigate the media coverage of non-communicable respiratory diseases within Texas newspapers. To identify meaningful associations, a co-occurrence network was employed, revealing the prevalent co-occurring keywords. Complementing this, sentiment analysis was applied to discern the prevailing

emotional tones conveyed within the news narratives. These methodologies provide a comprehensive understanding of the media's portrayal of respiratory diseases and the underlying emotions, enhancing insights into public perception and awareness. **Results:** The outcomes identified a comprehensive understanding of implications of respiratory ailments. Notably, individuals afflicted with chronic obstructive pulmonary disease (COPD) may also contend with other persistent health conditions. Pollution, particularly air pollution, has been recognized as a significant contributor to the development and exacerbation of chronic non-communicable respiratory conditions. Sentiment analysis revealed that words that contain the trust emotion appeared in about 24% of news frames. The second most prevalent emotion was anticipation, which appeared in 17% of news frames. The presence of fear (16%) and sadness (13%) emotions was also notable. **Conclusions:** Although previous research attempted to explore the portrayal of different public health issues in the news media, no study has been conducted to explore the coverage of chronic non-communicable respiratory diseases in newspapers within the context of Texas. Thus, this research provides insights into how health policymakers can shape health strategies based upon news coverage by focusing on the crucial frames identified in this study.

Wind Ensemble Infectious Disease Risks: A Microbiological Examination of the Fungal Flora in the Water Key Liquids of Brass and Woodwind Instruments

Samantha Johnston, BS; James Mobley, MD, MPH, FAAFP; Cynthia Bridges, PhD
Texas Public Health Journal 2024;76(4):34-37

ABSTRACT

Background: When played, wind instruments are warmed from room temperature to body temperature. Condensation accumulates within the instrument the longer it is played and will need to be expelled to maintain tone quality. Brass instruments, except French horns, have water keys while woodwind instruments, except some saxophone models, must manually be cleared of accumulated condensate. Usually this is done by emptying the liquids onto the rehearsal floor. The purpose of this study was to determine whether the condensate released from band instruments contains fungal flora that could potentially pose a health risk to players in a wind ensemble. **Methods:** Fluid swabs were obtained from a total of 59 woodwind and brass instruments after being played until warm. The swabs were processed as environmental specimens at Clinical Pathology Laboratories, Austin, Texas. The results were compiled and analyzed based on instrument and ensemble. The data were further examined detailing total fungal growth per ensemble and fungal growth per instrument. A Fisher's Exact Test in a 2x3 contingency table was calculated to evaluate the significance of the data. **Results:** There were three mold species identified from 26 of the total cultured instruments, with *Paecilomyces* and *Fusarium* species predominating. Four yeast species were identified from 14 of the total cultured instruments, with *Candida* species predominating. The remaining 27 instruments yielded no microbial growth. **Conclusion:** While fungal growth is present in the condensate released by instruments, the recovered species do not pose a significant health risk to immunocompetent musicians. Musicians who are immunocompromised or who have chronic medical conditions may rarely be vulnerable to infections from contaminated instruments.

Volume 76, Issue 3: Summer 2024

Message from the TPHA President

Lisette K. Osborne, RN/NCC-E, MSN, ECPA, CHEP, FTPHA (2024-2025)
Texas Public Health Journal 2024;76(3):2-3

Commissioner's Comments: Public Health in the Field

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2024;76(3):3-4

Poison Control

11th Annual Pills and Thrills that Kill! Toxicology in Review, El Paso, Texas, April 3-4, 2024

Salvador Baeza, PharmD, DABAT, FACCT
Texas Public Health Journal 2024;76(3):5-7

Paqui® One Chip Challenge Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS
Texas Public Health Journal 2024;76(3):7-8

Database Review

Publicly Available Database: Centers for Disease Control and Prevention Wide-ranging Online Data for Epidemiologic Research (WONDER) Multiple Cause of Death: Carbon Monoxide Deaths in Texas

Mathias B. Forrester, BS
Texas Public Health Journal 2024;76(3):9-10

Book Review

The Anxious Generation: How the Great Rewiring of Childhood is Causing an Epidemic of Mental Illness, by Jonathan Haidt

Carol A. Galeener, PhD
Texas Public Health Journal 2024;76(3):11

Brief Report

COVID-19 Risk Perception Among College Students in Rural East Texas

Dan Aristide, MPH, BS; Harrison Ndetan, MSc, MPH, DrPH, MD, PhD
Texas Public Health Journal 2024;76(3):12-14

ABSTRACT

Background: College students already deal with the academic challenges of college in their lives, but the COVID-19 pandemic brought the added stress of exposure to COVID-19. This study aimed to assess the risk perception of COVID-19 among college students and factors that influence such perception. **Methods:** This cross-sectional study used a Qualtrics email survey to determine the sources of East Texas college students' COVID-19 risk perception. The survey used a Likert scale to gauge a student's perceived risk of COVID-19 to their safety (0, no risk, and 10, extreme risk). The study data was obtained from 456 students at one regional university system. The socio-demographic factors (SDFs) involved include race/ethnicity, gender preference, religiosity, vaccination status, political inclination, and age. **Results:** Data analysis showed that the students' cohort had moderate risk perception (5) with a standard deviation (SD) of 3. The study reveals minorities had a higher risk perception than their white counterparts - Black/African Americans had the highest risk perception of 6.0 ± 3.0 . The data also revealed that Democrats had a higher risk perception (6.0 ± 3.0) compared to other political affiliations, and the female category had a higher risk perception (5.18 ± 2.59) compared to the male category (4.35 ± 2.96). **Conclusions:** Results reveal that SDFs like race/ethnicity, gender, and political leaning can affect one's COVID-19 risk perception among East Texas college students.

A Sight for Sore Eyes: Pattern of Google Searches for "Hurt Eyes" in Texas after the Total Solar Eclipse

Mathias B. Forrester, BS
Texas Public Health Journal 2024;76(3):15-17

ABSTRACT

Background: Millions of people in Texas lived within the path of the total solar eclipse on April 8, 2024, and hundreds of thousands of people were expected to visit Texas to view the event. Looking directly at the sun during a solar eclipse without protective equipment can cause eye damage. People were advised to view the solar eclipse only through eclipse glasses or other protective eyewear. The objective of this study was to describe the pattern of Google searches for eye injury in Texas after the solar eclipse. **Methods:** Google Trends analyses were performed to evaluate searches for the term “hurt eyes” in Texas. In Google Trends, data are normalized in that each data point consists of the number of searches for the term of interest divided by the total searches; the fraction or rate serves as a measure of the relative popularity of the search term. The data are scaled on a range of 0 to 100. To identify any daily changes in searches, a Google Trends analysis was performed for the 30-day time period of March 16, 2024–April 14, 2024. To identify geographic differences, a Google Trends analysis was performed for the three-day period of April 8–10, 2024, to produce a geographic heat map of the searches during that time period. **Results:** The Google Trends analysis for the 30-day period of March 16, 2024–April 14, 2024, found that, during March 16, 2024–April 7, 2024, the scale values ranged 0–12. The highest value was on April 8, 2024, the day of the total solar eclipse, declining over the next two days before ranging 5–10 during April 11–14, 2024. The Google Trends analysis for the three-day period of April 8–10, 2024, found that six of the seven metropolitan areas that were at least partially in the path of totality of the solar eclipse were in the seven metropolitan areas with the highest scale values. **Conclusions:** Google searches in Texas for the term “hurt eyes” increased on the day of the April 8, 2024, total solar eclipse and remained relatively high the next two days following the event before returning to normal afterward. Most of the metropolitan regions with the highest proportion of searches were those in the path of the total solar eclipse.

Optimizing Cardiopulmonary Resuscitation Education: A New Format for Improved Learning Outcomes

Shreyas Perumal, Pranav Ramesh, Esha Kanna, Shreyas Saride, Bharat Jannapureddy
Texas Public Health Journal 2024;76(3):18–20

ABSTRACT

Background: Every year, 350,000 people die from cardiac arrest. However, cardiopulmonary resuscitation (CPR) can double or triple an individual's chance of survival after cardiac arrest. Global CPR Training aims to spread awareness and educate our communities on this life-saving skill, focusing our attention on rural and low-income communities that have higher average emergency response times. **Methods:** Our free training courses are based on the American Red Cross material and are hour-long classes condensed to efficiently and effectively teach CPR, known as an IMPACT course. These classes are held at the University of Texas at Dallas in designated classrooms and at Stacy Montessori Academy. Participants of our efficacy study are given an emergency cardiac arrest scenario and are scored in a pre-test and post-test based on the completion of specific CPR steps. The instructor provides no prompts, and the results are not shared with the participants. **Results:** Based on the current analysis of pre-test and post-test results, the Global CPR Training course has resulted in a 185.5% increase in cardiac arrest and CPR knowledge immediately following the class. **Conclusions:** A future examination will be given one year after each class to verify the validity of our training. Furthermore, to improve the quality of our course, we are receiving feedback from all participants via online survey forms that instructors analyze following every class. The program is expected to increase CPR knowledge and skill retention while also improving out-of-hospital health outcomes involving cardiac arrest in rural and low-income communities.

Original Public Health Research

Personal Exposure to Polycyclic Aromatic Hydrocarbons: A Pilot Study of Teachers in El Paso, Texas

Inyang Uwak, MD, DrPH; Michael Shields, PhD; Suriya Vallamsundar, PhD, PE; Tara Ramani, PhD, PE; Juan Aguilera, MD, PhD; Wen-Whai Li, PhD; Navada Harvey, MS; Jennifer Horney, PhD; Natalie M. Johnson, PhD
Texas Public Health Journal 2024;76(3):21–25

ABSTRACT

Background: Polycyclic aromatic hydrocarbons (PAHs) are an important component of urban air pollution. This study aimed to evaluate personal exposure to atmospheric PAHs in teachers working and residing in El Paso, Texas. **Methods:** Study participants carried air monitoring equipment in a backpack and wore silicone wristbands over a 24-hour period to serve as active and passive samplers, respectively. **Results:** Of the 25 PAHs measured, 23

compounds were detected in the filters, and 16 compounds were detected in the wristbands. Phenanthrene and naphthalene were the most abundant PAHs sequestered in both matrices. The filters captured more high molecular weight PAHs, whereas the wristbands captured more low molecular weight PAHs. As expected, concentrations of individual PAHs in filters and wristbands were not highly correlated, except in the case of 1-methylnaphthalene.

Conclusion: The application of silicone wristbands as passive samples represents a useful, less burdensome exposure assessment technique with potential utility in environmental or occupational studies characterizing PAHs.

The Texas Prescription Monitoring Program (PMP): The Evaluation of a Statewide Campaign Aimed to Increase Prescriber Use of the PMP

Kathrynn Pounders, PhD; Michael Mackert, PhD; Sophia A. Dove, MA; Susan Kirtz, MPH; Jessica Hughes Wagner, MPH

Texas Public Health Journal 2024;76(3):26-29

ABSTRACT

Background: Prescription Monitoring Programs (PMPs) are state-level registries of prescriptions and dispensations of controlled substances and were designed to help prescribers make decisions before prescribing controlled substances. This work examines the effectiveness of a statewide campaign created to promote use of the PMP as a public health tool. **Methods:** Survey data were collected among 199 prescribers, and data were analyzed using descriptive statistical analysis. **Results:** Prescribers who recalled the campaign (compared to those who did not recall the campaign) had higher perceptions of the PMP as a public health tool, as a clinical decision-making tool, as a tool for patient-centered care, as a tool for having conversations with patients about opioid misuse, and as a tool to improve clinical performance. **Conclusions:** Policy makers and statewide organizations should consider using health campaigns as they can be effectively used to promote the PMP as a public health tool in terms of increasing PMP usage.

Salud Con Sabor Latino: Changing Nutritional Health Behaviors through Community Health Clubs in the Lower Rio Grande Valley

Minyoung Chung, MD, MPH; Jordan McMaster, MD, MPH; Clarissa Meza, MD, MPH; Juana Escareño, CHW, CHW-I; Esmeralda Ibarra, CHW, CHW-I; Jason Rosenfeld, DrPH, MPH, CHW-I

Texas Public Health Journal 2024;76(3):30-33

ABSTRACT

Background: The Community Health Club model is a community-based, participatory education model that promotes participant well-being and empowers underserved community members to create sustainable health behavior changes. Community Health Clubs have been widely adopted in low-and middle-income countries, but the model has only recently been adapted for and begun receiving attention in the United States. This article describes the use of Community Health Clubs in a resource-poor community in the Lower Rio Grande Valley of Texas by utilizing a curriculum adapted for Hispanic populations called Salud Con Sabor Latino. The purpose of this article is to assess the impact of the Salud Con Sabor Latino curriculum on Community Health Club participants' nutritional and physical activity knowledge and behaviors and describe other impacts of the model on participants' physical, mental, and social well-being. **Methods:** The study was conducted in Texas' Lower Rio Grande Valley in July 2019. A mixed methods study design was utilized, combining pre- and post-intervention surveys and post-intervention interviews. Surveys assessed the impact of the curriculum on participants' nutritional and physical activity knowledge and behaviors. Interviews assessed the effect on participants' social, emotional, and mental well-being. **Results:** Participants were significantly ($p=0.01$) more likely to report consuming protein in the past 24 hours at post-intervention. Participants were significantly more likely to report greater than 30 minutes of exercise per day at post-intervention ($p=0.05$) and significantly less likely to report a lack of energy as a barrier to engaging in physical activity at post-intervention ($p=0.02$). Qualitative interviews showed improved mental well-being, increased motivation due to positive peer pressure, and reduced social isolation. **Conclusions:** Community Health Clubs seem to improve participant well-being through participatory education, collective behavior change, social support, and positive peer pressure. This study shows that the Community Health Club model can be utilized within Texas' Lower Rio Grande Valley and possibly other marginalized communities within the United States.

TPHA Remembers Gloria Brown McNeil

Volume 76, Issue 2: Spring 2024

Message from the TPHA President

Melissa Oden, DHEd, LMSW-IPR, MPH, CHES (2023-2024)
Texas Public Health Journal 2024;76(2):2-3

Commissioner's Comments: Public Health Goes Down the Drain

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2024;76(2):3-4

Poison Control

Scorpion Envenomation in Dogs in Texas

Mathias B. Forrester, BS; Jeanie Shawhart, PharmD
Texas Public Health Journal 2024;76(2):4-5

Database Review

Publicly Available Database: United States Parachute Association

Mathias B. Forrester, BS
Texas Public Health Journal 2024;76(2):5

Book Review

The Shadow Docket, by Stephen Vladek. c. 2023

Carol A. Galeener, PhD
Texas Public Health Journal 2024;76(2):6

Public Health Practice Commentary

Community Gardens: A Tool for Public Housing Complexes to Combat Food Insecurity in the Older Adult Population

Sarah Suhood, MS, BS; Chayanne Robinson, BS; Carmel N. Tovar, BS; Sydney E. Love, BS; Bridgette Kielhack, BS
Texas Public Health Journal 2024;76(2):8-11

ABSTRACT

In the United States and worldwide, food insecurity continues to plague underserved communities. At-risk populations experiencing other barriers to health, such as homelessness and poverty, will further suffer from food insecurity to a greater degree. Locally, public housing facilities can be improved by implementing community gardens. This will not only address food insecurity but also provide health benefits that can uniquely benefit the older adult and disabled population. Benefits include improvements in physical mobility, decreasing fall risk, and preventing vitamin D deficiency. Cruciferous vegetables grown in gardens can support the gastrointestinal system's microbiome, improving cardiovascular function. Because food insecurity is linked to depression, improving mental health through gardening can notably benefit vulnerable populations. Growing food together as a community will also reduce stress levels, increase social connectedness, and improve individual-level psychosocial outcomes. By directing efforts against food insecurity, community members can receive the vital aid needed to protect their right to health.

Public Health Practice

An Interactive Online Dashboard with COVID-19 Trends and Data Analysis in Northeast and South Texas

Zitong Zhang, MS; Rachit Sabharwal, MS; Miryoung Lee, PhD; Kehe Zhang, MS; Paul McGaha, PhD; Michelle Crum, PhD; Cici Bauer, PhD; Susan P. Fisher-Hoch, MD; Joseph B. McCormick, PhD; Belinda M Reininger, PhD; Samantha Thomas; Esmeralda Guajardo; Daniel Pinon;5 Ashraf Yaseen, PhD
Texas Public Health Journal 2024;76(2):12-19

ABSTRACT

In response to the pandemic due to COVID-19, we developed online interactive dashboards to track and visualize the reported cases in real-time in certain geographical areas in Texas. In collaboration with local public health

departments, we established an automated process of data collection/processing and then developed dashboards with more detailed tracking and analysis results. The dashboards aimed to provide Texans in those areas with health disparities with clear and detailed in-time tracking and analysis results of COVID-19 data and to help the public understand the in-time status of COVID-19 in their areas. Evaluation of the dashboards was conducted by surveying our collaborators in those areas and deemed highly effective and useful. We believe that the framework used in developing the dashboards and the data processing pipeline presented in this work could be used in tracking emerging infectious diseases and planning for the emergency management in the future.

Original Public Health Research

Loperamide Ingestions and Cardiotoxicity Reported to Texas Poison Centers, 2004-2021

Michael Baillio, MD; Tavisty Tarkenton, MD; Haylea Stuteville, MPH; Shawn M. Varney, MD
Texas Public Health Journal 2024;76(2):21-26

ABSTRACT

Background: Loperamide is an over-the-counter anti-diarrheal mu-opioid analogue that has appeared more frequently in emergency department patients in excessive doses to mitigate opioid cravings and withdrawal symptoms. Given the concern for its abuse potential and serious cardiotoxicity at high doses, we aimed to describe the cardiac effects in patients with loperamide ingestions reported to the Texas Poison Center Network (TPCN). **Methods:** Single agent loperamide ingestions for all ages were extracted from the TPCN database from 2004 to 2021. We defined exposure reasons and medical outcomes according to the America's Poison Centers' classification system. **Results:** The TPCN recorded 1,421 single agent loperamide ingestions during this period, with a mean of 79 ingestions annually. Most cases (n=931, 65.5%) occurred in children under six years of age and were evenly split between males and females. Most cases were unintentional (n=904, 64.0%), while 12.7% (n=181) were for abuse, misuse, and suspected suicide. Most cases (72.6%) experienced no or minimal effects. Cardiac events occurred in 33 patients (2.3%) and included tachycardia (n=19, 57.6%), bradycardia (n=10, 30.3%), ventricular tachycardia (n=8, 24.2%), conduction disturbance (n=7, 21.2%), asystole (n=2, 6.1%), and cardiac arrest (n=4, 12.1%). Three of the four cardiac arrest cases were for "suspected suicide," "intentional abuse," and "unknown intent," while the fourth was "unknown relation to the exposure." Most (n=25, 75.8%) cases with a cardiac event were intentional exposures. **Conclusions:** Most single agent loperamide ingestions reported to the TPCN were unintentional and occurred in patients under six years of age. A portion of patients experienced multiple cardiac events (conduction disturbances, dysrhythmias, and cardiac arrests) related to loperamide ingestions.

Tracking Longitudinal Health Communication Data in Texas: The First Report of the Texas Health Communication Survey

Michael Mackert, PhD; Jiahua Yang, PhD; Weijia Shi, PhD; Jessica Hughes Wagner, MPH; Erin Donovan, PhD; Jay M. Bernhardt, MPH, PhD
Texas Public Health Journal 2024;76(2):27-35

ABSTRACT

Longitudinal and representative health communication data, such as the National Cancer Institute's Health Information National Trends Survey (HINTS), track changing patterns of health-related knowledge, attitudes, and behaviors among the public. Such data have significant implications for effective health communication and intervention strategies. However, nationally representative data may have less descriptive and predictive value when used to guide state-level public health efforts, especially given rapidly evolving health communication and media environments. Public health challenges and priorities, as well as health needs and characteristics of intended audiences, often vary across different states; yet, state-level longitudinal and representative health communication data are limited. Therefore, we developed the Texas Health Communication Survey, modeled on HINTS, to support health communication research and practice within the state of Texas. Using first round data from a representative sample of Texans (N=1,028), we reported baseline descriptive findings of key variables related to engagement with health information, interpersonal health communication, and eHealth. We also identified differences in these variables by demographic and socioeconomic characteristics, which indicates health inequity among different communities and the importance of tailoring public health efforts. Moreover, we compared our data with national data collected via HINTS and discussed some similarities and differences. Overall, our findings highlighted the importance of tracking regional data. The Texas Health Communication Survey, as an example of longitudinal and

representative regional health communication data, will provide important insights to identify public health needs, guide intervention development, and make policy decisions across the state.

Brief Report

Eclipsing Drowning: Bringing Water Safety to Light in Texas

Holly Cao Nguyen, BS; David Zane, MS

Texas Public Health Journal 2024;76(2):37-39

ABSTRACT

Background: On April 8, 2024, a total solar eclipse will cross North America, including parts of Texas. Bodies of water are often popular destinations for viewing celestial phenomena. Crowds, combined with bodies of water being a preferential viewing location, may lead to a heightened risk of water-related injuries and drownings. The objective of this project was to identify Texas bodies of water within the eclipse's path of totality and provide a record of local promotion of locations to view the total solar eclipse. **Methods:** Online internet searches were used to determine the location of widely known Texas lakes, rivers, and other bodies of water in the eclipse's path of totality. **Results:** Fifty-two unique bodies of water were identified. The number of identified bodies of water varied by jurisdiction. **Conclusions:** This report raises awareness to keep people safe from drowning and water-related injuries as they marvel at the remarkable celestial event occurring on April 8, 2024.

Public Health Activity Highlights

Mathias B. Forrester, BS

Texas Public Health Journal 2024;76(2):40-43

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Message from the TPHA President

Melissa Oden, DHed, LMSW-IPR, MPH, CHES (2023-2024)
Texas Public Health Journal 2024;76(1):2-3

Commissioner's Comments: Priorities for 2024 and Beyond

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2024;76(1):3-4

Poison Control

Common Causes of Pediatric Seizures with Intentional Exposures Reported to the Texas Poison Center Network during 2012-2022

Teisha Ray, PharmD; S. David Baker, PharmD, DABAT
Texas Public Health Journal 2024;76(1):4-5

Database Review

Publicly Available Database: Center for Food Safety and Applied Nutrition Adverse Event Reporting System (CAERS): Kratom Adverse Events

Mathias B. Forrester, BS
Texas Public Health Journal 2024;76(1):5-7

Book Review

***The People's Hospital*, by Ricardo Nuila, MD**

Carol A. Galeener, PhD
Texas Public Health Journal 2024;76(1):7

Original Public Health Commentary

A Primer on the Medicaid Program in Texas: Potential Avenues to Effective Healthcare

Maneesha Julakanti, MD; Neal R. Barshes, MD, MPH; Tobi Somorin, BS; Sherene E. Sharath, PhD, MPH
Texas Public Health Journal 2024;76(1):8-11

ABSTRACT

Objective: This short commentary (1) describes the differences in the funding and administration of Medicare and Medicaid, (2) orients Medicaid's role in public health care – specifically in Texas, and (3) identifies potential interventional targets in the context of the first two aims. **Study Design:** Narrative commentary. **Methods:** A review of state policies in combination with interviews from subject-matter experts were used to develop the content for this article. **Results:** Government-funded public health programs are positioned to significantly increase access to care and promote equity in quality. To leverage existing frameworks in facilitating efficient care – particularly in the context of chronic diseases - it is important to understand the available mechanisms and processes. For Medicaid, the dual federal-state funding avenues present unique challenges that are not observed in the Medicare model. There is a paucity of information summarizing the administrative and reimbursement fundamentals of Medicaid.

Conclusions: The most effective plans will require broad-scale integration with targets at multiple levels of Medicaid administration and fund dissemination. Components of such plans could include Medicaid requirements for high-impact chronic diseases that are developed and implemented by insurance contractors, resource support to safety net hospitals (SNHs) or Disproportionate Share Hospitals (DSHs), and fair reimbursement schedules to specialty-care providers. Critically, defining the characteristics of target populations will also be instrumental in effectiveness.

Original Public Health Research

Stress and Its Impact on Weight and Diet Among College Students During the COVID-19 Pandemic

Pamela R. Duarte; Faith M. Anyasi; Augusto X. Rodriguez, PhD; Heidi Y. Perkins, PhD; Amanda M. Perkins-Ball, PhD; Laura S. Kabiri, PT, DPT, PhD, CSCS; and Cassandra S. Diep, PhD
Texas Public Health Journal 2024;76(1):12-19

ABSTRACT

Background: The COVID-19 pandemic has increased stress among college students. Many studies on pandemic stress among college students were conducted at the onset of the pandemic in the spring of 2020. This study explored stress and resilience in college students in the fall of 2020, when universities were balancing the pandemic and normality, including differences by demographics and the impact on weight and dietary changes. **Methods:** The study participants comprised 140 Houston-area college students between the ages of 18 and 25 years who completed the COVID-19 Stress, Physical Activity, and Nutrition Effects on Students (C-SPANES) survey. Data analyses conducted include descriptive statistics, correlations, t-tests, and ANOVAs to assess differences in stress and resilience by demographics. Binary logistic regression and multiple block regression were used to predict the impact of stress and resilience on weight and dietary changes, respectively. **Results:** Overall, participants reported moderate stress and low resilience. Stress was highest among female participants, those who were overweight/obese, those with low/very low food security status, the poor/working class, and older participants (all Bonferroni-corrected $p < 0.03$). Resilience was also high among female participants (Bonferroni-corrected $p < 0.03$). While controlling for demographics, stress predicted weight change ($B = 0.112$, $p < 0.05$), but neither stress nor resilience predicted dietary change. **Conclusion:** It is important to address high stress in college students, especially those who are female, overweight/obese, food insecure, low socioeconomic status, and older. Future research and public health programs are needed to address college students' stress during the ongoing COVID-19 pandemic.

Visual Activity of Schoolchildren during the School Day Before and During the COVID-19 Pandemic: An Educator Survey

Rachel C Williams, OD, MS; Lisa A Ostrin, OD, PhD
Texas Public Health Journal 2024;76(1):20-26

ABSTRACT

Background: The COVID-19 pandemic introduced barriers to in-person learning, challenging teachers worldwide to modify their classroom activities. These changes in daily visual behavior could have long-term implications for children's eye health. **Methods:** Teachers ($n = 52$) were asked to describe the platforms used for teaching, estimate the time children spent in various activities during the school day, and describe their perceptions of how children's vision may be affected by pandemic-related classroom changes. **Results:** During the pandemic, classroom time spent in group work decreased, while individual work increased (both $p < 0.005$). The use of printed material decreased, whereas computer, phone, and tablet use for academic purposes increased (all $p < 0.005$). Most teachers believed that pandemic-related classroom changes contributed to increased amounts of near work and eye fatigue in their students. **Conclusions:** The adoption of digital devices for learning may have a lasting impact on eye health. Guidelines for the use of digital devices in schools should be based on evidence-based studies and prompt educators to balance teaching modalities. Given previously reported associations between visual activity with conditions such as myopia and computer vision syndrome, eye care professionals should be prepared to monitor for potential post-pandemic ocular issues in children.

Brief Report

Pediatric Cannabis Exposures Treated at United States Hospital Emergency Departments

Mathias B Forrester, BS; Zia Qi, BA; Brian Perron, PhD; Sara Rehman Noor, MD
Texas Public Health Journal 2024;76(1):27-31

ABSTRACT

Introduction: The legalization of cannabis in the United States (US) is increasing. Similarly, published literature indicates that pediatric cannabis exposures have increased, including in Texas, where the recreational use of cannabis is illegal, but certain physicians can prescribe cannabis for patients with certain conditions. Adverse effects associated with pediatric cannabis exposure include drowsiness or lethargy, ataxia, tachycardia, mydriasis, hypotonia, muscle rigidity, seizures, and agitation or irritability. The objective of this study was to characterize trends in cannabis exposures by young children treated at US hospital emergency departments (EDs). **Methods:** Data were obtained from the National Electronic Injury Surveillance System (NEISS), a database of consumer product-related injuries and all poisonings among children 0-4 years collected from a sample of approximately 100 US hospital EDs. National estimates can be calculated from database records. Cannabis exposures involving patients age 0-4 years reported during 2000-2022 were identified and analyzed. **Results:** A total of 270 cannabis exposures

involving patients age 0-4 years treated at a sample of US hospital EDs during 2000-2022 were identified, resulting in a national estimate of 5,504 such exposures. The annual estimated number of exposures ranged between 0 and 175 during 2000-2017 and was 415 in 2018, 416 in 2019, 757 in 2020, 1,429 in 2021, and 1,440 in 2022. The distribution by disposition was 43.3% treated or examined and released from the ED, 40.7% treated and admitted for hospitalization, 6.6% held for observation, 7.9% treated and transferred to another hospital, and 4.5% left without being seen/left against medical advice. **Conclusion:** This study found that the number of pediatric cannabis exposures treated at US hospital EDs increased greatly during 2018-2022 when compared to the prior 18 years. Over half of the patients required hospital management beyond the ED.

Volume 75, Issue 4: Fall 2023

Message from the TPHA President

Melissa Oden, DHed, LMSW-IPR, MPH, CHES (2023-2024)
Texas Public Health Journal 2023;75(4):2

Commissioner's Comments: Budget Update on Public Health Funding

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2023;75(4):3

Poison Control

Changes in Pediatric Foreign Body Ingestions Reported to Texas Poison Centers During the COVID-19 Pandemic

Mathias B. Forrester, BS; Maxamillian Avila, MD, CSPI; Teisha Ray, PharmD, CSPI; Maria Hinojosa, PharmD, CSPI; Shawn M. Varney, MD, FACEP, FAACP, FACEP
Texas Public Health Journal 2023;75(4):4-6

Disc Battery Ingestions Among Older Adults Reported to Texas Poison Centers

Mathias B. Forrester, BS; Teisha Ray, PharmD, CSPI; Maxamillian Avila, MD, CSPI; Anelle Menendez, MD, CSPI; Thi Nguyen, MD, CSPI
Texas Public Health Journal 2023;75(4):7

Database Review

Publicly Available Database: Centers for Disease Control and Prevention Heat & Health Tracker: Daily Heat-Related Illness Data for June-July 2023

Mathias B. Forrester, BS
Texas Public Health Journal 2023;75(4):8-9

Publicly Available Database: National Highway Traffic Safety Administration Fatality and Injury Reporting System Tool (FIRST): People Killed in Fatal Crashes in Texas

Mathias B. Forrester, BS
Texas Public Health Journal 2023;75(4):10-11

Book Review

***Memoir of a Pandemic*, by Brett Giroir, MD**

Carol A. Galeener, PhD
Texas Public Health Journal 2023;75(4):12

Original Public Health Research

Association of Demographic and Clinical Characteristics of Pertussis Incidence and Trends in Collin County, Texas, 2015-2019

Hammad Akram, MBBS, MPH, CIC, GCAM; Emeka Ohagi, PhD, MPH, PMP; Hafsa Hassan, MBBS; Jawaid Asghar, MBBS, MHA, CIC
Texas Public Health Journal 2023;75(4):13-18

ABSTRACT

Background: Pertussis continues to be an important vaccine-preventable disease impacting thousands of individuals each year in the United States. Collin County, Texas, has experienced rapid population growth over the last decade, resulting in several public health challenges. This study attempts to examine the association of demographic and clinical characteristics of pertussis incidence rate and trends in Collin County, Texas, between 2015 and 2019.

Methods: We analyzed pertussis surveillance data for all age groups reported to the local public health department in Collin County, Texas, from 2015 to 2019. The dataset was downloaded from the National Electronic Disease Surveillance System (NEDSS) and comprised of confirmed or probable cases per the Texas Department of State Health Services case definition. Variables (gender, age group, specific symptoms – cough duration and illness severity, vaccination status) were subjected to a Chi-square test, and results were presented as frequencies and

percentages. In addition to examining data characteristics by severity and demographic parameters, disease severity was determined using a modified scale version. **Results:** Out of 405 cases identified, 75.3% of the persons were aged 0-19 years. The mean age was 18.9 years, with a standard deviation of 19.3. Paroxysmal cough was present in 96.5% of cases, followed by whoop (45.2%), post-tussive emesis (31.9%), and apnea (2.7%). Overall, 56.3% had a disease severity scale >6, and 55.8% had a cough duration of >3 weeks. Eighty-three percent (83.0%) of the cases reported ever receiving pertussis vaccine, and 52.1% indicated they had >3 doses. Being female in the 0-19 years age group was significantly associated with a cough duration of ≥ 3 weeks ($\chi^2 = 6.59$, $P = 0.01$). **Conclusions:** Identifying and capturing pertussis cases in a community is critical, as many other respiratory illnesses can present with similar symptoms. Health education programs targeting diverse community entities can help create awareness about pertussis and enhance vaccination compliance.

Perceptions and Use of Tobacco Products in Veteran and Nonveteran University Health Profession Students

Garry Ladd, DHSc

Texas Public Health Journal 2023;75(4):19-28

ABSTRACT

Background: Tobacco use remains the most preventable cause of disease, disability, and death. The use of most tobacco products has remained consistent in the general public and in health professionals, with recent increases in the use of electronic cigarettes and other vaping products in both populations. Because of unique relationships with their patients, health professionals view themselves as role models for their patients for health-related behaviors, including the use of tobacco products. The purpose of this study was to compare tobacco use and perceptions between veteran and nonveteran university health profession students in Dallas, Texas. **Methods:** A survey was used to measure perceptions and use of tobacco products in veteran and nonveteran university health profession students ($N = 194$). **Results:** Most respondents believed that health professionals should serve as role models for their patients (97.4%), should have a role in giving advice or information about tobacco product cessation to their patients (97.4%), and that health professionals should receive specific training on tobacco product cessation techniques (85.5%). Most reported that they have not received formal training in tobacco product cessation to share with patients during their coursework (86.5%). Veterans were more likely to believe that health professionals should serve as role models ($p < .012$) and were more likely to have received formal training in tobacco product cessation approaches ($p < .005$) than their nonveteran peers. **Conclusions:** Decreasing the public's use of tobacco products would have great public health benefit and greatly reduce medical costs. Providing education, training, and guidance to health profession students will help prevent and stop the use of tobacco products to make a positive difference in public health efforts.

Exploring Associations between Perceived Problematic Community Issues and General Self-Rated Health

Gene L. Theodori, PhD; Jin Young Choi, PhD, MPH; Diego F. Alvarez, MD, PhD; M. Jade Zimpfer, PhD

Texas Public Health Journal 2023;75(4):29-33

ABSTRACT

Background: Our purpose in this study was to explore perceived problematic issues of local communities in rural areas and to test the hypothesis that increased perceptions of problematic issues in the community are negatively associated with respondents' general self-rated health (GSRH). **Methods:** Data used for this paper were drawn from two surveys of persons living in small towns and rural places in Texas. The association of each of the 33 perceived problematic issues with GSRH was assessed using bivariate and multivariate correlation analyses. **Results:** Results indicated that 88% of the potentially problematic community issues included in this study were negatively and significantly associated with respondents' GSRH at the bivariate level. The overall pattern of associations changed only slightly when the individual-level characteristic variables were controlled. Certain sociodemographic variables (i.e., age, household income, educational attainment, and race) were verified to be significant predictors of GSRH. **Conclusions:** Similar to results from previous studies conducted in urban settings, our findings from rural and small-town Texas demonstrate the importance of incorporating individuals' perceptions of problematic community issues in health disparities research.

Feeding Rural Texas Communities During the COVID-19 Pandemic

Amanda Scarbrough, PhD; Mariah Jade Zimpfer, PhD; Patrick Davis, PhD; Christine Cardinal, JD

Texas Public Health Journal 2023;75(4):34-39

ABSTRACT

Introduction: Nearly 26.5% of the United States population is located in rural census tracts. Of this population, over 93% lived within 10 miles of a supermarket. Texas has an estimated population of 30,029,572 people, of which 3,035,014 (10.11%) are living in rural communities. Under normal circumstances for many rural areas, seemingly simple activities, such as shopping for healthy and affordable food, can be difficult. In times of crisis, such as the COVID-19 pandemic, an already strained system of access to healthy and affordable food can be significantly exacerbated in rural communities. **Methods:** The study utilized both Geographic Information Systems (GIS) and quantitative methods to investigate the relationship between metro and rural classification, access to full-service grocery stores, and COVID-19. **Results:** Of the full-service grocery stores reported in Texas, 1,770 (79%) reside in Metro communities, leaving 369 (21%) full-service grocery stores to serve rural Texans. There was a significant ($p=0.039$) yet very weak ($R^2=0.021$) inverse relationship between the number of normalized COVID-19 fatalities and full-service grocery stores in rural counties. In addition, simple linear regression indicates that there was a significant ($p<0.0001$) and strong ($R^2=0.879$) positive relationship between the normalized confirmed COVID-19 cases and full-service grocery stores in metro counties. There was also a significant ($p<0.0001$) and weak ($R^2=0.348$) positive relationship between the normalized confirmed cases of COVID-19 and full-service grocery stores in rural counties. **Conclusion:** Our findings can help rural community health systems in understanding the effects COVID-19 had on rural communities. Additionally, and particularly importantly, these findings can assist rural communities in preparing for future pandemics.

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Message from the TPHA President

Melissa Oden, DHEd, LMSW-IPR, MPH, CHES (2023-2024)
Texas Public Health Journal 2023;75(3):2

Commissioner's Comments: Fentanyl: a Texas-sized epidemic

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2023;75(3):3-4

Poison Control

Ingestion of *Cycas revoluta* by dogs in Texas

Mathias B. Forrester, Johanne Freeman
Texas Public Health Journal 2023;75(3):4

10th Annual Pills and Thrills that Kill! Toxicology in Review, El Paso, Texas, April 5-6, 2023

Salvador Baeza
Texas Public Health Journal 2023;75(3):5-6

Database Review

Publicly Available Database: Publicly Available Database: Texas Parks and Wildlife Department Texas

Hunting Accident Reports: Twenty Years of Hunting Accidents

Mathias B. Forrester, BS
Texas Public Health Journal 2023;75(3):7-8

TPHA Remembers...

Texas Public Health Journal 2023;75(3):8

Book Review

Artificial Intelligence in Healthcare, by Parag Mahajan, MD

Artificial Intelligence in Healthcare, by Dr. Janak Gunatilleke

Carol A. Galeener, PhD
Texas Public Health Journal 2023;75(3):9

Public Health Practice Commentary

The Establishment of Medicaid Social Determinants of Health Data Collection and Standards Working Group Policy Recommendation

Sheina A. Duncan, BSBE
Texas Public Health Journal 2023;75(3):10-13

ABSTRACT

In 2021, the Centers for Medicare and Medicaid Services (CMS) issued a new roadmap for states to address social determinants of health (SDOH) to reduce poor health outcomes. Current CMS value-based models and recommendations do not adequately account for the overbearing systemic issues impacting the health of specific Medicaid populations in any given area because SDOH data standards have not been established, and the data are not being collected accordingly. Current Medicaid data collection on its recipients is not sufficient to inform disease surveillance. The American Academy of Family Physicians 2017 SDOH Survey reported over half of its physicians failed to collect social needs data. Also, facilities may be understaffed and/or lack resources required to collect patient information to better understand and pinpoint needs. Each state governs and administers its own Medicaid program. Such divergence, in addition to a lack of common data standards, makes healthcare comparisons within and between state programs unreliable and inconclusive. The establishment of SDOH data infrastructure and governance standards by a centralized Medicaid data working group is a necessary first step to improve Medicaid health outcomes from the top-down and bottom-up on population- and individual-levels. The working group can address current data barriers. Standardized Medicaid SDOH data collection will provide CMS with data-driven evidence to inform personalized approaches to address public health issues and assist policymakers in health care

decision-making. This is especially important to states, such as Texas, which did not expand Medicaid, as it would be useful to understand how this decision positively or negatively impacted their populations.

Public Health Practice

Locally Estimated Scatterplot Smoothing (LOESS) Across Texas: The Novel Application of an Accessible-Use Methodology to Detect Trends in COVID-19 Incidence Across Disparate Geographic Regions

Sabrina Blackledge, PhD, MA; Christopher Webb, PhD, MPH; Karen Nunley, PhD; Natalie Archer, PhD, MS; Stephen J. Pont, MD, MPH

Texas Public Health Journal 2023;75(3):14-19

ABSTRACT

The COVID-19 pandemic has presented unprecedented challenges to conventional surveillance systems, including high day-to-day reporting variability, timeliness, cost, manpower, and interpretability of large-volume data. A review of the advantages and limitations across common visual surveillance approaches to SARS-CoV-2/COVID-19 disease progression are discussed. A novel surveillance methodology using a two-month moving locally estimated scatterplot smoothing (LOESS) procedure, laid out in a small-multiple panel format, was successfully able to address many surveillance issues that occurred with onset of the COVID-19 pandemic. This surveillance system was used throughout the COVID-19 response by the state of Texas to detect daily incidence trends across disparate regions. The LOESS panel methodology can be applied to daily new cases or other variables of interest across multiple levels of aggregated regions for COVID-19 or other diseases. Use-case testing indicated the LOESS strikes a successful balance between daily variability versus early detection of true change in overall country and regional COVID-19 trends beyond that of a weekly moving average. In sum, the paneled LOESS smoothing methodology described herein presents a highly useful addition to other conventional methods of trend detection. This approach can be applied to COVID-19 and other rapidly spreading infectious diseases across multiple regions of interest and could be an additional highly accessible tool available for utilization by many state and regional jurisdictions.

Original Public Health Research

Impact of Race/Ethnicity, Income, and Insurance Status on Medical Access Within a Majority Hispanic Population Located in the United States-Mexico Border Region

Nico Carswell, BS; Maanasa Chittari, BSA; Bina Yarlalagadda, BS, MS; Michael Linden Johnson, MBA; Christopher Lindner, MHA, MSS, BSN, RN, NE-BC; Kristina Mena, PhD, MSPH; Christiane Herber-Valdez, EdD
Texas Public Health Journal 2023;75(3):20-26

ABSTRACT

Background: Literature suggests that members of historically minoritized races/ethnicities, lower income individuals, and the uninsured experience greater barriers to healthcare in the United States. Whether these trends hold true within the unique binational and majority Hispanic population of El Paso County, Texas, is unclear. This study tested the hypothesis that race/ethnicity, income, and insurance status are associated with access to medical care and prescribed drugs among patients of outpatient clinics in El Paso County, Texas. **Methods:** Data from a regional healthcare satisfaction survey conducted in El Paso, Texas, was analyzed to determine associations between race/ethnicity, income, and insurance status and access to medical care and prescribed drugs. **Results:** Strong associations were found between low income and skipping appointments or delaying prescriptions. Strong associations were also found between being uninsured and delaying or not filling prescriptions. However, no associations were found between race/ethnicity and access to medical care and prescribed drugs. **Conclusions:** The results of this study conducted among a majority Hispanic population confirm the negative effects of low income and uninsured status on access to healthcare; yet they do not confirm effects of race/ethnicity on access. These results raise important questions for majority Hispanic populations and suggest that historically minoritized race/ethnicity may have less of a negative effect on healthcare access within these populations. These findings should be useful in better identifying barriers patients may face in outpatient settings and for informing public health policy, particularly in regions that are historically and predominately Hispanic, such as along the United States-Mexico border.

Landscape of Lung Cancer Screening in Texas

Yu Liu, Ph.D.; Hyo Jung Tak, Ph.D.; Robert Volk, Ph.D.; Ya-Chen Tina Shih, Ph.D.

ABSTRACT

Lung cancer is a major public health concern in Texas. Low dose computed tomography (LDCT) is shown to reduce the risk of dying from lung cancer among high-risk populations. The United States Preventive Services Task Force (USPSTF) endorsed LDCT for lung cancer screening since 2014, and the Centers for Medicare & Medicaid Services started covering the expense since 2015. We used data from the 2018 Behavioral Risk Factor Surveillance System (BRFSS) survey to ascertain recent estimates of the proportion of screening-eligible individuals for various sociodemographic subgroups, as well as the LDCT uptake rate among screening-eligible population, for Texas versus other states. The estimated uptake rate among Texans who were eligible for lung cancer screening was around 25% in 2018. Although the rate of lung cancer screening in Texas was higher than the rate reported in the other seven states (average of 11%) that also participated in the lung cancer screening module of the 2018 BRFSS survey, results indicated Texas' lower screening rates in specific vulnerable populations: racial/ethnic minorities and residences without insurance coverage. Greater public and community outreach and communication may improve the use of LDCT among screening-eligible Texans.

Volume 75, Issue 2: Spring 2023

Message from the TPHA President

Elizabeth Cuevas, BS, MS, PhD, LP (2022-2023)
Texas Public Health Journal 2023;75(2):2

From the Editor

Mathias Forrester, BS
Texas Public Health Journal 2023;75(2):2

Commissioner's Comments: Exceptional Items for Exceptional Public Health

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2023;75(2):3

Poison Control

Nitrous Oxide Inhalation Abuse and Misuse Reported to Texas Poison Centers

Mathias B. Forrester, Johanne Freeman
Texas Public Health Journal 2023;75(2):4-5

Database Review

Publicly Available Database: National Electronic Injury Surveillance System-All Injury Program (NEISS-AIP): Changes in dog bites treated at emergency departments during the COVID-19 pandemic

Mathias B. Forrester, BS
Texas Public Health Journal 2023;75(2):5-10

Book Review and More

Song of the Cell by Siddhartha Mukherjee

Carol A. Galeener, PhD, and ChatGPT-3
Texas Public Health Journal 2023;75(2):11

Brief Report: Acute Non-Occupational Pesticide Exposures Cases Reported to the Texas Department of Agriculture (2015-2021)

Armando Elizalde Velazquez, Ph.D.
Texas Public Health Journal 2023;75(2):12-18

ABSTRACT

Background: Unintentional exposure to pesticides can occur during an occupational or non-occupational situation. Occupational exposures in Texas are reported by law. In contrast, non-occupational exposures are sometimes overlooked, and very little information on these exposures is available. This study describes the magnitude and characteristics of acute non-occupational pesticide exposures reported in Texas during 2015-2021. **Methods:** Data were obtained from the Texas Department of Agriculture's internal database to establish geographic and temporal distributions of the cases. Cases were classified based on the strength of evidence following Centers for Disease Control and Prevention (CDC) guidelines. Descriptive statistics were used to characterize the attributes of the reported cases and the reported health effects. **Results:** A total of 313 non-occupational pesticide exposure incidents were identified; 228 cases had enough strength of evidence to support an association between exposure and the health effects. Insecticides were the type of pesticide with the most reports (50.4%, n=115). Cameron and Hidalgo counties had the highest incidences of pesticide exposure cases, 0.58 and 0.48 per 100,000 population, respectively, and among these counties, malathion was the active ingredient with the most reports. However, overall, naphthalene was the most reported active ingredient, involved in 12.3% (n=28) of the incidents. Most of the cases were classified as low illness severity (82.9%, n=189), with headaches, eye irritation, and dyspnea being the most reported symptoms, and only 21% (n=49) of the people exposed seeking medical attention after the incidents. **Conclusions:** Texas had a low incidence (0.16 per 100,000 population) of acute nonoccupational pesticide exposure cases during 2015-2021. Incidence of exposures was three times higher for residents of Cameron and Hidalgo counties, compared with the incidence for the entire state from 2015-2021. Findings of this study highlight areas where interventions could be focused to reduce pesticide exposure.

Original Public Health Research

Genital Herpes Knowledge and Its Association with Perceived Risk for Contracting Genital Herpes among Men Who Have Sex with Men

Russell H Wendt, DrPH; Paige Padgett Wermuth, PhD; Mayar Al Mohajer, MD
Texas Public Health Journal 2023;75(2):19-25

ABSTRACT

Introduction: A growing body of research focusing on sexually transmitted infection (STI)-related knowledge among sexual and gender minority (SGM) populations exists, but relatively few studies address genital herpes among men who have sex with other men (MSM). Although genital herpes receives less attention than more medically severe conditions like human immunodeficiency virus (HIV), the MSM population experiences higher genital herpes prevalence than the general population. Of primary interest in this study was the relationship genital herpes knowledge has with self-perception of risk for contracting genital herpes. **Methods:** This cross-sectional survey was conducted during December 2018 and January 2019 at Houston-based MSM venues and events with 302 total participants recruited. Participants were given four statements to gauge their knowledge of genital herpes and were asked how much risk they perceived themselves to have for contracting genital herpes. **Results:** Higher genital herpes knowledge was associated with increased self-perception of risk for contracting genital herpes (adjusted odds ratio [aOR] = 1.72, 95% confidence interval [CI] [1.32, 2.24]). Factors associated with decreased risk perception were having 2 to 3 sexual partners in the past year (aOR = 0.37, 95% CI [0.16, 0.86]) and 0 to 1 sexual partner(s) in the past year (aOR = 0.06, 95% CI [0.02, 0.15]) when compared to those with more than 10 sexual partners in the past year. **Conclusions:** Based on this study's data, MSM are potentially at higher risk for contracting genital herpes than they perceive. Education about genital herpes among MSM could reduce gaps in knowledge and improve sexual outcomes.

Methamphetamine and Other Associated Drugs as Cause of Accidental Overdose Deaths in Harris County, Texas, between 2016-2020

Namrata Walia MD MHA MPH; Varsha Podduturi MD; Daryl Shorter MD
Texas Public Health Journal 2023;75(2):26-31

ABSTRACT

Background and Objectives: Methamphetamine has been identified as a substance of concern due to its highly addictive potential. This study was conducted to examine the occurrence and association of methamphetamine with other drugs in accidental drug-related deaths in Harris County, Texas, between 2016-2020. **Methods:** The data on accidental drug overdose deaths was extracted from toxicology reports from the Harris County Institute of Forensic Sciences. Incidence count and bivariate analysis (chi-squared test) were reported. Joinpoint regression analyses were conducted to report the trend of mortality. The analysis included overdose deaths involving of methamphetamine, benzodiazepines, alcohol, heroin, fentanyl, prescription opioids, and cocaine. **Results:** The total number of accidental drug overdose deaths increased from 429 in 2016 to 989 in 2020. The deaths involving methamphetamine represented 13% of total deaths in 2016, compared to 35% of deaths in 2020. White males (36.23%) comprised the most reported overdose deaths. Besides opioids, cocaine, methamphetamine, and benzodiazepines were among the drugs most commonly involved in overdose deaths in the recent years. Opioids were involved in more than half (51%) of the accidental overdose cases ($p=0.009$). The cases involving methamphetamine rose from 56 in 2016 to 352 in 2020. The trend of co-occurrence of methamphetamine with other drugs was found to be significant. It co-occurred mainly with benzodiazepines ($p=0.008$), cocaine ($p=0.002$), and heroin ($p=0.001$) between 2016 and 2019; methamphetamine plus fentanyl were one of the drugs most commonly involved in 2020 ($p=0.006$). The trend of increased co-occurrence of methamphetamine with other drugs between 2016-2020 was significant. Its co-occurrence with benzodiazepines increased 86% ($p=0.008$), with cocaine 63% ($p=0.002$), with heroin 60 % ($p=0.001$), and with fentanyl 175% ($p=0.006$). **Discussion and Conclusions:** This study extends the research of methamphetamine overdose and its association with other drugs. While prior studies have focused primarily on national data, this study is the first of its kind to focus on a big and diverse city within Texas. Harris County, Texas, has experienced a substantial increase in the number of overall accidental drug overdose deaths, especially involving methamphetamine.

Public Health Activity Highlights

Mathias B. Forrester, BS
Texas Public Health Journal 2023;75(2):33-35

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Message from the TPHA President

Elizabeth Cuevas, BS, MS, PhD, LP (2022-2023)
Texas Public Health Journal 2023;75(1):2

From the Editor

Catherine D. Cooksley, DrPH, CPH
Texas Public Health Journal 2023;75(1):2-3

Commissioner's Comments: A Dream Come True

Jennifer Shuford, MD, MPH
Texas Public Health Journal 2023;75(1):4

Poison Control

Changes in Pepper Spray Exposures Reported to Texas Poison Centers During 2020

Mathias B. Forrester
Texas Public Health Journal 2023;75(1):5-8

Public Health Research Brief Reports

Brief Report: Changes in Pediatric Consumer Product-Related Dog Bites and Scratches Treated at Emergency Departments during the COVID-19 Pandemic

Mathias B. Forrester
Texas Public Health Journal 2023;75(1):8-12

ABSTRACT

Background: In 2020 during the COVID-19 pandemic, the number of people adopting dogs was reported to have increased in the United States (US). The objective of this study was to compare the pattern of pediatric consumer product-related dog bites and scratches treated at US hospital emergency departments (EDs) in 2020 to those in 2019. **Methods:** Data were obtained from the National Electronic Injury Surveillance System (NEISS), a database of consumer product-related injuries collected from a sample of approximately 100 US hospital EDs. Cases were dog bites and scratches involving patients age 0-19 years reported to the NEISS during 2019-2020. The national estimated number of injuries during 2020 was compared to the estimated number during 2019. **Results:** An estimated 7,052 pediatric consumer product-related dog bites and scratches were treated at US hospital EDs during 2020, a 9.7% decrease from the estimated 7,806 pediatric dog bites and scratches in 2019. The estimated number of patients in 2020 age 0-5 years increased 6.7%, 5-12 years decreased 12.1%, and 13-19 years decreased 20.2%. The estimated number of pediatric consumer product-related dog bites and scratches that occurred at home decreased 10.3%, at other public property decreased 3.5%, on a street or high way decreased 43.2%, and at a place of recreation or sports increased 38.2%. The estimated number of injuries affecting the head and neck increased 5.1%, lower extremity decreased 13.5%, upper extremity decreased 20.6%, and trunk decreased 14.8%. The estimated number of pediatric consumer product-related dog bites and scratches treated at children's hospital EDs increased 36.5% and treated at non-children's hospital EDs decreased 13.4%. **Conclusions:** Between 2019 and 2020, pediatric consumer product-related dog bites and scratches differed by patient age, location where the incident occurred, the body part affected, and the type of hospital where the patient was treated.

Brief Report: A Mixed Methods Survey Exploring the Benefits of a Doctor of Medicine/ Master of Public Health Dual Degree Program During the COVID-19 Pandemic

Samuel E. Neher, MS, EdD; Laura J. Benjamins, MD, MPH
Texas Public Health Journal 2023;75(1):13-15

ABSTRACT

Background: The popularity of Doctor of Medicine and Master of Public Health (MD/MPH) dual degree programs is growing, yet there is a dearth of literature about program outcomes. Purpose: The purpose of this study was to examine the benefits of a long-running MD/MPH program at McGovern Medical School within the University of Texas Health Science Center at Houston. **Methods:** A mixed methods survey was used to learn from current students, graduating students, and alumni. **Results:** Eighty-nine percent of alumni reported that the skills and

knowledge gained from the MPH degree helped their career, and 77.8% reported that the dual degree helped to advance their career. The majority of current (68.4%) and graduating (100.0%) students reported that, compared to their peers not in the dual degree program, the MPH helped them understand the COVID-19 pandemic. Additionally, the majority of current (78.9%) and graduating (71.5%) students felt that their dual degree helped them to explain the COVID-19 pandemic to their non-medical school peers. Compared to peers without a public health background, 77.7% of alumni reported they were better prepared to understand the COVID-19 pandemic, and 77.7% were better able to explain the COVID-19 pandemic to their family and friends. **Summary:** The MD/MPH dual degree program has clear benefits. This study adds value to the literature of an increasingly popular dual degree program. Specifically, alumni find that the MD/MPH degree helped advance their career. Additionally, current students, graduating students, and alumni found the MPH degree paired with their medical degree enhanced their understanding and communication of the COVID-19 pandemic.

Database Review

Publicly Available Database: Federal Railroad Administration Railroad Casualty Data: Pattern of Injuries in Texas

Mathias B. Forrester, BS

Texas Public Health Journal 2023;75(1):15-16

Public Health Practice Commentary

Reducing Sexually Transmitted Infections in Texas by Improving Sex Education in Texas Public Schools

Alex Estrada, MPH; Armando D. Mendez, MS; Nathaniel Webb, MPH; Sarpong Boateng, MPH; Rohit

Balasundaram, MPH; Malinee Neelamegam, PhD; Stacey B. Griner, PhD

Texas Public Health Journal 2023;75(1):16-19

Book Review

American Contagions: Epidemics and the Law from Smallpox to Covid-19 by John Fabian Witt. Published 2020.

Carol Galeener, PhD

Texas Public Health Journal 2023;75(1):20

Original Public Health Research

“My Best Bad Habit”: A Qualitative Study on Understanding the Social Context of Vaping in North Texas

Janice Byth; Leyla Koyuncuoglu, MS; Brynn Torres; Doug Henry, PhD; Kamilah Hasan, MA, CHW

Texas Public Health Journal 2023;75(1):21-24

ABSTRACT

Background: Increasing use of vape devices, particularly among young people, has become a public health concern, leading the Centers for Disease Control and Prevention (CDC) to declare vaping an “epidemic” in 2020. In February 2020, the highest rates of e-cigarette or vaping use associated lung injury (EVALI) in the United States were reported in Texas, specifically in North Texas. While the epidemiological markers of vaping are becoming clarified, relatively little remains known about the social components of vaping culture, which influences both vaping risk behavior and the evaluations of public health messaging. From a public health standpoint, knowledge of vaping behaviors that originate in the social environment may be an important first step in developing targeted campaigns designed to decrease risk. Anti-vaping campaigns in Texas may thus be missing the target by failing to address concerns already existing in vaping culture and the social world in which vaping occurs. **Methods:** In spring 2020, a qualitative exploratory study, conducted in North Texas in partnership with Denton County Public Health, utilized 42 semi-structured interviews with young adults between the ages of 18-26 years who vape. Additional participant observation and informal interviews were conducted with vape shop and vape lounge owners. **Results:** Almost all (90%) of participants recognized some risk to vaping but found evidence they’d seen inconclusive; in comparison to the quality and safety of devices or e-juice and the financial cost of habitual usage, “lung health” was a concern for a relatively small percentage (25%). In the absence of medical evidence they found credible, personal and bodily experiences were used to evaluate vaping’s effect on health; all participants had developed personal strategies to ease their concerns about product quality and safety. Almost half (46%) specifically vaped because they saw it as either benign or in fact good for their stress levels and much better for them than combustible cigarettes. **Conclusions:** Results indicate that public health messages seen do not always reflect the concerns or needs expressed by young people who vape. **Public Health Significance/ Relevance for Research and Practice:** An

evolving vaping culture both transmits knowledge and shapes risk perceptions. It is essential that public health information be accessible and tailored to vapers' needs. Recommendations are made on how to improve, develop, and disseminate effective intervention strategies specific to vaping.

Association Between Positive COVID-19 Molecular Tests and COVID-like Illness in Texas During the First Year of the Pandemic

Jeffrey Koss, MA; Linc Allen, MBA; Leah Chapman, PhD, MPH; Sarah Seidel, DrPH
Texas Public Health Journal 2023;75(1):25-33

ABSTRACT

Background: Throughout the COVID-19 pandemic, syndromic surveillance data have complemented authoritative COVID-19 case data by providing preliminary data that are more immediately usable for surveillance. **Purpose:** The purpose of this study was to analyze the effectiveness of the United States Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) during COVID-19 by analyzing the association between COVID-like illness (CLI) visits and positive molecular COVID-19 tests in Texas. Additionally, we examined how these associations varied across 22 Trauma Service Areas (TSAs) and over time in Texas. **Methods:** Data were extracted from Texas' syndromic surveillance database, TxS2, using ESSENCE for the 52-week period from March 8, 2020, to March 6, 2021. We calculated Pearson's correlation coefficients to evaluate the association between the number of positive molecular COVID-19 tests and CLI visits for Texas overall and by TSA. We then calculated the ratio of weekly total number of CLI visits to weekly positive COVID-19 tests and charted this ratio over time to determine how CLI visits reflected the number of positive molecular tests. **Results:** Pearson's correlation coefficient analysis revealed a strong correlation between positive COVID-19 molecular tests and CLI throughout Texas as a whole during the study period ($r=0.986$, $p<0.001$). Additionally, 16 out of 22 TSAs had correlation coefficients above 0.90. Overall, the ratio of CLI visits to positive molecular tests remained relatively steady (between 10-20 CLI visits for every 100 positive tests), though for a few TSAs it was less consistent. **Public Health Significance:** Our study provides evidence of the utility and effectiveness of using CLI as a real-time public health surveillance tool to monitor COVID-19 cases in Texas. Our finding that certain TSAs had lower correlations and less consistent ratios of CLI visits to positive molecular tests warrants further investigation of regional characteristics contributing to these variations.

An Exploration of COVID-19 Vulnerabilities in Six Texas Counties

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Texas Public Health Journal 2023;75(1):34-38

ABSTRACT

Background: COVID-19 prevalence and deaths have been disproportionate by geographic location and social determinants, exacerbating health disparities. It is essential to understand the needs of vulnerable communities and frame a public policy to lessen vulnerabilities originating from social determinants of health. This project aimed to investigate COVID-19 community vulnerabilities in the six Texas counties with the highest populations and/or the highest COVID-19 death counts. **Methods:** According to the 2021 United States (US) Census, Harris, Dallas, Bexar, Tarrant, and Travis were the five most populated Texas counties. According to the Texas Department of State Health Services COVID-19 Dashboard, Harris, Dallas, Bexar, Tarrant, and El Paso counties showed the highest COVID-19 death counts. The COVID-19 vulnerabilities for Harris, Dallas, Bexar, Tarrant, Travis, and El Paso counties were explored using the US COVID-19 Community Vulnerability Index (US-CCVI) and compared to the vulnerabilities in the state of Texas and the US. **Results:** The overall vulnerability scores of the six counties, ranging from 0.83 to 0.96, were lower than Texas (0.98) and higher than US (0.50) scores. Regarding Socioeconomic Status, Minority Status/Language, and Population Density, all six counties were highly vulnerable. The vulnerability scores of Health System Factors in the counties were lower than the state-level score but higher than the national score. Minority populations most vulnerable to COVID-19 mortality varied across counties, but Hispanics and Blacks were highly vulnerable. **Conclusion:** Further investigation of granular social determinants data is needed to develop local policy and public health interventions that will impact the vulnerable communities meaningfully.

Save the Date: Texas Public Health Association Education Conference, San Antonio, Texas): The Future Is Bright: Leading Forward

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Message from the TPHA President

Elizabeth Cuevas, BS, MS, PhD, LP (2022-2023)
Texas Public Health Journal 2022;74(4):2

Commissioner's Comments: A Great Funding Opportunity: The Department of State Health Services Federally Qualified Health Center Incubator Program

Dr. John Hellerstedt
Texas Public Health Journal 2022;74(4):3

Poison Control

Helium Inhalations Reported to Texas Poison Centers

Mathias B. Forrester, Amy Young, Kelly Hogue
Texas Public Health Journal 2022;74(4):4-5

Hot Topic

Hot Topic: Monkeypox Outbreak

Mathias B. Forrester, BS, Catherine D. Cooksley, DrPH, CPH
Texas Public Health Journal 2022;74(4):5-9

Database Review

Publicly Available Database: Federal Aviation Administration laser incident reports: Pattern of aviation laser incidents in Texas

Mathias B. Forrester, BS; Bashir El-Khoury, MD; Mark Winter, PhD
Texas Public Health Journal 2022;74(4):10-11

Book Review

Breaking the Age Code, by Becca Levy, 2022

Carol Galeener, PhD
Texas Public Health Journal 2022;74(4):11

Original Public Health Research

Environmental Dissemination of Carbapenem Resistant Enterobacteria in the Rio Grande River: A Public Health Concern?

Maria D. Fuentes MD, MPH; Gloria Sepulveda; Mateo Flores; Jose Mendoza, MS; Maria Alvarez, PhD; Delfina C. Domínguez, MLS (ASCP), MS, PhD
Texas Public Health Journal 2022;74(4):12-16

ABSTRACT

Antimicrobial resistant genes (ARG) are beginning to be recognized as contaminants of aquatic environments worldwide since they can be released through human activities and animal waste. Carbapenems are antibiotics used as a last resort in treating serious infections caused by multi-drug resistant bacteria. These bacteria produce enzymes that break down various antibiotics, such as penicillins and cephalosporins, rendering them ineffective. In the United States (U.S.), the most commonly found carbapenemase is the *Klebsiella pneumoniae* carbapenemase (KPC). The purpose of this pilot study was to analyze water samples, selected at three sites, from a segment of the Rio Grande River between El Paso, Texas, and Ciudad Juarez, Mexico, for the presence of KPCs using three different methods: first, chromogenic agar to screen for carbapenemase production and then polymerase chain reaction (PCR) and isothermal loop mediated amplification (LAMP) to confirm the presence of the KPC gene. Out of 28 bacterial isolates cultured in CHROMagar™ KPC, approximately a third (11/28) were positive for KPC production. Bacterial isolates included *Citrobacter freundii* complex (1 isolate), *Klebsiella oxytoca* (2 isolates), and *Klebsiella pneumoniae* (8 isolates). All 11 isolates that were screened through ChroMagar™ KPC also demonstrated the presence of KPC genes through PCR and LAMP. Most of the carbapenem resistant organisms were obtained from Site 3, where recreational activities occur during the summer months. The Rio Grande River runs between the border of the U.S. and Mexico. In the U.S., water from the river is used for irrigation and drinking water, whereas on the Mexican side, families use the river for recreational purposes. The presence of resistant bacteria in this segment

of the river may represent a health concern. Public health programs need to be developed to prevent ARG transfer to humans and assess antibiotic resistance (AR) contamination in the ecosystem.

Association between Sociodemographic Factors and E-Cigarette Use among Texas Adolescents

Christie A. Okonkwo-Diogu, PhD; Tolu Andrea Osoba, PhD; W. Sumner Davis, PhD

Texas Public Health Journal 2022;74(4):17-22

ABSTRACT

The use of electronic cigarettes (e-cigarettes) among adolescents has remained a major public health concern. Reports have shown that the adolescent brain is still growing and can be affected by nicotine and cancer-causing chemicals contained in e-cigarettes. The rising trend of e-cigarette use by adolescents has reportedly reached epidemic proportions, and there is a knowledge gap in the factors associated with this behavior and the provision of appropriate interventions for the at-risk population. This quantitative, cross-sectional design study investigated the association between sociodemographic factors and Texas adolescents' use of e-cigarettes by conducting secondary data analysis of the Texas Department of State Health Services Youth Tobacco Survey. The theory of planned behavior guided this study, and Pearson's Chi-Square and Logistic Regression analyses were conducted. The sociodemographic factors examined for potential association with e-cigarette use among Texas adolescents included age, gender, and race/ ethnicity, while the covariates include socioeconomic status and area of residence. The results showed that age ($p < .001$) was significantly associated with adolescent e-cigarette use. Increasing age is associated with greater odds of e-cigarette use. The findings from this study may offer potential positive social change by providing a better understanding of how sociodemographic factors influence adolescent e-cigarette use. The results from this study might also guide public health practitioners in developing audience-targeted health promotion programmes for mitigating adolescent e-cigarette use.

Investigating the Experiences and Effects of Synthetic Cannabinoid (kush/K2/Spice) Use Among Individuals Experiencing Homelessness in Houston, Texas

Alane Celeste-Villalvir, DrPH, MPA; Cathy Crouch, LCSW; Angela M. Heads, PhD; Laura Witte, DrPH, MPH; Michael Weaver, MD, DFASAM; Joy M. Schmitz, PhD; Frances Isbell; and Vanessa Schick, PhD

Texas Public Health Journal 2022;74(4):23-28

ABSTRACT

Background: Synthetic cannabinoids (SC), colloquially known as kush, K2, and Spice, are low-cost substances with serious side effects. Their growing popularity has resulted in an increase in SC-related emergency department visits over recent years, particularly among people experiencing homelessness. **Purpose:** The present field survey study explored the connection between homelessness and SC use to describe the characteristics of SC use among this population. **Methods:** Individuals aged 18 years or older residing in homeless encampments in Houston, Texas, with experiences of SC use were eligible to participate. Participants completed an interviewer-administered survey about their SC use. **Results:** The majority of participants ($N=65$) were Black/ African American ($n=46$, 65.7%) and male ($n=58$, 82.9%). Over half of study participants reported symptoms associated with dependence, such as increased tolerance ($n=40$, 61.5%). Participants reported a variety of serious physical side effects following SC use, including catatonia ($n=35$, 50%), seizures/ convulsions ($n=13$, 18.6%), and heart palpitations/increased heart rate ($n=35$, 50%). A small proportion of participants reported instances of self-harm ($n=8$, 12.3%) and violence toward others ($n=9$, 13.8%) following SC use. Participants also reported emergency department use, vehicular accidents, being victims of robberies/theft, and sexual assault. **Conclusions:** The symptoms following SC use could lead to serious consequences for people experiencing homelessness, including criminal justice involvement, severe illness, hospitalization, victimization, and death. Further information about SC toxicity and potentially serious complications is needed for adequate clinical and community response, as well as to provide individuals experiencing homelessness with knowledge that can allow them to protect themselves when using SC and minimize its harms.

Increasing firearm fatality among Texas school-age children (5-18 years) – 1999-2020

Robert S Levine, MD; Maria C Mejia, MD MPH; Sandra J Gonzalez, PhD; Namrata Walia, MD; Roger J Zoorob, MD MPH; Charles H Hennekens, MD DrPH

Texas Public Health Journal 2022;74(4):29-35

ABSTRACT

Background: Data are sparse about firearm fatalities among Texas schoolchildren. **Purpose:** Explore firearm fatalities among children ages 5-18 years from 1999 to 2020. **Key Methods.** We utilized publicly available Multiple Cause of Death Files from the National Center for Health Statistics (NCHS) and International Classification of Diseases (ICD) Codes (10th Edition) Accident (W32-W34), Suicide (X72-X74), Assault (X93-X95), and Undetermined Intent (Y22-Y24) to identify firearm fatality as an underlying or contributory cause. We used Annual Percent Change (APC) as a measure of the magnitude of effect and 95% confidence intervals (CIs), p values, and joinpoint regression analyses to test for statistical significance. **Key Results:** From 1999 to 2020 there were 4,090 firearm fatalities among Texas school-age children. Following significant declines from 1999 to 2013, firearm fatality rates significantly increased. The APC from 2013-2020 was 12.6 (95% CI 9.7, 15.6 p<0.001). The APCs were statistically significant for boys; non-Hispanic Black, non-Hispanic White, and Hispanic children; residents of Large Central Metropolitan areas, Medium Metropolitan, Large Fringe Metropolitan, and smaller areas; for residents of the Texas-Mexico Border and non-Border areas; and for residents of counties with a military base. From 2013 to 2020, rates were highest among non-Hispanic Black children, followed in order by non-Hispanic White, Hispanic, and Asian and Pacific Islander children. **Public Health Significance:** There are alarming increases in firearm fatalities among Texas school age children (5-18 years). Analytic epidemiologic studies designed *a priori* to do so are necessary to test hypotheses generated by these data. In the meanwhile, the data pose clinical and public health challenges.

COVID-19 Per Capita Fatality Rate: A Path Analysis Model

Michael Penuliar, MA, MBA, MA; Candice Clark, MA; Debra Curti, MEd; Miguel Carrasco, BS; Catherine Hudson, MPH; Olugbenga Olokede, MD, MPH; Namratha Mohan; Billy Philips, PhD, MPH
Texas Public Health Journal 2022;74(4):36-40

ABSTRACT

Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) has infected millions globally, causing pandemic coronavirus disease 2019 (COVID-19). At the time of writing, approximately 940,000 COVID-19 deaths have occurred in the United States, with over 84,000 deaths in Texas. This study hypothesized that an interconnected model with county-level variables related to income, insurance rates, rurality, health status, and 2020 presidential voting behaviors would cumulatively predict the county-level COVID-19 Fatalities per Capita rate in Texas. The path analysis conducted found strong support for the proposed model structure ($R^2 = 37.6\%$) with the strongest total effects on COVID-19 Fatalities per Capita from socioeconomic (Median Income) and political (Percent 2020 Democrat Vote) factors. Increased county-level Median Income and Percent 2020 Democrat Vote were both negatively related to COVID-19 Fatalities per Capita. These results can, in part, be explained by the politicization of the pandemic and the relevance of increased monetary resources that might allow a county's population some protection from the most severe effects of COVID-19. The findings of this study introduce robust analyses regarding some of the major contributing factors of the county-level COVID-19 Fatalities per Capita rate and demonstrate an important contribution of knowledge regarding public health disparities across Texas counties.

Awareness and Use of Pre-Exposure Prophylaxis among Men who have Sex with Men in Dallas, Texas, 2017: Prevalence, Associated Factors and Predictors

Jie Deng, MS; Justin Buendia, PhD; Margaret Vaaler, PhD; and Osaro Mgbere, PhD, MS, MPH
Texas Public Health Journal 2022;74(4):41-47

ABSTRACT

Background: Gay, bisexual, and other men who have sex with men (MSM) are at high risk of acquiring human immunodeficiency virus (HIV). Taking pre-exposure prophylaxis (PrEP) daily reduces the risk of acquiring HIV through sexual contact by up to 99%. This study aimed to assess the prevalence of PrEP awareness and use, and the associated factors among HIV-negative, sexually active MSM in Dallas, Texas. **Methods:** Data from 406 HIV-negative, sexually active MSM recruited through venue-based sampling in 2017 and obtained from the National HIV Behavioral Surveillance project in Dallas, Texas, were analyzed. We used descriptive and inferential statistics that included bivariate and multivariate regression models to explore the associations between self-reported PrEP awareness and use, and the sociodemographic characteristics and high-risk sexual behaviors. **Results:** Prevalence of PrEP awareness and use in the past 12 months were 83.7% and 18.2%, respectively. PrEP awareness was significantly ($p \leq 0.05$) less common among Black MSM (14.1%) and among those with a high school

diploma/General Educational Development (GED) or less (18.8%) or those who had more than five male sexual partners in the past 12 months (40.9%). It was also lower among those with a household income of less than \$20,000 (9.1%) and persons experiencing homelessness (4.4%) or incarceration (5.6%). PrEP use was significantly ($p \leq 0.05$) lower among Black MSM (9.5%) as well as those with no health insurance (20.3%), with a high school diploma/GED or less (12.2%), and with household income lower than \$20,000 (5.4%). PrEP awareness was 13% less common among Black MSM (adjusted prevalence ratio [aPR]=0.87, 95% confidence interval [CI]: 0.79-0.97) and 15% less common among Hispanic MSM (aPR=0.85, 95% CI: 0.78-0.93) compared to White MSM. In contrast, PrEP awareness (aPR: 1.12, 95% CI: 1.02-1.22) and use (aPR: 2.02, 95% CI: 1.42-2.88) were significantly ($p \leq 0.05$) associated with participation in HIV behavioral interventions. **Conclusion:** The positive association of HIV behavioral interventions with both PrEP awareness and use suggests that this approach may enhance PrEP rollout in Dallas and also serve as a model for statewide campaigns in the MSM communities. In addition, efforts to increase PrEP awareness and use should target Black and Hispanic MSM and MSM with lower socioeconomic status (SES).

Volume 74, Issue 3: Summer 2022

Message from the TPHA President

Elizabeth Cuevas, BS, MS, PhD, LP (2022-2023)
Texas Public Health Journal 2022;74(3):2

From the Editor

Catherine D. Cooksley, DrPH, CPH
Texas Public Health Journal 2022;74(3):2

Commissioner's Comments: Keep Calm and Swim On

Dr. John Hellerstedt
Texas Public Health Journal 2022;74(3):3

Poison Control

9th Annual Pills and Thrills that Kill! Toxicology in Review, El Paso, Texas, April 6-7, 2022

Salvador Baeza
Texas Public Health Journal 2022;74(3):4-5

Database Review

Publicly Available Database: United States Coast Guard Recreational Boating Accidents

Mathias B. Forrester, BS
Texas Public Health Journal 2022;74(3):5-6

Book Review

Bowling Alone: Revised and Updated: The Collapse and Revival of American Community by Robert D. Putnam, 2020

Carol Galeener, PhD
Texas Public Health Journal 2022;74(3):6-7

Original Public Health Research

Reframing Family Planning In-person Outreach Events for Adolescents and Young Adults: Aligning Program Goals with a Business Plan

Mariam R. Chacko M.D., Allyssa A. Abacan M.P.H2, Peggy B Smith, M.A.; Ph.D.
Texas Public Health Journal 2022;74(3):8-13

ABSTRACT

Background: Outreach activities for adolescent and young adults (AYA) by state-funded family planning services are an integral part of public health practice. However, due to an unfunded mandate in Texas, financially justifying such activities within a primarily fee-for-service reimbursement program has been challenging. Aligning outreach activities with a program's goals and business plan is important.

Purpose: An interdisciplinary approach to: (1) Assess degree of integration of a family planning clinic (FPC) system's outreach activities for AYA (13 to 24 years) with the clinics' program goals and business plan; (2) Facilitate restructuring of the outreach program; and (3) Estimate the Return On Investment (ROI) for three outreach events.

Methods: The outreach program is under the aegis of FPC system's five community-based and four school-based clinics located in a large urban city in Texas that serves AYA. An Outreach Program Integration Framework assessed the degree of integration of activities with the program's goals and business plan. An iterative process was used to restructure outreach through meetings, review of outreach invitations, chart reviews for patient demographics and a patient survey. We estimated ROI using data from patient survey, chart and billing review.

Results: The majority of outreach dimensions were not well integrated into program goals and business plan. Problems and solutions were identified and implemented during restructuring. The STI/HIV testing campaign and a Wellness Resource Fair in close proximity to the clinics resulted in positive ROIs (+ 300% and +398% respectively). A postpartum visit program resulted in a negative ROI (-28%).

Summary: Assessing the degree of integration of an outreach program with program goals and business plan and restructuring a program is important. Estimating ROI can help measure outreach success. This approach can

encourage the state to formulate policies which result in financial support and better integration of outreach programs with family planning clinics.

Factors Associated with COVID-19 Vaccine Hesitancy among Texas Households

Leah Chapman, PhD, MPH; Jing Hu, MS; Sarah Seidel, DrPH

Texas Public Health Journal 2022;74(3):14-21

ABSTRACT

COVID-19 vaccinations are an important tool for alleviating the effects of the pandemic. However, many Americans, including many Texans, are hesitant to receive a COVID-19 vaccine. This study examined who, among Texans, is most likely to experience COVID-19 vaccine hesitancy and determined the reasons behind COVID-19 vaccine hesitancy among Texans. To address our objectives, we used six weeks of repeated cross-sectional data from January 6, 2021, through March 29, 2021, from the United States Census Bureau's Household Pulse Survey. An average of 4,145 Texas household responded to the survey each week. We found that 52 percent of Texans who had not yet received a COVID-19 vaccine (as of January - March 2021) reported vaccine hesitancy. Female and black Texans had the highest odds of reporting COVID-19 vaccine hesitancy, while Texans of Asian descent, Texans who have college degrees or higher, and Texans 40 years and older had a lower odds of reporting hesitancy. The most common reasons for vaccine hesitancy among Texans were: they plan to wait and see if the vaccine is safe and they may get it later; they are concerned about possible side effects of a COVID-19 vaccine; and they think other people need the vaccine more than they do at the present moment. Efforts to promote COVID-19 vaccination in Texas may benefit from a focus on black, female, and younger (<40 years) Texans. Additionally, to increase COVID-19 vaccination rates, public health messages could address the two most commonly reported reasons for Texans' vaccine hesitancy: (1) I plan to wait and see if it is safe and may get it later, and (2) I am concerned about possible side effects of a COVID-19 vaccine.

Racial Disparities in Texas SARS-CoV-2 Vaccine Administration Over Time

Jonathan Chen, BA; Nahid Rianon, MBBS/MD, DrPH; Linda Piller, MD, MPH; Shira Goldstein, MD

Texas Public Health Journal 2022;74(3):22-26

ABSTRACT

Racial disparities have played a major part in the COVID-19 (SARS-CoV-2) pandemic in the United States as minority populations have borne an increased proportion of cases and deaths compared to White Americans. As the SARS-CoV-2 vaccines became available, local and state government agencies developed plans to distribute them more equitably. We analyzed the number of fully vaccinated individuals in the five most populous counties in Texas to determine if local government plans had an effect on racial disparities in vaccination rates. We found that, initially, vaccination rates of Asian and White people were significantly greater than those of Black and Hispanic people while vaccine availability was limited. However, as the supply of vaccines increased, vaccination rates among Hispanic people increased at a faster rate than those of Black people. We also found that local governments that specifically targeted at-risk ZIP codes showed less racial disparities in vaccination rates overall. Increased vaccine supply can mitigate some racial disparities in vaccination rates. However, some racial disparities in vaccination rates persisted despite the increased vaccine supply and may require more targeted interventions.

Healthcare Experiences: A View-Point from Young Adult Minorities

Maryam Lakhani, MPH; Derek Cegelka, PhD, MPH, CHES

Texas Public Health Journal 2022;74(3):27-33

ABSTRACT

Background: Historically, minority populations and healthcare have not had a positive relationship. Cases such as the surgical experiments on enslaved people, the Tuskegee Syphilis study, and the cloning of Henrietta Lacks' cells are all examples of the mistreatment of minority populations by the medical community. Although many changes have been made, many minority groups still report having poor healthcare experiences due to institutionalized racism, healthcare disparities such as insurance coverage or access to care, racial inequalities, language barriers, and medical mistrust. This is dangerous as young minorities see the mistreatment of their elders by the medical community and the cycle continues.

Objective: To determine the experiences of young adult minorities within the medical system.

Methods: Undergraduate students (N=32) at a public four-year institution in Texas that self-identified as a minority attended focus groups and discussed their overall healthcare experiences. Responses were recorded, transcribed, and analyzed for common themes.

Results: Common themes emerged from the participants in the focus groups: Communication between patient and physician, Trust of Physician, Affordability/Cost of Care, Comfort/ Empathy, Relatability, and Healthcare Setting.

Conclusions: These themes align with previous research about minorities and healthcare. Young adult minorities report lower levels of satisfaction with their healthcare providers due to communication problems (language barriers). Because of this, many of the young minorities still have a level of distrust in physicians that are not the same race or gender as they are. These feelings put a strain on the overall trust for the institutions that serve minorities and many young adults want to go into the healthcare in order to stop this from happening to others. Appropriate implementations of the results have been shared for public health practice.

Incorporating medical students into an interdisciplinary, population-based study of SARS-CoV-2 infection in asymptomatic individuals in South Texas

Anika K. Kurian, MBBS, MPH, DrPH; Susanne Schmidt, PhD; Martin Goros, MS; Jonathan A Gelfond, MD, PhD; Golareh Agha, PhD; Ryan Wealther, MD; Robert G. DelBello, BS, MD; Claudina Tami, MD, MPH; Barbara S. Taylor, MD, MS

Texas Public Health Journal 2022;74(3):34-39

ABSTRACT

Background: Asymptomatic and pre-symptomatic infections may play a significant role in the spread of COVID-19 but determining prevalence of these infections in the general population is labor intensive.

Purpose: This approach describes an innovative surveillance strategy using teams of medical students and emergency medical technicians (EMTs). Medical students represent a highly trained but underutilized workforce in the pandemic response.

Methods: A household-level sampling frame generated a population-weighted representative sample of households in San Antonio, Texas. Households were included if an English or Spanish-speaking adult (≥ 18 yo) answered the door and was willing to participate; excluded if household members had past or present COVID-19 symptoms or close contact with confirmed COVID-19 infection. Interdisciplinary teams of medical or medical/public health dual degree students paired with EMTs conducted a survey and instructed participants on how to self-administer nasal swabs among 502 community members without symptoms of COVID-19 from June 1-6, 2020, weeks prior to a community case surge.

Results: Of 502 participants, median age was 52 years and average household size was 3.1. Only 40% reported no medical risk factors for COVID-19 complications. Hypertension (23.6%) and diabetes (13.4%) were the most common pre-existing medical conditions; 29% of respondents reporting feeling at risk for SARS-CoV-2 during daily outside-of-the-home activities. All 502 SARS-CoV-2 PCR tests were negative, suggesting a prevalence range of 0%-1.2%.

Public Health Significance: It is unlikely that pre-symptomatic and asymptomatic COVID-19 infections in households without existing COVID-19 infections played a major role in the propagation of the epidemic at this point in time. While community-wide testing of individuals without symptoms of COVID-19 may be low yield in the context of low prevalence of symptomatic cases of COVID-19, medical students provided valuable support for community-based surveillance at a time when public health infrastructure was severely taxed.

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Message from the TPHA President

Lisette K. Osborne, RN-BC, MSN, CHEP (2021-2022)
Texas Public Health Journal 2022;74(2):2-3

Commissioner's Comments: Better Living Through Research

Dr. John Hellerstedt
Texas Public Health Journal 2022;74(2):3-4

Poison Control

Changes in Pediatric Ocular Hand Sanitizer Exposures Reported to Texas Poison Centers During 2020

Mathias B. Forrester, BS; Jeanie Jaramillo-Stametz; Maria Hinojosa, PharmD
Texas Public Health Journal 2022;74(2):4-7

Texas Public Health Association Welcomes Our New Institution/Agency Member: Texas Health Institute

Texas Public Health Journal 2022;74(2):7

Database Review

Publicly Available Database: National Electronic Injury Surveillance System (NEISS): Changes in dog leash-related injuries treated at emergency departments during the COVID-19 pandemic

Mathias B. Forrester, BS
Texas Public Health Journal 2022;74(2):8-12

Book Review

The Bias That Divides Us: The Science and Politics of Myside Thinking by Keith E. Stanovich, 2021.

Carol Galeener, PhD
Texas Public Health Journal 2022;74(2):13

Public Health Practice Commentary

Pandemic Lessons in Public Health Dentistry: A Commentary from Two Community Clinics in Dallas, TX

Simmi Patel, DDS, Katharine Nimmons, MPH, M.Sc., Karl Veasey, DDS, Joshua Liescheski, DDS
Texas Public Health Journal 2022;74(2):13-15

TPHA Annual Education Conference Registration is Open!

Texas Public Health Journal 2022;74(2):15

Original Public Health Research

Interdisciplinary Collaboration to Reframe COVID-19 Health Messages

Ruth Grubestic DrPH, RN, PHCNS-BC, and Marcia Rae McCulley, MFA
Texas Public Health Journal 2022;74(2):16-18

ABSTRACT

Background: During the early days of the COVID-19 pandemic, the public was receiving confusing and mixed messages regarding prevention of the disease. Misinformation was rampant in social media, and young adults were most vulnerable to these inappropriate messages. Colleges and universities were faced with the task of resuming classes in a safe manner to avoid a total shutdown, providing a unique opportunity for undergraduate public health and design students at a small liberal arts university to work together on an interdisciplinary, collaborative assignment creating revised COVID-19 health messages geared toward their peers. The purpose of this project was to create an interdisciplinary assignment for public health and design majors to work collaboratively and reframe existing COVID-19 health messages aimed at guiding peers in appropriate health behaviours.

Methods: Health-related topics such as proper mask placement, environmental sanitation, safe distancing, handwashing protocol, safe traveling during COVID-19, identification of signs and symptoms of COVID-19, and how to differentiate screening from testing for COVID-19 were suggested for student consideration for the assignment. Communication improved between campus peers within the project groups. Interdisciplinary

collaboration was forced upon the students due to the nature of the assignment and grades that were provided for each assignment. Creativity was assessed by the faculty comparing the original versus final project health messages. **Results and Discussion:** Health messages designed by peers for a small liberal arts college were utilized to spread COVID-19 safety information around campus for college students living and studying on campus in hopes of limiting the prevalence of COVID-19 on campus. Students learned to work collaboratively between disciplines to create appropriate COVID-19-related health messages. As future public health professionals, these skills are invaluable.

Give a Vet a Smile: A Community Intervention

Bridgette Pullis, PhD, RN, CHPN; Margo Y. Melchor, EdD, MEd, RDH
Texas Public Health Journal 2022;74(2):19-21

ABSTRACT

It is not uncommon for veterans to suffer from a lack of health care, including dental services. This lack of care is especially acute among veterans who are homeless. While the United States Department of Veterans Affairs (VA) offers dental care for veterans with a 100% service-related disability rating, this accounts for only about 12% of all veterans, leaving many without access to care. The prevalence of mental illness and substance use among homeless veterans and the high rate of chronic systemic conditions such as hypertension, diabetes, and lung disease further impact access to care. Poor dental health has been linked to a decrease in overall quality of life. In addition, poor oral health has been shown to impact one's ability to become gainfully employed, a goal which many homeless veterans aim to achieve. With no existing area programs to provide dental care to this sub-population, a community intervention to address this disparity was developed by the Cizic School of Nursing at UT Health and the UT Health School of Dentistry.

Celebrate Public Health: National Public Health Week April 4-10, 2022

Texas Public Health Journal 2022;74(2):22-23

Texas Public Health Journal Special Section Focused on the National Institute of Health's *All of Us* Research Program

Texas Public Health Journal 2022;74(2):24-47

From the Editor

Texas Public Health Journal 2022;74(2):25

Texas Public Health Journal - APHA, Texas, & *All of Us*

Julia Viola and Rachelle Ciulla
Texas Public Health Journal 2022;74(2):26-27

***All of Us* Research Program Publicly Available Data**

Mathias B. Forrester, BS
Texas Public Health Journal 2022;74(2):33-34

How can academic institutions engage with the '*All of Us*' program? A brief report on a Health Policy Dialogue

Hani Serag, MD, MPH, and Rebeca Wong, PhD
Texas Public Health Journal 2022;74(2):39-40

The *All of Us* Story at The University of Texas at Tyler Health Science Center: Question and Answer Session with the Texas Public Health Journal (TPHJ) Team and The University of Texas at Tyler Health Science Center (HSC) *All of Us* Research Program (*All of Us*) Team

Carlton Allen, MS, CHW, CHES®; Paul McGaha, DO, MPH; Michelle R. Wells, BA; Rachel French, BA; Michael E. Morris, PhD, MPH; Michelle Crum, PhD
Texas Public Health Journal 2022;74(2):42-45

A Health Science Center's Approach to Online Recruitment

Carlton Allen, MS, CHW, CHES®

Volume 74, Issue 1: Winter 2022

Message from the TPHA President

Lisette K. Osborne, RN-BC, MSN, CHEP (2021-2022)
Texas Public Health Journal 2022;74(1):2-3

Commissioner's Comments: Are You Ready?

Dr. John Hellerstedt
Texas Public Health Journal 2022;74(1):3-4

Poison Control

Changes in Exposures Reported to Texas Poison Centers after the February 2021 Power Outages

Mathias B. Forrester, BS; Jeanie Jaramillo-Stametz; Mark Winter
Texas Public Health Journal 2022;74(1):4-5

Database Review

Publicly Available Database: Google Trends: Pattern of ivermectin Google searches in Texas during the COVID-19 pandemic

Mathias B. Forrester, BS
Texas Public Health Journal 2022;74(1):6-7

Book Review

Noise: A Flaw in Human Judgment, by Daniel Kahneman, Olivier Sibony, Cass R. Sunstein, 2021.

Carol Galeener, PhD
Texas Public Health Journal 2022;74(1):8

Original Research Articles

Prescription Drugged-Impaired Driving in Texas: A Pilot Project

Amber Brooke Trueblood, DrPH; Paige Ericson-Graber, MIA, Jon Graber, MIA; Cody Stewart, and Troy D. Walden, PhD
Texas Public Health Journal 2022;74(1):9-12

ABSTRACT

Background: Existing impaired driving research has a crucial limitation: many studies exclude both prescription and over-the-counter drugs. This is despite the fact that these drugs, even when used as prescribed or recommended, still have the potential to cause impairment of the driving task. Moreover, if found impaired, drivers can still be arrested and convicted of a driving while intoxicated (DWI) offense. The prevalence of prescription and over-the-counter drug driving is largely unknown. This pilot survey examined attitudes and prevalence of prescription drug-driving in Texas. **Methods:** A pilot project conducted from March 2020 to August 2020 focused on developing educational materials for the public on prescription drug use and driving included a pilot survey. The survey consisted of 20 questions focused on attitudes and prevalence of prescription drug use and driving. An electronic survey was distributed to Texans aged 18 years and older using a convenience sample. Descriptive statistics (frequencies, percentages) were calculated for each question. **Results:** There were 90 Texas respondents, most were female (n=58; 64%), white (n=74; 82%), and 45 to 54 years old (n=24; 27%). Eighteen percent of respondents believed that prescription drugs do not impact one's ability to drive, and 41%, depending on the drug category, found it unlikely that an individual would be arrested for impaired driving while taking prescription drugs. In addition, 29% of respondents who reported drug use reported taking a drug with alcohol (polysubstance use); 33% of respondents who reported drug use reported taking a drug and operating a motor vehicle; and 24% of respondents who reported drug use reported taking drugs for a chronic pain condition. **Conclusion:** While the results are exploratory, the findings highlight the need for future research, as well as identify areas for potential educational efforts. To increase robustness for future studies, the pilot survey should be validated.

Save the Date: Texas Public Health Association Education Conference (Virtual): Resilience in Public Health

Texas Public Health Journal 2022;74(1):13

COVID-19 and Injury Connections: A Literature Review

ABSTRACT

Objective: To identify, catalog, organize, and describe the COVID-19 and injury scientific literature by reviewing published articles in 2020 on 17 injury categories. **Data Sources:** A key word search of the SafetyLit® bibliographic database was performed to identify relevant published articles in the broad field of injury prevention and safety promotion. **Results:** We identified 473 unique articles on our 17 injury categories (articles could be in more than one category). The injury categories of suicide and intimate partner violence yielded the greatest numbers of articles, with 160 (34%) and 134 (28%), respectively. Those related to trauma (n=94), road traffic (n=67), and child abuse (n=42) followed. Between April and November 2020, an average of 57 articles were published monthly. Regarding the geographic regions of focus of the articles, 40% were from North America, 26% from Europe, 23% from Asia, 6% from Oceania, 3% from South America, and 2% from Africa. Forty different countries were identified. The United States was the most common country (n=128; 38%), followed by the United Kingdom (n=43; 13%). The remaining top ten countries with the most number of articles were as follows: India (n=26), Australia (n=17), Italy (n=13), Iran (n=12), China (n=10), Bangladesh (n=8), Canada (n=7), and France, Ireland, Japan, and Spain (n=6 each). A compendium of these articles was created that contains selected bibliographical information, including hyperlinks. **Conclusion:** The authors believe that this is the first report to explore the scientific literature regarding COVID-19 that included a wide range of injury categories. Their findings indicate the existence of a sizable, growing, and diverse body of published articles on countries from around the world.

Evaluating Law Enforcement Officers' Level of Confidence in Administration of Narcan® (naloxone) for Opioid Overdose Reversal Following Training

Erica Beaty, MSN, RN, CHSE; Phyllis Hooten, PhD, RN-BC; Taylor Ratcliff, MD, FACEP, FAEMS; Courtney Shaver, MS; Captain Perry Moose, Master Peace Officer
Texas Public Health Journal 2022;74(1):19-22

ABSTRACT

Background: Opioid overdose-related deaths have increased substantially over the last several years, especially with COVID-19. Within hospital settings, Narcan® (naloxone) has been used to reverse the lethal effects of opiate overdose for decades. Despite the 2015 Texas Legislation allowing law enforcement officers (LEOs) to administer naloxone to community opioid overdose victims, it varies across the state if LEOs have the needed training and equipment to do so. **Purpose:** A public health initiative in one rural Texas county partnered a medical center and sheriff's department to train deputies on naloxone administration. Because limited research exists on LEOs' confidence regarding naloxone administration, a study was conducted during the public health initiative. **Methods:** A mixed-methods pre/post-intervention study design was used. The sample consisted of 25 sheriff's department employees, 23-62 years of age, who attended the training. Data collection involved participants completing a research team-designed survey prior to, immediately after, and six months after the training. **Results:** The median score on all items increased when comparing pre-education to immediately post-education surveys. The largest increase was the belief that naloxone administration within community settings saves lives (Pre: median=10; Post: median=100). The median score on confidence of ability to maintain opioid victim's safety doubled when comparing pre- to post-education scores (Pre: median=50; Post: median=100). Although only eight participants completed the six months follow-up survey, the median score on all items was 100. **Summary Statement:** Study findings suggest training LEOs positively impacts their confidence level for administering naloxone and increases their appreciation for the life-saving measure. One study implication is the need for more educational opportunities promoting the use of naloxone in community settings. The project provides evidence that partnering local law enforcement and community hospitals is an effective public health response to the opioid crisis.

Use of Survivorship Care Plans by Texas CoC-Accredited Cancer Programs, 2020

Melissa Dunn MPH, Lauren Milius CHES, Amanda Ivarra CHES, Maria Cooper PhD, Nimisha Bhakta MPH
Texas Public Health Journal 2022;74(1):23-27

ABSTRACT

Background: Survivorship care plans (SCPs) are records of cancer survivors' treatments, medications, and plans for future care. From 2012-2019, Commission on Cancer (CoC)-accredited cancer programs were required to provide cancer survivors with SCPs to maintain accreditation. Following changes to the 2020 CoC Standards, SCPs are no

longer required, although programs are encouraged to continue providing them. **Purpose:** The purpose of this paper is to understand CoC-accredited cancer programs' current use of SCPs, challenges to providing SCPs, and planned changes to SCP use following changes to the 2020 CoC Standards. **Methods:** The 66 Texas CoC-accredited cancer programs were sent a cross-sectional electronic survey that covered current use of SCPs, metrics around completing SCPs, and intended changes to SCP use. The response rate was 42%. Descriptive statistics were calculated using SPSS and Microsoft Excel. **Results:** The study found that of respondents, most CoC-accredited cancer programs are currently using SCPs. On average, these programs provide SCPs to 57.2% of their patients. Less than half of respondents integrate their SCPs into their electronic health record (EHR). Nurses were most frequently responsible for preparing and reviewing SCPs with patients. All respondents said that their SCPs cover patient treatment detail and schedule for follow-up visits. Nearly all respondents said that the costs of preparing an SCP are not reimbursable. The two most commonly cited barriers to providing SCPs were: the process is too time-consuming and there is a lack of staff to prepare the SCP. **Conclusions:** Most CoC-accredited cancer programs plan to continue use of SCPs despite changes to the CoC Standards in 2020. However, barriers to SCP development, EHR integration, and delivery persist. **Public health significance:** Efforts to reduce the barriers identified from this survey will be critical to achieving high quality cancer survivorship care in CoC-accredited cancer programs.

TPHA Announces a New Institution/Agency Membership Category

Texas Public Health Journal 2022;74(1):28

The Role of Scientific Mistrust, the Anti-Science Movement, and Public Health

Kurt W. Smith, PhD, MPA; David Smith, PhD

Texas Public Health Journal 2022;74(1):29-30

ABSTRACT

In a recent study conducted among college-aged students in Texas, we explored the erosion of confidence in science as a legitimate method to interpret the world around us, even among those engaged in post-secondary education. Reasons and public health ramifications for rejecting scientific inquiry were explored as these students take their place in the life and economy of Texas. Correlations were found between a mistrust of science and views toward evolution, global warming, and vaccination for COVID-19.

Publication Opportunity for National Institutes of Health All of Us Participants

Texas Public Health Journal 2022;74(1):31

Volume 73, Issue 4: Fall 2021

Message from the TPHA President

Lisette K. Osborne, RN-BC, MSN, CHEP (2021-2022)
Texas Public Health Journal 2021;73(4):2-3

Commissioner's Comments: Catching Up After COVID-19: Addressing Routine Cancer Screenings

Dr. John Hellerstedt, MD
Texas Public Health Journal 2021;73(4):4-5

Poison Control

Pediatric *Rhaphiolepis indica* ingestions reported to Texas poison centers

Mathias B. Forrester, BS, Morgan Click, BSN, RN, Eric Anthony Smith, MSIS
Texas Public Health Journal 2021;73(4):6-7

Database Review

Publicly Available Database: National Federation of State High School Associations

Mathias B. Forrester, BS
Texas Public Health Journal 2021;73(4):7-10

Public Health Research Brief Report

Medical Spanish Track for Family Medicine Residents: A pilot to improve the care of Spanish-speaking patients

Laura Porterfield, MD; Tran Cao, MD
Texas Public Health Journal 2021;73(4):11-13

ABSTRACT

Background: Patient-clinician language concordance has a significant impact on quality of patient care. Patients with limited English proficiency who are cared for by physicians who speak their native language demonstrate higher patient satisfaction, better control of chronic diseases, decreased likelihood of medication problems, and improved rates of treatment of mental health symptoms. In Texas, where over a quarter of the population reports speaking Spanish at home, the lack of language concordance between these patients and their providers represents a significant public health concern. Incorporating Spanish language training into primary care residencies represents a potential intervention to help alleviate this gap.

Methods: Based on resident interest and the relative paucity of Spanish-speaking physicians, a Medical Spanish Track was started as part of the Family Medicine Resident Program at the University of Texas Medical Branch. The track is longitudinal over the course of the three-year residency training and incorporates virtual courses, tandem clinics with a fluent faculty, monthly sessions at a volunteer clinic for Spanish-speaking asylees, a two-week immersion experience, and repeat assessments with the Clinical Cultural and Linguistic Assessment over the course of residency.

Discussion: The Medical Spanish Track as part of residency training represents a potential model that could improve the quality of care and health outcomes of Spanish-speaking patients. If successful, implementation of similar models in other primary care residencies and training programs for health professionals could increase the percentage of the workforce with Spanish proficiency and thus improve care for the large Spanish-speaking segment of Texas' population.

Call for Abstracts - TPHA Virtual Annual Education Conference

Texas Public Health Journal 2021;73(4):14

Book Review

Book Review: Preventing the Next Pandemic: Vaccine Diplomacy in a Time of Anti-Science

Carol Galeener, PhD
Texas Public Health Journal 2021;73(4):15

Original Research Articles

Emergency Department Utilization among Patients with Schizophrenia in North Texas

Mikyoungh Lee, PhD, RN, Marie-Anne Demuynck, PhD, Carol L. Perryman, PhD, MLIS
Texas Public Health Journal 2021;73(4):16-23

ABSTRACT

Background: Individuals with schizophrenia have many co-occurring mental, behavioral, and physical health issues and utilize health services considerably. Their emergency department (ED) visits in Texas have been increasing significantly.

Purpose: This project examined ED utilization by patients with schizophrenia in North Texas.

Methods: A retrospective study was conducted using the Texas Health Care Information Collection data obtained from the Dallas-Fort Worth Hospital Council. We investigated whether ED visits and healthcare charges varied by demographics and identified reasons for ED visits by patients with schizophrenia between 2013-2015 from 91 hospitals in the North Texas region.

Results: Out of the 474,853 ED claims of mental health services, 113,537 (23.91%) ED claims were by patients with schizophrenia. The ED claims of these patients increased at higher rates than the ones for all mental health services over three years. The mean charges of ED claims per patient increased by 30.97% over three years. ED claims with schizophrenia were more prevalent in males and the Black population. The most frequent primary diagnoses in ED claims were Schizophrenic Disorders (14.00%), Episodic Mood Disorders (8.71%), and Symptoms involving the Respiratory System and Other Chest Symptoms (6.23%). The common comorbid conditions brought by these patients when visiting ED included Tobacco Use Disorder (38.8%), Unspecified Essential Hypertension (27.05%), Long-Term Current Use of Other Medications (12.83%), Unspecified Bipolar Disorders (11.95%), and Diabetes Mellitus (10.87%).

Conclusion: This study findings support the need for effective coordinated public health services to patients with schizophrenia. Further research and predictive models are needed to identify strategies for patients with schizophrenia to receive appropriate health care services and prevent avoidable ED visits and health care costs.

Publication Opportunity-All of Us Research Program

Texas Public Health Journal 2021;73(4):23

COVID-19 Vaccination Rates, Intention to Vaccinate, and Predictors of Vaccination among Texas Nurses

Sandra Branson, PHD, MSN, RN; Barbara Hekel, PhD, MPH, RN; Eunjung Lim, PhD; Alexandra Michel, PhD, RN/CNM; Deborah Mattheus, PhD, RN/NP; Gregory Zimet, PhD; Holly B. Fontenot, PhD, RN/NP
Texas Public Health Journal 2021;73(4):24-29

ABSTRACT

Background: Nurses are at a higher risk than the general public for contracting COVID-19. Ensuring vaccination is one measure to limit the pandemic.

Purpose: To assess COVID-19 vaccination status, intention, and hesitancy among Texas nurses three months after emergency use authorization vaccine approval.

Methods: Online survey of Texas nurses.

Results: Nearly half of the nurses worked in a hospital setting, and 88% intended to or had been vaccinated. The odds for no intention to vaccinate were 4.23 times higher among those who tested positive or did not take a COVID-19 test. No intent to vaccinate had lower mean general (favorable) COVID-19 vaccine attitudes (Mean=3.2, standard deviation [SD]=1.1) and higher mean lack of perceived safety of the vaccine (Mean=4.0, SD=1.1).

Summary: That 12% of Texas nurses who responded to the survey do not intend to receive the vaccine is a call to action. Interventions tailored to address previous COVID-19 disease, vaccine attitudes, lack of perceived severity, and vaccine safety are needed.

Factors associated with Texas Nurses' Consideration to Leave the Nursing Workforce: Impact of the COVID-19 Pandemic

Barbara Hekel, PhD, MPH, RN; Sandra Branson, PhD, MSN, RN; Eunjung Lim, PhD; Alexandra Michel, PhD, RN/CNM; Holly B. Fontenot, PhD, RN/NP
Texas Public Health Journal 2021;73(4):30-34

ABSTRACT

Background: Nurses provide a majority of the patient care in hospital and long-term care settings. The state of Texas is expected to have the third largest shortage of nurses by the year 2030, and currently the lack of registered

nurses (RNs) is growing. The COVID-19 pandemic has significantly impacted Texas over the last 18 months, and there is grave concern for the future impact on the Texas nursing workforce.

Purpose: Assess specific demographic and COVID-19-related predictors of intention to leave the workforce in Texas nurses.

Methods: Online survey of Texas nurses.

Results: 311 Texas nurses completed the survey; nearly 19% considered leaving the nursing workforce, with the two most common reasons being an unsafe work environment and family/caregiver strains. Nurses who felt strengthened in their commitment to nursing had lower odds of leaving the nursing workforce.

Summary: The outcomes of this study suggest that a significant nursing shortage could be looming in Texas if interventions are not developed to support nurses in their current role, particularly around safety and balancing family/caregiver needs. The results provide additional parameters regarding workforce planning at the hospital and state level. Now is the time for nurse educators, employers, and policy-makers to expand policies and implement targeted programs to retain nurses in the workforce.

It's Not Just Opioids: Polysubstance Overdose Deaths in Harris County, Texas 2013-2018

Bethanie S. Van Horne, DrPH, MPH; Molly O'Neil, MS; Rachael J. Keefe, MD, MPH; Dorothy Mandell, PhD
Texas Public Health Journal 2021;73(4):35-39

ABSTRACT

Background: Drug overdose is the leading cause of injury-related death in the U.S. Although the opioid epidemic dominates national and state priorities, overdose deaths involving polysubstance use are also on the rise and the prevalence of specific drugs varies within and across regions. The purpose of this study was to examine trends in polysubstance overdose deaths over a 6-year period in Harris County, Texas.

Methods: Fatal overdose data from 2013-2018 from the Harris County Institute of Forensic Sciences were used. Deaths were grouped by the class of substance(s) included in the cause of death. Descriptive statistics and linear regression were used to describe the drug overdose patterns and trends overtime. Spatiotemporal trends of age-adjusted single and polysubstance overdose death rates over the study period were analyzed at the census tract level using an emerging hot spot analysis.

Results: A total of 3,062 deaths due to toxic overdose were included, with an average increase of 44 deaths each year ($p=0.007$). Nearly 50% of deaths had two or more classes of drugs in their system at the time of death. There were significant increases in all overdose deaths, polysubstance involved deaths, and polysubstance deaths involving opioids, cocaine, methamphetamines, ethanol, and antidepressants/antipsychotics. Of the 786 census tracts in Harris County, 43 (5.5%) indicated significant spatiotemporal clustering and were classified as polysubstance overdose hot spots.

Public Health Significance: Our findings suggest that substance use screening, prevention, and treatment strategies should address concurrent use of multiple substances. Existing screening protocols need to be updated to be responsive to polysubstance users, specific substances common to the community, and the additional time needed to discuss multiple substances. Timely surveillance data that use mapping techniques and includes polysubstance identification could be extremely useful to help inform updated screening tools, and target outreach and intervention in locations most impacted.

Volume 73, Issue 3: Summer 2021

Message from the TPHA President

Lisette K. Osborne, RN-BC, MSN, CHEP (2021-2022)
Texas Public Health Journal 2021;73(3):2-3

Commissioner's Comments: Vaccination Now and for the Future

Dr. John Hellerstedt
Texas Public Health Journal 2021;73(3):4-5

Poison Control

Twenty Years of Animal Bites and Stings Reported to Texas Poison Centers

Mathias B. Forrester, BS Eric Anthony Smith, MSIS
Texas Public Health Journal 2021;73(3):6-7

Database Review

Publicly Available Database: Food and Drug Administration Adverse Event Reporting System (FAERS)

Mathias B. Forrester, BS
Texas Public Health Journal 2021;73(3):7-8

Public Health Research Brief Report

Prevalence of SARS-CoV-2 Detected in Student Athlete Population on a Mid-Size University Campus During the First Week of Classes

Miranda Rice, Emily S. Bailey
Texas Public Health Journal 2021;73(3):9-10

Public Health Practice Commentary

Eight Tips for Reducing Vaccine Hesitancy in Texas: A.R.T.I.S.T.R.Y.

Christine Cardinal, JD, MPH
Texas Public Health Journal 2021;73(3):11-12

Book Review

The Code Breaker: Jennifer Doudna, Gene Editing, and the Future of the Human Race by Walter Isaacson, © 2021

Carol Galeener, PhD
Texas Public Health Journal 2021;73(3):13

Original Research Articles

Physical Activity Behaviors and Park Use Among Members of a Mid-Sized University

Isabelle S. Kusters, PhD, MPH; Julianna M. Dean, PhD, MS; Mark Sommer, MS; Denise B. Cazes, MA
Texas Public Health Journal 2021;73(3):14-20

ABSTRACT

Background: Physical activity (PA) is a vital component of a healthy lifestyle. Strong evidence demonstrates an association between PA and reduced risk of adverse physical and mental health outcomes. However, participation in recommended levels of PA may be affected by personal and environmental enablers and barriers such as attitudes and motivation, time or other accessibility factors, and the amenities of nearby parks. The purpose of this study was to determine the PA behaviors of the members of a mid-sized public university, understand local park usage, and identify barriers to the use of parks as spaces for PA.

Methods: In total, 1,248 respondents completed a short electronic survey covering demographic information, type and frequency of PA, usual PA location, frequency of park use, and barriers to park use.

Results: Most (80.0%) self-rated their health as "Good" or higher, although 58.6% were categorized as overweight or obese. About 80.9% indicated they completed some form of PA in the past month, and the most reported time of PA was after 5pm. There was a significant difference in location of PA between those with "Good" health and those with "Poor" health between 9am and 5pm ($p = 0.016$). Most respondents indicated engagement in PA on weekends

and weekdays; approximately 6.4% participated only on weekends. Nearly half of respondents (49.3%) identified their usual PA location as home or in their neighborhood; only around 15.3% indicated using a park as their usual PA location. The most reported type of PA was walking or running, and these were the top activities in parks and neighborhoods. About 31.1% of respondents indicated they had not visited a park in the last three months. The top reasons for not using local parks were time, weather, motivation, and park location. Respondents indicated that important park amenities included well-maintained areas, a relaxing atmosphere, and parking.

Conclusion: Our findings provide valuable information on PA barriers and desired park amenities in a large geographic area such as that which the host university serves. Future research should explore the most efficient and effective ways to mitigate these barriers and improve park amenities at the community level, as well as programs to encourage neighborhood-based PA.

Disproportionate COVID-19 mortality among Hispanics in Travis County, Texas, March-August 2020

Vivienne Heines, MPH; Zoe Thompson, MPH; Hailey Rucas, MPH; David Zane, MS
Texas Public Health Journal 2021;73(3):21-23

ABSTRACT

COVID-19 has rapidly displaced all other major causes of mortality among the Hispanic population in Travis County, Texas. Austin Public Health (APH) used case-based surveillance and case investigation data to understand the demographic characteristics of deaths among persons with laboratory-confirmed COVID-19 during the first six months of the pandemic (March-August 2020). Among 422 Travis County decedents, 56.4% were male, 48.6% were Hispanic, and 72.4% were age 65 years or older. Among decedents, the age-adjusted COVID-19 mortality rate was nearly four times as high for Hispanics than for non-Hispanic Whites. Hispanic decedents were frequently younger, with a median age of 68 years compared to 82 years for non-Hispanic Whites. These findings regarding health disparities related to COVID-19 have implications for public health practice that can assist in guiding the pandemic response. By identifying the disproportionate impact of COVID-19 on Travis County's Hispanic population, this analysis can shape education, outreach, and testing needed to limit COVID-19 transmission and mortality.

Fall 2020 COVID-19 Growth: A Texas University Susceptible-Infected-Removed (SIR) Model

Mike Penuliar, MA, MA, MBA; Candice Clark, MA; Debbie Curti, MEd; Cathy Hudson, MPH; Billy Philips, PhD, MPH
Texas Public Health Journal 2021;73(3):24-28

ABSTRACT

The global pandemic of 2020 initiated by the novel coronavirus SARS-CoV-2, causing coronavirus disease 2019 (COVID-19), has uprooted the education system of the United States. In fall 2020, as American colleges and universities resumed their regular instruction to the best of their abilities, outbreaks began to emerge, and university towns across the country became virus hotspots. Unfortunately, many of those outbreaks were in Texas' university towns. With many concerned, this study provides a highly accessible and modifiable epidemiological tool known as a susceptible-infected-removed (SIR) model, uniquely tailored for educational institutions. Using case and community data, this tool allows users to see the impact of COVID-19 both historically and predictively. The results of an exemplar model using a large public research university in Texas, Texas Tech University, are discussed.

Correlation Between US Mortality and Exposure to Ambient Ozone and PM_{2.5}

Gordon Gong, MD, MS
Texas Public Health Journal 2021;73(3):29-37

ABSTRACT

Objectives: This study explores the association between US mortality and exposure to air pollutants: ambient ozone and particulate matter with diameter < 2.5µM (PM_{2.5}); it elucidates exposure to these pollutants in rural and urban areas of the United States

Methods: Statistical data used for this study was obtained from Center for Disease Control (CDC) websites i.e., including concentrations values for PM_{2.5} and ambient ozone (2012- 2014); age-adjusted rates for seven leading causes of death (heart disease, cancer, chronic lower respiratory disease, accidents, stroke, Alzheimer's, diabetes); and all-cause mortality (2016).

Results: Analysis by the general linear model indicates that a significant, positive correlation exists between mortality by each leading cause and mean personal exposures to PM2.5 and ozone (except ozone-cancer mortality correlation) when controlled for covariates. Mean personal exposure to PM2.5 was lower in rural areas when compared to urban areas within each state except Florida and Wyoming. In Texas, counties with the highest population densities had the highest mean personal exposure to PM2.5.

Conclusion: A positive correlation exists between mean personal exposure to PM2.5 and ozone and mortality by each cause studied with one exception in the United States of America. Mean personal exposure to PM2.5 was lower in rural areas when compared to urban areas except in Florida and Wyoming. Texans living in counties with a higher population density were exposed to higher mean personal exposure to PM2.5. Consequently, it becomes imperative for federal and state governments to liaise with industry and community stakeholders in ensuring a reduction in air pollution. This should immediately improve the health and well-being of the general populace and shall ultimately, increase life expectancy in the United States.

TPHA Remembers...

Texas Public Health Journal 2021;73(3):38-39

Volume 73, Issue 2: Spring 2021

Message from the TPHA President: Ancient Egyptians, Health, and Public Health

Raouf Arafat, MD, MPH

Texas Public Health Journal 2021;73(2):2-3

From the Editor

Texas Public Health Journal 2021;73(2):3

Commissioner's Comments: Marking Public Health Week as New Hope Springs Forth

Dr. John Hellerstedt

Texas Public Health Journal 2021;73(2):4

Poison Control

Impact of the COVID-19 Pandemic on Suspected Attempted Suicides (especially in children) and Exposures to Selected Substances Used to "Prevent" or "Treat" COVID-19

Joshua Day, MBA, Pharm.D. Candidate; Dr. Jeanie Jaramillo-Stametz, Pharm.D., MS

Texas Public Health Journal 2021;73(2):4-7

COVID-19 Vaccine Adverse Event Reports Received by the Vaccine Adverse Event Surveillance System from Texas

Mathias B. Forrester, BS

Texas Public Health Journal 2021;73(2):7-8

Database Review

Publicly Available Database: Vaccine Adverse Event Reporting System (VAERS)

Mathias B. Forrester, BS

Texas Public Health Journal 2021;73(2):8-9

Public Health Practice Commentary

Medical Student Community Service During the COVID-19 Pandemic

Daniel Szabo

Texas Public Health Journal 2021;73(2):10

Book Review

Think Again: The Power of Knowing What You Don't Know by Adam Grant, © 2021

Carol Galeener, PhD

Texas Public Health Journal 2021;73(2):11

Public Health Research Brief Report

Leveraging predictive modeling for public health efforts - COVID-19 forecast for Texas

Subi Gandhi, PhD; Prem Purswani, BS; Pushpak Gupta, BS; Mahesh Sharma, MS

Texas Public Health Journal 2021;73(2):12-14

Original Research Articles

Diabetes and Rurality: Discrepancy in Access to Care

M. Jade Zimpfer, Gene L. Theodori, Amanda W. Scarbrough

Texas Public Health Journal 2021;73(2):15-20

ABSTRACT

In order for a diabetic patient to maintain a healthy life, careful attention of an endocrinologist is required. A diabetic's reliance on the availability and accessibility of an endocrinologist can prove to be precarious when there are very few or none in his/her spatial proximity. Previous studies suggest certain socioeconomic variables (race, sex, and rurality) substantially impact an individual's susceptibility to diabetes. In this paper, we used the most cited socioeconomic variables in the extant literature to designate whether or not a county should be labeled 'at-risk.' 'At-

risk' counties were denoted as such based on the relationship between the variable examined and the diabetic prevalence rate for the state of Texas. Additionally, we examined diabetes prevalence among 'at-risk' counties and the location of endocrinologist offices to assess the spatial accessibility for diabetic patients in potentially accessing the appropriate health care for the disease. Analyses revealed that using a combination of population density and median income criteria produced more counties in Texas labeled 'at-risk' than when using a more restrictive combination of several previously-cited socioeconomic variables, or when identifying 'at-risk' counties using race alone (proportion of African-American or Hispanic residents). Moreover, results show that rural counties labeled 'at-risk' are often the least likely to have an endocrinologist office in the county or in surrounding counties. Additionally, many counties with higher than the state prevalence for diabetes do not have endocrinologist offices; rather, endocrinologists are more likely to be located in densely populated counties. We conclude that there is a discrepancy in diabetic patients in counties defined as 'at-risk' having accessibility to appropriate care for their disease.

Physician Awareness of Reporting Requirements and Recommended Diagnostics for Measles, Mumps, and Rubella – Collin County, TX

Samreen Asghar, Daphne Lynch, MPH

Texas Public Health Journal 2021;73(2):21-24

ABSTRACT

With the threat of resurgence in vaccine preventable diseases, there is the growing need for improved public health outreach to local physicians on notifiable condition reporting and diagnostic testing for measles, mumps, and rubella. Collin County Health Care Services (CCHCS) examined physician knowledge via a physician survey on condition reporting requirements for measles, mumps, and rubella, as well as the familiarity of preferred diagnostics for these diseases. The survey targeted private pediatric clinics and urgent care facilities within the jurisdiction. CCHCS contacted 116 health care facilities asking for a physician from the facility to participate in the study. Nineteen health care facilities elected to participate, with one physician from each facility completing the survey. We asked about the Department of State Health Services (DSHS) and Centers for Disease Control and Prevention (CDC) preferred testing methods. Questions about DSHS preferred laboratory testing revealed, 73.7% of respondents answered correctly for measles (PCR via throat swab), 68.4% for mumps (PCR via buccal swab), and 52.6% for rubella (PCR via pharyngeal swab). Of those who responded with the correct DSHS preferred method of testing, only 50% measles, 61.5% mumps, and 70% had the capability to collect the specimen. Results from diagnostic questioning concluded that healthcare facilities need additional guidance. The physicians that answered correctly on recommended diagnostic criteria indicated further that the capability to collect the specimen at their facility was lacking. This is an identified area of opportunity for public health. Local public health should expand outreach to include additional testing guidance. To successfully control the spread of disease, it is imperative that physicians be familiar with reporting guidelines and preferred diagnostics.

Determination of the Presence and Concentration of Heavy Metals Found in Crumb Rubber Mulch in Bryan–College Station Metropolitan Area Parks

Leanne Fawkes, MPH, Brenda V. Gonzales, MPH, Kathryn Klumb, MPH, Christine Yeboah-Agyapong, MD, MPH, Garrett T. Sansom, DrPH, MPH

Texas Public Health Journal 2021;73(2):25-29

ABSTRACT

Scrap tire reuse and disposal in the United States is a growing environmental and public health concern. Scrap tires are increasingly being made into crumb rubber for use in parks and playgrounds. The use of crumb rubber has risen over the last few decades as a safer alternative to traditional materials in protecting children from falls. There have been rising concerns that crumb rubber may contain toxic levels of heavy metals and may be placing children in harms way. This study analyzed the presence and concentration of fourteen metals from a representative sample of parks in the Bryan–College Station Metropolitan area in Texas (N=16). Though sampled results were found to contain Arsenic (As), Barium (Ba), Bromine (Br), Cadmium (Cd), Copper (Cu), Iron (Fe), Lead (Pb), Titanium (Ti), and Zinc (Zn), all levels of these metals were below the guideline limits set by the United States Consumer Product Safety Commission as well as the European Committee for Standardization guidelines. Additional research is required to further assess the safety of parks and playgrounds, specifically targeting additional compounds such as polycyclic aromatic compounds and volatile organic compounds.

TPHA Celebrates National Public Health Week!

Celebrating Our TPHA Members and Their Commitment to Public Health

Catherine D. Cooksley, DrPH, CPH

Texas Public Health Journal 2021;73(2):30-34

Texas Public Health Association Governing Council Position Paper on Public Health Funding and Infrastructure

Catherine D. Cooksley, DrPH, CPH

Texas Public Health Journal 2021;73(2):35-39

Volume 73, Issue 1: Winter 2021

Message from the TPHA President: Public Health Funding, Infrastructure and TPHA Position Paper

Raouf Arafat, MD, MPH

Texas Public Health Journal 2021;73(1):2-3

From the Editor

Texas Public Health Journal 2021;73(1):3

Commissioner's Comments: Mental Health, Resilience and the Pandemic

Dr. John Hellerstedt

Texas Public Health Journal 2021;73(1):4

Poison Control

Twenty Years of Opioid Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS, Eric Anthony Smith, MSIS

Texas Public Health Journal 2021;73(1):5-6

Book Review

Stuck: How Vaccine Rumors Start – And Why They Don't Go Away by Heidi J. Larson

Carol Galeener, PhD

Texas Public Health Journal 2021;73(1):7

Public Health Practice Commentary:

Texas Can Afford the Best Public Health System!

Eduardo Sanchez, MD, MPH, FAAFP

Texas Public Health Journal 2021;73(1):8-9

Public Health Practice Review:

Natural Disasters, Their Health Effects, and the Significance of Disaster Epidemiology: A Review

Sean Liu, BA and Abiodun Oluyomi, PhD

Texas Public Health Journal 2021;73(1):10-14

ABSTRACT

The purpose of this paper is to review common natural disasters in Texas, along with their health effects on affected populations, in order to understand the benefit of integrating disaster research efforts into emergency response systems. The topic of natural disasters is important to address because many types of disasters in Texas are becoming more common or more intense. When disasters strike, all populations within the geographic area of impact feel the effects. Of the consequences following a disaster, the multitude of health effects are one of the most pressing to address. Immediate impacts include physical injuries, such as drownings and burns. Intermediate impacts include communicable diseases and starvation. Long-term impacts include chronic diseases and mental health disorders. To fully investigate these health effects, there needs to be a robust method of integrating disaster epidemiological studies into the immediate disaster emergency response. Disaster emergency response encompasses the actions of government and independent entities to provide immediate relief, such as provision of health services and allocation of resources, to groups and individuals impacted by natural disasters. Integration of disaster epidemiological research into the disaster emergency response could help fill in current gaps in knowledge, such as the long-term health effects of natural disasters on chronic disease and child development.

Original Public Health Research:

Racial Disparities in COVID-19 Cases across Zip Codes in Harris County

Minji Chae, MS, and Omolola Adepoju, PhD

Texas Public Health Journal 2021;73(1):15-19

ABSTRACT

Background: National reports suggest that racial minorities bear the heaviest burden of COVID-19. However, others have suggested the need for rigorous analyses and the importance of context when reporting racial disparities in COVID-19 cases. Texas' increasing cases are over-represented in Harris County, which leads in the counts of cases and mortality in the state. This study examined COVID-19 in Harris County to evaluate the racial groups most susceptible and the implications these findings may have. **Methods:** This study used publicly available county-level COVID-19 case data obtained from the Harris County Public Health COVID-19 Dashboard, from March 4, 2020 to July 14, 2020. The data were merged with the 2020 Houston State of Health Indicator data characteristics. A multivariate linear regression model was used to examine the relationship between COVID-19 cases per 1,000 population by racial group, adjusting for education level, socioeconomic status, elderly population living alone, and household size. **Results:** Our results suggest that a unit increase in the proportion of Hispanic residents in a zip code is associated with a 7% increase in COVID-19 cases per 1,000 population ($p=0.004$). A positive relationship was observed for non-Hispanic Black residents and a negative relationship was observed for non-Hispanic White residents; however, neither was statistically significant. Our findings also indicate that a unit increase in the proportion of residents living below poverty in a zip code is linked to a 18% increase in COVID-19 cases per 1,000 population ($p=0.004$). **Conclusion:** Harris County zip codes with higher proportions of Hispanic residents are disproportionately affected by the COVID-19 pandemic. Targeted interventions and messaging should focus on the Hispanic community, as the county seeks to flatten the curve and reduce the burden of infections.

Perspectives of Texas School Nurses on Providing Sexual and Reproductive Health Education and Resources to Teens

Emily Gao, MD; Terry Greenberg; Deborah Tapler, PhD, RN, CNE; May Lau, MD, MPH
Texas Public Health Journal 2021;73(1):20-24

ABSTRACT

School nurses are recognized by teens as important sources of sexual and reproductive health information. In many southern states, such as Texas, education in schools on sexual and reproductive health has primarily been abstinence-based. This study examined the perspectives of middle and high school nurses in Texas on the provision of sexual and reproductive health information and resources to teens. A seven-question written survey was administered at a state-wide school nurse meeting. Of the 69 school nurses who completed the survey, most of the nurses agreed that providing teens with medically accurate information about sexual and reproductive health is important, and most reported that they had the knowledge to provide this education. Most nurses reported that their schools limit the sexual and reproductive information they can provide and their ability to distribute condoms to students. In Texas, school nurses might play an important role in creating change within their schools and school districts so that more comprehensive sexual education and resources are provided.

Save the Date: TPHA Virtual Education Conference

Texas Public Health Journal 2021;73(1):24

Comparing Risk Factors for Past 30-day E-cigarette and Combustible Tobacco Use: A Longitudinal Analysis of the Texas Adolescent Tobacco and Marketing Surveillance Study (2014-2017)

Udoka Obinwa, MPH, PhD; Stephanie L. Clendennen, DrPH; Shazia Rangwalam MPH; Aslesha Sumbe, MPH, Kathleen R. Case, DrPH; Melissa B. Harrell, PhD
Texas Public Health Journal 2021;73(1):25-32

ABSTRACT

Significance: Youth use of e-cigarettes is reaching 'epidemic proportions,' even as combustible tobacco use is declining. Comparison of risk factors that are uniquely associated with e-cigarette and combustible tobacco use among adolescents is warranted. **Methods:** Six waves of data from the Texas Adolescent Tobacco and Marketing Surveillance (TATAMS) study ($n=3907$; $N=461,069$; 2014-2017) were used in this analysis. A random intercept logistic regression model was used to compare intrapersonal, interpersonal, and environmental risk factors for use of both products based on the Social Ecological Model. **Results:** Risk factors that were significantly associated with both past 30-day use of e-cigarette and combustible tobacco products over time included past 30-day use of marijuana and alcohol, social acceptability of product use, having friends and family members who used the products, and male gender. Increasing age, worse academic performance, higher sensation seeking score, higher recall of social media promotion in the past 30 days, and lower positive affect score were associated with past 30-day use of combustible tobacco only. White race was associated with past-30 day use of e-cigarettes only. **Conclusion:**

Involving peers and parents in preventive interventions designed to reduce uptake of these products is paramount, as is the need to address other substance use, like alcohol and marijuana. Efforts should also be made to create a social climate that makes tobacco use (e-cigarettes and combustible products) less acceptable and desirable.

Advancing Diabetes Education One Click at a Time: Telehealth Glycemic Control Program for Rural Texans

Mia M. Painter, DNP, RN, FNP, Jeannette T. Crenshaw, DNP, RN, LCCE, FACCE, IBCLC, NEA-BC, FAAN,
Richard E. Gilder, RN, BSN, MS, CNOR, BCNI

Texas Public Health Journal 2021;73(1):33-38

ABSTRACT

Background: The number of Americans diagnosed with type II diabetes mellitus (T2DM) has grown substantially, resulting in an increased cost burden to the United States' healthcare system. Access to self-management diabetes education has been a challenge, particularly for patients in rural communities. New strategies, such as telehealth services, are needed to improve population health by increasing access to diabetes self-management education (DSME), especially in rural settings. **Objective:** The primary objective of this program implementation project was to improve glycemic control and access to DSME in adult patients with T2DM by implementing a telehealth DSME program that provided individualized and ongoing patient education. **Methods:** A pilot telehealth DSME program for a rural primary care setting previously using on site education was implemented. Adult patients with T2DM received DSME using telehealth services between March 1, 2018 and March 1, 2019. Program evaluation measures included patient participation, hemoglobin A1C (HbA1C), anti-diabetic medication adjustments, and six-month sustainability. We compared program evaluation measures from the onsite education only group (n=24) with those of the pilot telehealth program (n=55). **Results:** A mean HbA1C reduction of 1.7% at 3 months with the greatest improvement being 9.4% reduction was measured among telehealth participants. Using telehealth education, barriers to access were reduced resulting in increased patient participation of 34%. **Summary:** Telehealth DSME provided an effective strategy for diabetes self-management education with improved patient participation and glycemic control. **Implications for Nursing:** As diabetes incidence rises in the United States, nurses are tasked with identifying innovative methods for reaching a growing population to provide disease prevention management education. Telehealth programs have the potential to help improve patient access to DSME education thereby improving glycemic control.

TPHA Remembers...

Texas Public Health Journal 2021;73(1):38

Volume 72, Issue 4: Fall 2020

Message from TPHA President

Support Public Health, Support Global Health

Raouf Arafat, MD, MPH

Texas Public Health Journal 2020;72(4):2-3

From the Editor

Texas Public Health Journal 2020;72(4):3

Commissioner's Comments: Promoting Flu Vaccination During the COVID-19 Pandemic

Dr. John Hellerstedt

Texas Public Health Journal 2020;72(4):3-4

Poison Control

Pattern of Vitamin Exposures among Children in Relation to the COVID-19 Pandemic

Brandi Corpier, PharmD Candidate, Dr. Jeanie Jaramillo-Stametz, PharmD

Texas Public Health Journal 2020;72(4):4-5

Google Trends Patterns of Cleaner and Disinfectant Terms During the COVID-19 Pandemic

Mathias B. Forrester, BS

Texas Public Health Journal 2020;72(4):6-8

Cleaner and Disinfectant Exposures Reported to Texas Poison Centers During the COVID-19 Pandemic

Mathias B. Forrester, BS, Eric Anthony Smith, MSIS

Texas Public Health Journal 2020;72(4):9-11

Public Health Brief Report

One Residency Program's Response to the COVID-19 Pandemic and Educational Experiences Gained

Dalia Nessim, MD, PhD, MPH, Shaadi Khademi, MD, MS, Cynthia Ball, DO, MS, Kevin Moore, PhD, MBA

Texas Public Health Journal 2020;72(4):12-14

Book Review

The COVID-19 Catastrophe by Richard Horton

Carol A. Galeener, PhD

Texas Public Health Journal 2020;72(4):14

Original Public Health Research

Simple COVID-19 Susceptible-Infected-Recovered Model with Social Distancing Levels Across Time: A West Texas Example

Mike Penuliar, MA, MBA; Candice Clark, MA; Scott Phillips, MA; Debbie Curti, MEd; Cathy Hudson, MPH; Billy Philips, PhD, MPH

Texas Public Health Journal 2020;72(4):15-20

ABSTRACT

In the era of the novel coronavirus disease of 2019, COVID-19, there are many who have attempted to model various aspects of how the pandemic would play out, based on when hospitals and health care providers would be overwhelmed. Others have attempted to model the relative effectiveness of various public health attempts to contain it such as social distancing, hand washing, and masking. Still others have made models of the peaks and valleys of reopening the economy with spikes of new infection. A robust approach to each of these applications is the Susceptible-Infected-Recovered (SIR) model that is presented in this manuscript: a simple, practical, and useful model albeit as imperfect as any such attempt at predicting an uncertain and unknown future. Yet, the events can be modeled, predicted, and done within the noise of the situations that affect their validity.

Behavioral Risks among Reproductive-Age Women and Men with Mobility-Related Disabilities in Texas

Lorraine O. Walker, EdD, MPH, Yen T. Chen, MS, Sookja Kang, BSN, Heather Becker, PhD

ABSTRACT

Background: Women with disabilities, a health disparities group, are choosing to become parents, but it is unclear the extent to which they face related disparities regarding key health promotion behaviors associated with perinatal outcomes. Men's health behaviors may also directly or indirectly influence these outcomes. The purpose of this study was to compare the preconception health behaviors of reproductive-age women and men with mobility-related disabilities to their non-disabled counterparts to better understand areas for improving health promotion in this population. **Methods:** We used Texas Behavioral Risk Factor Surveillance System (BRFSS) data for 2013 and 2015 among a subsample of women (non-pregnant) and men age 18-44 years (N = 7,108). Physical disability categorization was based on whether mobility-related disability (MRD) was reported. Health behaviors examined were current smoking status, meeting aerobic physical activity (PA) and muscle strengthening guidelines, and dark green vegetable intake. In addition to frequencies and percentages, logistic regression analyses were used to examine associations between MRD and health behaviors separately for women and men. **Results:** After adjusting for covariates, women with MRD had higher odds of smoking (odds ratio [OR] = 1.77, 95% confidence interval [CI]: 1.03-3.04), not meeting aerobic PA guidelines (OR = 1.82, 95% CI: 1.13-2.92), and having lower dark green vegetable intakes (OR = 1.61, 95% CI: 1.01-2.56). Men with MRD had reduced odds of having lower dark green vegetable intake (OR = 0.50, 95% CI: 0.28-0.88). **Conclusion:** Women of reproductive age who have MRD face increased odds of smoking, being less physically active, and having lower dark green vegetable intake compared with non-disabled women. These areas require increased attention in health promotion programs targeting preconception health of women with MRD.

Exploring the Relationship Between Farmers' Markets, Food Assistance Programs, Food Deserts and Diet-Related Diseases in Texas Census Tracts in 2017

Colleen Burkhardt, B.S.; Todd L. Matthews, PhD; Andrea M. Brace, PhD, CHES
Texas Public Health Journal 2020;72(4):28-32

ABSTRACT

Background: Access to affordable and nutritious foods is vital to maintaining a healthy and well-balanced diet. Individuals living in food deserts are not able to reap the benefits that fresh fruits and vegetable offer and may have a greater risk of developing diet-related diseases. Farmers' markets are one way to bring locally grown and affordable fresh produce to areas lacking supermarkets and grocery stores. This study explores the relationships between locations of farmers' markets, food assistance program access at markets, food deserts, and rates of obesity and diabetes by census tract. **Methods:** Data were collected from the 2017 USDA National Farmers' Market Directory, 2015 USDA Food Access Research Atlas, and 2013 CDC Diabetes and Obesity County Data Indicators. Maps were prepared using ArcGIS. Census tract level relationships were determined using spatial visualization. **Results:** 201 farmers' markets were located in Texas in 2017. The majority (79%) of these markets accepted zero Food Assistance Programs (FAPs). The highest concentrations of farmers' markets could be found around metropolitan areas. Most food deserts do not have any farmers' markets within their boundaries. **Conclusions:** Farmers' markets are not located in the areas of most need. When farmers' markets were located within the boundaries of food deserts, they often did not accept FAPs. Farmers' markets alone are not adequately addressing the issue of food access in the state of Texas. There are mixed spatial relationships linking diet-related diseases to residents who live in food deserts. Community based gardens located in food deserts and cultivated by community members would bring affordable and nutritious foods directly to those who would otherwise not have access to them.

New Public Health Resource: Statewide Behavioral Health Coordinating Council Launches Mental Health Resources Website

Texas Public Health Journal 2020;72(4):34

TPHA Remembers...Robert (Bob) Lee Drummond

Texas Public Health Journal 2020;72(4):35

Volume 72, Issue 3: Summer 2020

Message from TPHA President

Raouf Arafat, MD, MPH

Texas Public Health Journal 2020;72(3):2-3

From the Editor

Catherine D. Cooksley, DrPH, CPH, Editor

Texas Public Health Journal 2020;72(3):3

Commissioner's Comments: Public Health in the Time of COVID-19

Dr. John Hellerstedt

Texas Public Health Journal 2020;72(3):3-4

Poison Control

Where the Cottonmouths are: *Agkistrodon Piscivorus* Geographic Distribution vs Texas Poison Center Caller Counties

Mathias B. Forrester, BS

Texas Public Health Journal 2020;72(3):5

Homemade Slime Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS, Anelle Menendez, MD, CSPI, Eric Anthony Smith, MSIS

Texas Public Health Journal 2020;72(3):6-7

Book Review

Pale Rider: The Spanish Flu of 1918 and How It Changed the World, by Laura Spinney (2017)

Carol Galeener, PhD

Texas Public Health Journal 2020;72(3):7-8

Combatting Disease Transmission: Hospital Point of Entry Hand Sanitation Practice Comparison

Marcia L. Jones DHA, Teresa L. North PhD, and Robin SantaMaria MSN

Texas Public Health Journal 2020;72(3):10-14

ABSTRACT

The practice of hand sanitation in the U.S. is poor, with as few as 5% adequately washing their hands after restroom usage. In comparison, the figure is 89% in Switzerland. The objective of this study was to determine if a low-cost marketing-based effort using prominent poster display would improve hand sanitation practices upon entry into a San Antonio, Texas, hospital. An experimental study design was used, with a control population of 580 participant actions observed over a 3-hour period, duplicated with different test participants 1-week later, when a 70 cm by 86 cm poster was added. Poster presence significantly increased use of the hand sanitizer from 1.21% to 4.31%, $X^2(1, N = 1,160) = 10.41$, $p = .001$, Cramer's $V = .095$. While hand sanitizer use was still low, the significant 4-fold increase suggests marketing-type approaches using non-obtrusive display of inexpensive posters in hospital entryways provide a starting point in educating the public about the importance of hand hygiene in preventing disease spread.

The Distribution of Opioid-Related Emergency Department Admissions and Mortality by Texas County

Meghan Steel, MPH©

Texas Public Health Journal 2020;72(3):15-18

ABSTRACT

The purpose of this study is to describe county-level variations in the epidemiology of the opioid epidemic across the state of Texas. It processes and presents electronically published data from the Texas Department of State Health Services (DSHS) for the purposes of organizing the available data so it can inform the evidence-based distribution of the resources devoted to combating the opioid epidemic. Based on this analysis of the DSHS data, the author concludes that the counties most impacted by the opioid epidemic are not those with the largest populations. While the major population hubs in the state (i.e., Harris, Dallas, and Bexar Counties) have the greatest crude numbers of

opioid-related deaths and emergency department admissions, the population-adjusted morbidity and mortality rates are lower than those in several counties with smaller population sizes. Policy makers looking to mitigate the damage of this impending public health crisis should direct resources to counties with a higher rate of opioid misuse per population, most notably Nacogdoches and Galveston Counties, rather than solely focus on bolstering services in the more populous counties.

Predictors of Nonadherence to Colonoscopy Following a Positive Fecal Immunochemical Test in a Primarily Rural Region of Northeast Texas

Gabriela Orsak, PhD, Carlton M. Allen, MS, Karan P. Singh, PhD, FMSSANZ, FASA, FSMS, and Paul McGaha, DO, MPH

Texas Public Health Journal 2020;72(3):19-23

ABSTRACT

Background: Colorectal cancer is the third most commonly diagnosed cancer in the United States and disproportionately higher in primarily rural Northeast Texas. In order to alleviate barriers to care common in rural areas such as distance to care, patients often complete a fecal immunochemical test at home, only needing a colonoscopy if the test yields positive results. However, many patients fail to follow-up with a colonoscopy following a positive fecal immunochemical test. **Methods:** This study sought to examine the role of medical and sociodemographic factors in predicting nonadherence to colonoscopy following a positive fecal immunochemical test result. Participants with a positive fecal immunochemical test result ($n = 241$) were followed for up to 1 year to examine whether they underwent a colonoscopy at an academic institution located in Smith County, TX. **Results:** Age, gender, race/ethnicity, insurance status, and having a previous screening did not predict the likelihood of following-up a positive fecal immunochemical test result with a colonoscopy. Individuals living within Smith County (who travel shorter distances) compared to individuals living outside of Smith County (longer travel distances) ($p = .005$) were 88% more likely to have a follow-up colonoscopy. Individuals living within Smith County followed-up after 177.08 days ($SE = 23.89$), while those not living in Smith County followed-up after 231.11 days ($SE = 11.22$). Finally, those with a family history of colon cancer were 75% more likely ($p = .030$) to have a follow-up colonoscopy. Those with a family history of colon cancer followed-up after 126.89 days ($SE = 28.52$), while those without a history followed-up after 203.04 days ($SE = 12.27$). **Discussion:** Among primarily rural populations, the distance one travels to receive care and a family history of colorectal cancer are better predictors of receiving a colonoscopy after a positive fecal immunochemical test than other variables.

Spatial Variation in Chronic Obstructive Pulmonary Disease Mortality Rates in Texas Counties (1999 - 2016)

LeAnn Boyce, MA, MS, RRT, Gayle Prybutok, PhD, Joseph Oppong, PhD

Texas Public Health Journal 2020;72(3):25-30

ABSTRACT

Objective: This research studies the geography of chronic obstructive pulmonary disease (COPD) mortality in Texas counties from 1999-2016, and, utilizing the human ecology framework, this study examines the relationship between gender, socioeconomic status (SES), and smoking behavior with COPD mortality rates in Texas counties. **Methods:** Using Spearman correlation, we examine the relationship between county-level age-adjusted COPD death rates, SES data, air quality, and smoking behaviors for the years 1999-2016. ArcGIS was used to map the age-adjusted death rates for 1999-2016, in Texas counties, as they relate to all variables considered. **Results:** The results reveal that poverty level, nitrogen oxide, percentage of adult smokers, and gender are significant contributors to county-level variations in COPD mortality rates. This research found an inverse relationship between poverty and COPD deaths. **Discussion:** It is essential for public health professionals to utilize different technologies to assist their patients to enhance their self-management, which ultimately leads to overall better health outcomes. Using and understanding this geographic pattern provides important insights for developing geographically targeted interventions to improve care and distribute resources to those COPD patients in need. It is vital to educate citizens on risk factors and symptoms of COPD globally. Supporting initiatives that promote a tobacco-free society, such as media campaigns and increased tobacco prices, is essential in controlling COPD. Strengthening statewide COPD action plans such as public health interventions, community services that support COPD patients, and patient education are strongly recommended.

Texas Public Health Journal Publication Opportunities

Texas Public Health Journal 2020;72(3):31

Volume 72, Issue 2: Spring 2020

Message from TPHA Presidents

Witold Migala, PhD

Texas Public Health Journal 2020;72(2):2-3

From the Editor

Catherine D. Cooksley, DrPH, CPH, Editor

Texas Public Health Journal 2020;72(2):3

Commissioner's Comments: The Value of Public Health - We Protect Texas

Dr. John Hellerstedt

Texas Public Health Journal 2020;72(2):4

Texas Department of State Health Services COVID-19 Resources Website

Texas Public Health Journal 2020;72(2):5

Poison Control

Where the Copperheads Are: Agkistrodon Contortrix Geographic Distribution vs Texas Poison Center Caller Counties

Mathias B. Forrester, BS

Texas Public Health Journal 2020;72(2):5-6

Book Review

Wendy Beth Rosen's The Hidden Link Between Vision and Learning (c. 2016).

Carol Galeener, PhD

Texas Public Health Journal 2020;72(2):6-7

Original Public Health Research Articles:

Polymerase Chain Reaction Detection of Genetically Modified Organisms: A Preliminary Survey that Predicts Honest Labeling Under the Mandatory Labeling Law

Tegeler Z, MS, Kaneko G, PhD, Ehsan H, PhD

Texas Public Health Journal 2020;72(2):8-12

ABSTRACT

The current consensus on the safety of genetically modified organisms (GMOs) as human food is that genetic modification poses no great risk on human health. However, the National Bioengineered Food Disclosure Standard (mandatory labeling law), which came into force in 2016, likely increased concerns of fraudulent mislabeling. In this study, we conducted a market survey in order to investigate the prevalence and labeling accuracy of GMOs in Texas during the 2012–2015 period, which was prior to the start of the mandatory labeling law. Polymerase chain reaction detected common transgenes in GM plants in approximately half of 25 vegetable and 4 corn-based snack/cereal samples tested, indicating a high prevalence of GMOs. We also tested about 20 samples of 100% organic vegetables, imported foods, and vegetables from a fast food chain that has a non-GMO policy. In the United States since 2012, products made only with certified organic ingredients and methods (i.e., no genetic modification) can be labeled “100% organic,” and thus all of these samples were supposed to contain no GMOs. Our DNA-level analysis demonstrated that none of these samples were GMO positive. Although routine screening is necessary to ensure correct GMO labeling under the mandatory labeling law, these results indicate an honest attitude of food industries toward GMO labeling in Texas, which will help to facilitate effective scientific communication with the public.

Predictors of Colorectal Cancer Screening Activities among Uninsured Individuals in Rural Northeast Texas

Yen T. Chen, MS, Heather A. Becker, PhD, Gabriela Orsak, PhD, Carlton M. Allen, MS, Paul McGaha, DO, MPH

Texas Public Health Journal 2020;72(2):13-17

ABSTRACT

Introduction: Adherence to colorectal cancer (CRC) screening recommendations allows for both prevention and early detection of the disease, yet approximately one-third of U.S. adults aged 50-75 years have not regularly

received CRC screening. Screening rates are lower for uninsured and rural individuals. We examined the relationships between demographic factors, past CRC screening experience, family history of colon cancer, and preference for CRC screening (fecal immunochemical test [FIT] vs. colonoscopy) and completion of CRC screening in an ethnically diverse, largely rural sample, with a specific focus on uninsured individuals. **Methods:** Participants were 2,476 uninsured individuals (age, 45-75 years; 66% female) recruited from a community outreach program in northeast Texas. Variables included demographic factors and CRC health-related information. Chi-square tests and hierarchical logistic regression were used. **Results:** The CRC screening groups consisted of 1,413 who completed screening and 1,063 who did not. After controlling for demographic factors, participants who reported past CRC screening experience (odds ratio [OR] = 1.41, 95% confidence interval [CI] = 1.17, 1.71, $p < 0.001$) and chose colonoscopy (OR = 1.27, 95% CI = 1.04, 1.55, $p = 0.019$) had an increased likelihood of CRC screening completion. **Conclusion:** Educational programs coupled with financial support for screenings may help close the gap in screenings between minority racial/ethnic and gender groups. Participants with previous experience of CRC screening and preference for colonoscopy were associated with completing CRC screening. A focus on individuals' preferences for CRC screening may help develop and target appropriate intervention for promoting CRC screening. Further examination is warranted to determine the associations among various socio-demographic factors, lifestyle and behavioral factors, and psychosocial variables in this disadvantaged population. Moreover, intervention programs should raise awareness of the importance of family history of colon cancer.

Vision Health: Celebrating National Public Health Week by Featuring Texas Community Initiatives
Texas Public Health Journal 2020;72(2):18

Original Public Health Research Articles: Vision Health:

Community-Based Eye Health Screening Study in the Elderly Hispanic Population in North Texas

Sima Taj Mozdbar, OD; Jennifer Deakins, OD, FAAO; Jenny Terrell, OD, FAAO; Leigh Ann Johnson, PhD; Abbot F. Clark, PhD, FARVO

Texas Public Health Journal 2020;72(2):19-21

ABSTRACT

The Hispanic population is underserved and underrepresented in health care. Epidemiological studies are crucial for providing insight to identify disparities and unmet eye health needs in this vulnerable group. The purpose of our study is to examine the prevalence of ocular conditions in the elderly Hispanic population in North Texas and identify the frequency in which these conditions were undiagnosed. This study was ancillary to the Health and Aging Brain study among Latino Elders (HABLE). Seventy-three HABLE participants (aged > 50 years) underwent neuropsychological evaluation and an eye health screening at the University of North Texas Health Science Center study site. Descriptive analyses were performed for prevalence of ocular conditions, as well as a comparison of self-reported conditions and ocular findings. Our results suggest the prevalence patterns for undetected ocular disease in the Hispanic population of North Texas are comparable with the epidemiological trends for this population group in other concentrated areas in the United States.

Assessing Retinal Arteriole Tortuosity with a New Clinical Rubric

Wendy Harrison, OD, PhD, FAAO; Danielle Weiler, OD, FAAO

Texas Public Health Journal 2020;72(2):22-26

ABSTRACT

Background: Retinal arteriole tortuosity (curvature of an arteriole) can be an important marker of health with changes over time in tortuosity signaling changes in many ocular and systemic diseases. While automated programs for assessing retinal arteriole tortuosity exist for use in research, a grading scheme which is simple and can be used easily in an eye exam during clinical practice does not. We have developed a grading rubric which compares arteriole inflections to the optic nerve. The purpose of this study was to evaluate the effectiveness of this new rubric with survey respondents experienced in retinal evaluation who were recruited from around the world, including Texas. If proven accurate, this clinical rubric to assess tortuosity could aid in the diagnosis of ocular and systemic diseases and improve interprofessional care coordination if change in retinal tortuosity is noted over time.

Methods: 220 survey respondents who were all optometrists or optometry students were trained via an online survey to grade retinal arterioles using a three-step scale: no inflections (straight), 1-2 significant inflections (wavy), and 3 or more significant inflections (tortuous). There were 30 retinal photographs in the survey for the respondents to grade. In addition to grading retinal arteriole tortuosity, the respondents self-reported their number of years in

practice, the number of retinal exams performed in a typical week, and their clinical specialty. **Results:** Overall 70% of the photos were graded to match the key. The overall percent agreement for grading photos with the grading scale was 59% with a kappa of 0.40 (which is the upper limit of fair agreement). **Conclusion:** There was fair agreement among respondents using this new grading scale for retinal arteriole tortuosity. With more training on the use of the grading scale, this could be improved and implemented in clinical practice and have important public health implications.

**Select Original Short Papers: Vision Health:
The Use of Telemedicine in Diabetic Eye Care**

Angelina Tran, OD, FAAO; Ancil Mathew, OD, FAAO; Bhagya Segu, OD, MPH, FAAO
Texas Public Health Journal 2020;72(2):27-29

ABSTRACT

Rural Texas residents face many inequities to receiving adequate healthcare due to provider shortages, transportation, cost, and low health literacy, among other barriers. Telemedicine is an invaluable tool that can improve access to care in these communities. We discuss the use and success of telemedicine in the Veterans Health Administration (VHA) in screening for diabetic eye disease, and telemedicine's potential in eye care delivery to rural and urban regions outside VHA.

Nursing Students and See to Succeed: A Service Learning Strategic Partnership

Suzanne Scheller, MS RN
Texas Public Health Journal 2020;72(2):30-31

ABSTRACT

The focus of nursing education is to prepare nurses to meet the health care demands of a diverse population. To meet this goal, nursing schools work collaboratively with health related organizations with the hope of gaining varied clinical experiences for their students while serving the community's health care needs using a service learning model. This article contextualizes a service learning strategic partnership between Texas Woman's University (TWU) College of Nursing and See to Succeed, a vision program for Houston's underserved children.

See to Succeed: Securing the "Safety Net" with Follow-Up Care

Khadija Sutarwalla, OD, Pat Segu, OD, FAAO, Janet Garza, OD, FAAO, Veronica Mendez, OD, Maria De La Cruz-Morgan, MPA
Texas Public Health Journal 2020;72(2):32-35

ABSTRACT

Over the past century, the health of our state and awareness of preventable medical conditions have improved in many ways as a result of the significant resources dedicated to public health programs, education, research, and healthcare. Among these efforts to increase access to care, the See to Succeed (STS) Program was developed to remove barriers to vision care for children who remain on the unresolved list in the Greater Houston area. The unresolved list consists of children who have failed vision screenings but have not been connected to care. This safety net vision program for Houston's most underserved children provides comprehensive eye exams and eyeglasses at no cost to the patient. Considering that the critical period for visual plasticity is from birth through the age of 8 years, any disruption to the development of the eye caused by a poor visual experience can lead to permanent visual impairment. Amblyopia can lead to permanent vision loss in one or both eyes if treatment is delayed or not initiated.^{1,2} Therefore, the careful development of a follow-up protocol to fulfill care needs beyond the routine eye exam provided by the STS program is instrumental in weaving a complete safety net intended to save children at risk.

Volume 72, Issue 1: Winter 2020

President's Message

Witold Migala, PhD

Texas Public Health Journal 2020;72(1):2

Commissioner's Comments: Innovative Texas Rabies Vaccine Airdrop Turns 25 Years Old

Dr. John Hellerstedt

Texas Public Health Journal 2020;72(1):3

Poison Control

Pattern of Naloxone Use with Opioid Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS, Cristina Thomas, MEd, CHES

Texas Public Health Journal 2020;72(1):4-6

Book Review

Good Economics for Hard Times, (2019) by Abhijit V. Banerjee and Esther Duflo

Carol Galeener, PhD

Texas Public Health Journal 2020;72(1):7

Public Health Practice Commentary:

Addressing the Complexities of Texas: A New Paradigm for Public Health Policy

Megan Rafferty, BS; Jake P. Joseph; Matthew Do; Snejana Nihtianova, PhD; Ekim Cem Muyan, PhD; Kenneth I. Wolpin, PhD; E. Susan Amirian, PhD, MSPH

Texas Public Health Journal 2020;72(1):8-9

Original Public Health Research Articles:

Should Addressing Mental Health be Fundamental for Combating HIV and SUD Epidemics?

Thenral Mangadu, MD, MPH, PhD, Max C. E. Orezza PhD, Rebecca Gallegos, MPH, Joao Ferreira Pinto PhD

Texas Public Health Journal 2020;72(1):10-14

ABSTRACT

El Paso County, Texas located on the U.S.-Mexico border, is among the three poorest counties in West Texas. Approximately, 165,000 adults residing in El Paso County are in need of mental health and Substance Use Disorder (SUD) related services annually. One of the largest SUD treatment providers in El Paso County, reported that upon admission, 35% of its clients were using heroin, 23% amphetamines, 22% alcohol, and 15% cocaine. As part of the Mujer Saludable/ Familia Feliz (MSFF) program to reduce risky sexual behaviors, improve healthy eating knowledge and skills, prevent domestic/sexual violence and provide support to survivors of domestic/sexual violence, minority women ages 18 and above (N=1171) were screened using a comprehensive SUD and sexual behavior questionnaire and the PHQ-9 depression scale. Chi-Square analysis showed that participants who scored with mild to severe depression were significantly more likely to use alcohol and drugs, practice risky sexual behaviors, and hence, more likely to be at a higher risk for HIV and SUD, compared to their non-depressed counterparts. Study findings imply that the mental health of clients be first addressed in treatment and/or prevention interventions addressing HIV and SUD. Furthermore, in minority populations similar to the current study population —Hispanic women residing in a U.S.-Mexico border community— mental health promotion must address structural violence and stressful factors such as immigration status, drug trafficking violence, and the access to drugs in the region. It is unclear whether alcohol and drug use and risky sexual behaviors reported in this study put this research population at a higher risk for depression, or if having depression promotes these SUD /risky sexual behaviors. Further research is needed to better understand this dynamic.

Effects of a Weekend Supplemental Nutrition Program on Food Insecure Children: A Longitudinal Intervention/Matched Control Group Study

Diane S. Berry, Ph.D.; Terry Clark

Texas Public Health Journal 2020;72(1):15-19

ABSTRACT

Child food insecurity is a pervasive problem, and children from food insecure households are especially likely to experience a variety of adverse physical and psychological health outcomes. We describe an intervention/matched control group study that assessed the effects of participation in a school-based weekend supplemental nutrition program on food insecure children. On Friday afternoons throughout the academic year, program participants received backpacks filled with shelf-stable food and snacks. Teachers assessed the children's behaviors, verbalizations, emotional health, and academic performance before and after participation. Comparison data were collected from children who did not take part in the program; program participants and comparison control group members were matched on age, sex, and initial level of food insecurity. Children who took part in the program displayed fewer behaviors and verbalizations indicative of food insecurity. Their academic performance, emotional health, and social experience also improved after participation. Parallel changes were not observed in children in the comparison group. The data suggest that weekend nutrition programs may improve the functioning and well-being of at risk children.

Assessing Physical Assault Hospitalizations at Dell Seton Medical Center in Austin, TX from 2015-2018

Stephani Curry, MPH; Melissa Harrell, PhD; Katelyn Jetelina, PhD; Kevin Rix, MPH; Thomas Coopwood, MD
Texas Public Health Journal 2020;72(1):20-24

ABSTRACT

Physical assaults [PAs] are a major public health concern in the United States, with rates increasing from 2014-2017. At Dell Seton Medical Center [DSMC] in Austin, PAs make up nearly 10% of hospitalizations, with around 250 patients per year. National data suggest some sociodemographic groups experience disproportionately higher rates of PAs than others. Given the diversity of Austin, TX, it was unclear whether local sociodemographic trends reflect national disparities or whether the differential percentages of these groups have changed over time. The objective of this study was to assess trends in the prevalence of physical assault hospitalizations at DSMC from 2015 to 2018 by seasonal or event period, sociodemographic factors, geographic location, and mechanism of injury. All data were extracted from DSMC's injury patient registry, which currently utilizes ICD-10 diagnosis codes within their electronic health records. Data were analyzed using Stata with tests of proportions to compare physical assaults over time, between and across sociodemographic groups, and by mechanism of injury. In addition, hot spot maps were used to describe the geospatial distribution of physical assaults that were hospitalized at DSMC. Results suggest males, Blacks, 25-34-year-olds, and the warmer months have disproportionately higher proportions of being hospitalized for PAs than females, other races and age groups, and the colder months. It was also found that the Austin City Limits [ACL] and South by Southwest [SXSW] music festivals showed no significant increase or decrease between 2015 to 2018. Finally, a disproportionate amount of PAs occurred in the zip code 78701. Results are beneficial for implementing primary and secondary prevention interventions aimed at decreasing physical assaults and leading future research.

Hispanic Child Abuse: Implications for Texas Health Professionals

Yue Xie, Ph.D., Sinem Akay-Sullivan, Ph.D., Amanda Scarbrough, Ph.D., Wafa Aljuhani, David Lawson, Ph.D.
Texas Public Health Journal 2020;72(1):25-31

ABSTRACT

Objective: Child abuse and neglect is a major public health issue. Current research suggests that Hispanics and Whites have similar child abuse rates, while African Americans are most at risk. Hence, policy focus has not been on the Hispanic population. Texas has a large Hispanic population and a shortage of healthcare professionals who are important to the wellbeing of the abused and neglected. Would research demonstrating elevated Hispanic child abuse prevalence impact Texas public health policy? **Methods:** Secondary data from the FY2013 National Child Abuse and Neglect Data System Child File (NCANDS) dataset were used for national level analyses. This dataset contained more than 3.4 million records. Unique child records of abuse substantiated cases were identified. Descriptive statistics were obtained on racial and ethnic identity of the victims. Chi-Square analyses along with Cramer's V were used to compare Hispanic children to Non-Hispanic children in terms of mental health access post-abuse, child living arrangements, and housing adequacy. **Results:** Of the abuse substantiated (448,771) and concurrently ethnically identifiable (375,903) cases, 117,619 cases (31.3%) involved Hispanic children. In comparison, in 2012 Hispanics were only 23.9% of the general population of children. Results further indicate that Hispanic children were less likely than Non-Hispanics to utilize mental health services post-abuse (4.6% vs. 7.8%, $p < 0.001$). Additionally, records were much more likely to be marked as unknown for Hispanic children as compared to Non-Hispanics for mental health usage (45.4% vs. 27.7%) and inadequate housing (31.3% vs. 23.3%). **Conclusion:**

Differing from past research conclusions, this study finds that Hispanics have a notably higher child abuse rate than the general population. As health professionals are often the referral source for child abuse, and most Texas counties experience primary care and mental health provider shortages, Texas policy makers, social service, and healthcare providers should pay more attention to improve service access to the underserved Hispanic children population.

Texas Healthcare Learning Collaborative: Medicaid Quality of Care in the Travis Service Area

Wenhui Zhang, PhD, Lisa C Kirsch, MPAff, Anjum Khurshid, MD, PhD

Texas Public Health Journal 2020;72(1):32-38

ABSTRACT

Background: As a key effort toward value-based care, the Texas Healthcare Learning Collaborative (THLC) website presents Medicaid healthcare quality measures for Texas. The purpose of this study was to explore the publicly accessible healthcare quality evidence from THLC for the Travis Medicaid managed care service delivery area (Travis Service Area), which includes Travis County and seven other counties in Central Texas (Hays, Caldwell, Bastrop, Fayette, Lee, Burnet, and Williamson). The study aims at informing regional stakeholders about relevant Medicaid healthcare quality data for policy and planning purposes. **Methods:** Relevant THLC sections and subsections on the measures in the Texas Health and Human Services (Texas HHS) Medical Pay-for Quality Program were reviewed for available visualizations and datasets. The presented visualizations and downloadable datasets on the healthcare quality of the Travis Service Area were extracted, synthesized, and analyzed with Microsoft Excel tables. **Results:** THLC presented complete information on most Pay-for-Quality measures from 2014 to 2016. Findings on the quality measures and health disparities were listed. Quality of care measures for which complete data were not available for 2014-2016 were also noted. Over half of the quality measure outcomes had improved over time. Sixteen future key quality improvement effort areas were identified for the Travis Service Area, and the health disparities by socio-demographic and clinical subgroups were addressed to inform future program and policy design and reforms. **Discussion:** Additional data on demographics within each hospital and among disease groups will lead to more analyses and explorations to inform detailed healthcare redesign in Central Texas. Future study also needs to understand the user experience of healthcare providers, hospital administrators, and policy makers with the THLC website.

Texas Public Health Association's 96th Annual Education Conference:

TPHA's Annual Silent Auction Fundraiser Information

Texas Public Health Journal 2020;72(1):38

Conference and Registration Information

Texas Public Health Journal 2020;72(1):39

Volume 71, Issue 4: Fall 2019

President's Message

Witold Migala, PhD

Texas Public Health Journal 2019;71(4):2-3

Commissioner's Comments: Legislative Session Provides a Boost to Public Health

Dr. John Hellerstedt

Texas Public Health Journal 2019;71(4):3

Poison Control:

Desert Rose (*Adenium obesum*) Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS, Cristina Thomas, MEd, CHES

Texas Public Health Journal 2019;71(4):4

Trends in Laundry Detergent Pod Ocular Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS, Cristina Thomas, MEd, CHES

Texas Public Health Journal 2019;71(4):4-5

Public Health Practice Commentary:

To Remind, Encourage, and Recognize: An Open Letter to all Texas Public Health Nurses

Monica J. Hughes, MSN, RN, NE-BC, CNE

Texas Public Health Journal 2019;71(4):6-7

Public Health Practice Commentary on the 86th Texas Legislative Session

Jinny Suh

Texas Public Health Journal 2019;71(4):7-8

Book Review

Eric Topol, Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again. 2019. Basic Books.

Carol Galeener, PhD

Texas Public Health Journal 2019;71(4):8

Public Health Practice Policy:

Assessing Texas Youth Electronic Nicotine Delivery System (ENDS) Use: Policy Perspectives

Christine Cardinal, JD, MPH, Dhritinut Ratnapradipa, PhD

Texas Public Health Journal 2019;71(4):9-12

ABSTRACT

Electronic nicotine delivery systems (ENDS), known as vapes, are noncombustible tobacco products that are commonplace in educational institutions nationwide. This article discusses student ENDS use and related policies via a socioecological model framework and proposes future steps to protect youth from the harms of ENDS and nicotine addiction.

Original Public Health Research:

Refugee Healthcare Needs: Perceptions of Health and Social Service Professionals in South Texas

Heidi J. Worabo, Kathryn Parke, Andrew Muck, and Moshtagh Farokhi

Texas Public Health Journal 2019;71(4):13-18

ABSTRACT

Throughout the world, a record 68.5 million people have been forced from their homes due to war, conflict and persecution. The United States provided resettlement for 53,716 refugees in 2017 with 4,768 settling in Texas. Refugees face several challenges as they adjust to life in the US, including health problems. Current literature exploring healthcare needs of the resettled refugee population is focused on refugees' self-perspective and /or databank sources. To enhance the understanding of refugee healthcare needs in south Texas, we aimed to examine

the issue from the perspective of health and social service professionals who work regularly with refugees. Participants for this initiative were recruited through purposive sampling. Between August 2015 and February 2016, seventeen professionals participated in one-on-one interviews that were recorded, transcribed, and analyzed for themes. We used a semi-structured interview guide based upon community assessment models. Themes that emerged included 1) non-communicable chronic conditions are most common and often masked, undiagnosed, or present with a complaint of pain; 2) the importance of reflective listening, cultural sensitivity and understanding the refugee experience; and 3) limited access to healthcare exacerbates vulnerable health states. These findings highlight the need for healthcare professionals to be aware of undiagnosed conditions and somatization of mental health issues among refugees, as well as providing guidance for cultural sensitivity training for professionals. Lastly, refugees need improved access to care that is community-engaged, affordable, and incorporates health promotional activities. Policymakers in Texas should pursue healthcare reform to tackle the foremost barrier to healthcare, which is cost.

Video Directly Observed Therapy for Tuberculosis Treatment at Harris County Public Health: A Cost Analysis and Adherence Assessment

Sarah Siddiqui, MD, MPH; Dana Wiltz-Beckham, DVM, MBA, MPH; Kimberly Fields, RN, MSN, FNP; Aisha Haynie, MD, MPA; Brian C. Reed, MD; Les Becker, MBA; Umair Shah, MD, MPH; Cara Pennel, DrPH, MPH; Sapna Kaul, PhD

Texas Public Health Journal 2019;71(4):19-22

ABSTRACT

Background: Harris County Public Health (HCPH) is among the first local health departments (LHDs) nationwide to fully implement Video Directly Observed Therapy (VDOT) for routine tuberculosis (TB) management. This study compared the adherence rates between VDOT and in-person Directly Observed Therapy (DOT) for TB patients treated by HCPH, and assessed the local health department costs averted by using VDOT.

Methods: The study consisted of 47 individuals who participated in VDOT at HCPH from October 1, 2014 to September 30, 2015. These individuals started with in-person DOT and subsequently enrolled in VDOT. VDOT adherence rate (i.e. proportion of observations that demonstrated successful receipt of TB treatment) was compared with that of in-person DOT using chi-squared tests. The total cost-averted by VDOT included the cost saved on vehicle use, staff time for home visits, and staff time driving. Time and mileage saved with VDOT were also determined.

Results: The adherence rates for VDOT and DOT were 92% and 97%, respectively ($p < 0.05$). Using VDOT instead of in-person DOT saved a total of \$27,991.91 during the specified duration of the study, which is a 38% reduction in total cost. Moreover, VDOT saved 1,832 driving hours (56,902 driving miles) that would have been required with DOT.

Conclusions: Use of VDOT instead of DOT saved costs while maintaining high adherence rates. While this study demonstrates the value of VDOT within a large LHD, further research is needed to evaluate the cost-effectiveness of VDOT in a variety of settings and using advanced statistical methods.

A Public Health Snapshot - Injury Mortality Trends by Intent among Children and Adolescents Aged 10-19 Years across Texas, 1999-2016

David Zane, MS, Micky Moerbe, MPH, CPH, Haruna Miyakado-Steger, MS, Danielle Carlton, MPH, Larissa Singletary, PhD, Kirstin Short, MPH, Jennifer Wright, MPH, Rita Espinoza, MPH, Anita K. Kurian, MBBS, MPH, DrPH, Steven Hinojosa, PhD, MPH, CPH, Hieremila Haile, MPH, Daphne Lynch, MPH, Fernando Gonzalez, MPH, Susana Barrera, PhD, Juan Rodriguez, MPH, Lily Metzler, MPH, Catalina Lozano

Texas Public Health Journal 2019;71(4):23-29

ABSTRACT

Background: Texas has nearly 4 million residents aged 10- 19 years. This report provides a snapshot of injury mortality trends in Texas, stratified by intent, among children and adolescents 10-19 years old. Epidemiologists from the 10 counties with the largest child and adolescent populations in Texas (Harris, Dallas, Tarrant, Bexar, Hidalgo, Travis, Collin, El Paso, Denton, and Fort Bend) collaborated to analyze these trends for Texas as a whole, as well as for their individual counties.

Methods: Using Centers for Disease Control and Prevention (CDC) WONDER, analyses for an 18-year period (1999- 2016) focused on summary unintentional and intentional (homicide and suicide) injury death counts as well as annual (and three-year rolling) death rates which were calculated as the number of deaths per 100,000 age-specific population residing in Texas or the respective county.

Results: Between 1999 and 2016, 11,095 children and adolescents in Texas died from unintentional injuries and 5,936 died from intentional injuries. Between 1999 and 2016, the unintentional injury death rate declined 48% (from 22.7 to 11.9), and the intentional injury death rate increased 2% (from 10.2 to 10.4). Since 2010, suicide rates increased 53% between 2010 and 2016 (from 4.3 to 6.4). Since 2012, homicide rates increased 43% (from 2.8 to 4.0).

Discussion: Over the 18-year period, the state level gap between unintentional injury deaths and intentional injury deaths among children and adolescents has decreased. The report provides a snapshot of injury mortality trends in children and adolescents aged 10-19 for ten counties across Texas. Eight of the ten selected counties saw the number of intentional injury deaths surpass unintentional injury deaths over this time period. In Harris and Dallas Counties, there were consistently more homicides than suicides during 1999-2016, but this gap appears to have narrowed over time; Tarrant County has reported higher suicide rates than homicide rates in recent years. The report contributes to the recognition of injuries as a public health problem in Texas. It provides multiple public health recommendations such as: a) continuing to monitor the injury mortality trends at the state and county levels; b) support county/region Child Fatality Review Teams through participation, data sharing, and providing information on community prevention efforts; and c) continue to promote effective injury prevention interventions.

TPHA Annual Education Conference Call for Abstracts

Texas Public Health Journal 2019;71(4):30-31

Volume 71, Issue 3: Summer 2019

President's Message

Witold Migala, PhD

Texas Public Health Journal 2019;71(3):2

Commissioner's Comments: It's Time to Get TexasReady

Dr. John Hellerstedt

Texas Public Health Journal 2019;71(3):3

Poison Control:

Swimming Pool Product Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS, Cristina Thomas, MEd, CHES

Texas Public Health Journal 2019;71(3):3-4

Fifth Annual Pills and Thrills that Kill! Toxicology in Review, El Paso, Texas, March 27-28, 2019

Stephen W. Borron, Salvador Baeza, Diane Huerta

Texas Public Health Journal 2019;71(3):4-7

Public Health Practice Commentary:

Rethinking Our Approach to Influenza Control

Neil J. Nusbaum JD, MD

Texas Public Health Journal 2019;71(3):7-8

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Texas Public Health Journal 2019;71(3):8

Sponsored Focused Section

Rural Community Recovery Awareness and Training

Final Report, June 2019 Edited for publication in this Focused Section of the Texas Public Health Journal

Melissa Oden, Russell Hopkins, Mary Jo MacGregor, Christa Selby3, Christine Vo

Texas Public Health Journal 2019;71(3):9-17

Original Public Health Research:

A New Approach to Examining Severe Maternal Morbidity: Using Geographic Information System to Visualize Delivery Catchment Area Distribution in Harris County, Texas, 2016

Meliha Salahuddin, PhD, MBBS; Amelia C. Eisenhart, MS; Dorothy J. Mandell, PhD; Eileen Nehme, PhD; Molly O'Neil, MS; Nagla Elerian, MS; Courtney Byrd-Williams, PhD; David L. Lakey, MD; and Divya A. Patel, PhD

Texas Public Health Journal 2019;71(3):18-22

ABSTRACT

Introduction: Severe maternal morbidity (SMM), which is an unexpected outcome of the process of labor and delivery resulting in significant short- or long-term consequences to a woman's health,¹ is reflective of the context in which it occurs, including individual/family-, provider-, facility-, health systems-, and community-level contexts.²

Methods: Using Texas all-payer inpatient hospitalization data for 2011-2016, delivery-related hospitalizations were classified as SMM based on 21 ICD-10-CM diagnosis and procedure codes. Using ArcGIS Desktop, SMM was mapped at (1) maternal residence ZIP Code for Harris County, and (2) maternal residence ZIP Code and hospital level for two hospitals with the lowest and two hospitals with the highest SMM rates.

Results: SMM remained consistent during 2011-2016 in Harris County (15.4-23.4 per 1,000 deliveries, $P>0.05$). Among the 125 ZIP Codes with at least 100 deliveries in 2016, over one-third had SMM higher than the state rate. In the four hospitals included in this study, the SMM rate ranged from 1.9 to 33.8 per 1,000 deliveries. The hospital with the highest SMM rate included deliveries from a wide catchment area, while the other three hospitals had a relatively concentrated delivery catchment area.

Conclusions/Implications: In this exploratory study, we observed differences in SMM across hospital and community settings, which reflects complex factors, including patient preexisting conditions, hospital quality of

care, and community characteristics. Our findings can help generate additional areas of research to gain in-depth understanding of the relative contribution of these multi-level factors to SMM and inform development of risk adjustment approaches for SMM.

Addressing Disparities Through Health Workforce Development: The Experience of Texas AHEC East

Wei-Chen Lee, PhD; Steve Shelton, MBA; Ben G. Raimor, MD, MA, FAAP; Caley A. Satterfield, EdD

Texas Public Health Journal 2019;71(3):23-25

Local Health Department's Readiness to Address Emerging Infectious Diseases: A Program Evaluation

Arturo Rodriguez, DNP, RN, MPH, CPM; Lisa Campbell, DNP, RN, PHNA-BC

Texas Public Health Journal 2019;71(3):26-35

ABSTRACT

Background: In Texas, novel cases of Chikungunya virus and Zika virus, both mosquito-borne virus infections, occurred locally in Brownsville in 2015 and 2016. The Brownsville Health Department (local health department or LHD) conducted a program evaluation to assess program readiness to address vulnerabilities from emerging infectious diseases (EIDs). The program evaluation conducted at this LHD will serve to minimize future impacts of EIDs and build system resiliency in the community which lies at the southernmost tip of Texas, situated on the gulf coast along the US/Mexico border.

Methods: A program evaluation was conducted using a logic model and Strengths, Weakness, Opportunities, and Threats (SWOT) analysis to identify any existing gaps that could prevent an adequate and rapid response to EIDs. Additionally, an economic and sustainability assessment of the LHD was completed to ensure a sustainable model capable of maintaining workforce capacity. The Program Sustain Assessment Tool, (PSAT) was used to evaluate the LHD's sustainability capability over time. A twelve-month citywide demonstration mosquito surveillance project was conducted utilizing 52 mosquito traps arranged by Global Positioning System (GPS) in four city quadrants. *Aedes aegypti* and *Aedes albopictus* species were sent to the Texas Department of State Health Services laboratory for testing of viral pathogens such as Dengue virus and Zika virus.

Results and Discussion: The SWOT results formed a departmental action plan to address the EID concerns. Identified strengths included qualified leadership and staff support to accomplish operational outcomes. Weaknesses identified during the assessment were funding, both long and short-term, and inadequate resources and staffing levels to maintain program integrity and long-term strategies. A sustainability report highlighted the need to extend funding stability and strategic planning alongside the need to conduct a program evaluation of the LHD vector control program. Trap mosquito data show the year-round presence of both *Aedes* and *Culex*, species of mosquitoes both known to carry viral diseases harmful to humans. Variables beyond the control of the LHD are demographic factors and geographic location. To achieve collaborative and transformational changes, the LHD may form an action plan sensitive to existing attitudes and cultural norms by creating one binational, bilingual strategy affecting both communities on both sides of the Texas-Mexico border.

Conclusion: The program evaluation analysis identified gaps in the LHD that were addressed to reduce the risk of EID exposure to improve health status for those living in impacted areas of Brownsville, Texas. The continued surveillance of mosquitoes' presence year-round continues with expanded scope expected to remain in place to protect against potential EIDs. The updated plan will expand our current practices and allow us to protect the public against the Zika virus and other potential EIDs. Our program evaluation may be useful as a template for other LHDs. Our program evaluation resulted in the formulation of a strategic plan focused on increasing capacity and resiliency towards EID presence.

Texas Public Health Association 2020 Annual Meeting

Texas Public Health Journal 2019;71(3):35

Volume 71, Issue 2: Spring 2019

President's Message

Witold Migala, PhD

Texas Public Health Journal 2019;71(2):2-3

Commissioner's Comments: Suicide trends show we still have work to do

Dr. John Hellerstedt

Texas Public Health Journal 2019;71(2):3

TPHA and Public Health Region VI Feature Section: 'Oral Health: Targeting Rural Areas'

Editorial Note

Texas Public Health Journal 2019;71(2):4

Emergency Department Utilization for Non-Traumatic Oral Health Conditions by Rural Texas Residents in 2016

Josefine Ortiz Wolfe, PhD, RDH, CHE; Gourav Patil, MPH, MBBS

Texas Public Health Journal 2019;71(2):4-5

Geriatric Oral Health in Texas is a Public Health Concern

Maryam Tabrizi, DMD, MPH and Kathy T. Gibson, DDS

Texas Public Health Journal 2019;71(2):6-8

Addressing the Oral Health needs in Northeast Texas

Adrienne Haire DMD; Kate Starnes JD; Carrie Hobbs RDH MeD; Christina Horton CDA BSDH, Regina Weems CDA

Texas Public Health Journal 2019;71(2):8-9

ABSTRACT

Addressing oral health disparities in Northeast Texas is a goal for this oral health project. With this project, the group is increasing access to care and treating patients in need through collaboration and community involvement.

Operation East Texas: A Model of Collaborative Dental Public Health Community Outreach

Daniel Jones, DDS, PhD; Paul Hoffmann, MSSW, MBA; Joshua Liescheski, DDS; Leeanna Bartlett, M.Ed.;

Katharine Nimmons, M.Sc., MPH; Christina Horton, RDH, BSDH

Texas Public Health Journal 2019;71(2):10-11

Texas Tooth Steps

Sangeetha Gajendran Sarah, BDS MHA; Elizabeth C. Stewart, RDH; Howard Pollick, BDS MPH; Enihomo Obadan Udoh, BDS MPH Dr. Med. Sc.; Christina Murphey, RN PhD; Sherdeana Owens, MPA DDS

Texas Public Health Journal 2019;71(2):11-13

ABSTRACT

Oral health is essential for overall health and numerous studies indicate that pregnant women with good oral health reduce the risk of mother-to-infant transmission of pathogenic bacteria. To maintain a healthy mouth, oral hygiene and regular dental visits are essential. Oral health professionals should engage in preventive education to promote oral health awareness among pregnant women. The Texas Oral Health Coalition, through the training program "Texas Tooth Steps", enhances knowledge and awareness among pregnant women about oral health, general health, and infant oral health needs.

Oral Health Initiatives in Rural Louisiana

Kimberly Brent, MPA; Mechaune Butler, MPA

Texas Public Health Journal 2019;71(2):13-15

Oral Health in Oklahoma Rural Communities

Amrita Amar Swamy Martin, BDS (India), MPH Candidate; R. Radadiya Aka Patel, BDS (India), MPH Candidate; Jana Winfree, DDS, MPH, Julie Seward, MEd, RDH; Marisa New, MPH, OTR
Texas Public Health Journal 2019;71(2):16-18

Poison Control

***Sophora secundiflora* Ingestions Reported to Texas Poison Centers**

Mathias B. Forrester, BS; George M. Layton, MD, CSPI; Shawn M. Varney, MD
Texas Public Health Journal 2019;71(2):19-20

Book Review

Samuel Arbesman's Overcomplicated: Technology at the Limits of Comprehension (2016, 2017)

Carol Galeener, PhD
Texas Public Health Journal 2019;71(2):20-21

Original Public Health Research:

Evaluation of the Texas Injury Prevention Leadership Collaborative Essential Leadership Skills Training

Cary M. Cain, MPH, RN; Lindsay J. Pollok, MPH; Marissa A. Rodriguez; Courtney Edwards, DNP, MPH, RN; Carolyn J. Cumpsty-Fowler PhD, MPH.
Texas Public Health Journal 2019;71(2):22-25

ABSTRACT

Preventable injuries are a leading cause of death in the state of Texas. Leadership skills are considered a core component of effective injury and violence prevention (IVP) programs; however, available and accessible leadership training opportunities for IVP professionals in the state are lacking. The Texas Injury Prevention Leadership Collaborative (Collaborative) was established to develop and maintain a workforce of leaders to influence prevention of injuries in the state of Texas. The Collaborative hosted an Essential Leadership Skills Training in Spring 2016. The training was designed to develop leadership skills and to empower participants to lead effective IVP strategies in their communities. A qualitative evaluation was conducted to understand the enduring effects of the training. Themes identified in the interviews were participant experiences engaging with the content, challenges to applying these to the work environment, the value of networking and collaborative participation, and the desire to sustain the collaboration. Specific skills from the training were identified as beneficial and utilized by the participants after the training. The greatest benefit was the ability to network with other IVP professionals in the state. Barriers were noted in integrating learned skills to practice. The training provided IVP professionals skills to enhance their professional work. The evaluation showed that both state leadership and individual practitioners should prioritize continued development and practice of leadership skills to increase collaboration and IVP capacity in Texas.

Creation and Implementation of a Yoga and Meditation Program to Promote Wellness at a School of Nursing

Julie Ann Zuñiga, PhD, RN; Li Chen Lin, PhD, RN; Shalonda Horton, PhD, RN; Ana Todd, PhD, RN; Alexandra A. García, PhD, RN, PHNA-BC, FAAN
Texas Public Health Journal 2019;71(2):26-28

ABSTRACT

Background: Students in nursing programs experience high levels of stress, not only in the academic setting, but also in the clinical setting. **Methods:** The Mental Health and Wellbeing program consisted of four programs, developed for people with different preferences and physical abilities: yoga, gentle yoga, chair yoga, and meditation. **Results:** Over a 10-month period, a total of 18 meditation sessions, 21 chair yoga, 13 gentle yoga, and 21 regular yoga sessions were offered for students, faculty, staff of the nursing school and other university departments. Most participants attended more than one session, and new participants attended each month. Yoga class sizes averaged seven participants per session. Participants reported satisfaction with the sessions. Challenges to the program included securing accessible and appropriately-sized space to hold the sessions and students' competing priorities. **Conclusions:** Yoga and meditation sessions were successfully implemented in a school of nursing. Scaling up the program would require continued financial support, advertising to increase participation, and partnership with other colleges and departments.

Nonprofit Hospital Community Benefits: The Effect of Needs Assessment Quality and Monetary Input on Health Outcomes

Joshua Morgan, MD, MPH; Cara Pennel, DrPH, MPH; Daniel Jupiter, PhD; Sapna Kaul, PhD

Texas Public Health Journal 2019;71(2):29-34

ABSTRACT

Background: As tax-exempt charity organizations, United States nonprofit hospitals are expected to give back to their communities. Concerns that they have fallen short in this regard have resulted in legislation. Most attempts to quantify community contributions have focused on monetary input measures (i.e., hospitals' spending on community benefits). An outcomes-based approach more accurately assesses whether hospital contributions improve community health. **Objectives:** This study introduces an outcomes-based approach for evaluating the effectiveness of two hospital inputs: monetary contributions for community benefits and community health needs assessments. We hypothesized that a higher quality assessment report and increased community benefits spending would result in better health outcomes. **Methods:** We linked three data sources for 79 Texas hospitals: Form 990 Schedule H data (monetary inputs), quality scores for community assessment and implementation plan reports, and Prevention Quality Indicators (health outcomes: overall composite, chronic and acute). We generated descriptive statistics and conducted bivariate and multivariate regressions to examine the association between inputs and outcomes. **Results:** We found no significant associations between report scores and any composite health outcomes. All three health outcomes, overall ($\beta = -3.5e-4$), acute ($\beta = -2.6e-6$), and chronic ($\beta = -8.5e-5$), were negatively associated with community health initiatives as a percent of all hospital expenditures. Both the overall composite ($\beta = 4.1e-6$) and chronic health measure ($\beta = 2.0e-6$) had a weak positive association with direct patient care expenditures. **Conclusions:** Higher quality assessment reports and increased monetary inputs were not associated with improved health outcomes. Although the results from this study are largely inconclusive, we believe this is a first step to assess whether nonprofit hospital inputs lead to improved health outcomes. **Public health Implications:** Hospital community benefits could be used to fill gaps in the provision of population health services and benefits, while complementing existing public health improvement efforts.

Cancer Incidence Among the Mentally Ill Treated at the Local Mental Health Authority Clinics in Texas

Robert J Reynolds, MS MPH PhD; Steven M Day, PhD1; Alan Shafer, PhD; Emilie Becker, MD

Texas Public Health Journal 2019;71(2):35-42

ABSTRACT

Background: Though the increased mortality due to cancer among the severely mentally ill is well-established, estimates of the incidence of cancers in this population have been inconsistent. Here we study mentally ill clients treated at the Local Mental Health Authority outpatient clinics in Texas in the years 2005 to 2010 and compare age-adjusted incidence rates (AAIRs) for this population to those of the Texas general population. **Methods:** Rates among adult mental health treatment clients receiving services through the Texas Department of State Health Services were examined by matching client data to the Texas Cancer Registry (TCR). Rates were standardized to the year 2000 Standard Million population. General population AAIRs were computed from Texas Cancer Registry data using SEER*Stat version 8.1.2 software. **Results:** The AAIRs for all cancer sites combined were different than those for the general population of Texas for both mentally ill men and women. Women's AAIRs were higher than those in the general population for all cancer sites combined (DSHS AAIR = 923.4, 95% CI = 857.2 - 999.4; TCR AAIR = 480.9, 95% CI = 479.0 - 482.7), while incidence rates for men were lower than in the general population for all cancer sites combined (DSHS AAIR = 456.2, 95% CI = 414.1 - 507.3; TCR AAIR = 633.8, 95% CI = 631.4 - 636.2). No large racial or ethnic differences were observed. **Conclusion:** This research demonstrates excess risk of cancer diagnosis for mentally ill women in the State of Texas. The decreased risk for men most likely reflects a bias in the rate of detection of new cancers which may be related to men's overall healthcare seeking behaviors. These results suggest that primary healthcare workers treating women or men with mental health issues should make inquiries as to their general health whenever the opportunity arises.

TPHA Remembers...

Texas Public Health Journal 2019;71(2):43

Volume 71, Issue 1: Winter 2019

President's Message

Rachel Wiseman, MSPH

Texas Public Health Journal 2019;71(1):2

Commissioner's Comments

Dr. John Hellerstedt

Texas Public Health Journal 2019;71(1):3

Poison Control

Turpentine Ingestions Reported to Texas Poison Centers

Cristina Thomas, M.Ed., CHES

Texas Public Health Journal 2019;71(1):3-4

Book Review

The Book of Why: The New Science of Cause and Effect, by Judea Pearl and Dana Mackenzie (2018)

Carol Galeener, PhD

Texas Public Health Journal 2019;71(1):4-5

Original Public Health Research:

Leading causes of death in rural and urban areas of the eleven Texas public health regions

Gordon Gong, Debra Curti, Coleman Johnson, Catherine Hudson, Billy U. Philips, Jr.

Texas Public Health Journal 2019;71(1):6-14

ABSTRACT

Background: Johnson et al. recently reported that the age-adjusted rates of leading causes of death were higher in rural vs. urban areas in the three regions (East, West and South) of Texas in 2010 with few exceptions. It is more informative to map the excess deaths in rural areas among the 11 Texas Public Health Regions (PHRs) instead of the three larger regions. **Objectives:** To determine the age-adjusted rates of national and Texas' top 10 causes of death and the all-cause mortality in rural vs. urban areas for the 11 PHRs administered by local offices of the Texas Department of State Health Services (DSHS). **Methods:** Mortality data from 2010 to 2014 from DSHS were combined and stratified by PHR, race/ethnicity, and urbanization code. **Results:** Age-adjusted rates in most causes of death were higher in rural vs. urban areas in a majority, but not all, of the 11 PHRs. Specifically, PHRs 2, 3, 4, 6, 7, 8 and 11 each had eight or more causes of death with higher rates in rural vs. urban areas. After analysis by race/ethnicity, higher age-adjusted rates of most leading causes of death in rural areas in these PHRs persisted, particularly among non-Hispanic whites. **Conclusions:** The excess deaths in rural areas differ among PHRs and are more prominent among non-Hispanic whites than other racial groups. These findings will help policy makers take measures to improve rural health in Texas with special attention paid to those PHRs that had excess deaths in rural areas.

The School-Age Child: Does Homeless Mean Healthless?

Donna Paris, DNP, RN, CNE, Lisa Campbell, DNP, RN, APHN-BC

Texas Public Health Journal 2019;71(1):15-19

ABSTRACT

Background: Homelessness has become part of the life experience for a growing number of Americans and threatens the health and well-being of thousands of families and children. A small metropolitan area in West Texas assessed the needs of its homeless population, and while attention was given to the housing requirements of the homeless children, the healthcare needs were not specifically addressed. **Methods:** The city's needs assessment utilized a mixed-methods approach that included: (1) stakeholder focus groups; (2) identification and review of existing databases, including federal, state, and local sources (e.g., state homeless organizations, local school district, and the Abilene Police Department); and, (3) collection of individual data, as appropriate, from homeless individuals utilizing outdoor encampments and homeless shelters. Data from individual and agency sources were used and "triangulated" (i.e., compared and contrasted) to verify and/or disconfirm observations of diverse participants. However, the city assessment did not address healthcare concerns in the homeless school-age child.

This project identified the primary stakeholders and conducted focus groups to determine the available resources. Formative program development was accomplished using a logic model, and the program was implemented by the stakeholders to address the gaps in care. **Results:** Stakeholders with existing community programs met to discuss their programs and how they might better address the unmet needs the homeless school-age children. A program was developed and implemented by the authors to address the identified healthcare needs. The program was implemented and, although not all of the needs were met, several children were able to receive the medical and psychological care needed. The exact number and their needs were not released due to privacy and confidentiality issues. **Conclusions:** Barriers to appropriate healthcare were identified and reduced in order to encourage positive health outcomes in the school-age homeless population. The program was designed to identify existing community resources and reduce the barriers to their use in order to meet the healthcare needs of the homeless school-age child. The findings suggest the importance of collaboration and coordination of existing programs to maximize the benefit for the population.

An Exploratory Study of Community Health Priorities and Implementation Strategies for Nonprofit Hospitals in Southeastern Texas

Sodhi J, PT, MPT, MPH, Pennel CL, DrPH, MPH, Baillargeon J, PhD, Prochaska JD, DrPH, MPH
Texas Public Health Journal 2019;71(1):20-23

ABSTRACT

Background: The Internal Revenue Service expects nonprofit hospitals, as tax-exempt institutions, to provide benefit to the communities they serve, which includes conducting community health needs assessments and implementing strategies to improve community health. However, previous literature suggests the priorities hospitals identify and strategies they implement may do little to improve community health. **Objective:** This is an exploratory study that attempts to characterize the priorities and implementation strategies identified and implemented by a regional sample of Texas nonprofit hospitals. The priorities and implementation strategies are categorizing into four conditional categories and by levels of the social ecological model. **Methods:** We performed content analysis of thirty-two publicly available community health needs assessment and implementation strategy reports from February 21, 2018 to March 25, 2018. Reports were published in 2016 and 2017 by nonprofit hospitals within a southeastern region of Texas, defined in this study by 16-counties in the 1115 Medicaid Waiver Regional Healthcare Partnership 2. We used four conditional categories (medical conditions, behavioral conditions, health system conditions, and community conditions) to categorize priorities. Within each priority conditional category, we also classified levels of implementation strategies, using the social ecological model, as intrapersonal, interpersonal, organizational, community, or policy. **Results:** One-hundred thirty-five priorities were identified by the 32 nonprofit hospitals, with an average of four priorities per hospital. Health systems conditions were the most commonly identified priority (63.0%). Nine-hundred sixty-seven implementation strategies were identified, with an average of 30 strategies per hospital. By conditional category, most strategies (55.7%) addressed health system conditions, while only 0.2% addressed community conditions. The greatest number of implementation strategies were classified at the intrapersonal level (41.3%), while only 0.5% were at the policy level. **Conclusion:** While nonprofit hospitals are required to provide benefit to communities, most priorities hospital identified are health system-related and implementation strategies to address priorities are focus at the intrapersonal-level (on individuals). A greater emphasis on community priorities and policy-level strategies will likely have greater impact on community health improvement.

Practice Intervention Activities to Improve Population Health: A Case Study Using Electronic Health Records (EHR) for Chronic Disease Management

Richard C. Howe, Ph.D.; Sushma Sharma, Ph.D.; Matt Murray, MD
Texas Public Health Journal 2019;71(1):24-30

ABSTRACT

Objective: Diabetes has become the seventh leading cause of death in the U.S. The Texas Department of State Health Services (DSHS) contracted with Dallas Fort Worth Hospital Council Foundation (DFWHCF) to increase the use of health information technology (HIT) and electronic health records (EHRs) for treating patients with high blood pressure, pre-diabetes, and diabetes. **Methods:** The scope of work included recruitment of practice groups, development of data collection survey tools, a collection of baseline data, and creation of intervention plans specific to each practice and their EHR. Practices could choose from a list of 32 intervention items to improve the use of their EHR in the treatment of hypertension and diabetes. Overall, 18 intervention activities were selected by the

participating practices. **Results:** Key results suggest that 90.1% of the practices are now able to report on hypertension (NQF 18), up from 66% at the start of the project. Also, 96.4% of the practices are now able to report on diabetes (NQF 59), up from 87.5% at the start. On the prevention indicators side, 54.0% of practices are now able to report on pre-diabetes, up from 50%, and 53.64% of the practices now record overweight and obese patients, up from 44.31%. **Conclusion:** The intervention activities clearly improved a practice's ability to track key clinical indicators related to hypertension and diabetes. At the beginning of this study, most of the practices were using their EHR simply for clinical documentation and billing. By showing them how to collect, analyze, and develop reports that were focused on measures related to hypertension and diabetes, the practices began to track these disease conditions across their patient population. These findings demonstrate the value and potential of health information technology (HIT) and electronic health records (EHRs) in population and public health.

Increasing Political Astuteness in Graduate Nursing Students Enrolled in a Historically Black College or University Masters of Science in Nursing Program

Sharisse Hebert, DNP, RN, FNP-BC, Abida Solomon, PhD, Jerrel Moore, PhD, Chloe Gaines, PhD, RN, FNP-BC
Texas Public Health Journal 2019;71(1):31-34

ABSTRACT

Introduction: The common theme of concerns that has emerged with our graduate nursing students has been the difficulty with understanding public health policy. Political astuteness involves understanding policy design, policy implementation, and policy evaluation. This required health policy course in the graduate nursing curriculum was designed to empower nursing students with the knowledge to develop, implement, and restructure public health policies that are appropriate for the diverse population in which they serve. With very few articles published discussing health policy education within a diverse student population, health policy educators may be missing a chance in creating or shaping future health policy makers that represent the look and feel of America. **Objective:** To assess the impact of a required health policy course on graduate nursing student's political astuteness in a Historically Black College or University (HBCU). **Methods:** The students completed the Political Astuteness Inventory (PAI) survey using Survey Monkey prior to taking the required health policy course and after the course to compare levels of political astuteness and political activism. **Results:** Participants knew more about the legislative and policy process ($p < 0.01$), knew more about legislators ($p < 0.01$), were more aware about health policy issues ($p < 0.01$), increased their participation in professional organizations ($p < 0.01$), and were more involved in the political process ($p < 0.01$). **Conclusion:** These results strongly suggest that students' participation in the required health policy course was effective in changing their knowledge about the legislative and policy processes. Addressing the barriers and supporting the facilitators for political astuteness is a start in bridging the chasm of political process knowledge deficits.

Assessment of Hepatitis B Virus Immunity among Central Texas Veterans Diagnosed with HIV Infection

Najma Parvez, MD, Cassidy Dzenowski, PharmD, Kathleen L. Ramirez, RN, Andrew Himself, PharmD, David A. Jacob, PharmD, Joel Massey, MD
Texas Public Health Journal 2019;71(1):35-38

ABSTRACT

Background: Persons living with human immunodeficiency virus (HIV) infection are at higher risk for hepatitis B virus (HBV) infection, and have a decreased immune response to the hepatitis B vaccine (HepB), than the general population. Clinical guidelines recommend HBV immunity determination among HIV-infected patients and vaccination of HBV-susceptible patients with HepB. A protocol is needed to determine HBV susceptibility among this high-risk population and identify patients who require additional prevention measures against HBV infection. **Methods:** We identified patients with confirmed HIV infection at the Central Texas Veterans Health Care System (CTVHCS) during August 10, 2017, through December 15, 2017. We reviewed vaccination history and HBV serology records. We defined HBV immunity as hepatitis B surface immune globulin (anti-HBs) level ≥ 10 IU/L or evidence of past or current HBV infection. We identified anamnestic immunity among HBV-susceptible patients by using an antigenic stimulus HepB dose followed by post-dose anti-HBs. **Results:** Of 289 HIV-infected patients, 85 (29%) were HBV-susceptible. Of 40 patients who completed post-stimulus serology, 19 (48%) demonstrated immunity, decreasing the total number of HBV-susceptible patients from 85 to 64 (25% absolute decrease). HBV-susceptible patients with documented HepB vaccination history had 4.3-fold greater odds of anti-HBs conversion compared to unvaccinated patients (95% confidence interval 1.2–16.6). **Conclusions:** We developed a protocol to screen for HBV immunity among the CTVHCS population of HIV-infected patients, and we decreased the absolute

number of HBV-susceptible patients by 25%. Review of HBV immunity among HIV-infected patients identified a susceptible sub-population in need of additional HBV infection prevention measures.

TPHA Remembers

Texas Public Health Journal 2019;71(1):39

Volume 70, Issue 4: Fall 2018

President's Message

Rachel Wiseman, MPH

Texas Public Health Journal 2018;70(4):2-3

Commissioner's Comments

Dr. John Hellerstedt

Texas Public Health Journal 2018;70(4):3

Poison Control

ADHD Medication Exposures Reported to Texas Poison Centers

Kristi L. Hargrove, PharmD, George M. Layton, MD, Shawn M. Varney, MD

Texas Public Health Journal 2018;70(4):3-6

Public Health Practice Commentary

Geriatric Oral Health in Texas is a Public Health Concern

Maryam Tabrizi, DMD, MPH, Kathy T. Gibson, DDS

Texas Public Health Journal 2018;70(4):6-8

Original Public Health Research:

Longitudinal Assessment of Children Participating in a School-Based Supplemental Nutrition Program

Diane S. Berry, PhD, Richard Amory, BS, Terry Clark, Taylor Hanna, BA

Texas Public Health Journal 2018;70(4):9-12

ABSTRACT

Approximately one in four Texas children live in food insecure households. Moreover, food insecurity and chronic hunger exert well-documented deleterious effects on children's physical and psychological health and well-being. We assessed the benefits of a school-based weekend supplemental nutrition program for children identified as at risk for chronic hunger and food insecurity. Program participants received backpacks of shelf-stable food and snacks on Friday afternoons throughout the school year. School personnel provided observations of the children's engagement in behaviors associated with food insecurity, and verbalizations about access to food at home, as well as evaluations of their emotional well-being and academic performance. Assessments were made before and after program participation. Repeated measures analyses revealed that, subsequent to participation, (a.) children's engagement in behaviors indicative of food insecurity decreased; (b.) the frequency of children's spontaneous verbalizations revealing insufficient access to food decreased; (c.) evaluations of children's emotional well-being increased; and (d.) academic performance evaluations improved. These effects were independent of age, and replicated across sex. The data suggest that children who take part in such backpack programs may benefit in a variety of ways. Strengths and limitations of the present research as well as recommended avenues for future exploration are discussed.

Challenges to Address Health Disparities by Using Community Health Workers and Promotores (CHW/Ps) in Galveston County

Wei-Chen Lee, PhD, Hani Serag, MD, MPH, Dylan Lancaster, MS

Texas Public Health Journal 2018;70(4):13-16

ABSTRACT

Objective: The purpose of this research is to inform strengthening outreach programs to monitor and address social determinants of health. It examines the feasibility of using existing community health workers or promotores (CHW/Ps) in Galveston County to implement future interventions to reduce health disparities.

Materials and Methods: Using a list of certified CHW/Ps provided by Texas Department of State Health Services, we successfully recruited 11 participants for two focus group discussions (FGDs) held in June 2017. We used guidelines of 10 open-ended questions to collect data on numbers, training and the organizational umbrella of CHW/Ps in Galveston County; challenges they face; and the feasibility of their engagement with programs to reduce disparities. Responses were transcribed into one written script and cross-reviewed by two different investigators. We used qualitative coding to identify key themes based on which we categorized the responses.

Results: One of 11 participants was retired, one was unemployed, and nine were working in outreach programs of academic institutes or public health agencies. Most of them were serving uninsured patients or those covered by indigent health plans. From their responses, three themes emerged: inadequate local recognition, shortage of community resources, and insufficient financial resources.

Discussion and Conclusion: It is important to acknowledge CHW/Ps' roles in our communities and leverage their strength to reduce health disparities. The study highlighted disadvantages to serving in Galveston as a CHW/P, such as lack of resources. More supporting resources may benefit their work and eventually benefit the entire community.

Student-Faculty Collaborative Practices: Measuring Impact Through Demographic and Financial Comparison

Robert McKenzie, Brandon Paker, Hye Ryung Yang, Rosemary Liu, Mahsa Madani, Karina Mora Massad, Andrew Braun, Richard Usatine, MD

Texas Public Health Journal 2018;70(4):17-23

ABSTRACT

Background: As one of the states to opt out of Medicaid expansion under the Affordable Care Act, Texas remains the state with the highest number of uninsured nonelderly adults in the coverage gap. As a result, at least 15-20% of Bexar County residents remain uninsured. In order to remedy the gap in health coverage, the University of Texas Health San Antonio's (UTHSA) Student-Faculty Collaborative Practices (SFCPs) provide treatment to vulnerable communities in San Antonio. However, studies identifying their impact on the patients and community, as measured by financial savings and satisfactory care, are lacking. To quantify this, various aspects of three SFCPs - Haven for Hope, Alpha Home, and San Antonio Metropolitan Ministry Clinic (SAMP Clinic) - were identified and analyzed.

Methods: We first identified patient demographics based on gender, ethnicity, and age. Second, we ascertained other health care options available to and/or previously used by patients. Third, we recorded the time spent with patients by both students and faculty physicians and compared findings to reported Medicare/Medicaid averages. Last, we compared the estimated cost of SFCP patient visits to the average costs for similar visits reported by the Medicare/Medicaid re-imburement tool.

Results: Results show that SFCPs provide visits quantifiably similar to Medicare listed averages in both visit length and price at no cost to patients. Furthermore, we identified patient populations at risk for either inappropriate care or no care at all.

Discussion: SFCPs are a source of healthcare comparable to other commonly used sources such as the emergency department (ED) or primary care provider (PCP). The total amount of spending by our clinics is comparable to that of Medicaid/ Medicare and includes laboratory tests, medications, and other services. SFCPs work as a bridge to help give stable long-term primary care to vulnerable patient populations unable to afford healthcare, including programs such as Medi-aid/ Medicare or CareLink.

Focused Section: Public Health Practice Approaches to Address Societal Violence Public Health Practice Commentaries Addressing Factors Associated with Societal Violence Gun Violence in Texas: The time for a Public Health Response is Now!

Catherine Troisi, PhD

Texas Public Health Journal 2018;70(4):24-25

The Changing Epidemic of Synthetic Cannabinoid Use: What We Know and How Information Can Be Used in Public Health Practice and Research

Jane Carlisle Maxwell, PhD

Texas Public Health Journal 2018;70(4):25-27

Public Health Practice Community Programs to Address Societal Violence Why Stand Up? San Antonio Metropolitan Health District's Program to Curb Violence

Derek L. Taylor, BBA

Texas Public Health Journal 2018;70(4):28

Campus Violence Prevention Model: Tarleton State University

Caris Thetford, MS, LPC, NCC, Subi Gandhi, PhD, MPH

Texas Public Health Journal 2018;70(4):29-30

Book Review

The Coddling of the American Mind: How Good Intentions and Bad Ideas Are Setting Up a Generation for Failure, (2018) by Greg Lukianoff and Jonathan Haidt

Carol Galeener, PhD

Texas Public Health Journal 2018;70(4):30-31

Volume 70, Issue 3: Summer 2018

President's Message

Rachel Wiseman, MPH

Texas Public Health Journal 2018;70(3):2

Commissioner's Comments

Dr. John Hellerstedt

Texas Public Health Journal 2018;70(3):3

Poison Control News

Teething Product Ingestions Among Young Children

Mathias B. Forrester, BS; George M. Layton, MD

Texas Public Health Journal 2018;70(3):4

Fifth Annual Pills and Thrills that Kill! Toxicology in Review, El Paso, Texas, April 12-13, 2018

Stephen W. Borron; Salvador Baeza; Diane Huerta

Texas Public Health Journal 2018;70(3):5-6

Book Review:

Factfulness: Ten Reasons We're Wrong About the World – and Why Things are Better Than You Think, (April 2018), by Hans Rosling with Ola Rosling and Anna Rosling Ronnlund.

Reviewed by Carol A. Galeener, PhD

Texas Public Health Journal 2018;70(3):6-7

Public Health Commentary

Advancing Collaborative Efforts between Public Health Practice and Academic Public Health Partners to Improve Public Health Education

Cara Pennel, DrPH, MPH; Leslie Stalnaker

Texas Public Health Journal 2018;70(3):7-8

Call for Papers: Special Focused Journal Section: "Texas Takes Action to Address Societal Violence"

Texas Public Health Journal 2018;70(3):9

Texas Public Health Practice Approaches to Address Societal Violence

Increasing Resiliency and Decreasing Adverse Childhood and Community Experiences through Policy and Practice

Shannon Guillot-Wright, MA, PhD; Julie Purser, PhD; Jeff R. Temple, PhD

Texas Public Health Journal 2018;70(3):9-10

Original Public Health Research:

Gateway of Zika Virus into US: How Housing is Fundamental to Prevention

Amanda W. Scarbrough, PhD; Jack Hill, PhD; David Hoffpauir; Melinda Holt, PhD; Heranga Rathnasekara

Texas Public Health Journal 2018;70(3):11-16

ABSTRACT

On November 28, 2016, the Texas Department of State Health Services reported the state's first case of local mosquito-borne Zika virus infection in Cameron County, Texas. According to the Cameron County Department of Health Services, six of the 22 Zip codes in Cameron County (78586, 78566, 78559, 78550, 78521, 78520) reported 32 cases of Zika virus infection between January 1, 2016, and March 31, 2017. This project sought to spatially visualize and analyze all cases of confirmed Zika virus infection between January 1, 2016, and March 31, 2017. A Geographic Information System (GIS) was used to reformat, georeference, integrate, manage, analyze, and visualize the data and information. GIS visualization demonstrated that the highest number of cases of Zika virus infection occurring in Cameron County between January 1, 2016, and March 31, 2017, were found in Zip codes 78521 and 78520. These Zip codes are directly on the United States/Mexico border. In addition, when looking at the socio-economic status of Cameron County, GIS visualization demonstrated that Zip codes 78521 and 78520 have high

rates of individuals/families renting housing (“rental rate”) and low availability of unoccupied housing units for rental (“vacancy rate”) when compared to other zip codes reporting Zika virus infection. Further, in Zip codes 78521 and 78520, there is considerably less disposable income available per person than in other Zip codes in Cameron County reporting cases of Zika virus infection. Together, high rental rates, low vacancy rates, and less disposable income combined with the location on the border of Mexico, where there has been active transmission of the Zika virus infection, create an environment prime for the spread of the virus into the United States.

Sorting and Packaging the Evidence: Guiding Implementation of Effective Interventions to Prevent Distracted Driving With a Literature Review

Courtney Edwards MSN, MPH, RN; Marisa Abbe, PhD; Shelli Stephens-Stidham, MPA; MaryAnn Contreras, RN; Stewart Williams, Cassandra Dillon, MS; Julia Perez, BSN; Kevin Rix, MPH; Mark Sparkman, MD; Sandra Williams, RN; Rohit Sheno, MD

Texas Public Health Journal 2018;70(3):17-21

ABSTRACT

Background: Distracted driving has joined alcohol and speeding as a leading factor in fatal and serious motor vehicle injury crashes. In 2016, 455 people were killed in crashes involving distracted driving on Texas roadways, a 5.4% increase from 2015. The Injury Prevention Committee of the Texas Governor’s Emergency Medical Services (EMS) and Trauma Advisory Council conducted an extensive literature review to classify intervention strategies based on their effectiveness in reducing or preventing distracted driving. The goal was to provide practitioners with evidence-informed measures that are effective in counteracting distracted driving.

Methods: The literature reviewed consisted of peer-reviewed journals, government resources, injury prevention outlets, and private corporations’ websites. Inclusion criteria included English language publications during 1999-2016. Only publications including distracted driving prevention measures/ countermeasures were reviewed. The authors used the Nursing Levels of Evidence from “*Evidence-based Practice in Nursing & Healthcare: A Guide to Best Practice*” and the “Grading of Recommendations Assessment, Development and Evaluation” (GRADE) to determine criteria for evidence-based strategies. A color-based indicator was utilized to rank studies to signal appropriate or positive outcome interventions, interventions to be used with caution, inappropriate or harmful/negative outcome interventions, and inconclusive interventions.

Results: Twenty articles describing 16 interventions were identified. Two interventions were effective in reducing reported distracted driving. One intervention was found to not only be ineffective, but harmful. For three interventions, the evidence within these studies was inconclusive. Thirteen studies lacked well-designed evaluation and were classified as weak.

Conclusion: Effective interventions should be replicated and those interventions determined to be ineffective or potentially harmful should be discontinued. Synthesizing research into an easy to read format may be appealing to practitioners. Future assessment and research targeting intervention implementation will determine if this method of translating research is effective.

Racial and Geographic Variation in Leg Amputations Among Texans

Neal R. Barshes, MD, MPH; Sherene Sharath, MPH; Nader Zamani, MD; Kenneth Smith, PhD; Hani Serag, M.D, MPH; Selwyn O. Rogers, MD, MPH

Texas Public Health Journal 2018;70(3):22-27

ABSTRACT

Background: The existence of racial and ethnic disparities in leg amputations rates is well documented. Despite this, approaches to addressing these alarming disparities have been hampered by the inability to identify at-risk individuals in a region and design targeted interventions. We undertook this study to identify small geographic areas in which efforts focused on high-risk individuals with peripheral artery disease (PAD) could address disparities in leg amputation rates.

Methods: We used de-identified Texas state admission data to identify PAD-related admissions associated with an initial revascularization (leg angioplasty or leg bypass) or a primary leg (above-ankle) amputation between from 2004 through 2009.

Results: 21,273 major initial procedures were performed in Texas from 2004 through 2009 for PAD-related diagnoses, including 16,898 revascularizations and 4,375 leg amputations. A multivariate logistic regression demonstrated that an initial leg amputation done without revascularization was significantly associated with, among other variables: people categorized as black (odds ratio [OR] 1.79) or Hispanic (OR 1.42); those with Medicaid

coverage (OR 1.89); and those treated at low volume hospitals (OR 1.78; $p < 0.001$ for all). Four geographic regions were identified with significantly higher risk-adjusted leg amputation rates. Of the 349 Texas hospitals performing major procedures, 72 (21%) reported no revascularization procedures during the six-year period studied.

Conclusions: Prevention efforts directed at specific geographic areas may be more likely to reach at-risk people with PAD and thereby reduce leg amputations disparities in Texas. Such efforts might also find strategies to direct patients toward higher volume centers with higher revascularization rates.

Investigating Injuries Seen in Area Physician Offices After a Fertilizer Plant Explosion

Garrett Sansom, DrPH, MPH; Kahler Stone, DrPH, MPH; Jennifer A. Horney, PhD, MPH

Texas Public Health Journal 2018;70(3):28-30

ABSTRACT

In April 2015, an explosion at a fertilizer plant in West, Texas, caused extensive damage to nearby residences, a nursing home, and two schools. According to death certificates, medical record review, and interviews, 15 deaths resulted from fatal injuries and 252 individuals sought immediate treatment for nonfatal injuries in acute care facilities. To identify patients who later received care for explosion-related injuries from a private physician, and were therefore missed by the initial study, a list of health care providers and facilities that could have been utilized was developed. Providers were surveyed via telephone and asked to report any patients treated as a result of the explosion. Only one patient record was collected, and that patient had been identified in post-disaster surveillance. These findings support data from the 1995 Oklahoma City bombing, where little information was gathered from post-explosion private physician surveys. In the aftermath of a large event, limited resources for epidemiologic investigation of injuries should focus on acute care facilities.

TPHA Remembers..

Texas Public Health Journal 2018;70(3):31

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Planners4Health: A Renaissance between Planning and Public Health to Confront Disasters in Rural Area

Texas Public Health Journal 2018;70(S):1-24

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Melissa Oden, DHEd, LMSW-IPR, MPH, CHES

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A Public Health Solution to Long Term Recovery from a Severe Weather Event

Russell Hopkins

Texas Public Health Journal 2018;70(S):18-19

Planning for Public Health: A Personal Journey

David R. Gattis, FAICP, CFM, ICMA-CM (retired)

Texas Public Health Journal 2018;70(S):20-21

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Lisette Osborne, RN/BC, MSN, CHEP

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Texas Public Health Journal 2018;70(2):3

Correction

Texas Public Health Journal 2018;70(2):3

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Dr. John Hellerstedt

Texas Public Health Journal 2018;70(2):3-4

Poison Control News

Texas Poison Center Calls in Response to the "Tide Pod(TM) Challenge"

George M. Layton, MD; Shawn M. Varney, MD; Mathias B. Forrester, BS

Texas Public Health Journal 2018;70(2):4-6

Public Health Practice Commentary:

Model Program to Reduce Societal Violence in a Large Urban City

Kirk Driver, MCJ, MBA, Captain; Melissa Oden, DHEd, LMSW-IPR, MPH, CHES

Texas Public Health Journal 2018;70(2):6-7

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Texas Public Health Journal 2018;70(2):7

Book Review:

iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy--and Completely Unprepared for Adulthood--and What That Means for the Rest of Us, by Jean M. Twenge, PhD

Reviewed by Carol A. Galeener, PhD

Texas Public Health Journal 2018;70(2):8

Original Public Health Research:

Community Engagement Approach: Developing an Active Living Plan in Rural Texas

Susan Ferguson, DNP, MBA, RN, CPHQ, NEA-BC; Lisa Campbell, DNP, RN, APHN-BC; Derrick Neal, MPA

Texas Public Health Journal 2018;70(2):9-15

ABSTRACT

Background: Substantial evidence demonstrates a relationship between physical activity and chronic disease morbidity and mortality. Sedentary lifestyles pose serious health consequences and place a burden on the local public health system. We describe the development of an Active Living Plan (ALP) that addresses health risks of sedentary lifestyles in residents of Victoria County, a predominantly rural community in south Texas. Victoria County reports high rates of chronic disease such as diabetes and heart disease and cancer deaths. The county's adult obesity rate and number of adults reporting no physical activity are greater than the state and national averages.

Methods: The Victoria County Public Health Department engaged a diverse community group in creating the ALP using local health-benefitting environmental and policy strategies. The Victoria County ALP Coalition used a multi-step, collaborative process to design a blueprint for improving the health of its community. **Results and Discussion:** Stakeholders from nine societal sectors participated in identifying and recommending positive physical activity changes. The development of community-specific, evidence-based strategies addressed gaps in community physical

activity needs. Examples include promoting pedestrian safety, sidewalk improvements, establishing community gardens, and creating a calendar of activity events that residents can participate in. The Texas Department of State Health Services approved the ALP, which was disseminated to stakeholders and residents. *Conclusions:* The Victoria County ALP is a collaborative effort focused on increasing physical activity to reduce health risk factors associated with chronic health conditions. Changing the community's sedentary behavior and health outcomes will take time, but the ALP empowers the community to advocate for change. The ALP is considered a living document and will be updated based on new knowledge and practices as well as on observations of the community status from quarterly progress reports.

Healthy Students 2020: Analysis of a Self-Reported Health Assessment in a Public Four-Year University

Joseph Topinka, LLM, JD, MHA, MBA, Barbara Hewitt, PhD, MBA, Alexander McLeod, PhD, MBA, Clemens Scott Kruse, PhD, MBA, MSIT, MHA

Texas Public Health Journal 2018;70(2):16-22

ABSTRACT

Context: Healthy People (HP) 2020 has set several goals in the United States. The process to identify these goals was led by the HP2020 Federal Interagency Workgroup that was comprised of 50 members from the Department of Health and Human Services as well as other federal agencies. Studies have been conducted to determine whether the general population is meeting these goals; however, the authors could not locate a study that indicated how college students compared to these past assessments. This study measured healthy habits of the student population of a public, four-year state university. Six of the 12 Leading Health Indicator (LHI) topics of HP2020 were included in this study. **Methods:** A survey instrument consisting of structured responses was delivered through SurveyMonkey to about 10% of our student population. The response windows were a two-month period between April and May 2016 during which two reminders were sent to potential participants using email. **Findings:** 169 students completed the survey. 43% of the respondents reported that they have adequate access to health care, 26% reported symptoms of depression or anxiety, 71% exercised regularly, and 81% felt safe on campus. **Conclusions:** This survey instrument queried the student population of our university in order for us to categorize the overall health of the population and to leverage specific programs that would increase the health and wellness of our students. A revised version of the survey is under design to include additional LHIs from HP2020. **Policy Implications:** The results serve as a gauge to measure the effectiveness of our university's health goals and policy.

Emergency Preparedness and Recovery: A Toolkit for Rural Communities

Texas Public Health Journal 2018;70(2):22

Original Texas Public Health Case Study: Utilizing Students to Move Upstream with Social Determinants of Health Screening

Wei-Chen Lee, PhD; Shannon Guillot-Wright, MA; Premal Patel, MD

Texas Public Health Journal 2018;70(2):23-24

ABSTRACT

The United States is behind other industrialized nations on most health-related rankings whereas the United States healthcare expenditure is greater than most industrialized nations. To respond to this crisis, one healthcare reform theme is to identify social determinants of health (SDH) that may lead providers to develop plans to improve patients' health outcomes. This study introduces a pilot program to demonstrate a model of utilizing medical students to identify and address the SDH in an outpatient primary care setting. SDH are nonclinical factors that influence patients' health outcomes and reflect the macro environment where people live, work, and play. Addressing the SDH of patient populations can enhance the patient-centered, community-oriented primary care model. We anticipate that more health professionals and academicians will train students to identify and address the SDH of their patients and that this study will address questions related to feasibility.

GIS Day, Texas Department of State Health Services, Austin, Texas, November 15, 2017

Alassane Barro

Texas Public Health Journal 2018;70(2):25-26

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President's Message

Carol M. Davis, MSPH, CPH

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Commissioner's Comments: Hurricane Harvey: How Public Health Responds to a Disaster

Dr. John Hellerstedt

Texas Public Health Journal 2018;70(1):3

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Public Health Response to Texas Tornadoes

Melissa Oden, DHEd, LMSW-IPR, MPH, CHES; Russell Hopkins

Texas Public Health Journal 2018;70(1):4-5

San Patricio County Department of Public Health in Hurricane Harvey: Challenges and Lessons Learned

James A. Mobley, MD, MPH, FAAFP; Clara L. Rieder

Texas Public Health Journal 2018;70(1):5-6

Response of the Southwest Center for Agricultural Health, Injury Prevention, and Education to Hurricane Harvey

Vanessa Casanova, PhD; Nykole Kafka Vance, MS, MCHES; Amanda Wickman, MBA; Jeffrey Levin, MD, MSPH

Texas Public Health Journal 2018;70(1):6-7

San Antonio Metropolitan Health District's Response to Hurricane Harvey

Linda Kaufman, MSN, RN, PHNA-BC

Texas Public Health Journal 2018;70(1):7-8

Public Health "Cot Surveys" at a Mega-Shelter for Hurricane Harvey Evacuees

Lauren M. Leining; Christina Kadine Carstens; Kristy O. Murray, DVM, PhD

Texas Public Health Journal 2018;70(1):8

Harris County Public Health's Mass Shelter Response during Hurricane Harvey

Brian C. Reed, MD; Michael "Mac" McClendon; Les Becker, MBA; Umair Shah, MD MPH

Texas Public Health Journal 2018;70(1):9-10

Limiting Harvey-Related Carcinogenic Air Pollution Exposure

Loren H. Raun, PhD

Texas Public Health Journal 2018;70(1):10-11

Mass and Interim Sheltering and Evacuee Needs in Houston during Hurricane Harvey: A Public Health Response

Banerjee D; Wiginton L; Aikins J; Coker O; Amuzu O; Fleming J; Harris J; Williams SL

Texas Public Health Journal 2018;70(1):11-12

Medical and Nursing Needs in a Mass Shelter After Hurricane Harvey

Banerjee D; Fletcher-Davies T; Persse D; Schulte J; Yang B; Bryant W; Short K; Jones R; Williams SL

Texas Public Health Journal 2018;70(1):12-14

Neighborhood Restoration Centers: A Model to Advance Recovery after Hurricane Harvey

Vishnu Nepal, MSc, MPH; Donna Atkinson-Travis, MHA, MBA; Maria DeLaCruz, MPA; Deborah Banerjee, PhD

Texas Public Health Journal 2018;70(1):14-15

Expanding Public Health: Behavioral and Mental Health Response Needed for Hurricane and Other Disasters

Joann Schulte; David Persse; John Fleming; Risha L. Jones; Stephen Williams
Texas Public Health Journal 2018;70(1):15-16

Poison Control News

Gelsemium sempervirens Ingestions Reported to Texas Poison Centers: More Common in Late Winter-Early Spring

Mathias B. Forrester, BS; George M. Layton, MD
Texas Public Health Journal 2018;70(1):17

Original Public Health Research:

The Benchmark of Rural Health: The Top 10 Leading Causes of Death in Rural Texas

Coleman Johnson, JD; Gordon Gong, MD, MS; Debra Curti, MEd, RHIA; Billy U. Philips, Jr., PhD, MPH
Texas Public Health Journal 2018;70(1):18-23

ABSTRACT

Background: The overall mortality rate has been reported to be higher in rural vs. urban areas in several states in the United States. This study is to determine the rates of the top ten causes of death in rural vs. urban areas in East Texas, West Texas and South Texas in 2010, which also serve as the baseline for future studies. **Methods:** The top ten causes of death in the state and the nation were identified by Texas Department of State Health Services (DSHS) and the National Vital Statistics Report, respectively. Nine are leading causes of death for both Texas and the nation. Thus, eleven causes of death plus the all-cause mortality were studied. Death counts by age, race/ethnicity and county in 2010 were obtained from DSHS. The corresponding population sizes as the denominators for calculating age-adjusted mortality rates were obtained from the U.S. Census Bureau which conducts a once-a-decade full count census of the population by age, gender, ethnicity and county. **Results:** The age-adjusted mortality rate for each cause was significantly higher in rural vs. urban Texas with few exceptions. When analyzed by region, causes of death with the highest rates were all in rural areas: heart diseases, cancer, cerebrovascular diseases, accidents, suicide and all-cause mortality in rural East Texas; chronic lower respiratory disease, Alzheimer's disease, and pneumonia-influenza in rural West Texas; and diabetes, kidney diseases and septicemia in rural South Texas. The rates of death by most causes in each ethnic group were higher in rural vs. urban areas in East, West and South Texas, respectively. **Conclusions:** These results show clear disparities in mortality from common causes of death in rural areas vs. urban areas in Texas. Rates presented establish a baseline against which to judge the progress of future public health policies aimed at reducing these disparities.

Building an Educational Program for Adult Congenital Heart Disease: Needs Assessment Findings, Annual Symposium Description, and Evaluation Results

Ebun O. Ebunlomo, PhD, MPH, MCHES; Melanie Lazarus, MPH; Akanksha Thakkar, MD; Gary Monteiro, MD; C. Huie Lin, MD, PhD, FACC, FSCAI
Texas Public Health Journal 2018;70(1):24-30

ABSTRACT

Background: Congenital heart defects are the most common birth defect. Due to recent medical advances, there are an estimated 13 million adult survivors with congenital heart disease (ACHD) worldwide. Unfortunately, many ACHD patients have limited knowledge about their health risks (e.g., heart failure, pulmonary hypertension) and need for lifelong care as they transition from pediatric care to adult cardiology. To address this public health challenge, the DeBakey Institute for Cardiovascular Education and Training conducted a qualitative needs assessment and developed and evaluated an educational program for ACHD. **Methods:** We conducted a 90-minute focus group discussion with ACHD patients and caregivers. This discussion addressed ACHD information and resources, health education opportunities, and patient outreach and education strategies. We used a grounded theory approach to identify major themes and develop the educational Adult Congenital Heart (ACH) Symposium held on November 19, 2016. To evaluate the program, we collected data through direct observations, program facilitator debriefings, faculty interviews, and participant surveys. **Results:** Six ACHD patients and five caregivers participated in the focus group. Participants identified three major themes: transition of clinical care from pediatric to adult cardiology, gaps in nonclinical ACHD management, and effective educational and outreach strategies. The resultant annual ACH Symposium was well-received: 97% of our survey respondents (n=30) were satisfied with the

information, materials, and speakers. All respondents would recommend this symposium to others. **Conclusions:** Improving the long-term health of ACHD patients through a public health approach requires understanding the needs of this population and then implementing tailored educational programs. Our needs assessment findings can inform planning of future educational programs for ACHD. Finally, the ACH symposium model may be replicated in other regions to address ACHD knowledge gaps.

Commentary on: Where is the Technology Taking the Economy? By W. Brian Arthur. (McKinsey and Company Analytics, October 2017). <https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/where-is-technology-taking-the-economy>

Carol A. Galeener, PhD

Texas Public Health Journal 2018;70(1):31

Volume 69, Issue 4: Fall 2017

President's Message

Carol M. Davis, MSPH, CPH

Texas Public Health Journal 2017;69(4):2

How You Can Help Rebuilding Efforts After Recent Disasters: Compiled by TPHA Leadership and Editorial Teams

Texas Public Health Journal 2017;69(4):3

Commissioner's Comments: Turning the Tide on HIV

Dr. John Hellerstedt

Texas Public Health Journal 2017;69(4):4

Poison Control News

Vitamin D Ingestions Reported to Poison Centers: A Consequence of the Vitamin's Increasing Popularity

George M. Layton, C. Lizette Villarreal

Texas Public Health Journal 2017;69(4):5-6

Analysis of Mushroom Ingestions in Texas

Mathias B. Forrester

Texas Public Health Journal 2017;69(4):6-7

Book Review: Kindling Curiosity for Public Health

Carol A. Galeener, PhD, MPH

Texas Public Health Journal 2017;69(4):7

Original Public Health Research:

Vaccination of Patients with Influenza and Pneumococcal Vaccines Prior to Discharge from a University Hospital

Jillian Patton, MS4, C. Glen Mayhall, MD

Texas Public Health Journal 2017;69(4):8-11

ABSTRACT

Objective: To determine the effect of a standing orders program (SOP) for administration of pneumococcal and influenza vaccines on vaccination rates of patients from four adult medical wards at a major academic medical center. **Methods:** Patient medical records were reviewed to gather information on patient's vaccination eligibility and status prior to discharge. Patients from the four medical wards were assessed over a three-week period. **Results:** One hundred sixty-four patients were analyzed, and 35 patients were vaccinated, receiving 39 vaccines in total. Of all 399 indicated vaccines, 162 (41%) were administered prior to admission - 33% influenza, 54% 23 valent pneumococcal polysaccharide vaccine (PPSV23), and 34% 13 valent pneumococcal conjugate vaccine (PCV13). When accounting for vaccines that were previously administered, 237 vaccines (110 influenza, 63 PPSV23, 64 PCV13) were indicated for administration just prior to discharge; only 16% of these vaccines were administered (12% influenza, 4% PPSV23, 0% PCV13). **Conclusion:** Discharge vaccinations may be improved with provider education and an outline of the current pneumococcal vaccines administration recommendations.

Chronic Disease Profile of Galveston County Residents

Jacob Moran, Sreenivas P Veeranki

Texas Public Health Journal 2017;69(4):12-15

ABSTRACT

The burden of chronic disease continues to increase in the US and the world. The sociodemographics profile of the US population is comparable to the population profiles at the state and county level suggesting the chronic diseases burden might be the same at the local/county level. In this paper, we present the socio-demographics, chronic diseases and associated risk factors' profile of Galveston County and draw comparisons with Texan and US general

populations. Additionally, we propose recommendations for chronic disease prevention and control in the Galveston County.

Mortality after Discharge from Publicly-Funded Substance Abuse Treatment in Texas, 2006-2013

Brandon Maughan, MD, MHS, MSHP, FACEP; Alan B. Shafer, PhD; Emilie A. Becker

Texas Public Health Journal 2017;69(4):16-21

ABSTRACT

Background: Substance abuse is a leading cause of preventable morbidity and mortality. While there is prior literature on mortality associated with abuse of major drug classes, relatively less literature exists regarding risks of mortality experienced by patients after they complete substance abuse treatment. **Methods:** The study was a retrospective cohort record-linkage study of patients aged 18-64 who enrolled in and were discharged from substance abuse treatment provided by the Texas Department of State Health Services during 2006-2013. These records were matched to DSHS vital statistics death records. Patients were classified by type(s) of drugs patients reported using, including alcohol, central nervous system (CNS) depressants, marijuana, opioids, and stimulants. Age was classified into five categories (18-24, 25-34, 35-44, 45-54, and 55-64 years). Crude mortality rates (CMRs) and standardized mortality ratios (SMRs) were calculated for deaths occurring up to 5 years after discharge. Manner of death was examined for each drug category. **Results:** The study sample included 199,225 patients, of whom 6537 (3.3%) died. Among patients who reported substance use disorder of a single drug type, the highest post-discharge SMRs were associated with opioids (7.1), CNS depressants (6.8), and alcohol (5.1), relative to the expected number of deaths in the general Texas population. High SMRs were observed among women ages 18-34 with opioid use disorder (range 14.3-17.7), women ages 25-34 with alcohol use disorder (SMR 12.3), and patients ages 25-34 with CNS depressant use disorder (14.7). Lower SMRs were observed for stimulants (3.0) and marijuana (2.4). Fifty-three percent of deaths were natural and 31 percent were accidental; drug overdoses caused most accidental deaths. **Conclusions:** Patients retain elevated risks of mortality after discharge from substance abuse treatment. Additional programs should be considered to reduce potentially avoidable deaths among those at highest risk, including young women with a history of abusing opioids, CNS depressants, or alcohol. Future research should examine manners and causes of deaths among these high-risk patient cohorts.

Call for Papers! Special Focused Journal Section: "Texas Response to Extreme Public Health Challenges"

Texas Public Health Journal 2017;69(4):22

Save the Date: TPHA 94th Annual Education Conference

Texas Public Health Journal 2017;69(4):23

Volume 69, Special Electronic Issue: August 2017

**Abstracts from the 93rd Texas Public Health Association Annual Education Conference
March 27-29, 2017 in Fort Worth, Texas**

Texas Public Health Journal 2016;69(S):1-29

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President's Message

Carol M. Davis, MSPH, CPH
Texas Public Health Journal 2017;69(3):2

TPHA Committees and Highlights of Exciting Activities

Texas Public Health Journal 2017;69(3):2

Commissioner's Comments: Mumps Makes a Comeback in Texas and the US

Dr. John Hellerstedt
Texas Public Health Journal 2017;69(3):3

Poison Control News

Insect Repellent Bands: Attracting Kids Not Insects

C. Lizette Villarreal, George M. Layton
Texas Public Health Journal 2017;69(3):4

Book Review: Rigor Mortis: How Sloppy Science Creates Worthless Cures, Crushes Hope, and Wastes Billions by Richard Harris

Carol A. Galeener, PhD, MPH
Texas Public Health Journal 2017;69(3):5

Public Health Practice Commentary: Protect the Prevention Fund

Catherine L. Troisi, PhD
Texas Public Health Journal 2017;69(3):6

Original Peer-reviewed Public Health Research:

Creating Momentum in Public Health through Strategic Planning and Academic Partnerships

Lisa Campbell, DNP, RN, APHN-BC, Donna Ernst, DNP, RN, NEA-BC, CNL, CGRN, Francisco Javier Gonzales, DNP, RN, MBA/HCM, CCM, CPHQ, HACP, Tammy Stafford, DNP, MBA, RN, Karen Walsh, DNP, RN, FNP-BC, Jeff Watson, DNP, RN-BC, NEA-BC, NE-BC, CRRN
Texas Public Health Journal 2017;69(3):7-9

ABSTRACT

A strategic plan provides organizational direction and is one of seven pre-accreditation requirements of the Public Health Accreditation Board. However, developing a strategic plan requires an allocation of resources that can burden most local public health departments. The Victoria County (Texas) Public Health Department (VCPHD) leveraged resources and collaborated with an academic partner to develop a strategic plan in six weeks. Five Doctor of Nursing Practice students from Texas Tech University Health Sciences Center School of Nursing used the National Association of City County Health Officials' (NACCHO) Developing a Local Health Department Strategic Plan: A How-To Guide as a roadmap for planning and facilitation. Preplanning included conducting a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis for each of the seven health department divisions. VCPHD leadership (director and managers) participated in a one-day planning session. As a result, a new organizational vision, mission, and first-time strategic plan were created. With adequate planning, any health department could apply the strategies outlined by the authors to create a strategic plan that creates positive momentum in an organization.

Sifting for Clues: Using Patient Healthcare Records to Identify Missed Opportunities for Tuberculosis Prevention

Patrick Crowley, BS, BA; Thaddeus Miller, DrPH, MPH
Texas Public Health Journal 2017;69(3):10-11

ABSTRACT

Introduction: Structured medical records reviews have potential to give broad insight into individual risks. How these might identify missed opportunities in screening for tuberculosis (TB), readily observable TB risk indicators, or modifiable factors associated with the future development of active TB is incompletely understood. We explored the potential utility and limitations of structured medical records reviews in a local public health department setting. **Methods:** During five weeks beginning June 2015, we requested all available current and historical medical records for consenting TB patients in treatment in an urban public health department. We reviewed records to identify TB “prevention opportunities” - risk factors recorded at any healthcare or clinical encounter that took place at least two months prior to the onset of classic TB symptoms. **Results:** Sixteen of 33 eligible patients provided medical records releases, and one or more healthcare providers returned records for 14 of these 16. TB risk factors were evident in 14/14 record sets, and prevention opportunities were identified for 6/14 (n=12, range one to four). **Discussion:** Since TB is inherently preventable, every incident case represents an individual who has ‘fallen through the cracks’ in otherwise successful TB prevention programs. We found that simple, accessible, and well-established methods may have potential to identify gaps in TB control strategies.

The Effects of Chronic Medical Conditions and Obesity on Self-Reported Disability in Older Mexican Americans

Sanggon Nam, PhD, MS, Soham Al Snih, MD, PhD, Kyriakos Markides, PhD
Texas Public Health Journal 2017;69(3):12-15

ABSTRACT

We investigated the effect of chronic medical conditions including obesity on self-reported disability and mobility in Mexican Americans aged 75 or over using data from the Hispanic Established Population for the Epidemiological Study of the Elderly (Hispanic EPESE) Wave 5 (2004–2005). Disability was assessed with a modified version of the Katz activities of daily living (ADL) scale and mobility was assessed with the Rosow Breslau scale of gross mobility function. The percentage of participants needing assistance with ADLs were as follows: 26.7% for transferring from a bed to chair, 26.6% for walking across a small room, 17.9% for dressing, 16.3% for using a toilet, 14.3% for grooming, and 8.2% for eating. Fifty percent reported limitation in the ability to walk ½ a mile and walking up and down stairs. Multivariate logistic regression analysis after controlling for all covariates showed that arthritis, diabetes, stroke, and obesity were significantly associated with any ADL limitation, walking up and down stairs, and walking 1/2 mile. Prevention of obesity and chronic medical conditions will help increase functional independence in this population.

Developing Partnerships to Reduce Sodium in Worksite Cafeterias and Congregate Meal Programs

Sarah L. Ullevig, PhD, RD, LD, Ellen Spitsen, Anne C. Heine, RD, LD, ScM, DrPH, Alysse Swientek, Kathleen Shields, CHES2 and Erica T. Sosa, PhD, MCHES
Texas Public Health Journal 2017;69(3):16-19

ABSTRACT

Excessive sodium consumption is a worldwide public health concern and warrants immediate action to reduce sodium in the food environment. Public health departments are encouraged to partner with external entities to reduce sodium; however, multiple barriers to engaging and partnering with external entities exist. The purpose of this paper is to present strategies used to recruit and engage partners in implementing a sodium reduction initiative (SRI); identify barriers to implementation; and share lessons learned and recommendations for other local public health departments to successfully engage partners in implementing similar initiatives. The local health department used a multi-level approach to engage stakeholders and collaboratively assess opportunities for sodium reduction. As a result, the health department engaged 6 worksites and 3 congregate venues. The SRI included partners who collectively served over 13,500 working adults, 3,500 children and 3,000 older adults. The partnerships reduced sodium across 269 total food items, total. Local health departments can effectively partner with community entities to implement sodium reduction initiatives by using multi-level approaches to collaboration over traditional prescriptive approaches. Lessons learned can assist other municipalities in implementing similar sodium reduction initiatives in the food environment of their communities.

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President's Message

Melissa Oden, DHed, LMSW-IPR, MPH, CHES
Texas Public Health Journal 2017;69(2):2-3

Commissioner's Comments: Zika across Texas: An Update for the Front Lines

Dr. John Hellerstedt
Texas Public Health Journal 2017;69(2):3

Poison Control News

Copper Sulfate: A Potential Hazard at School

Mathias B. Forrester
Texas Public Health Journal 2017;69(2):4

2017 National Public Health Week Special Focused Journal Section: "Efforts toward Healthier Texas Communities":

Getting to the Healthiest Nation 2030: Public Health "Crashing" Traditional Healthcare Parties with Innovative Community Approaches

Eduardo Sanchez, MD
Texas Public Health Journal 2017;69(2):5-6

Patient Navigator Project

S. Kim Bush, MPA, CCHWI
Texas Public Health Journal 2017;69(2):6-7

Healthier Texas Communities through Agricultural Medicine Training

Amanda Wickman, MBA; Jeffrey Levin, MD, MSPH
Texas Public Health Journal 2017;69(2):7-8

Paying Tribute & Preventing Agricultural Tragedies

Nykole Vance, MS, CEP, CHES, Amanda Wickman, MBA
Texas Public Health Journal 2017;69(2):8

Healthy Babies Coalition and the Women's Health Workgroup of Prosper Waco

Jennifer McConaughy
Texas Public Health Journal 2017;69(2):8-9

Healthier Ingleside

Debra Handley, RN
Texas Public Health Journal 2017;69(2):9

The Health Science Dental Project

Dr. Sherdeana Owens, Marian Tajchman, RDH, MS, Brenda Buckner MSN, RN, CCRN
Texas Public Health Journal 2017;69(2):9-10

Building a Healthier Community to Live, Work and Play

William Carter, Joanna Patterson
Texas Public Health Journal 2017;69(2):10-11

UT Health Northeast Center for Rural Community Health: Working Together to Improve Healthcare

Kate Philley Starnes, JD, MEd, Carlton Allen, MS, CHW, CHES, Paula R. Brandon, RN, MSN, FACHE
Texas Public Health Journal 2017;69(2):11-12

What the Texas Public Health Journal Can Do for You

Texas Public Health Journal 2017;69(2):13

Original Public Health Research:

Texas Legislator Survey: Lessons Learned from Interviewing State Politicians about Obesity Policies

Donna Nichols, MEd, CHES; Diane Dowdy, PhD; Heather Atteberry, MPH; Tiff ni Menendez, MPH; Deanna M. Hoelscher, PhD, RD, LD

Texas Public Health Journal 2017;69(2):14-23

ABSTRACT

The primary focus of the 2013 Texas Health Perception Survey was to assess the knowledge, attitudes, and perceptions about obesity prevention and control measures of legislators from the 83rd Texas legislative session. The purpose of this manuscript is to present insights gained in surveying and interviewing Texas politicians. Initial steps in conducting the survey included formation of an Advisory Committee to guide the process, development of a survey instrument, and organizing a list of legislators and appropriate staff. Hard copy and online versions of the survey were developed. Administration of the survey required initial and follow-up visits and contact via email, phone, and in person. Lessons learned included methods to work effectively with partners as well as techniques to survey and interview legislators and their aides. Policy research work gives researchers, practitioners, and advocates opportunities to tailor future communications, refine and advance a childhood obesity policy agenda, and galvanize existing partnerships.

Physical Activity Associated with Age, Sex, and Seasonality among Park Users in an Unincorporated Community along the Texas-Mexico Border

Jennifer F. Mota, MPH, Belinda M. Reininger, DrPH, Jennifer L. Gay, PhD, Cristina S. Barroso, DrPH, Leslie D. Meyer, PhD, Harold W. Kohl III, PhD

Texas Public Health Journal 2017;69(2):24-28

ABSTRACT

Objective: This study examined variations in physical activity (PA) by age, sex and seasonality among park users living in predominantly Mexican American unincorporated community along the Texas-Mexico border.

Methods: Park-based PA was assessed during two time periods using direct observations of 2,446 park visitors. Variation in PA was examined by age, sex, seasonality, intensity level, and type of PA using separate Pearson's chi-square analyses. A multiple logistic regression analysis was conducted to examine the relationship between age group, sex, season, and intensity level of PA.

Results: Sedentary behaviors (32.8%), soccer (20.9%), and basketball (11.9%) were the most commonly observed activities. Multiple logistic regression analysis indicated that younger aged participants were more likely to engage in moderate and vigorous PA compared to older participants. Females were more likely to engage in light-intensity activity (OR = 1.77, $p < 0.001$), but were less likely to participate in moderate and vigorous PA (OR=0.15, $p < 0.001$) compared to males. Park visitors were significantly more likely to engage in light-intensity PA (OR = 1.78, $p < 0.001$) in the summer than in winter, although no difference by season was found for moderate and vigorous PA.

Conclusion: Age and sex differences were found in PA intensity, and seasonality was significantly different for light intensity PA, only. Public officials and planners may use this information to build and design parks that cater to the types of activities that Hispanics of different ages and genders engage in to increase the likelihood of meeting physical activity guidelines.

Book Review: Against Empathy: The Case for Rational Compassion by Paul Bloom, c. 2016. Does feeling for others make for bad public health policy?

Carol A. Galeener, PhD, MPH

Texas Public Health Journal 2017;69(2):29

GIS Day, Texas Department of State Health Services, Austin, Texas, November 16, 2016

Alassane Barro

Texas Public Health Journal 2017;69(2):30-31

Get Involved in TPHA: Join a Committee
Texas Public Health Journal 2017;69(2):31

Volume 69, Issue 1: Winter 2017

President's Message

Melissa Oden, DHed, LMSW-IPR, MPH, CHES
Texas Public Health Journal 2017;69(1):2-3

Sunset Implementation: A Renewed Focus on Public Health

Dr. John Hellerstedt
Texas Public Health Journal 2017;69(1):3-4

Poison Control News

Snow Globes: A Potential Christmas Hazard

Mathias B. Forrester
Texas Public Health Journal 2017;69(1):4

Recommended Interventions to Reduce the Risk of Iron Deficiency in Blood Donors

Muneeza A. Esani, MHA, MT(ASCP), Christine, M. Arcari, Ph.D., Miriam Mutambudzi, Ph.D., Vicki S. Freeman, Ph.D., MLS (ASCP)SC, Barbara J. Bryant, MD
Texas Public Health Journal 2017;69(1):5-9

ABSTRACT

Numerous studies indicate that US blood donors, especially women, have a high prevalence of iron deficiency. Iron is lost with each blood donation, and since donors are eligible to donate blood every eight weeks, it is a challenge to maintain iron balance in frequent blood donors. Prior to blood donations, donors are screened for anemia but not for iron deficiency. Several interventions have been considered to address this public health issue including deferral from donation due to decreased iron stores measured by ferritin levels, iron replacement therapy, education for donors regarding their iron status, extension of inter-donation interval, and restriction of number of donations within a year. A combined approach of education, to encourage donors to take iron supplements and to seek the care of their physicians when necessary, and iron replacement therapy, to replace the iron lost in blood donation, is recommended to address this public health issue.

Gender Differences in Human Papillomavirus Vaccination Series Completion Rate Among Children and Adolescents in West Texas

Joanne Thambuswamy, MD; Bethany Williams, MD; Fatma Levent, MD¹; Marcela Nur, MD
Texas Public Health Journal 2017;69(1):10-12

ABSTRACT

Introduction: The purpose of this study was to explore gender differences in Human Papillomavirus (HPV) vaccine completion rates among children and adolescents in academic outpatient pediatric clinics in West Texas.

Methods: Current Procedural Terminology (CPT) codes were used to identify HPV vaccination in patients ages 9-18 years in four outpatient pediatric clinics in Lubbock, Texas, between January 1, 2010- October 31, 2014. Gender, age, race/ethnicity, and number of HPV vaccines that each patient received were collected.

Results: A total of 1147 (51.2%) females, and 1092 (48.8%) males initiated HPV vaccination ($p=0.24$). There was a statistically significant difference in the age of initiation between females and males (12.3 ± 1.93 years vs. 12.8 ± 1.99 years; $p<0.001$). Five hundred fifty-nine (25%) received three or more doses, 274 (12.2%) completed the series within 12 months, and only 26 (1.2%) had optimal series completion within six months. More females than males received three or more doses of the HPV vaccine (304 vs. 255; $X^2=4.29$, $p<0.05$) and received three doses within 12 months (157 vs. 117; $X^2=5.84$, $p<0.05$).

Conclusions: Males started HPV vaccination at older age than females and were less likely to complete the three dose series than females.

E-cigarettes and Vaping: Risk Reduction and Risk Prevention

William V. Hyman, PhD; Stephen L. Brown, PhD
Texas Public Health Journal 2017;69(1):13-18

ABSTRACT

The decline in smoking over that last half century has been a significant public health achievement in the U.S. The emergence of e-cigarettes may hold potential for aiding smoking cessation efforts, but may also create new opportunities for nicotine experimentation. This paper reviews the emerging ecigarette industry, its marketing approaches, and recent steps to regulate labeling, distribution and advertising. It summarizes current research on the efficacy of e-cigarettes as smoking cessation aids as well as their potential health effects. It also discusses how young people might be particularly vulnerable to the allure of these new products. Finally, it outlines steps prevention specialists and health educators, especially those working with young people, could take to respond to this new trend.

High Frequency Patient Analysis to Identify Disparities Associated with Emergency Department Utilization in Dallas County

Sushma Sharma, Theresa Mendoza, Norman Seals, Kristin Jenkins, Marshal Isaacs, Ron J. Anderson
Texas Public Health Journal 2017;69(1):19-29

ABSTRACT

Objective: Socio-economic, demographic, cultural and environmental inequalities have been reported as determinants of non-urgent use of emergency department (ED). This study aimed to quantify the utilization characteristics of emergency department usage in Dallas County hospitals and to develop an analysis of high ED - utilizing patients using zip codes and “hot blocks”.

Methods: This study used out-patient ED data for 21 Dallas County hospitals from the Dallas-Fort Worth Hospital Council Foundation’s database. Spatial analysis and GIS mapping with ED data was used for high-utilizer patients was used to identify a “hot block” representing patients with the most visits.

Results: In 2012, total 912,302 outpatients ED visits were made by 544,149 patients in Dallas County hospitals. In 2012, total charges for outpatient ED visits were \$2,487,677,034. Based on NYU logarithm, nearly 66 percent of ED visits ideally might be treated in an outpatient venue other than the ED. “Hot spot” analysis enabled us to select zip codes representing the highest ED visits and further investigate the characteristics of those residents who were high ED utilizers.

Conclusion: This study identifies characteristics associated with high ED usage in Dallas County. The study also demonstrates the value and potential public health benefits of health care data-sharing. In the future, we encourage health care data-sharing in order to coordinate care between health care and public health providers ensuring higher quality individual case management.

Journal Information

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2017 Annual Education Conference

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President's Message

Melissa Oden, DHEd, LMSW-IPR, MPH, CHES
Texas Public Health Journal 2016;68(4):2-3

Commissioner's Comments: The Flu is Back, and so is Flu Surveillance

Dr. John Hellerstedt
Texas Public Health Journal 2016;68(4):3

Poison Control News

Dry Ice: A Potential Halloween Hazard

Mathias B. Forrester
Texas Public Health Journal 2016;68(4):4

Niacin Ingestions Reported to Poison Centers

Mathias B. Forrester
Texas Public Health Journal 2016;68(4):4-5

**Wind Ensemble Infectious Disease Risks II: A Microbiological Examination of Condensate Liquids in
Woodwind Instruments**

James Mobley, MD, MPH, FAAFP, Cynthia Bridges, PhD
Texas Public Health Journal 2016;68(4):6-10

ABSTRACT

Objective: To determine if the condensation that forms from playing woodwind instruments contains bacterial flora that could represent a health threat to others using the rehearsal area.

Methods: Thirty-seven fluid samples were obtained from seven types of woodwind instruments (flute, oboe, bassoon, clarinet, bass clarinet, alto saxophone, tenor saxophone). These were processed as environmental cultures.

Results: Thirteen bacterial species were recovered including three gram positives and ten gram negatives. Two species were cocci, nine were bacillus and two coccobacillus. Thirteen samples had no growth. The isolates were predominantly aquatic and either normal flora, opportunistic pathogens or both.

Conclusions: The liquids which are released by woodwind instruments, generally do not pose a threat. There may be some situations in which the secretions could be harmful, such as exposure to these fluids by persons with immunosuppression, cancer, HIV or chronic diseases.

Stressors and Coping Strategies among Female South Asian Community Health Workers in Dallas, Texas

Yara William, MHA, Amy R. Board, LMSW, MPH, Heather Kitzman-Ulrich, PhD
Texas Public Health Journal 2016;68(4):11-14

ABSTRACT

Background: Although immigrants from South Asia are the fastest growing ethnic group in the U.S., this group has not routinely been included in previous studies of burden among community health workers (CHWs). The objective of this study was to identify stressors and coping strategies of immigrant female South Asian CHWs residing in the Dallas/Fort Worth metropolitan area of Texas.

Methods: A focus group was conducted with six female CHWs who immigrated from South Asia (age range 40 to 61 years; median years in U.S. = 22; countries of origin: Bangladesh, India, Pakistan) to determine perceived stressors and identify coping mechanisms. The social ecological model was used to evaluate individual health behaviors as influenced by intrapersonal, interpersonal, community, and public policy/environmental factors, while the transactional model of stress and coping was used to evaluate the impact of stressors as mediated by individual appraisal of the event and sociocultural resources. Content analysis was used to determine themes.

Results: The three major themes that emerged were (1) motivation to be a CHW, (2) stressors, challenges, and demands, and (3) coping mechanisms and strategies. Community-related factors were the most prominent subthemes identified among both stressors and coping mechanisms.

Conclusions: Community-related stressors and coping mechanisms should be taken into account when designing CHW training and supportive programs for this population.

Needed: An Urgent Response to Health Disparities in East Texas

Wei-Chen Lee, PhD; Cissy A. Yoes, MS; Ben G. Raimor, MD, MA, FAAP
Texas Public Health Journal 2016;68(4):15-17

The latest public health info source ... And it's all crap

Carol Galeener, PhD
Texas Public Health Journal 2016;68(4):18

Volume 68, Special Electronic Issue: August 2015

**Abstracts from the 92nd Texas Public Health Association Annual Education Conference
April 11-13, 2016 in Galveston, Texas**

Texas Public Health Journal 2016;68(S):2-42

Volume 68, Issue 3: Summer 2016

President's Message

Melissa Oden, DHed, LMSW-IPR, MPH, CHES
Texas Public Health Journal 2016;68(3):2-3

Commissioner's Comments: Breastfeeding Boosts Infant Health, Public Health

Dr. John Hellerstedt
Texas Public Health Journal 2016;68(3):3-4

Poison Control News

Pediatric Ingestions of Lidocaine Products

Mathias B. Forrester
Texas Public Health Journal 2016;68(3):4

Impact of "Pill Mill" Legislation on Prescription Opioid Analgesic Exposures Reported to Texas Poison Centers

Mathias B. Forrester
Texas Public Health Journal 2016;68(3):5-6

Public Health Resources: Zika virus Index

David McLellan
Texas Public Health Journal 2016;68(3):6-9

Tribute to the Memory of Past TPHA members

Texas Public Health Journal 2016;68(3):9

Car Seat Safety, Not as Easy as 1-2-3: Car Seat Misuse in North Texas

Marisa K. Abbe, PhD, Jamie Pelletier, MPH, Nazia Hussain, MA, Brian D. Robertson, PhD, MPH
Texas Public Health Journal 2016;68(3):10-14

ABSTRACT

Objective: While national car seat usage is up, children continue to ride unrestrained, especially in the South. Additionally, the percentage of caregivers who have difficulty with a correct installation remains high at 75-85%. This article reviews the child passenger safety program run by The Safety Source-Injury Prevention Service at Children's Medical Center Dallas and reports on the 2013 car seat use and misuse data found at their inspection stations.

Methods: For each child seat inspected in 2013, a technician completed the Safe Kids Worldwide Child Passenger Safety Checklist. Researchers reviewed 530 forms and extracted specific data points.

Results: Of the children present, 78.6% were riding incorrectly or arrived unrestrained. The majority of seats had more than one error. Errors were significantly related to the type of car seat, with children in infant carriers almost 5 times more likely to be in an improperly installed seat. The most common error was with the harness, followed by using the seat belt to anchor the seat. Nearly all children were in the right seat for their age and weight however, about 6% of children graduated to the next seat prematurely.

Conclusions: Despite advances in educating caregivers about proper installation with an increased focus in social and print media, our findings mirror long-standing national installation error rates of over 75%. Quantitative findings narrow down key areas of concern, such as difficulty with the harness and issues of premature car seat graduation, which can then be addressed using a mixed-methods approach.

Evaluation of an Autism and Developmental Milestones Promotora Training Guide as a Teaching Tool for South Texas Community Health Workers

Beatriz Tapia, MD MPH CPH; Aida Vigil, MD MPH; Johanna McLendon, MD MPH; Aldo Eliel Martinez, MPH; Noe Garza, DDS MPH
Texas Public Health Journal 2016;68(3):15-19

ABSTRACT

Background: The latest Centers for Disease Control and Prevention prevalence estimate of Autism Spectrum Disorders (ASD) is 14.7 per 1,000 children aged eight years, roughly 30% higher than the prevalence reported in 2012. However, the prevalence of ASD among Hispanic children, including children in South Texas, continues to be much lower than national estimates for non-Hispanic White children. The possibility of underdiagnosis of ASD among Hispanic children remains a concern and may be attributed to a lack of culturally competent healthcare providers. To address inadequate access to healthcare among Hispanic communities, promotoras or community health worker (CHW)-based outreach has proven effective at increasing awareness on general health practices. A three-phase ‘train-the-trainer’ program was developed using the Developmental Milestones Promotora Training Guide as the main component. The objective of the first phase was to evaluate the use of the Training Guide to educate CHWs in South Texas on normal developmental milestones and recognize ASD warning signs.

Methods: Fifty-eight CHWs from two South Texas counties attended the training. The participants completed pre- and post-test assessments, and a paired t-test was conducted to ascertain mean percent-correct responses. The outcome of interest was a significant difference within participants in their mean percent correct responses between their pre- and posttests.

Results: A statistically significant difference ($n=58$, $p<0.0000$) was found between mean percent correct responses of the pretest (mean (M)= 60.49, standard deviation (SD)= 16.41) and post-test (M = 73.56, SD = 18.15).

Discussion: The Promotora Training Guide is an effective tool for increasing knowledge among South Texas CHWs regarding developmental milestones and ASD warning signs. Certification and training curriculums for CHWs should include this guide to enable CHWs to help Hispanic families recognize developmental delays, thereby improving the health outcomes of affected children by allowing for earlier detection, diagnosis, and therapy.

Volume 68, Issue 2: Spring 2016

President's Message

Melissa Oden, DHEd, LMSW-IPR, MPH, CHES
Texas Public Health Journal 2016;68(2):2-3

Commissioner's Comments: Texas Tackles Zika With Local Partners

Dr. John Hellerstedt
Texas Public Health Journal 2016;68(2):3-4

Poison Control News

Scorpion Stings in the Workplace

Mathias B. Forrester
Texas Public Health Journal 2016;68(2):4-5

Wisteria Is Not Just a Lane Desperate Housewives Live On

Mathias B. Forrester
Texas Public Health Journal 2016;68(2):5-6

Zika Virus: Interview with an Expert

Kara Elam, MS
Texas Public Health Journal 2016;68(2):6-9

Disparities Associated with Sexual Assaults and Abuses Identified by hospitals in North Texas Region and Dallas County during 2010-2012

Sushma Sharma, Richa Bashyal, Nathan Stafford, Theresa Mendoza, Kristin Jenkins
Texas Public Health Journal 2016;68(2):10-17

ABSTRACT

Objective: This study aimed to investigate the trend of hospital reported sexual assault and abuse instances in the North Texas region and counties. Study also aimed to geographically locate the counties and zip codes with high incidences of sexual assault and abuse to identify the disparities associated with higher incidences.

Methods: For this study, researchers collected the hospital reported cases for sexual assault and abuse from DFWHC Foundation's regional database for 2010-2012. Sexual assault and abuse Data with ICD-9 diagnostic codes namely 995.53, 995.83, V71.5, and E960.1 were included in this study. Arc GIS was used to map the sexual assault and abuse data from region to county and zip code level. Results: Total 2,720 cases were reported to hospitals in North Texas during 2012. Dallas County had highest number of hospital reported cases (1,378) in North Texas region. In Dallas County, greater proportion of the victims was uninsured (2011 and 2012 data), non-Hispanic/Latino, White females' aged 10-29 years. GIS mapping indicated that zip codes 75243, 75217, 75216 had highest number of incidences in Dallas County.

Results identified age, gender, socioeconomic (based on payer group), race and ethnicity related characteristics associated with sexual assault and abuse in selected areas.

Conclusion: This study has major significance in the realm of social and public health. With the identification of the contributing disparities, prevention, advocacy and educational efforts can be more efficiently targeted at zip code level. This study indicates the need of data sharing between different stakeholders to facilitate coordinated efforts for prevention, treatment and advocacy.

A Pilot Study: Supplemental Nutrition Assistance Program (SNAP) Food Choices and Pediatric Advanced Dental Care (ADC)

Adela Uribe, RDH MS, Melanie Taverna, RDH MS, Carol Nguyen, RDH MS, Emelda Hernandez, RDH MS, and Mary Jacks, RDH M
Texas Public Health Journal 2016;68(2):18-20

ABSTRACT

The original Food Stamp Program (FSP) was implemented during the Roosevelt Era to help increase farmers' income and provide hungry Americans with surplus foods. The Food and Nutrition Act of 2008 changed the

program's name to Supplemental Nutrition Assistance Program (SNAP) and defined allowable foods. SNAP food purchases include sweetened beverages and cariogenic (caries-causing) foods. Next to obesity, dental decay is the leading chronic illness in pediatric patients. Studies have established a relationship between SNAP foods and obesity in pediatric and adult patients. Frequent exposure to sugary, acidic, and/or carbohydrate drinks and snacks contribute to dental decay (caries). There is a gap in literature establishing a relationship between SNAP foods and dental caries. The purpose of this study was to examine a relationship between the pediatric patients that received advanced dental care (ADC) under general anesthesia, their food choices, and cariogenic frequency exposure. This study surveyed 60 parents of children who received ADC. The survey included demographics, the patients' nutritional patterns, and two questions related to SNAP benefits. It was conducted in a private room at two Texas pedodontic offices. Ninety-percent of patients that received ADC was insured by state public health programs, such as Medicaid. Sixty-seven percent of patients were between the ages of six months and five years, and 73% of participants received SNAP benefits.

Dr. Nina Sisley Memorial

Texas Public Health Journal 2016;68(2):20

Childhood Obesity: An Examination of Rural School Stakeholders' and Parents' Beliefs

Andrea E. McDonald, Lenna Dawkins-Moultin, Sharon L. McWhinney, E. Lisako McKyer

Texas Public Health Journal 2016;68(2):21-23

ABSTRACT

Background: Parents and teachers are important models in children's lives, but linking nutrition and health education across home and school remains a challenge. With the high prevalence of obesity in children, school stakeholders should be engaged in the process of assessment to assist in identifying possible solutions.

Methods: This study compared school stakeholders' and parents' perceptions toward childhood obesity. Thirty-nine (N=39) school stakeholders and one hundred (N=100) parents with children in the fourth grade were purposefully selected to participate in structured interviews or focus groups. Research questions were formulated to obtain information regarding awareness of childhood obesity, overall nutrition knowledge, perceptions of the contributors to the obesity problem, and perceptions of possible barriers to alleviating obesity. Responses from the interviews and focus groups were recorded, transcribed, and analyzed using Atlas Ti.

Results: Both categories of participants acknowledged obesity as a major problem among young children. The consensus among the school stakeholders was that there are inconsistencies in the messages transmitted by the home and school. The findings also revealed that limited nutrition education in the home and school, coupled with lack of parental involvement, low-income status, and parental denial contributed to children being overweight or obese.

Conclusion: This study reiterates the need to utilize a multidimensional approach in the fight against childhood obesity. Community health workers and school administrators need to work at achieving unanimity in the nutrition messages being communicated in the home and school.

Volume 68, Issue 1: Winter 2016

President's Message

Cindy Kilborn, MPH

Texas Public Health Journal 2016;68(1):2

Commissioner's Comments: Dr. Hellerstedt Named New DSHS Commissioner

Texas Public Health Journal 2016;68(1):3

Poison Control News

Explosions and Fires Reported with Electronic Cigarettes

Mathias B. Forrester

Texas Public Health Journal 2016;68(1):3-4

NBOMe Designer Drugs Reported to Texas Forensic Laboratories

Mathias B. Forrester, Jane Carlisle-Maxwell

Texas Public Health Journal 2016;68(1):4-5

Original Public Health Research and Practice

Lessons Learned from the Field: Community Assessment for Public Health Emergency Response (CASPER)

David F. Zane, MS, Tracy Haywood, BS, Barbara Adams, MPH, Herminia Alva, MPH, Vivienne Heines, MPH, Bonnie Feldt, MPH, Joseph (Greg) Rosen, BA, Judy Henry, PhD, Kaila Thompson, MPH, Sharon Stonum, MPH, Jennifer Kiger, MPH, Kelly Johnson, MS, Dana Wiltz-Beckham, DVM, Monty Gomez, MPH, Kirsten Short, MPH, Kahler Stone, MPH, Jennifer Horney, PhD

Texas Public Health Journal 2016;68(1):6-13

ABSTRACT

The Community Assessment for Public Health Emergency Response (CASPER) is a tool created for rapidly assessing public health threats and needs. CASPERs can be conducted in both disaster and nondisaster settings. It can provide situational awareness to public health and emergency management officials to strengthen disaster response and recovery, assist with public health preparedness planning efforts, and identify routine public health issues. Since 2001, Texas has ranked second in the nation in the number of CASPERs conducted. Multiple local health departments and the Texas Department of State Health Services have conducted CASPERs in their jurisdictions. We were interested in identifying and sharing lessons learned in conducting CASPERs. In spring 2015, we identified key informants at agencies and organizations in Texas that were believed to have conducted CASPERs from January 2008 through May 2015. Agencies and organizations included local health departments and DSHS Health Service Regions (HSRs) and Texas A&M University. Through facilitated telephone calls and email communications with key informants, we identified and documented lessons learned. We identified over 70 lessons learned in conducting CASPERs. These lessons were categorized according to the four general CASPER phases outlined in the Centers for Disease Control and Prevention's CASPER toolkit. As jurisdictions across Texas and the nation become trained on CASPER methods, we anticipate that more CASPERs will be conducted. We hope that these health departments and other organizations will use this shared knowledge to accelerate their CASPER planning and increase the potential success of their assessment. It is our desire that the CASPER community-of-practice will grow.

The Effect of a Pilot Nutrition Education Intervention on Perceived Cancer Risk in a Rural Texas Community

Liliana Correa, MS, Debra B. Reed, PhD, RDN, LD, Barent N. McCool, PhD, Mary Murimi, PhD, RDN, LD, Conrad Lyford, PhD

Texas Public Health Journal 2016;68(1):14-19

ABSTRACT

Background: A high consumption of fruits, vegetables, and whole grain foods and adequate levels of physical activity are associated with a lower risk of obesity and lower risk of lifestyle cancers. Research suggests that rural communities have a high risk of unhealthy behaviors that may contribute to excessive weight gain and risk of

lifestyle related cancers. The purpose of this pilot study was to determine the effect of an educational intervention in a rural Texas community on the intermediate outcomes of eating behavior (increasing the intake of fruits, vegetables, and whole grain foods) and physical activity behavior, and the distal outcome of body mass index (BMI).

Methods: The intervention, guided by the Social Cognitive Theory, was implemented over a 10-month period and included a variety of community-based education activities related to nutrition, physical activity, and cancer in a variety of settings. The effect of the intervention was assessed by analyzing pre- and post-data (N=67) using independent and paired samples t-tests and bivariate correlations.

Results: Participants were mainly Hispanic (53.7%) and White (44.8%). At pre-intervention, 6% of participants reported consuming >5 servings of fruits and vegetables daily, 19.4% consumed >3 servings of whole grain foods daily, and 85.1% were either overweight or obese. Only 31% of participants were aware that cancer risk was related to overweight at pre-intervention. At post-intervention, Hispanics showed a significant increase in the consumption of fruits and vegetables ($p<0.05$). Participation in sports or physical activity programs showed a significant increase ($p<0.05$). However, no significant decrease in BMI was shown.

Conclusion: This intervention had a limited effect in increasing targeted behaviors and no effect on reducing BMI. More assessment is needed in this rural community to identify barriers to healthy behaviors and to improve interventions to increase consumption of fruits, vegetables, and whole grain foods, levels of physical activity, and awareness of the cancer and obesity relationship.

Predictors of Perineal Laceration in Women Delivering on the Texas-Mexico Border

Jami Barnard, MD, Elizabeth Portugal, MSN, CNM, Loretta L. Hernandez, MPH, Zuber D. Mulla, MSPH, PhD, CPH

Texas Public Health Journal 2016;68(1):20-23

ABSTRACT

Objective: To identify predictors of perineal laceration in women delivering in a large county located on the Texas-Mexico border.

Methods: A retrospective cohort study of women who delivered vaginally in El Paso, Texas, between February 2007 and May 2010 was conducted. The majority of the women delivered at the University Medical Center of El Paso, a teaching hospital. Eighty-three deliveries to 78 women were included in the sample. Adjusted relative risks (RR) and p-values were calculated using log-binomial regression models. Generalized estimating equations were used to account for the fact that some patients contributed two deliveries to the sample.

Results: Patients ranged in age from 15 to 29 years (median=18 years). The majority (75.9%) were primiparous. Approximately half the cohort ($n=41$, 49.4%) experienced a perineal laceration. Infant head circumference, birth weight, maternal age, and maternal body mass index (BMI) were not associated with the risk of a perineal laceration. Women who were delivered by a physician compared to those who were delivered by a certified nurse midwife appeared to have a higher risk of perineal laceration (adjusted RR=1.58, $p=0.07$); however, further modeling revealed a higher p-value (0.09) for this variable. Primiparous women were twice as likely as multiparous women to have experienced a perineal laceration (adjusted RR=2.16, $p=0.048$).

Conclusions: Nulliparity is an established risk factor for perineal laceration. Our study supports this observation.

GIS Day, Texas Department of State Health Services, Austin, Texas, November 18, 2015

Alassane Barro and Mathias B Forrester

Texas Public Health Journal 2016;68(1):24-25

Call for Exhibitors! 92nd Annual TPHA Annual Education Conference

Texas Public Health Journal 2016;68(1):26

Call for Member Engagement and Fundraising

Texas Public Health Journal 2016;68(1):27

Volume 67, Issue 4: Fall 2015

President's Message

Cindy Kilborn, MPH

Texas Public Health Journal 2015;67(4):2

Commissioner's Comments: Unexpected Cases Prompt Immunization Discussion

Kirk Cole

Texas Public Health Journal 2015;67(3):3

Poison Control News:

Texas Poison Center Calls in Relation to Severe Rains and Flooding in May 2015

Mathias B. Forrester

Texas Public Health Journal 2015;67(4):3-5

Public Health Practice Conference Review:

Pharmaceuticals Without Borders: Report from the Joint Symposium held at the University of Texas School of Public Health on September 9, 2015

Michael S. Ewer, MD, MPH, JD, Carol A Galeener, MS, MPH, PhD

Texas Public Health Journal 2015;67(4):6-7

Public Health Practice Commentary:

Perspectives on Influencing Public Policy

Carol Galeener

Texas Public Health Journal 2015;67(4):7

Public Health Practice Interview:

Accreditation: An In-depth Interview with an Accreditation Achiever

Interviewee, Robert Hines, MSPH

Texas Public Health Journal 2015;67(4):8

Original Public Health Research:

How a Student Run Clinic Can Address Gaps in Access to Mental Health Services

Jacqueline Posada, MD, Hannah Potvin, MD, Amit Kumar, PT, Ph.D., MPH

Texas Public Health Journal 2015;67(4):9-12

ABSTRACT

Background: St. Vincent's Student Run Free Clinic (St. Vincent's Clinic) provides primary care and specialty services to uninsured and underinsured individuals of Galveston, Texas, and surrounding areas. Patient care at this clinic is provided by medical and allied health professional students. St. Vincent's Clinic offers a psychiatry specialty clinic twice a month which helps fill the gap between clinical- and public health-related mental health services provided by the state-funded outpatient mental health services. This study aims to describe the demographics, clinical, and treatment modality of patients receiving mental health services at St. Vincent's Clinic.

Methods: Retrospective secondary analysis of electronic medical records (EMR) for all patients seen at the psychiatry clinic from September 2013 through August 2014. EMR was reviewed for patient demographic information, psychiatric diagnoses, medications, comorbidities, and follow up time-period.

Results: In one year, St. Vincent's Clinic saw a total of 708 patients, 117 (16%) of whom received treatment at the psychiatry clinic. Depression (55.4%) and anxiety disorders (42.2%) were the two most common diagnoses of psychiatric patients. Selective serotonin reuptake inhibitors, fluoxetine, and citalopram were the most commonly prescribed medications. Almost 33.3% of psychiatry patients utilized counseling services while 38.5% of psychiatry patients had only one psychiatry visit at St. Vincent's Clinic.

Conclusion: St. Vincent's Clinic provides free mental health services to uninsured psychiatric patients, primarily in the form of medication management. Student volunteers are able to use their training skills to deliver mental health services in Galveston and surrounding counties for patients not covered by existing public health services. The high

prevalence of comorbid conditions and poor follow-up among psychiatric patients have greater implications on student-run free clinics with limited resources. More institutional support is needed to deliver integrated care and proper follow-up of patients with a psychiatric diagnosis.

Mini-Grant Demonstration Projects: A Community Approach to Increase Physical Activity

Richard Wood, MHA, Deb Kellstedt, MPH, Angela Hochhalter PhD, Meghan Kress, PhD, Julie Ribardo, PhD, Ninfa Pena-Purcell, PhD, Michelle Carvalho, MPH, Cam Escoffery, PhD, Marcia Ory, PhD
Texas Public Health Journal 2015;67(4):13-17

ABSTRACT

The CTxCARES Program at the Texas A&M University School of Public Health established a mini-grant initiative with the goal of engaging community-based partners in identifying a research project, launching partnerships, implementing and sustaining strategies for increasing physical activity as a means of cancer prevention and control. Based on dissemination research and guided by prior experiences with mini-grants from partners in the Centers for Disease Control and Prevention's Cancer Prevention and Control Research Network, CTxCARES initiated a mini-grant competition through the Brazos Valley Health Partnership and awarded five mini-grants of \$10,000 each to community-based organizations in the Brazos Valley of Texas in the fall of 2010. Grantees chose from the following Community Guide strategies: enhancing infrastructure, increasing safety, and improving access to places for physical activity. Three sites working in partnership with other local agencies made infrastructure improvements to walking trails or city streets, one site fenced an outdoor area for children to be physically active, and the last site equipped elementary schools to link a behavioral nutrition program with community-based physical activity resources. Community-based mini-grants resulted in successful implementation of evidence-based strategies for increasing physical activity and increased community-capacity to translate proven strategies into practice. Key to the success of projects was organizational leadership and identifying strategies that fit within the context of each community, thus promoting additional partnerships and community buy-in. Program sustainability continues through creative approaches.

About Our TPHA Journal

Catherine D. Cooksley, DrPH
Texas Public Health Journal 2015;67(4):18

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Texas Public Health Journal 2015;67(4):18

Volume 67, Issue 3: Summer 2015

President's Message

Cindy Kilborn, MPH

Texas Public Health Journal 2015;67(3):2

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Kirk Cole

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Blue Bell Ice Cream Recall: Calls to Texas Poison Centers

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Mathias B. Forrester

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Book Review: What Mommy Didn't Tell Him -- Jonathan Zimmerman (2015) Too Hot to Handle: A Global History of Sex Education

Carol A. Galeener, PhD

Texas Public Health Journal 2015;67(3):5-6

Original Public Health Research:

Household Pesticide Use in Colonias in Webb and Hidalgo Counties, South Texas, as Assessed Using a Pesticide Inventory

Jennifer A. Ross, DRPH, Amber B. Trueblood, MPH, K.C. Donnelly, PhD, Leslie H. Cizmas, PhD

Texas Public Health Journal 2015;67(3):7-10

ABSTRACT

Pesticide exposures are associated with multiple adverse health outcomes. Previous studies have shown use of pesticides inside homes along the United States-Mexico border. This inventory assessed household pesticide use in low-income, predominantly Hispanic colonias in Webb and Hidalgo Counties, near the Texas-Mexico border. Three rounds of data were collected, in Webb County in the spring and fall, and Hidalgo County in the spring. Participants were recruited using convenience sampling. Promotoras (lay health workers) asked participants to show them the pesticide containers in the home, then completed a pesticide inventory form for each container. The collected data included the U.S. Environmental Protection Agency (EPA) registration number, application frequency, and where each pesticide was used. In each of three sampling rounds, between 89.5%-92.1% of the pesticides had EPA registration numbers and were in their original, labelled containers. Over half the pesticides (ranging from 55.6% to 74.5% in each round) were used once per month or more often. Pyrethroids were the most common active ingredients overall (accounting for 47.3% to 66.7% of the active ingredients identified in the three rounds). In all rounds, over 30% of the pesticides identified in this inventory were reportedly used in kitchen cabinets or on kitchen surfaces used for food. Within the subset of pesticides used in kitchen cabinets or on food surfaces, the most common active ingredients were pyrethroids (ranging from 50.0% to 80.0% in the three rounds). The results suggest additional research is needed regarding the frequency of pesticide use indoors, particularly on food surfaces.

Improving Public Health in Rural Texas: Could Hispanic Providers Be the Answer?

Amanda W. Scarbrough, PhD, Steve R. Shelton, MBA

Texas Public Health Journal 2015;67(3):11-14

ABSTRACT

Background: With the implementation of the Affordable Care Act, concern exists that the healthcare system does not have a sufficient primary care workforce to handle the anticipated influx of newly insured. One way the federal

government is addressing the shortage is through funding the National Health Service Corps (NHSC). NHSC offers loan repayment assistance in exchange for working in underserved communities.

Purpose: The primary purpose of this study was to determine what factors contributed to providers remaining in underserved communities after loan repayment obligation.

Methods: One hundred and forty NHSC Loan Repayors (LRPs) were surveyed. The survey collected demographic data and assessed employment satisfaction, preferred recruitment/retention strategies, and intentions after completing their service obligation.

Results: Sixty-six participants returned the survey. Ethnicity was a significant factor in the choice of practice location. Of the Hispanic LRPs, 93% stated they were either likely or very likely to practice in an underserved rural community as compared to 58% of their Non-Hispanic counterparts.

Conclusion: If Hispanic practitioners intend to practice in underserved rural communities, graduating more Hispanics could narrow the shortage of primary care practitioners in rural communities.

Are Fracking Sites Associated with Increased Motor Vehicle Crashes in Texas?

Amber Brooke Trueblood, MPH, Garrett Sansom, MPH

Texas Public Health Journal 2015;67(3):15-17

ABSTRACT

Hydraulic fracturing or fracking is becoming common throughout the United States as the demand for oil increases. However, fracking is a controversial and hot topic due to potential environmental and human health concerns. One concern is the impact that fracking sites have on motor vehicle crashes due to the increased traffic and population in local communities. This project aimed to determine if fracking sites are associated with an increase in motor vehicle crashes in Texas. Due to increased traffic requirements to build and maintain fracking sites, the project hypothesized that counties with increased fracking site growth would also experience an increase in the reported number of motor vehicle crashes. A thematic map was produced with publicly available data to outline the location and changes in motor vehicle crashes compared to the fracking site growth by county in Texas (n=254). The thematic map showed a spatial association between fracking growth and growth of motor vehicle accidents; this association has a correlation coefficient of $r=0.34$. This project found areas that had increasing numbers of fracking sites, typically also had an increased number in the total number of motor vehicle crashes.

A Descriptive Analysis of the Increasing Burden of Reported Chronic Hepatitis C in Liberty County, 2013

Kate Klein, BA, Huai Lin, MD, PhD, Anthony Eshofonie, MD, MPH, Krista Swanson, MPH, LaTasha R Martin, MPH, Paula Duquesnay, BS

Texas Public Health Journal 2015;67(3):18-22

ABSTRACT

Background: From 2010 to 2013, the Texas Department of State Health Services (DSHS) observed an increase in reported chronic Hepatitis C (HCV) infections in Liberty County each year.

Methods: In order to better understand this trend, we identified records of laboratory-confirmed chronic HCV cases reported to DSHS in 2013. We attempted structured telephone interviews regarding HCV risk factors for all identified case-patients and conducted two sets of analyses using Epi Info 7.1.2; Analysis I described the characteristics among case-patients diagnosed within Liberty County, and Analysis II compared the characteristics between case-patients diagnosed within versus outside of Liberty County.

Results: Of the 140 reported cases, 86 were reached for interview, and 32 were excluded from Analysis I based on residence at diagnosis. Males constituted over half of the case-patients (57%), and the majority (62%) were non-Hispanic Whites. Ages of the case-patients ranged from 18-84 (mean = 54). The most common risk factors included having more than 5 sexual partners (60%), tattoos (57%), incarceration (56%), contact with someone with HCV (43%), and injection drug use (35%). Prevalence of risk factors such as tattoos, body piercings, and injection drug use was found to statistically differ by age. In Analysis II (N=86), the main significant finding was that case-patients diagnosed outside of Liberty County were less likely to be currently residing within Liberty County.

Conclusion: There is a need to better understand the effects of age and mobility of this population on HCV infection in Liberty County, and to promote avoidance of unhealthy practices through community educational campaigns.

The Texas Public Health Association Remembers Two of its Public Health Heroes

Texas Public Health Journal 2015;67(3):23

Volume 67, Issue 2: Spring 2015

President's Message

Cindy Kilborn, MPH

Texas Public Health Journal 2015;67(2):2

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Kirk Cole

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Narcissus: A Potentially Toxic Case of Mistaken Identity

Mathias B. Forrester

Texas Public Health Journal 2015;67(2):5-6

Pediatric Ingestions of Sodium Phosphate Laxatives

Mathias B. Forrester

Texas Public Health Journal 2015;67(2):6

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Resistance to Vaccination: The Immunocompromised at Risk

James H. Swan, Ph.D.

Texas Public Health Journal 2015;67(2):7-8

National Public Health Week: Tribute to Texas Public Health Practice

Compiled by Catherine D. Cooksley, DrPH

Texas Public Health Journal 2015;67(2):8-13

Public Health Resources Reviews:

Book Review: The Lowdown on Legal Highs – Mike Power (2014) Drugs Unlimited: The Web Revolution That's Changing How the World Gets High

Carol A. Galeener, PhD

Texas Public Health Journal 2015;67(2):14-15

Software Review: Getting a Handle on Drug Relapse: the MAP Approach

Carol A. Galeener, PhD

Texas Public Health Journal 2015;67(2):15

Wind Ensemble Infectious Disease Risks: A Microbiological Examination of Water Key Liquids in Brass Instruments

James Mobley, MD, MPH, FAAFP, Cynthia Bridges, PhD

Texas Public Health Journal 2015;67(2):16-18

ABSTRACT

Objective: To determine whether the fluids that wind instrument players release onto rehearsal hall floors pose a risk to band members or others using the rehearsal area.

Methods: Thirty samples were obtained from five types of brass instruments (trumpet, French horn, trombone, baritone, tuba). These were processed as environmental cultures.

Results: Twenty-three samples grew *Alcaligenes faecalis*. Three trumpet specimens, one French horn specimen, and one trombone specimen grew oral flora from their samples. One sample grew a species which is generally considered to be a fecal contaminant.

Conclusions: Most large brass instruments (trombone, euphonium, and tuba) do not contain oral bacteria. French horns and trumpets may have oral bacterial flora in their accumulated liquid. Most instruments will have *Alcaligenes*

faecalis. In general the liquid from water keys does not pose an environmental hazard to persons with normal immune systems. Bands are highly inclusive and diversified. There may be special situations in which players are prone to infection or have cancer or immune disorders, which would require attention for the prevention of infections.

Rural-Urban Differences in Late-Stage Breast Cancer: Do Associations Differ by Rural-Urban Classification System?

Sandi L Pruitt, Ph.D., Jan M Eberth, Ph.D., E Scott Morris, MS, David B Grinsfelder, MPH, Erica L Cuate, MPH
Texas Public Health Journal 2015;67(2):19-27

ABSTRACT

Introduction: Rural residence is associated with later stage of breast cancer diagnosis in some but not all prior studies. The lack of a standardized definition of rural residence may contribute to these mixed findings. We characterize and compare multiple definitions of rural vs. non-rural residence to provide guidance regarding choice of measures and to further elucidate rural disparities in breast cancer stage at diagnosis.

Methods: We used Texas Cancer Registry data of 120,738 female breast cancer patients ≥ 50 years old diagnosed between 1995-2009. We defined rural vs. non-rural residence using 7 different measures and examined their agreement using Kappa statistics. Measures were defined at various geographic levels: county, ZIP code, census tract, and census block group. Late-stage was defined as regional or distant disease. For each measure, we tested the association of rural residence and late-stage cancer with unadjusted and adjusted logistic regression. Covariates included: age; patient race/ethnicity; diagnosis year; census block group-level mammography capacity; and census tract-level percent poverty, percent Hispanic, and percent Black.

Results: We found moderate to high levels of agreement between measures of rural vs. non-rural residence. For 72.9% of all patients, all 7 definitions agreed as to rural vs. non-rural residence. Overall, 6 of 7 definitions demonstrated an adverse association between rural residence and late-stage disease in unadjusted and adjusted models (Adjusted OR Range = 1.09-1.14).

Discussion: Our results document a clear rural disadvantage in late-stage breast cancer. We contribute to the heterogeneous literature by comparing varied measures of rural residence. We recommend use of the census tract-level Rural Urban Commuting Area Codes in future cancer outcomes research where small area data are available.

Volume 67, Special Electronic Issue: March 2015

**Abstracts from the 91st Texas Public Health Education Conference
February 23-25, 2015 in Austin Texas**

Texas Public Health Journal 2015;67(S):2-37

Volume 67, Issue 1: Winter 2015

President's Message

James Swan, Ph.D.

Texas Public Health Journal 2015;67(1):2

Commissioner's Comments: Ebola Response Highlights Strength of Public Health

David L. Lakey, M.D.

Texas Public Health Journal 2015;67(1):4

Ebola Goes Viral: Google Trends Pattern of Ebola Searches During Recent Ebola Outbreak in Texas

Mathias B. Forrester, Darien Hinson

Texas Public Health Journal 2015;67(1):4-6

Book Review: Redefining Medicine and Public Health – Atul Gawande, MD. (2014) Being Mortal: Medicine and What Happens in the End

Carol A. Galeener, PhD

Texas Public Health Journal 2015;67(1):7

GIS Day, Texas Department of State Health Services, Austin, Texas, November 19, 2014

Leon Kincy, Mathias B Forrester

Texas Public Health Journal 2015;67(1):8-10

Development of a Comprehensive 12-Week Health Promotion Program for Houston Airport System

Ebun O. Ebunlomo, PhD, MPH, MCHES, PHR, Nicole Hare-Everline, DHSc, MS, CHES, Ashley Weber, MPH, CHES, Jessica Rich, BS

Texas Public Health Journal 2015;67(1):11-13

ABSTRACT

Background: In 2012, the City of Houston was named the fattest city in America according to the Centers for Disease Control and Prevention (CDC), which prompted initiatives such as the Mayor's Wellness Council (MWC) to encourage Houstonians to make wise choices regarding healthy eating and regular physical activity through education and activities. The City of Houston employee health risk appraisal data indicated that 62% of its employee population was overweight or obese. Given these statistics and the well-established importance of the workplace as an effective setting for health promotion and disease prevention, the City of Houston's Employee Wellness Program, Discover Health with the Wellness Connection, emerged. Discover Health with the Wellness Connection has focused its efforts through tailored, evidence-based approaches to promoting weight management among its employees.

Methods: The 12-week Balanced Living Program was implemented as a pilot comprehensive health promotion program to address healthy eating, physical activity, and stress management to reduce obesity among 235 diverse employees within the Houston Airport System (HAS). Partnerships were cultivated with organizations such as the American Diabetes Association and Novo Nordisk, Inc., to provide interactive one-hour weekly educational sessions to the employees. The developed curriculum was designed based on the Diabetes Prevention Program (DPP), a major research study which found that diet and exercise could prevent or delay the onset of type 2 diabetes.

Results: Employees lost a total of 345 pounds, and over 90% of participants were satisfied with the program's contents, delivery, format, and usefulness of the program.

Discussion: Overall, this program was successfully implemented and yielded positive measurable outcomes. This program has implications for other worksite wellness initiatives as program planners can gain knowledge about how to develop comprehensive initiatives to improve in the health and well-being of diverse employee populations. We anticipate future implementation of a modified version of this program across other City of Houston departments with comparable health risk profiles.

Frequent Flyer Analysis of Emergency Department Visits in Tarrant County: Integrated Healthcare Informatics in Public Health

Richa Bashyal, Sushma Sharma, Ed Schmitt, Kristin Jenkins

Texas Public Health Journal 2015;67(1):14-19

ABSTRACT

Objective: Socioeconomic, demographic, cultural, and environmental disparities have been reported as determinants of non-urgent use of the emergency department (ED). This study aimed to quantify the utilization characteristics of ED visits in Tarrant County and to develop a “High Frequency Patient Analysis” of Tarrant County ED utilization including zip codes and “hot blocks” analysis.

Methods: This study uses the out-patient ED data for Tarrant County from the Dallas-Fort Worth Hospital Council Foundation’s database. Spatial analysis using Geographic Information System (GIS) mapping with the ED data was used for the “hot spot” and frequent flyer analysis to identify the patients with the most ED visits (frequent flyers) and their characteristics like age, ethnicity, race, reasons of ED visits (primary diagnosis based on ICD9 codes), payer status, and total charges filed by the hospitals.

Results: In 2012, the total number of ED visits in Tarrant County hospitals was 667,736 by 386,786 patients. The total charges of the ED visits in 2012 were \$1,920,854,981. Only 12% of the visits were not preventable emergency visits. Four percent of the visits were made by patients with mental health, substance abuse, and alcohol related problems. Two zip codes with the highest ED visits were selected for further “hot spot” analysis. Acute upper respiratory infections, asthma, pain, chest pain, headache, abdominal pain, and bronchitis were the most common primary diagnoses in frequent flyer patients.

Conclusion: This study identifies disparities associated with high ED usage in Tarrant County. These results have major significance in terms of public health planning. With the identification of health disparities in the high ED visit areas, public health efforts addressing disease prevention and management can be more efficiently targeted and appropriately implemented. In the future, we encourage healthcare data-sharing in order to coordinate care between different healthcare providers and for individual case management. Health care policies and information protection laws may need to be revised to facilitate the personalized and targeted care to these high-frequency patients and for continuity of care and care management outside the hospital.

Volume 66, Issue 4: Fall 2014

President's Message

James Swan, Ph.D.

Texas Public Health Journal 2014;66(4):2-3

Commissioner's Comments: The Public Health Impact of Unaccompanied Children

David L. Lakey, M.D.

Texas Public Health Journal 2014;66(4):3

Public Health Commentary: Children Refugees in South Texas

Thomas Schlenker, MD, MPH, Hector F. Gonzalez MD, MPH

Texas Public Health Journal 2014;66(4):4

Comparison of Adverse Events Involving Influenza Vaccine Reported to Two Programs

Mathias B. Forrester

Texas Public Health Journal 2014;66(4):5-6

Anabolic-Androgenic Steroid Abuse in Texas

Mathias B. Forrester

Texas Public Health Journal 2014;66(4):7

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Rising Anti-Vaccination Attitudes in the United States: A Plea for Paternalism

Corinne McLeod

Texas Public Health Journal 2014;66(4):8-10

Age Well Live Well Texas

Holly Riley, James H. Swan, PhD

Texas Public Health Journal 2014;66(4):10-11

Not Their First Rodeo: Texas Researchers Battle Ebola Virus

Carol A. Galeener, PhD

Texas Public Health Journal 2014;66(4):12

Commentary on Ebola

James Swan, PhD

Texas Public Health Journal 2014;66(4):13

Improving Collaboration between Federally-funded Health Centers and Aging Services

Jennifer Jurado Severance, Ph.D., Princess D. Jackson, Ph.D.

Texas Public Health Journal 2014;66(4):14-17

ABSTRACT

Background: Federally-funded health centers that harness the reinforcing nature of collaborative efforts with aging services can better prepare for the needs of rapidly increasing numbers of vulnerable older adults.

Methods: We surveyed 44 key informants at 31 health centers across Texas to evaluate partnerships with seven types of organizations serving older adults. Findings were analyzed to determine the level of collaboration with aging services and barriers to collaboration and serving older adults.

Results: Health centers collaborated with at least one aging service through more informal than formal partnerships. Respondents indicated major barriers to providing services to older adults, including inadequate transportation, inadequate reimbursement from third party payer sources, and limited funding. Also, respondents indicated employees with multiple responsibilities were unable to develop collaborative relationships with aging services.

Conclusion: Findings indicate that although collaboration occurs, financial incentives and a shared focus on underserved older adults can enhance commitments across public health and aging sectors.

An Overview of Tobacco-Free Policy Among Worksites in a Central Texas County

Kahler Stone, MPH, Jake Pry, MPH, Hammad Akram, MPH

Texas Public Health Journal 2014;66(4):18-22

ABSTRACT

The State of Texas is not smoke-free, leaving Texas municipalities and worksites to decide their smoke-free ordinances and policies. The majority of worksites in McLennan County are not regulated by comprehensive municipal smoke-free ordinances. Large employers (N=118) in McLennan County were sent a survey electronically, by mail, and/or by phone interview to assess worksite policies and measures to protect against smoke and smokeless tobacco exposures. The survey was distributed and the resulting data was analyzed and reported. A response rate of 64% (n=75) was achieved across worksites. Fifty-eight (77.3%) worksites reported having a tobacco use policy with 14 (24.1%) reporting a comprehensive tobacco-free campus policy. Among industries with more than 4 worksites surveyed, education (84.6%), healthcare (87.5%) and non-profit (85.7%) had the highest percentage of existing tobacco-free policy. A minority, 13 (22.4%) worksites, reported that their tobacco-free policy is not enforced. A total of 56 (74.6%) worksites reported not offering tobacco cessation support to their employees. This survey led to a better understanding of the tobacco and secondhand smoke protection among large employers in McLennan County. Ultimately, with a 100% tobacco-free campus being the highest level of protection, 61 (81.3%) of large employers surveyed in McLennan County have the ability to reduce the risk of exposure to tobacco and secondhand smoke through complete tobacco protection policy integration.

Public-Private Partnerships: Multidisciplinary Plans to Reduce Child and Adolescent Obesity

Tracey Smith Page, DNP, RN, FNP-BC, Lisa Campbell, DNP, RN, APHN-BC

Texas Public Health Journal 2014;66(4):23-25

ABSTRACT

Background: The alarming rates of childhood obesity are a national concern associated with physical, psychosocial, and financial burdens. With this knowledge, a family nurse practitioner recognized the need to develop community based interventions to address childhood obesity.

Methods: A select team of community leaders were assembled to develop a multidisciplinary, community collaboration centered on the utilization of public-private partnerships. A logic model was used to identify resources, interventions, and projected outcomes.

Results: A collaborative community organization was founded, and subcommittees were established to address concerns within five main categories (leadership, physical activity, nutrition, environment, and communication). The logic model continues to function as a foundation for building public-private partnerships with a common goal of reducing childhood obesity in Del Rio, Texas.

Conclusions: Combining the use of a logic model with the development of public-private partnerships is an effective method for establishing a community collaborative aimed at reducing childhood obesity.

In Memorium: Dr. Ron Anderson

Texas Public Health Journal 2014;66(4):26

Save the Date

Texas Public Health Journal 2014;66(4):27

Volume 66, Issue 3: Summer 2014

President's Message

James Swan, Ph.D.

Texas Public Health Journal 2014;66(3):2

Commissioner's Comments: Ready and Able

David L. Lakey, M.D.

Texas Public Health Journal 2014;66(3):2-3

Snakes At a Barbecue: Snake Bites During Holidays

Mathias B. Forrester, C. Lizette Villarreal, Darelle Hinson

Texas Public Health Journal 2014;66(3):3-4

Assessing Barriers to Healthcare Access Among Refugees Living in San Antonio, Texas

Neelima Navuluri MD, Anna Haring MD, Kristy Smithson-Riniker MD MPH, Rachel Sosland MD, Roseann

Vivanco RN MSN, Ruth Berggren MD, Jason Rosenfeld MPH

Texas Public Health Journal 2014;66(3):5-9

ABSTRACT

Context: Existing research on refugee healthcare access is focused on psychological, emotional and cultural barriers to care. Our research shows that before we can address these internal barriers we must focus interventions on basic structural barriers in a way that specifically targets the needs of individuals from different countries. To impact health seeking behavior, basic structural needs such as communication, financing, and transportation must be met. This needs assessment looked at the differences in barriers to healthcare access faced by refugees from different countries of origin. It also specifies structural barriers that are common among all refugee groups.

Design: Cross-sectional survey

Setting: San Antonio, Texas

Patients/Participants: Over age 18, self-identify as refugee, arrived in US between January 2008 through December 2010. Subjects (n=49) recruited in two subgroups: a) San Antonio Refugee Health Clinic (SARHC) (n=6), b) randomized door-to-door sampling at apartment complexes identified as housing for resettled refugees (n=43).

Intervention/Instrument: 64 question survey tool assessing demographics, financial payment systems, transportation, technology, English fluency, translation services, confidence in healthcare providers, finances, ability to seek healthcare, and impressions of discrimination. Survey sessions conducted in seven languages.

Results: Refugees have trouble accessing healthcare as shown by the fact that 53.2% of refugees do not feel confident scheduling a doctor's appointment and 41.3% report visiting the ER when they get sick. 24.5% of refugees reported having one or more chronic illnesses, but only 16.7% of those who reported having a chronic illness also reported going to a doctor for check-ups. The major structural barriers to accessing healthcare in this population include language, transportation, and financing. Inadequate English language skill is a major barrier as evidenced by that fact that confidence in scheduling a doctor's appointment is significantly associated with confidence in speaking and reading English ($p = 0.001$). In this population, 65.3% of refugees reported that they require a translator, while 30.6% use a family member as a translator. Only 34.7% have access to a private motor vehicle and only those without access to a private motor vehicle are more likely to list transportation as a major barrier ($p = 0.042$). Barriers differ by country of origin and age groups within this population. While language is a major barrier for all groups, refugees from Nepal, Bhutan and Burma identified language more than other groups ($p = 0.026$), while adults over the age of 40 were more likely to list language as a major barrier than younger people ($p = 0.009$). Bhutanese and Nepalese refugees were more likely to feel that the quality of their healthcare would improve if they had more money than Burmese refugees ($p = 0.001$).

Conclusion: In order to improve the health of the refugee population in San Antonio, we first must address the major structural barriers to accessing healthcare; language, transportation and financing. Because there are significant differences in experiences within this population, a "one size fits all" approach is not the most effective means to intervene. We believe that an accompaniment program that pairs healthcare professionals and students with refugee families will contextualize the message and learning, while simultaneously addressing both structural and internal barriers to accessing healthcare services in this population.

Follow-up Commentary: Translating Research into Action – The San Antonio Refugee Health Clinic

Neelima Navuluri MD, B. Alex Foster, MD, MPH, Andrew Muck MD, Moshtag Farokhi, DDS, MPH, Roseann Vivanco, MSN, RN

Texas Public Health Journal 2014;66(3):9-10

Empowering Health Promotion Students on the Texas-Mexico Border Through Digital Storytelling: Implications for Public Health in Vulnerable Communities

Thenral Mangadu, MD, MPH, Ph.D

Texas Public Health Journal 2014;66(3):11-14

ABSTRACT

US–Mexico border communities are at high risk for health disparities related to communicable and non-communicable diseases owing to structural issues such as poor access to health care, lack of health insurance, health professional shortage, and immigration-related barriers. El Paso, Texas, is a city located adjacent to Juarez, Mexico, on the US-Mexico border with more than 81.4% of the population being of Latino/Hispanic (Mexican American) origin and 42% of the residents uninsured. Health promotion professionals practicing in Texas-Mexico border communities need to be sensitive about the regional, social, and cultural contexts which contribute to the high prevalence of health disparities inherent to the region. Public health professional preparation must incorporate significant learning experiences which raise the critical consciousness vital to empowering health promotion and public health professionals to address social determinants of health. Digital Storytelling empowers individuals to create social change through reflection of individual experiences and transforming the same to broader community contexts. Hence, Digital Storytelling was used as a pedagogical method to engage and empower undergraduate health promotion students enrolled in a health promotion program planning course at the University of Texas at El Paso, a Hispanic Serving Institution (HSI) situated on the Texas- Mexico border. Twenty-nine students designed four Digital Stories to address peer health issues using a rigorous program planning framework and screened them on-campus for peer health promotion. The insights from this Digital Storytelling assignment and their implications for empowerment education in public health professional preparation and Texas-Mexico border health are discussed.

Multi-jurisdictional Norovirus Outbreak at a Swimming Pool

Randy Valcin, Senior Epidemiologist, Harlan "Mark" Guidry, MD. MPH, Marty Entringer, M.S, R.S

Texas Public Health Journal 2014;66(3):15-17

Summary

On Saturday June 1, 2013, the Galveston County Health District's (GCHD) epidemiology program received a report that 50 members of an area swim team "A" had developed a gastrointestinal illness. However, after further investigation we learned that pool users who became ill were residents of both Galveston County and Harris County. The swimming pool these swimmers used is located in, Galveston County, Texas, in city "A" and is inspected and issued its permit by the GCHD. However, part of city "A's" boundaries are within the southern part of Harris County. The pool is an eight-lane pool with a maximum pool depth of 5 feet and pool capacity of 235 patrons; this pool also has a baby pool attached.

Attitudes Toward Treatment and Potential Barriers to Access of Mental Health Services in a Sample of Elderly Hispanic and Anglo Adults

Mark G. Hartlaub, Ph.D., Paula Biedenharn, Ph.D., Pamela Brouillard, Psy.D., and Steve Seidel, Ph.D

Texas Public Health Journal 2014;66(3):18-20

ABSTRACT

Negative connotations about mental health treatment and the social stigma associated with mental illness may be important determinants of access to services for senior citizens. Since attitudes are often predictive of behavior, we sought to examine senior's attitudes toward seeking psychological help, as well as the perceived potential barriers to accessing mental health services in a regional community sample. A total of 188 volunteers (53% Hispanic, 47% Anglo) from senior centers in the local community were interviewed for this study. We found that the Anglo respondents had more favorable attitudes than Hispanic respondents on the Attitudes Toward Mental Health Treatment Scale, but not on the Attitudes Toward Seeking Psychological Help Scale. Implications of these results and suggestions for increasing treatment options to underserved senior populations are offered and discussed.

Municipal Bicycle Share Program Users, Uses, and Effects: View from San Antonio, Texas-

Eileen Nehme, MPH, and Harold W. Kohl III, PhD

Texas Public Health Journal 2014;66(3):21-25

ABSTRACT

Background: Bicycle share programs, potential facilitators of physical activity in the form of recreational or transportation cycling, are increasing in popularity. The purpose of this study was to describe members of a newly (2011) implemented program in San Antonio, Texas, and compare their cycling frequency and trip types before and after joining. Demographic variations in cycling behaviors and reasons for joining were also assessed.

Methods: Historical cross-sectional internet survey of program members in 2012. Participants reported on both current and premembership cycling behaviors.

Results: The proportion of female respondents was lower but similar to the overall population (47% vs. 52%). Relative to the San Antonio population, respondents were more likely to be white and live in higher-income households (white population: 71% vs. 26%). Across gender and ethnic subpopulations, greater proportions reported cycling weekly, and cycling for transportation to non-work destinations, after versus before joining the bicycle share program (weekly cycling: 83% vs. 49%, $p<0.001$; transport cycling: 66% vs. 39%, $p<0.001$). Among non-whites, a greater proportion reported recreational cycling via the bicycle share program than reported recreational cycling in the year prior (80% vs. 51%, $p=0.01$). Men were more likely than women to have joined in order to increase transportation options (80% vs. 51%, $p<0.001$) and because of concerns for the environment (41% vs. 27%, $p=0.05$). Women were more likely than men to have been prompted to join by someone they knew (43% vs. 26%, $p=0.03$). Non-whites were more likely to join as a way to save money on transportation than were whites (34% vs. 14%, $p=0.004$).

Conclusion: Results suggest participants cycled more after joining the bicycle share program than before joining, particularly for transportation trips to non-work destinations. Demographic characteristics may distinguish membership in bicycle share programs, but not patterns of usage among members. Recommendations for future research are given.

Cyberbullying at a Texas University - A Mixed Methods Approach to Examining Online Aggression

Katie Crosslin, PhD, CHES and Matt Crosslin, MEd

Texas Public Health Journal 2014;66(3):26-31

ABSTRACT

Objective: Cyberbullying is characterized by utilizing digital technology repeatedly to purposefully send information about another person to inflict harm. The objective of this mixed-methods study was to identify the prevalence for victimization and bullying behaviors, as well as to examine undergraduate students' perceptions and experiences with cyberbullying.

Participants: This study was conducted from 2011 to 2012 among undergraduate students at a Texas university (N = 286).

Methods: Prevalence of cyberbullying victimization/offending behaviors, and demographic variables were measured. Open-ended questions inquiring about personal cyberbullying experiences were included.

Results: Cyberbullying typically occurred through text message, email, and social networking sites. Approximately 32.4% of participants experienced at least two types of victimization and 16% of the study population reported victimizing others in two or more ways. Participants indicated that they were often cyberbullied due to relationship break-ups or disagreements in the dormitory. Behavioral impacts such as avoiding new friends and not trusting others were reported, as well as emotional reactions such as suicide ideation.

Conclusions: Administrators and faculty should focus on changing the campus culture to promote prevention, intervention, and enforcement of cyberbullying.

Volume 66, Issue 2: Spring 2014

President's Message

Dr. Alexandra Garcia

Texas Public Health Journal 2014;66(2):2

Message from TPHA's new president

James H. Swan, Ph.D.

Texas Public Health Journal 2014;66(1):2-3

Commissioner's Comments: A Focus on Women's Health

David L. Lakey, M.D.

Texas Public Health Journal 2014;66(2):3-4

Buckyball Magnet Ingestions: Small Objects That Can Cause Big Problems

Mathias B. Forrester

Texas Public Health Journal 2014;66(2):4

Rodent Glue Traps: A Sticky Problem With Young Children

Mathias B. Forrester

Texas Public Health Journal 2014;66(2):5

Regional and Racial/Ethnic Differences in the Association between Perceptions of Dietary Practices, Eating Habits, and Obesity among Texas Adolescents

Brianna F. Moore MS, Adriana Pe'rez MS PhD, William Sorensen PhD, Kevin Gosselin PhD, Joyce E. Ballard PhD, Debra L. Saxton MS

Texas Public Health Journal 2014;66(2):6-11

ABSTRACT

Purpose: Adolescent obesity is now of critical concern for Texas, as the statewide prevalence is higher than the National prevalence. The purpose of this study is to evaluate the association of perceptions of dietary practices, eating habits, weight-loss behaviors and overweight/obesity among adolescents in three Health Service Regions (HSRs) in Texas.

Methods: Our study utilized data from eighth and eleventh grade adolescents (n=3,837) who participated in the 2004-2005 School Physical Activity and Nutrition (SPAN) study. Weighted multinomial logistic regression evaluated the association of eating habits, perceptions of dietary practices, and weight-loss behaviors on adolescents' weight status (overweight or obese compared with normal/underweight), by demographic-specific subpopulations and adjusting for race/ethnicity, gender, grade and/or HSR.

Results: Approximately one third of adolescents were overweight (17.2%) or obese (17.1%). Associated factors for obesity among Texas adolescents included: (a) not meeting recommendations for dairy consumption (in African American adolescents as compared with Hispanics and White/other); and (b) perceiving eating habits as "less healthy than peers" (among Hispanic and White/other adolescents as compared with African American adolescents).

Conclusions: Interesting differences arise across race/ethnicity categories and regions when evaluating the influence of perceived eating habits relative to peers on weight status. These findings highlight the importance of considering the socio-cultural context of health outcomes and health-related behaviors among adolescents. We propose that health educators should: (a) approach eating habits and nutrition education with cultural competency; and (b) continue to encourage adolescents to meet the recommendations for dairy consumption daily. Moreover, policymakers should consider the influence of perceived social norms on eating habits and weight status among adolescents.

A Comparison of Health Outcomes Between Three Counties in the Houston Metropolitan Area: Harris County, Fort Bend County and Brazoria County

Hafeez U. Rehman, MD, MPH, CPH

Texas Public Health Journal 2014;66(2):12-15

ABSTRACT

The three counties, Harris, Fort Bend and Brazoria, within the Houston Metropolitan Area are studied for disparities in health outcomes and health factors. Disparities in health may be related to race/ethnicity, socioeconomic factors or overall demographic factors. The County Health Ranking and Roadmaps Data is analyzed to compare the health disparities between the three counties. County Health Ranking and Roadmaps used a number of noteworthy data sources to describe the health outcomes and health factors of all the counties within each state. The demographic and health care data of the three counties selected are compared to determine the health disparities between them. Health outcome and health factor measures rated higher for the Fort Bend and Brazoria counties in contrast to the Harris County. A number of measures like HIV prevalence, infant and child mortality, number of uninsured adults and children, poor physical and mental health days, adult obesity, excessive drinking, sexually transmitted infections, and teen birth showed higher trends in Harris County than the Fort Bend and Brazoria Counties. Harris County ranked much lower for overall health outcomes and factors within the state of Texas. Although the three counties compared, share a similar geographic location and resources, wide distinction in health outcomes and factors are observed among them. The variation can be associated to socioeconomic and racial/ethnic diversity between them. Higher health care costs are not affordable to the communities uniformly and a good resolution to end health disparities would be to offer affordable health insurance across the state.

Differences in Environmental Perceptions, Physical Activity, and Weight Status among Rural and Urban Residents in Texas

Allison Ottenbacher, PhD; Roderick Harrison, PhD; Marcus Martin, PhD; Eddilisa Martin, PharmD; Thomas James, PhD; Kim Linnear, MPA; Avani Parikh, MPH; Patricia Moore, PhD; Kathryn Cardarelli, PhD
Texas Public Health Journal 2014;66(2):16-18

ABSTRACT

Purpose: The objective of this study was to distinguish the effects of rural vs. urban residence from those of race-ethnicity, education, and income, in the environmental perceptions, physical activity and weight status of respondents in rural and urban counties in Texas.

Methods: The data are from a survey conducted in three rural and three urban counties participating in Transforming Texas in 2012.

Findings: Residents of rural counties had less favorable environmental perceptions, lower rates of physical activity, and higher rates of obesity, than residents of urban counties. Rural rates of physical activity, but not of obesity, were lower than urban rates after controlling for demographic confounders.

Conclusions: Health professionals must acknowledge the differences between individuals living in different environments to develop more effective health promotion strategies.

Sentinel Indicators of Unhealthy Homes

Debra Cherry, MD, MS; John Vasselli, MS; Sharon Huff, MD, MS; Rena Saito, PhD, CIH
Texas Public Health Journal 2014;66(2):19-24

ABSTRACT

Objective: Home observation reveals factors that are highly relevant to children's health and development, but no standardized tool currently exists that is both brief enough for widespread application and detailed enough to capture a broad spectrum of environmental concerns. The purpose of this study was to begin developing a brief, easily administered home observation tool that could identify sentinel indicators of unhealthy homes with minimum burden to study participants.

Methods: Investigators developed a new dwelling unit observation (DUO) tool based on review of existing home assessment tools and subjective selection of items that were easy to administer, highly informative, and possibly indicative of more extensive environmental concerns. The new DUO was pilot tested in a sample of 18 homes that varied widely in value and location within a Texas county.

Results: The most outstanding sentinel observations indicating potentially unhealthy conditions, all of which occurred with a frequency of one in 18 dwellings, included a roach infestation, structural disrepair, extremely unclean indoor surfaces, poor access to services (18 miles from the nearest grocery store), and close proximity to an agricultural field. Sentinel air quality measurements obtained with 15-minute readings on handheld sensors included elevated carbon monoxide (CO) and carbon dioxide (CO₂) in a home with poor ventilation and elevated particulates (PM 2.5) in a home with indoor tobacco smoking.

Conclusions: Using the DUO, data collectors without any specialized training were able to record the most important environmental factors related to health and simple air quality measurements in a matter of minutes.

Sentinel indicators of unhealthy conditions can trigger more detailed evaluations, limiting such evaluations to homes that are most likely to have a problem.

Evaluating a De-Centralized Regional Delivery System for Breast Cancer Screening and Patient Navigation for the Rural Underserved

Stephen J. Inrig, PhD, Jasmin A. Tiro, PhD, Trisha V. Melhado, MPH, Keith E. Argenbright, MD, MMM, Simon J. Craddock Lee, PhD MPH

Texas Public Health Journal 2014;66(2):25-34

ABSTRACT

Providing breast cancer screening services in rural areas is challenging due to the fractured nature of healthcare delivery systems and complex reimbursement mechanisms that create barriers to access for the under- and uninsured. Interventions that reduce structural barriers to mammography, like patient navigation programs, are effective and recommended, especially for minority and underserved women. Although the literature on rural healthcare is significant, the field lacks studies of adaptive service delivery models and rigorous evaluation of evidence-based programs that facilitate routine screening and appropriate follow-up across large geographic areas.

Objectives: To better understand how to implement a decentralized regional delivery “hub & spoke” model for rural breast cancer screening and patient navigation, we have designed a rigorous, structured, multi-level and mixed-methods evaluation based on Glasgow’s RE-AIM model (Reach, Effectiveness, Adoption, Implementation, and Maintenance).

Methods and Design: The program is comprised of three core components: 1) Outreach to underserved women by partnering with county organizations; 2) Navigation to guide patients through screening and appropriate follow-up; and 3) Centralized Reimbursement to coordinate funding for screening services through a central contract with Medicaid Breast and Cervical Cancer Services (BCCS). Using Glasgow’s RE-AIM model, we will: 1) assess which counties have the resources and capacity to implement outreach and/or navigation components, 2) train partners in each county on how to implement components, and 3) monitor process and outcome measures in each county at regular intervals, providing booster training when needed.

Discussion: This evaluation strategy will elucidate how the heterogeneity of rural county infrastructure impacts decentralized service delivery as a navigation program expands. In addition to increasing breast cancer screening access, our model improves and maintains time to diagnostic resolution and facilitates timely referral to local cancer treatment services. We offer this evaluation approach as an exemplar for scientific methods to evaluate the translation of evidence-based federal policy into sustainable health services delivery in a rural setting.

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President's Message

Dr. Alexandra Garcia

Texas Public Health Journal 2014;66(1):2

Texas Public Health Journal Index for 2008 - 2012

Texas Public Health Journal 2014;66(1):3-8

Commissioner's Comments: Sunset Review: An Opportunity to Improve Texas Public Health

David L. Lakey, M.D.

Texas Public Health Journal 2014;66(1):8-9

Krokodil: An Urban Legend in the United States So Far

Mathias B. Forrester, Jane Carlisle Maxwell

Texas Public Health Journal 2014;66(1):9-10

Public Health Commentary: Youth Suicide in Texas – A Call to Action

Lauren Gambill, MD

Texas Public Health Journal 2014;66(1):10

A Voluntary Approach to Improve Menu Options in Restaurants Through a Local Collaborative Partnership

Lesli Biediger-Friedman, PhD, MPH, RD, Erica T. Sosa, PhD, MCHES, Kathleen Shields, CHES, Alexa Shutt, PhD, MPH, RD

Texas Public Health Journal 2014;66(1):11-14

ABSTRACT

Background: Restaurants are uniquely positioned to equip patrons so they can make nutritionally informed food selections. Community collaborations aim to promote healthy selections to restaurant patrons dining out in order to step forward in the efforts against obesity. This study shows a collaborative restaurant initiative to feature healthier food options in restaurants in a large urban city. The Healthy Restaurants Coalition (HRC) was developed as a partnership between public health personnel, food professionals, registered dietitians and other important stakeholders. The ¡Por Vida! initiative was launched in 2010 by the Healthy Restaurants Coalition.

Methods: Three sub-committees of the Healthy Restaurants Coalition (HRC) convened to develop the ¡Por Vida! initiative. One subcommittee developed healthy menu item criteria, based on national dietary guidelines; the second developed the logo and marketing plan; and the third selected and recruited restaurants. Participation and outcomes were tracked from 2008 to 2010.

Results: Seven restaurant brands with more than 75 locations participated in the first wave of the initiative. Five additional restaurants joined the initiative following the launch. Restaurants worked with HRC registered dietitians to analyze and modify their recipes to meet healthy menu item criteria. The HRC collectively determined marketing strategies and restaurant recruitment needs. The ¡Por Vida! initiative received attention from a wide-range of media outlets and was commended for its collaborative approach.

Discussion: Partnerships including restaurants and registered dietitians are key in communities addressing the obesity epidemic. Restaurants and food service professionals were found to be willing to partner with public health personnel when they are able to actively participate in the development of initiatives.

Barriers to Physical Activity Education for Cancer Survivors: A Survey of English and Spanish Speaking Promotores/Community Health Workers in Texas

Deborah Vollmer Dahlke, MPAff, CHW, Jinmyoung Cho, PhD, Venus Gines, MA, CHWI, Julie St. John, MA, MPH, CHWI, Doctoral Candidate, Marcia Ory, MA, MPH, PhD

Texas Public Health Journal 2014;66(1):15-19

ABSTRACT

Background: Recent systematic reviews confirm that physical activity can be effective in enhancing health-related quality of life among cancer survivors. Older and ethnic minority cancer survivors frequently experience

environmental, social, and cultural barriers to physical activity interventions. Promotores/Community Health Workers (P/CHWs) are an effective way to reach underserved and difficult to reach cancer survivor populations.

Methods: A survey of Texas P/CHWs explored barriers to delivering health promotion for physical activity and examined the P/CHWs' use of Internet and social networking. An email with links to either an English or Spanish language survey was distributed to 287 P/CHWs living in Texas. Among 254 respondents, 168 selected the English and 86 selected the Spanish language surveys.

Results: Of the Spanish language survey respondents, 92.9% were of Latino/Hispanic ethnicity, as were 55.2% of the English language respondents. Pearson's chi-square tests showed significant differences by choice of survey language in types of service to cancer survivors, barriers to physical activity, and Internet use for health information and social networking.

Conclusions: This research highlights the need for greater consideration of cultural, social, and environmental characteristics in developing culturally and linguistically specific P/CHW training and interventions to promote physical activity and healthy lifestyles in order to improve survivorship outcomes.

Excessive Alcohol Consumption Among Adults with Chronic Medical Conditions in Texas

Nimisha Bhakta, MPH, Lisa Wyman, PhD, MPH, Timothy S. Naimi, MD, MPH

Texas Public Health Journal 2014;66(1):20-24

ABSTRACT

Background: More than 1,500 persons died due to excessive alcohol consumption in Texas in 2010. Texas has a high burden of chronic diseases, including those related to excessive alcohol consumption. The purpose of this study was to explore the population-based patterns of excessive alcohol consumption and chronic diseases that can be either caused or exacerbated by excessive drinking among Texas adults.

Methods: Texas 2011 Behavioral Risk Factor Surveillance System (BRFSS) survey data were analyzed. The sample size was 14,973 adults aged >18 years; data were weighted to be representative of the Texas adult population. Analysis was performed using SAS 9.2 software for three measures of excessive alcohol consumption (binge drinking, heavy drinking, and usual consumption in excess of U.S. Dietary Guidelines limit); these measures were related to eight chronic diseases and selected socio-demographic characteristics.

Results: Among Texas adults with the chronic diseases assessed, 29.6% reported one of the three measures of excessive drinking, including 27.4% of those who had a routine checkup in the past two years. Current smokers had the highest (48.1%) and adults with diabetes (14.5%) had the lowest prevalence of excessive drinking. Excessive drinking was lower among racial minorities or those with low educational or income levels. Subpopulations who tended to have a higher prevalence of excessive drinking included men, those aged 18-44 years, unmarried persons, employed persons, those with at least some college education, and those with annual household income \$50,000 or more. Among excessive drinkers, 69.4% reported having one or more chronic diseases.

Conclusions: The prevalence of excessive alcohol consumption is high among Texas adults with alcohol-associated chronic diseases, and many alcohol policies can effectively reduce excessive drinking. Similar findings among those with a recent checkup underscore the importance of routine alcohol screening and brief counseling interventions in accordance with national guidelines.

Spatial Analysis of Cardiovascular Disease Mortality and Exposure to PM2.5 in Harris County, Texas

Mary Ford, MS; Linda Highfield, PhD; Philomene Balihe, MPH; D. Michael Hallman, PhD

Texas Public Health Journal 2014;66(1):25-33

ABSTRACT

Background: There is a strong and well-established link between fine particulate matter air pollution (PM2.5) exposure and cardiovascular disease (CVD) mortality, yet no studies have looked at the association of these in major metropolitan areas in Texas, such as Harris County. Harris County has the dubious distinction of having some of the worst air quality in the United States (US). With this in mind, we explored the spatial association between PM2.5 and CVD in Harris County, Texas, at the Census tract level. The objective was to assess how increased ambient PM2.5 exposure related to CVD mortality rates in the study area, while controlling for race, income, education, and age.

Methods: An estimated exposure raster was created for Harris County for two seasonal periods (February and September 2002), representing the minimum and maximum exposure levels for PM2.5, respectively. Exposure was estimated using a Kriging model at the Census tract level. PM2.5 exposure and CVD mortality rates were analyzed using an Ordinary Least Squares (OLS) regression model.

Results: Controlling for race, income, and age, each 1 $\mu\text{g}/\text{m}^3$ increase in PM_{2.5} exposure was associated with an increase in CVD mortality of 16.57 deaths per 100,000 for February 2002 and 14.47 deaths per 100,000 for September 2002.

Conclusion: These findings support previously published studies associating PM_{2.5} exposure with CVD mortality rates. This study further identified the areas of greatest PM_{2.5} exposure in Harris County as being the geographical locations of populations with the highest risk of CVD (i.e., predominantly older, low-income populations with a predominance of African Americans). The magnitude of the effect of PM_{2.5} exposure on CVD mortality rates in the study region indicates a need for further community-level studies in Harris County to address disproportionate exposure in vulnerable populations.

GIS Day, Texas Department of State Health Services, Austin, Texas, November 20, 2013

Tracy Haywood, Mathias B Forrester

Texas Public Health Journal 2014;66(1):34-35

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President's Message

Dr. Alexandra Garcia

Texas Public Health Journal 2013;65(4):2

Commissioner's Comments: Outbreaks Highlight Importance of Immunizations

David L. Lakey, M.D.

Texas Public Health Journal 2013;65(4):3

Pediatric Iron Ingestions: Are Potentially Serious Ingestions Increasing?

Mathias B. Forrester

Texas Public Health Journal 2013;65(4):3-4

Book Review: Technologies for Active Aging Andrew Sixsmith, Gloria Gutman Editors Springer Science+Business Media, New York, 2013

Reviewed by Ronald L. Wade

Texas Public Health Journal 2013;65(4):5

Brief report: Using Focus Groups to Explore Health Literacy and Health Numeracy in Hispanic Adults Living in Northeast Texas

Jessica R. Hyde, BS, CHES; Cheryl M. Cooper, PhD, RN

Texas Public Health Journal 2013;65(4):6

Using PhotoVoice to Teach Social Issues With Undergraduate Social Work Students

Melissa Oden, DHEd, LMSW-IPR, MPH, CHES

Texas Public Health Journal 2013;65(4):7-9

ABSTRACT

An important theoretical mainstay in public health is the concept of the social determinants of health. The literature clearly states that inequities in health arise because of the circumstances in which people grow, live, work, and age, and the systems put in place to manage illness. Political, social, and economic forces in turn, shape the conditions in which people live and die. This theoretical construct provides an excellent conduit for teaching undergraduate social work students about social issues that affect their practice as social workers. PhotoVoice builds skills within disadvantaged and marginalized communities using innovative participatory photography and digital storytelling methods so that they have the opportunity to represent themselves and create tools for advocacy and communications to achieve positive social change.

PHOTOS FROM THE GALLERY WALK EVENT

Texas Public Health Journal 2013;65(4):10

Trends in Occupation-Related Musculoskeletal Disorders in Texas and the United States (2003-2009)

Michelle L. Cook, MPH; Marc A. Kowalkowski, MS; Robert Collins, MS, PE, CIH, CSP; Christine Mathews, MPH; Susan L. Prosperie, MS, RS; Christina Socias, MPH and Sharon P. Cooper, PhD

Texas Public Health Journal 2013;65(4):11-15

ABSTRACT

Objectives: To evaluate temporal trends in nonfatal occupational musculoskeletal disorders (MSDs) reported in Texas and the United States from 2003 to 2009.

Methods: We analyzed aggregate data from the 2003 to 2009 iterations of the U.S. Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses to assess trends in reported occupational MSDs over the study interval. We evaluated the number of reported events and proportional changes over time using descriptive statistics and linear regression.

Results: From 2003-2009, the number occupational MSDs decreased from 26,810 to 14,690 in Texas and from 435,180 to 283,800 in the U.S. The percentage of occupational MSDs reported in the U.S. that occurred in Texas decreased from 6.1% in 2003 to 5.2% in 2009. The percentage of occupational MSDs in Texas declined, on average,

by 1.28% annually, compared to only 0.62% per year in the U.S. In 2009, MSDs accounted for 24.4% and 29.4% of all nonfatal occupational injuries and illnesses in Texas and the U.S., respectively.

Discussion: In the U.S. and Texas, total occupational MSDs have declined from 2003 to 2009. However, MSDs continue to represent a significant proportion of nonfatal occupational injuries and illnesses. Designing and implementing programs to reduce MSDs in the workplace should remain a high priority among occupational health researchers.

Texas Poison Centers' Involvement in the Public Health Response to the West Nile Virus Outbreak in 2012

Mathias B. Forrester, Melody Gardner

Texas Public Health Journal 2013;65(4):16-20

ABSTRACT

Context: The largest West Nile virus outbreak in Texas occurred in 2012, with Dallas County particularly affected. Aerial insecticide spraying was conducted in Dallas County during August 16-23. On August 14, the North Texas Poison Center issued a press release indicating that the public could call the Texas Poison Center Network (TPCN) if they have questions about West Nile virus or the spraying. The TPCN also activated its interactive voice response (IVR) system during August 15-27 to provide messages about West Nile virus and the aerial spraying.

Objective: This investigation was to determine whether the West Nile virus outbreak affected the pattern of calls the TPCN received.

Methods: The daily number of total calls handled by TPCN agents in August was determined and examined for any trends in relation to the aerial spraying. All West Nile virus-related calls handled by TPCN agents during August were identified and the call date, caller county, and call topic determined. The number of times the IVR message was accessed each day was identified.

Results: The number of total calls handled by TPCN agents on August 16 (1,256) was the highest daily number of calls received in 2012. Of 988 West Nile virus-related calls handled by TPCN agents, 78% were about the aerial spraying, 19% were about West Nile virus, and 3% were unknown; 94% were information calls. Seventy-two percent of the calls originated in Dallas County. The IVR message was accessed by 1,516 callers.

Discussion: The 2012 West Nile virus outbreak resulted in a surge in calls to the TPCN on August 16. The IVR system was utilized to answer a number of calls. Most of the West Nile virus-related calls handled by TPCN agents were about the aerial spraying, were requests for information, and came from Dallas County.

Collaborative Care Delivery Requires an Understanding of Organizational Differences

Ronald Wade, MS, James H. Swan, Ph.D., Norman A. Dolch, Ph.D., Keith W. Turner, Ph.D., Keahnan Washington, MHS

Texas Public Health Journal 2013;65(4):21-23

ABSTRACT

Care-providing organizations must understand and appreciate fundamental differences between themselves in order to deliver quality care to clients. This study using a mixed methods approach explores differences between government agencies and nonprofit organizations during the startup of Aging and Disability Resource Centers (ADRCs) intended to help the aged and disabled find available services. Results indicate differences that may create barriers to their efforts. Public Health is involved with care and services to vulnerable populations, among these are organizations such as ADRCs.

Description of Injuries and Illnesses in the Transportation and Warehouse Sector in Texas and the United States, 2005-2009

Anna Serrano, MPH, MBA; Clint Pinion, MPH; Timothy D. Read, MS, EIT; Jing Su; Jaennie Yoon, MA, MPH; Julie St. John, MA, MPH, CHWI; Christina Socias, DrPH, Susan L. Prosperie, MS, RS; Sharon P. Cooper, PhD

Texas Public Health Journal 2013;65(4):24-28

ABSTRACT

Objectives: The purpose of this paper is to describe recent trends of occupational non-fatal injury in the Transportation and Warehouse private industry sector of Texas as compared to that of the U.S.

Methods: We conducted a descriptive examination of occupational injuries for the Transportation and Warehousing sector of the State of Texas and the United States using data obtained from the United States Bureau of Labor

Statistics (BLS) Workplace Injuries Database for 2005-2009. We stratified data by age, race/ethnicity, gender, type of exposure and occupation.

Results: In the U.S. and in Texas, injuries and illnesses among workers in the Transportation and Warehousing sector were predominately distributed among White workers ages 35-44 and 45-54. In Texas, Hispanics dominated the majority of injuries and illnesses. In the U.S. and in Texas, bodily reaction and exertion was the major exposure associated with injuries and illness. During 2005-2009, workers in the Transportation and Warehousing sector experienced a decrease from 33,440 to 24,000 injuries and illnesses in the US and from 3,390 to 2,490 during the same time period in Texas.

Conclusions: Data obtained through the BLS revealed there were no substantial differences for injuries between Texas and the U.S. in distributions or total rates based on age, race/ethnicity, gender or exposure stratum within the Transportation and Warehousing industry. The severity of injuries and illnesses in this industry continue to remain an issue as demonstrated by the increasing rates for greater number of days missed from work within Texas. Future areas of examination include comparing economic employment trends with the presented injury and illness case information for the Transportation and Warehousing industry in Texas. Exploration of prevention and reduction programs should also be addressed.

A Speed Mentoring Experience for University Students in Public Health Education

Ninfa Peña-Purcell, PhD, MCHES, Nancy Asomaning, MSPH

Texas Public Health Journal 2013;65(4):29-33

ABSTRACT

This exploratory study investigates the utility of speed mentoring as a professional development tool for public health educators. In the Fall of 2012, the Texas Society for Public Health Education sponsored its inaugural speed mentoring event as a pre-conference session targeting public health or health education undergraduate or master level students and early career professionals (< 5 years). Speed mentoring mirrors the speed-dating concept where mentees are matched with mentors in two rotations of 15-minute sessions. The event's aim was to connect early career professionals (mentees) with veterans (mentors) to provide an opportunity for mentees to obtain brief career advice. Potential mentees completed the required application. Application data were used to match mentees and mentors by health education specialty and/or research interest. As part of the application, mentees submitted four career-related questions, which were provided to the mentor in advance of the session. In general, two questions were answered in each session.

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President's Message

Dr. Alexandra Garcia

Texas Public Health Journal 2013;65(3):2-3

Commissioner's Comments: Legislative Session: Major Support for Public Health

David L. Lakey, M.D.

Texas Public Health Journal 2013;65(3):3-4

TPHA POISON CONTROL UPDATE:

The Less Than Glorious Side of Morning Glories

Mathias B. Forrester

Texas Public Health Journal 2013;65(3):5

Pediatric Ingestions of Dissolvable Nicotine Products

Mathias B. Forrester

Texas Public Health Journal 2013;65(3):5-6

Lessons from History: the 1665 Plague in Eyam, England

Lisa A. Campbell, DNP, RN, APHN-BC, Cheryl C. Stegbauer, PhD, FNP-BC, APN, FAANP, William B. Stroube, PhD

Texas Public Health Journal 2013;65(3):6-8

ABSTRACT

In 1665, bubonic plague arrived in rural Eyam, England with devastating effects. The entire village established a self-imposed isolation in an effort to prevent further spread of the deadly plague. The authors use a comparative epidemiological approach to examine issues and methods addressed by the village in 1665. The etiology and progression of disease from the historical perspective is contrasted against what is known today about the natural course of bubonic plague. Observations are based upon multiple visits to Eyam and the current public health literature. The plague has existed since the time of the Egyptians, and the disease has not been eradicated.

Book Review: What to Expect When No One's Expecting: America's Coming Demographic Disaster

Jonathan V. Last, Carol A. Galeener, PhD

Texas Public Health Journal 2013;65(3):8-9

Texas Public Health Association Accreditation Grant Report (as of June 28, 2013)

Texas Public Health Journal 2013;65(3):9

The Role of Non-Operating Revenue in Providing Community Benefit in Not-For-Profit Hospitals in Texas

Jinhyung Lee, Ph.D.

Texas Public Health Journal 2013;65(3):10-13

ABSTRACT

Not-for-profit hospitals provide community benefit in exchange for tax exemption. However, not-for-profit hospitals are receiving increased public criticism because of insufficient levels of community benefit provision. Thus, this study examined the effect of financial activities on uncompensated care provision in Texas not-for-profit hospitals from 2007 to 2010. Various regression models (fixed effect and system generalized method of moment) were employed to control for autocorrelation and endogeneity problems. The finding shows that a hospital's provision of community benefit is not tied to market performance of its financial assets.

Effective Deployment of an Electronic Health Record (EHR) in a Rural Local Health Department (LHD)

Debra McCullough, DNP, RN, FNP

Texas Public Health Journal 2013;65(3):14-17

ABSTRACT

In 2004, President George W. Bush called for widespread adoption of electronic health records (EHR) within 10 years. Seven years later, after careful deliberation and researching the advantages and disadvantages, Andrews County Health Department (ACHD) decided to transition from paper to an EHR. This article describes the pre-implementation and post-implementation strategies and tactics a team employed successfully to implement the EHR. **Lessons Learned:** A proactive multidisciplinary team approach is essential for implementing an EHR successfully. To decrease workflow disruption: predetermine a realistic scanning policy; decrease the patient load immediately post-implementation; design some electronic processes to model existing paper practices; be alert and change cumbersome processes because they cultivate work arounds; encourage and promote continual improvement and workflow redesign; select a flexible electronic system; and establish a lab interface if possible. Pre-determined policy may not be adopted by staff because novice EHR users revert to processes learned in the EHR vendor training. In addition successful EHR implementation and use involves: gaining leadership, stakeholder, and end-user buy-in; utilizing a step-by-step process; matching the capabilities of the EHR selected to the staffs' perceived benefits; redesigning workflow with an improvement focus; and ensuring flexibility and capacity for creating documentation components within the EHR.

Public Health Accreditation Board (PHAB) Beta Test Experience of Smaller Local Health Departments

Debra McCullough, DNP, RN, FNP, Mary Fenton, DrPH, RN, ANP, FAAN, Tommy Camden, MS
Texas Public Health Journal 2013;65(3):18-22

ABSTRACT

Background: In 2009, the Public Health Accreditation Board (PHAB) conducted a Beta Test to determine the barriers and best practices related to preparing for and implementing accreditation standards, measures, and documentation requirements. In May 2011, PHAB published the final Standards and Measures Version 1.0 for the initial accreditation application period of 2011-2012. The purpose of this study was to describe the experience of smaller rural local health departments (LHDs) participating in the PHAB accreditation Beta Test to determine if it is feasible for smaller rural LHDs to meet the same standards and measures as larger LHDs with substantially more resources.

Participants: LHD Directors overseeing public health jurisdictions with populations <55,500 who participated in the PHAB Beta Test. **Methods:** Recorded telephone interviews using a qualitative phenomenological method.

Results: A content analysis identified common elements which facilitated achieving accreditation and common barriers to achieving accreditation. LHD Directors believed small rural LHDs have the capacity to meet the PHAB Standards and Measures, if given enough time; smaller rural LHDs should apply for and achieve accreditation; and PHAB Standards and Measures are flexible and can apply equally to small, medium, and large and rural or metropolitan LHDs. Lack of documentation and documentation organization and storage presented the most common barrier to achieving the PHAB standards and measures. Additional barriers included: lack of formal agreements between the LHD and state health department (SHD) or external agencies conducting services; lack of completion of the three required prerequisites (community assessment, improvement plan, and strategic plan); and lack of quality improvement knowledge. Participants reported lessons learned, recommendations for preparing for accreditation, unexpected events, and staff behavior changes resulting from the process.

Gap Analysis to Determine a Small Local Health Department's (LHD) Compliance with the Public Health Accreditation Board (2011) Standards and Measures Version 1.0

Debra McCullough, DNP, RN, FNP, Mary Fenton, DrPH, RN, ANP, FAAN, Tommy Camden, MS
Texas Public Health Journal 2013;65(3):23-25

ABSTRACT

Public health departments across the nation are in varying stages of public health agency accreditation readiness. To assess a rural West Texas local health department's (LHD) readiness for national accreditation, Andrews County Health Department's staff conducted a gap analysis to compare the LHD's policies, procedures, and practices to the Public Health Accreditation Board (PHAB) Standards and Measures Version 1.0 (2011) documentation requirements.

Method: Quality Improvement Gap Analysis. Setting: LHD serving a population jurisdiction of <15,000.

Results: Twenty-seven (28%) measures were partially met, 39 (40%) were not met, 21 (21%) required collaboration with the state health department, and 11 (11%) required technical assistance. The LHD partially met the majority of the administration and management domain measures. Most gaps resulted from not implementing the three required accreditation prerequisites (community health assessment, community health improvement plan, and department

strategic plan); lack of documentation of public health enforcement monitoring activities and access to care issues; and the lack of a performance management system to monitor organizational goal achievement. Conclusion: Gap analysis was a useful planning methodology to determine a small LHD's readiness for national accreditation. The LHD staff believes achieving agency accreditation is a realistic goal for the future and estimates taking five years to meet all identified gaps.

Reducing Sexually Transmitted Disease (STD)/Human Immunodeficiency Virus (HIV) Rates Among 13-18 Year Olds: Improving the STD/HIV Curriculum Administration in Dallas County

Jennifer J. Edwards, PhD, Earl Mullins, MPH, Venus Dukes, MS, LaShonda Worthey, BS, Dawnetta Smith, MSW
Texas Public Health Journal 2013;65(3):26-27

ABSTRACT

Objective: To determine the extent to which sexually transmitted disease (STD)/human immunodeficiency virus (HIV) prevention education is currently provided by Dallas County independent school districts (ISDs) and what opportunities exist to improve STD/HIV prevention education for the 13-18-year age group in the county.

Methods: A purposive sample of 16 administrators responsible for STD/HIV education in the districts was invited to complete an online questionnaire between February 28 and March 22, 2012. Quantitative data was collected using statistical reporting software. Thematic content analysis was employed for open-ended responses.

Results: The assessment found that 67% of Dallas County ISD participants have an STD/HIV education curriculum available for student participation. Dallas County ISDs have a 64% parental consent approval rate. Thirty percent of STD/HIV courses offered have instructors with a degree/education in health education, nursing, or public health; 48% do not; and 22% of the courses have some instructors with and some without this educational background.

Discussion: There is a lack of parental consent for student participation in STD/HIV education classes. There is also a need for school districts to provide comprehensive STD/HIV training for course instructors. Dallas County Health and Human Services (DCHHS) recommends that a Dallas County convener step forward to form a Teen STD/HIV Education Collaborative to facilitate increasing the parental consent rate for STD/HIV education.

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Impact of 2012 West Nile Virus Outbreak on Pesticide Exposures Reported to Texas Poison Centers

Mathias B. Forrester, Melody Gardner

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The United States and Federally Subsidized Health Care

Kirk L. Smith MD, Ph.D; Phillip Hoverstadt, MPH

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Waivers and Medicaid in the State of Texas

Phillip Hoverstadt, MPH, Kirk L. Smith MD, Ph.D, Belinda Reininger DrPH, Christine Arcari Ph.D, MPH

Texas Public Health Journal 2013;65(2):16-21

CERCIT: Research to Keep Texans Informed About Cancer Care

Catherine Cooksley, DrPH, Anthony DiNuzzo, PhD and Jean Freeman, PhD on Behalf of the CERCIT Investigators

Texas Public Health Journal 2013;65(2):22-23

The "Cores" of CERCIT: Data Management Core – Principal Investigator:

Catherine D. Cooksley (UTMB)

Texas Public Health Journal 2013;65(2):23-25

Training Core- Principal Investigators:

Drs. Jean Freeman (UTMB) and Linda Elting (MDA)

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Knowledge and Translation Core – Principal Investigators:

Drs. Karl Eschbach and Anthony DiNuzzo (UTMB) and Dr. Leonard Zwelling (MDA)

Texas Public Health Journal 2013;65(2):26-29

Utilization of BRCA testing in older women with breast and/or ovarian cancer in the state of Texas

Ana M. Rodriguez, Sharon H. Giordano, and Catherine D. Cooksley

Texas Public Health Journal 2013;65(2):30-36

ABSTRACT

Background: Genetic testing for hereditary breast ovarian cancer (HBOC) susceptibility due to BRCA1 and BRCA2 (BRCA1/2) gene mutations became commercially available in the US in late 1996. Medicare began cost coverage in 2000 for some women with existing breast and/or ovarian cancer to assess treatment and family testing options.

Methods: We used the Texas Cancer Registry-Linked Medicare Database for this population-based cross-sectional study. We identified women aged 66 years or older with breast and/or ovarian cancer diagnosed between 2005 and 2007 and used their Medicare claims through 2009 to calculate the rate of testing in Texas and the proportion of women positive for BRCA mutations. We compared our findings to current literature.

Results: We identified 7,744 having at least one of the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes identifying risk factors associated with HBOC. Of these 7,744 women,

1,594 (20.4%) were tested, with 1,411 having a documented risk factor and 183 with no documented risk factors. The percentages of women with breast and ovarian cancer and positive mutations were 0.18% and 3%, respectively.

Conclusions: The study of older women with breast and/or ovarian cancer who carry the BRCA1/2 mutation is possible when using a single state's cancer registry-linked claims administrative database. Although the prevalence of this mutation was comparable to published estimates in a similar population, the number was small and may limit detailed study of treatment and patient outcomes.

Impact: Studies such as ours may provide useful information for the nurses, geneticists, and genetic counselors involved in genetic counseling, and follow up of women at high risk for mutations and their families.

Prostate Cancer Treatment Patterns in the State of Texas, 2004-2007

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Texas Public Health Journal 2013;65(2):37-43

ABSTRACT:

Background: Understanding current patterns of prostate cancer treatment in Texas is critically important in order to develop public health strategies to ensure appropriate treatment of unfavorable disease while discouraging inappropriate treatment of favorable disease. Yet to date, little is known regarding prostate cancer treatment patterns in Texas. Accordingly, we conducted the first population-based study of prostate cancer treatment patterns using the Texas Cancer Registry (TCR) data linked to patient Medicare claims.

Methods: We identified a total of 11,877 men residing in Texas, age 66 and older, who were diagnosed with incident prostate cancer from 2004 to 2007 and had fee-for-service Medicare coverage. TCR data classified patients as favorable risk (T1 or T2, low grade) versus unfavorable risk (T3 or T4 or high grade). Cancer treatment within one year of diagnosis was determined using TCR data and Medicare billing claims. Chi-square test evaluated for unadjusted associations between risk group and treatment, and multivariate logistic regression identified factors associated with observation in men with favorable disease and inappropriate omission of treatment in men with unfavorable disease.

Results: A total of 45% of men had favorable disease and 51% had unfavorable disease. Treatment was given to 86% of men with favorable disease and 94% of men with unfavorable disease ($p < 0.001$). The most common treatment was external beam radiation (35% of cohort) followed by radical prostatectomy (27% of cohort). Among men with favorable disease, advanced age, comorbid illness, diagnosis in 2007, and consultation with an urologist only (compared to an urologist and radiation oncologist) were associated with increased odds of observation. Among men with unfavorable disease, advanced age, black race, and consultation with an urologist only (compared to an urologist and radiation oncologist) were associated with increased odds of inappropriate omission of cancer treatment.

Conclusion: The vast majority of older men diagnosed with prostate cancer in Texas receive cancer-directed treatment. Efforts are needed to decrease use of cancer-directed treatment in older men with favorable disease while preserving the high treatment rate in older men with unfavorable disease.

The Current Utilization of Breast and Prostate Cancer Screening in Older Adults in Texas

Elizabeth Jaramillo, MD1, Alai Tan, MD, PhD

Texas Public Health Journal 2013;65(2):44-50

ABSTRACT:

Objective: To determine the current utilization of breast and prostate cancer screening in Texas.

Methods: Two cohorts of Texas Medicare beneficiaries aged 67 years or older, one female ($n=657,227$) and the other male ($n=532,338$), were identified from the Texas Medicare data in 2008 and 2009, respectively. For females, Medicare claims during 2008-2009 were evaluated for screening mammography utilization. For males, Medicare claims in 2009 were evaluated for prostate-specific antigen (PSA) screening. Descriptive statistics and logistic regression models were used to evaluate screening utilization and associated factors.

Results: Among subjects aged 67-74 years, 52.3% of females received mammography screening in 2008-2009 and 46.3% of males received PSA screening in 2009. The screening rates varied greatly across Texas counties and health service regions. Younger age, non-Hispanic white, higher socio-economic status, and more comorbidities were associated with higher likelihood of receiving mammography or PSA screening. Among subjects aged 75 years or older and with limited life expectancy, 22.0% of females and 38.6% of males still received mammography and PSA

screening, respectively. Even in those with limited life expectancy, subjects 67-74 years were more likely to receive screening than those 75 years or older.

Conclusion: Both under- and over-screening were observed in Texas. Screening rates varied greatly across Texas regions. It is evident that screening decisions were currently based primarily on age, not life expectancy. Systematic interventions aimed at healthcare and public health professionals are needed to increase appropriate cancer screening and avoid inappropriate screening.

The Human and Economic Burden of Cervical Cancer in Texas

Jan M. Eberth, PhD; Pratibha Prarelkar, MPH; Hoang Nguyen, PhD; Charlotte Sun, DrPH; Jennifer Irvin-Vidrine, PhD; Linda S. Elting, DrPH

Texas Public Health Journal 2013;65(2):51-55

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Kaye M. Reynolds, MPH

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David L. Lakey, M.D.

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Nancy Crider, DrPH, RN

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The "Cinnamon Challenge" - Potentially Serious Consequences of a Popular Dare

Mathias B. Forrester

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CPRIT - Delivering on the Promise Made to Texans

Michelle Frerich

Texas Public Health Journal 2013;65(1):7

Cancer Screenings throughout Texas, 2008 and 2010 Behavioral Risk Factor Surveillance System

Michelle L. Cook, MPH, W. Ryan Maynard, MBA, Stephen Wyatt, DMD, MPH, and Becky Garcia, PhD

Texas Public Health Journal 2013;65(1):8-13

ABSTRACT

Objective: The Cancer Prevention and Research Institute of Texas (CPRIT) was founded in 2007 when Texas voters approved a constitutional amendment to position Texas as a leader in cancer research and prevention efforts. CPRIT began funding evidence-based prevention programs in 2010. This purpose of this data analysis project was to establish and document baseline estimates of cancer screening proportions throughout Texas.

Methods: The data results were obtained utilizing the query system on the Texas Behavioral Risk Factor Surveillance System website. Since data were reported in the negative (e.g., never having a sigmoidoscopy/ colonoscopy) and not the affirmative, prevalence rates and confidence intervals were obtained by subtracting from 100%. The proportion of adults reporting cancer screenings were examined by geographic location.

Results: The estimated rates of mammography screening among 40+ year old women for the state decreased from 72.6% in 2008 to 70.0% in 2010, although it was not a significant change. The colorectal cancer screening rates were higher in 2010 than in 2008 for all of the geographic areas analyzed with the exception of Dallas-Plano-Irving Primary Metropolitan Statistical Areas (PMSA), which stayed the same. Although not significant, all areas, except Amarillo Metropolitan Statistical Area (MSA), Ft. Worth-Arlington PMSA, Austin-Round Rock-San Marcos MSA, and McAllen-Edinburg-Mission MSA had a decline in cervical cancer screening rates between the two years.

Conclusion: While statistically significant changes are hard to show with the smaller sample sizes of specific geographic locations, monitoring changes statewide and throughout the state is vital for programming purposes.

Reducing Breast Cancer Screening Barriers Among Underserved Women in South Dallas

Kathryn M. Cardarelli, PhD, Allison Ottenbacher, PhD, Kim Linnear, MPA, Marcy Paul, MA, Marcus Martin, PhD, Oladimeji Akinboro, MPH1, Jing Chen, Nikita Phillips, DrPH, and the Dallas Cancer Disparities Coalition Community Advisory Board

Texas Public Health Journal 2013;65(1):14-19

ABSTRACT

Objective: To identify breast cancer screening barriers in an underserved population and evaluate the changes in barriers and knowledge that result from attending a breast cancer prevention program.

Participants: Medically underserved women, age 40 or older, residing in South Dallas, Texas, who were eligible to receive a screening mammogram and had no personal history of cancer.

Methods: Participants attended an 8-week program on breast cancer prevention, early detection, and overall healthy lifestyle education. Women were also invited to receive a screening mammogram. Pre and post-surveys were administered to collect information, including breast cancer screening knowledge, attitudes, barriers, access to health care, and self-efficacy.

Results: At baseline (N = 430), women reported an average of 2.8 (standard error 0.12) breast cancer screening barriers. The most commonly reported barrier was "I am not aware of any free or reduced-cost resources in my community where I can get a mammogram" (47%). For each previous breast cancer screening behavior (mammogram, self-exam, clinical exam), significantly greater barriers were reported among women who reported no screening. After adjustment, the odds of ever having a mammogram decreased by 14% for each additional barrier (OR: 0.86 [95% CI: 0.79-0.95]). Total barriers were reduced from 2.7 (0.16) at baseline to 1.7 (0.13) (p<0.01) at follow-up. Total knowledge increased from 5.0 (0.08) to 5.7 (0.08) (p<0.01) pre- to post-program. In total 185 women received a mammogram at some time during the 2-year prevention program.

Conclusions: Awareness, cost, availability, and transportation are major factors hindering this population from receiving a screening mammogram. After participating in a breast cancer prevention program, women reported a smaller number of barriers and greater knowledge about breast cancer. More importantly, the most common barriers reported at baseline were reduced through this prevention program.

Promotores and ÉPICO: A Model for Implementing a Cancer Training and Education Program Among Hispanics with Increased Cancer Risk

Julie St. John, Christopher E. Beaudoin, Katharine Nimmons, Denise Adame, Marcia Ory
Texas Public Health Journal 2013;65(1):20-24

ABSTRACT

Objective: This paper describes the development and implementation of a cancer training and education program entitled: ÉPICO: Education to Promote Improved Cancer Outcomes. Led by the Center for Community Health Development and funded by the Cancer Prevention Research Institute of Texas (CPRIT), ÉPICO aims to increase the utilization of comprehensive cancer services by developing a replicable training program on prevention, early detection, treatment, and healthy survivorship for colorectal, breast, and cervical cancers. ÉPICO trains promotores (i.e., Community Health Workers [CHWs]) to educate Hispanic residents in the colonias along the South Texas-Mexico border.

Methods: ÉPICO promotores received training in focus group moderation and conducted 12 focus groups with colonia residents and outside agency promotores to inform the development of the training modules. Next, project promotores completed a CHW instructor certification program, including certified training on message tailoring. The ÉPICO team then developed, pilot tested, and revised bilingual training modules covering prevention/early detection, treatment, and survivorship for breast, cervical, and colorectal cancers. Project promotores conducted training sessions with outside agency promotores, who then implemented the tailoring-based training in their outreach activities and administered evaluation tools.

Results: Project promotores completed a Texas Department of State Health Services (DSHS) certified CHW/Promotor/a Instructor course and assisted in developing and delivering 20 approved DSHS CHW/Promotor/a CEU cancer education modules. During year one, 335 promotores received 461 units of EPICO training modules (2,273 DSHS-certified CHW/Promotor/a CEUs), constituting more than 1,000 South Texas colonia residents received 1,431 units of ÉPICO training modules by outside agency promotores who attended the ÉPICO Promotor/a training events.

Conclusion: ÉPICO provides culturally relevant, tailored strategies to promote cancer prevention, early detection, treatment, and healthy survivorship in South Texas colonias. The project fills a gap in the existing CEU material available for DSHS-certified promotores while simultaneously addressing the cancer education needs of colonia residents.

Breast Screening and Patient Navigation in Rural Texas Counties - Strategic Steps

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Texas Public Health Journal 2013;65(1):25-27

ABSTRACT

Objective: To increase access to breast screening and patient navigation by reducing geographic and financial barriers for rural and underserved women in Denton, Wise, Parker, Hood and Johnson counties.

Methods: The Breast Screening and Patient Navigation (BSPAN) program's engages with local community leaders and health care providers to enable on-going access for breast cancer screening, diagnostic mammograms, and biopsies for the underserved. BSPAN's community framework utilized both mobile and local providers for screening mammograms, as well as diagnostic services for women with abnormal screening results. Additionally, it filled the critical diagnostic gap for women with breast symptoms who are clinically ineligible for breast cancer screening.

Results: A total of 3,308 screening mammograms and 2,042 diagnostic mammograms were provided over two years in five underserved counties covering 3800 square miles. Ninety-nine breast cancers were diagnosed with 80% found in early stage. 22% had either never been screened or had not been screened in 10 years. 93% reported incomes less than 200% of the Federal poverty level and 85% lacked any health insurance. Navigators streamlined referral to needed services and reduced time to clinical resolution to 13-21 days.

Conclusions: Through extensive outreach, education and community involvement, BSPAN provided culturally-appropriate information on breast cancer prevention and detection that resulted in a measureable increase in screening mammograms, a reduction in time to diagnosis, diagnosis at earlier stage and navigation to follow-up care. Judicious use of multiple funding streams expanded our success. Successful implementation of BSPAN has demonstrated the feasibility of this engaged partnership model to provide breast cancer screening and patient navigation across multiple rural and underserved counties. It has provided programmatic foundation for a CPRIT competitive renewal to evolve into a decentralized regional delivery model expanding breast health services into 12 additional rural and underserved counties.

Impact of Community Outreach on Stage Distribution of Breast Cancer in the Texas Panhandle

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Texas Public Health Journal 2013;65(1):28-31

ABSTRACT

Background: Increased screening and early detection are the most significant impacts to reducing breast cancer mortality. Unfortunately, screening mammography guidelines are less likely to be adhered to among the socio-economically disadvantaged and in rural areas resulting in disproportionate rates of late stage diagnoses among these women. Access to Breast Care for West Texas (ABC4WT) program targeted outreach for the underserved community of the Texas Panhandle to enhance breast health through education and screening. This paper presents an analysis of stage distribution over 3 and ½ years of the ABC4WT project.

Methods: This is a longitudinal study of prospectively maintained databases to examine the number of community events, women reached, and stage distribution of all cancers treated at the Breast Center of Excellence between 2009 and 2012. The Cochran-Mantel-Haenszel test was used to test the significance of shift in stage of breast cancer; and ordinal option Cochran-Armitage trend test was used to analyze the time trends for early versus late stage at diagnosis.

Results: A total of 1,150 women were reached via 226 outreach events between January 1, 2009 and June 30, 2012. Five hundred and seventy-one (49.6%) were Hispanics; median (interquartile) household income was \$1,400 (1,350) per month. Three hundred and seventy eight women were diagnosed and treated for breast cancer at the Breast Center of Excellence during the same time frame. The earlier stage at diagnosis of cancer rose from 78.7% (37/47) in early January 2009 to 95.4% (42/44) by 2012; similarly the later stage at presentation dropped from 21.2% (10/47) to 4.5% (2/44) over the same period [$p = 0.0114$].

Conclusions: Targeted evidence-based community outreach programs were potentially associated with earlier stage of cancer at diagnosis.

Adherence to Physical Activity Guidelines After Cancer Diagnosis Among Cancer Survivors Ages 45-64 in Texas

Pratibha Parelkar, Hoang Thanh Nguyen, Holly Holmes, and Linda S. Elting

Texas Public Health Journal 2013;65(1):32-36

ABSTRACT

Background: Advances in cancer treatment have improved 5-year survival rates. However, late effects resulting from cancer treatment can adversely affect cancer survivors' quality of life. Evidence suggests that regular physical activity (PA) among cancer survivors is associated with improved health outcomes. In this study, we examined whether cancer survivors adhere to PA guidelines and assessed health-related quality of life (HRQOL) of survivors who did adhere to PA guidelines compared with those who did not. In addition, we identified factors that may influence adherence to PA guidelines.

Methods: We used data from the 2009 Behavioral Risk Factor Surveillance System survey and analyzed them using SAS survey procedures to account for the complex sampling design. The sample consisted of 451 adult cancer survivors, at least 1 year since diagnosis, residing in Texas, and 45-64 years old. A multivariable analysis was conducted to examine the adherence to PA recommendations among cancer survivors by sex, education, race, body mass index (BMI), and comorbidities.

Results: About 48% of cancer survivors reported adhering to recommended PA guidelines. Cancer survivors not adhering to PA recommendations reported poorer HRQOL than cancer survivors who met the recommendations. Cancer survivors who were overweight (OR, 2.09; 95% CI, 1.04-4.22; $p=0.038$) or obese (OR, 4.45; 95% CI, 1.98-10.01; $p<0.001$) were more likely to not adhere to PA recommendation.

Conclusion: Most of the cancer survivors did not meet the PA guidelines. Thus, identifying ways to increase PA through targeted interventions is imperative, particularly for those groups of cancer survivors we have identified as not adhering to PA recommendations.

County-level estimates of human papillomavirus vaccine coverage among young adult women in Texas, 2008

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Texas Public Health Journal 2013;65(1):37-40

ABSTRACT

Purpose: The purpose of this study is to describe the county-level geographic distribution of human papillomavirus (HPV) vaccine coverage among young women aged 18-26 in Texas using multilevel, small area estimation.

Methods: Multilevel (individual, county, public health region) random-intercept logit models were fit to HPV vaccination data (receipt of ≥ 1 dose Gardasil®) from the 2008 Behavioral Risk Factor Surveillance System and a number of secondary sources. Using the parameters from the final model, we simulated HPV vaccine coverage in each county.

Results: Indirect county-level estimates ranged from 1.9-23.8%, with a weighted state average of 11.4%. The counties with the highest and lowest coverage estimates were Orange County, TX and Webb County, TX respectively. Significant correlations were observed between HPV vaccination and age, Hispanic ethnicity, and the percentage of uninsured at the county and public health region levels.

Conclusions: Small area analyses have been used in a variety of settings to assess a variety of health outcomes, and as shown in this study, can be used to highlight geographic disparities and opportunities for intervention in HPV vaccine coverage.

Bexar County's Commitment to Cancer: Support for Cancer Prevention

George B. Hernández, Jr., JD, Roberto Villarreal, MD, MPH

Texas Public Health Journal 2013;65(1):41-43

Volume 64, Issue 4: Fall 2012

President's Message

Kaye M. Reynolds, MPH

Texas Public Health Journal 2012;64(4):2

Commissioner's Comments: State Supports Local Efforts to Battle West Nile

David L. Lakey, M.D.

Texas Public Health Journal 2012;64(4):3

West Nile virus Activity From the Front Lines in Texas:

Region 11 – Updated 9/27/2012

Brian R. Smith, MD, MPH

Texas Public Health Journal 2012;64(4):3

Plano - Submitted 9/7/2012

Geoffrey Heinicke, MPH, RS

Texas Public Health Journal 2012;64(4):3-4

Houston, Texas (as of September 28, 2012), Confirmed and Probable Reported Cases

Salma A. Khuwaja MD, MPH, DrPH

Texas Public Health Journal 2012;64(4):4

West Nile virus in Tarrant County: the 2012 Season As of 9/13/2012

Lou K. Brewer

Texas Public Health Journal 2012;64(4):5

Public Health Emergency Response to a Massive Wildfire in Texas (2011)

David F. Zane, MS, Russell Jones, MPH, Jon Huss, Katherine Sanches, MPH, Jeff Hoogheem, Bruce Clements, MPH

Texas Public Health Journal 2012;64(4):6-10

ABSTRACT

Wildfires are a growing hazard in most regions of the United States, presenting a threat to property and life. We describe the public health emergency response to the massive and historic wildfire in central Texas of September 4 – October 9, 2011, by the Texas Department of State Health Services (DSHS). DSHS determined that the immediate issues that needed to be addressed during the initial response period included: a) command and control, b) responder safety and health, c) sheltering, d) disaster behavioral health, e) epidemiology and surveillance, f) medical material management and distribution, and g) communication/emergency public information. Public health and medical officials in other jurisdictions may benefit from our experiences and promising best practices as they look to enhance their own public health preparedness and response capabilities for wildfires and other public health emergencies.

Evaluation of a Health Department Sponsored Community Garden in Houston/Harris County

Biru Yang, MPH, PhD, Maria P. Brietzke, MPH, Faith Foreman, MPH, PhD, Adebawale Awosika-Olumo, MPH, MD, Toral F. Sindha RD, LD, Zahyrah C. Blakeney, BBA Management, Janet Aikins, PhD, MPH

Texas Public Health Journal 2012;64(4):10-12

The Texas – Kenya Health Nexus: a Story Over Five Decades in the Making

Carol Galeener, PhD,

Texas Public Health Journal 2012;64(4):13

Changes in Texas Poison Center Call Patterns in Response to H1N1 Infl uenza Outbreak

Mathias B. Forrester, B.S.

Texas Public Health Journal 2012;64(4):14-18

Assessment of a Child Injury Prevention Intervention in the Texas-Mexico Border

Norma Garza, BS, MPH, Genny Carrillo Zuniga, M.D., M.P.H., M.S.P.H., Sc.D., Luohua Jiang, Ph.D., Nelda Mier, Ph.D., John Hellsten, Ph.D., Antonio Rene, Ph.D., M.P.H.

Texas Public Health Journal 2012;64(4):19-22

ABSTRACT

Unintentional injury is the leading cause of mortality and morbidity among young children in the United States and it disproportionately affects low income families. The purpose of this study was twofold: 1) to investigate the effectiveness of injury prevention training for Mexican American households living in impoverished areas along the Texas-Mexico border, known as colonias (neighborhoods), and 2) to conduct a home hazards assessment. This was a non-randomized, cross sectional one group, pre-post-test design that included 58 households with children ages 14 years and under. Certified promotoras conducted face-to-face educational interventions, applied a questionnaire and used a direct observation assessment survey. Descriptive and inferential analyses were used for data analyses. There was a statistically significant increase in child injury-related knowledge among participants at post-test in all four global categories measured: Infant safety (ages 0-2 years) ($p=0.0001$), child safety (ages 2-8 years) ($p=0.0001$), road safety ($p=0.0001$), and home safety ($p=0.0001$). Hazards found in the homes of participants were lack of safety caps on electric outlets and no smoke alarms. This study suggests a culturally-appropriate intervention is effective in increasing injury prevention knowledge of U.S. border residents living in low-income areas. There is a need for culturally-appropriate interventions for this population.

College Students' Perceptions of HIV Risk, Importance of Protective Behaviors, and Intentions to Change Behavior after Attending an HIV/AIDS Awareness Event

Matthew Lee Smith, PhD, MPH, CHES, Mindy Menn, MS, Lauren Dorsett, CHES, Kelly L. Wilson, PhD, MCHES

Texas Public Health Journal 2012;64(4):23-29

ABSTRACT

Objective: To assess the influence of an informal HIV awareness-raising event on college students' perceived risk for contracting HIV, perceived importance of HIV-related protective behaviors, and intentions to modify HIV-related protective behaviors.

Design: A questionnaire-based survey of college students who attended the annual The Catwalk for HIV/AIDS Awareness.

Setting: One hundred and six college students were surveyed after attending a campus-wide three-hour HIV education event with an associated health fair.

Methods: Human subjects approval was obtained from a university Institutional Review Board. The questionnaire sought the following data: participant demographics, sexual behaviors, perceived HIV knowledge, perceived HIV risk, perceived importance of protective sexuality-related behaviors, and intentions to change sexual behaviors. No incentives were provided for research participation.

Results: Participants who were African American ($OR=9.68$) or reported having oral and vaginal sex ($OR=24.44$) were more likely to perceive themselves to be at moderate/extreme risk for contracting HIV when compared to their counterparts, respectively. Female students were over 14 times more likely than male students to perceive full importance in HIV protective behaviors such as being abstinent, being monogamous, consistently using condoms, and getting tested for HIV. Participants who had been Hispanic ($OR=9.90$), perceived themselves to be at risk for contracting HIV ($OR=2.36$), or perceived more importance in protective behaviors ($OR=5.39$) were significantly more likely to intend to alter their sexual behaviors after attending the event.

Conclusions: Among formal education about sexual behaviors, informal HIV awareness events can potentially disperse accurate information in a non-judgmental atmosphere.

The Relationship between Hurricane Ike Residency Damage or Destruction and Intimate Partner Violence among African American Male Youth

Angela Meshack, DrPH, MPH, Ronald J. Peters, Jr., DrPH, MS, Charles Amos, DrPH, MPH, Regina Jones Johnson, DrPH, MSN, RN, Mandy J. Hill, DrPH, MPH, E. James Essien, MD, DrPH

Texas Public Health Journal 2012;64(4):30-33

ABSTRACT

To determine if a relationship exists between damage or destruction to residence in response to Hurricane Ike and intimate partner violence among a sample of African American male teens in Houston, Texas. This study offers secondary analysis of cross-sectional data collected from 152 predominantly African American males through the Fifth Ward Enrichment Program (FWEP) in Houston, Texas, between November 2008 and December 2008. Teenage males who stated that they encountered damage or destruction to their residences due to Hurricane Ike were twice as likely to report intimate partner violence in the past 30 days (OR =2.85, 95% CI: 1.4, 5.7) compared to those who did not. A logistic regression model that controlled for having an intimate partner in the last year and age showed similar significant results (OR =3.1, 95% CI: 1.5, 6.5). This study demonstrates that there may be an increased risk of intimate partner violence among youth following the damage and destruction caused by a natural disaster. Public health professionals may wish to consider programs post-natural disaster that give teens the skills needed to maintain healthy interpersonal relationships.

Back to School Poison Control Alert: Adverse Effects from Ingestion of Energy Drinks

Mathias B. Forrester

Texas Public Health Journal 2012;64(4):34-35

Dr. R. Palmer Beasley Remembered

Texas Public Health Journal 2012;64(4):35-36

Texas Public Health Training Center News: Integrating Primary Care and Public Health

Nancy Crider, DrPH, RN

Texas Public Health Journal 2012;64(4):36

TPHA News and Information

Texas Public Health Journal 2012;64(4):37-39

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Kaye M. Reynolds, MPH

Texas Public Health Journal 2012;64(3):2

Editorial Note

Texas Public Health Journal 2012;64(3):2

Commissioner's Comments

David L. Lakey, M.D.

Texas Public Health Journal 2012;64(3):3

Save the Date: Local Health Department Accreditation Skill Building Conference September 24-25, 2012

Texas Public Health Journal 2012;64(3):4

Adoption of Information Technology In Texas Nursing Homes

Rick Nauert PT, MHF, MHA, PhD, Tina Fields, PhD, MPH

Texas Public Health Journal 2012;64(3):5-11

Background: Use of health information technology (HIT) to improve care for long-term care (LTC) residents is a prerequisite for obtaining a high-performing health care system. Although LTC was not included in recent legislation to reward use of HIT, health reform calls for patient-focused, coordinated care delivery that will necessitate use of HIT and electronic health records (EHRs) in LTC facilities.

Methods: Approximately 34% of the 1170 Texas LTC facilities responded to a survey on the use of HIT for 12 clinical functionalities and 9 administrative/quality enhancement tasks. Findings were analyzed to determine difference in use among ownership segments, and Texas HIT utilization was compared to prior national and state surveys. Ultimately findings were placed in stage-based EMR adoption models.

Results: The absence of a consistent terminology and the rapid evolution of HIT limited valid comparisons with earlier HIT assessments. Comparisons among ownership sectors showed that profit-based homes were significantly advanced in their use of HIT/EMRs for numerous factors. Texas LTC facilities used EMR/HIT functionalities on the same level (Stage 3 of 7) as the majority of national and rural hospitals, although some hospitals had progressed to mature stages of EMR.

Conclusion: Texas LTC facilities are using health information technology to perform various clinical and administrative functions. In a majority of cases, current use of HIT in LTC is comparable to early adoption patterns in hospitals. However, in response to federal initiatives, hospitals are accelerating toward sophisticated use of EMR functionalities. This trend may create a digital divide between LTC facilities and hospitals/physicians. Our findings suggest that Texas non-profit facilities may be challenged to stay abreast of HIT advances associated with health care reform.

Texas Public Health Association Membership Application

Texas Public Health Journal 2012;64(3):11

A Rural Local Health Department's Journey toward Selecting an Electronic Health Record

Debra McCullough, DNP, RN, FNP, Susan McBride, PhD, RN, Janice Arceneaux, DNP, RN, CMSRN, Commander James L. Dickens, Badia Harlin, DNP, RN, FNP-C, Lenora Sevcik, DNP, RN

Texas Public Health Journal 2012;64(3):12-17

ABSTRACT

A small rural West Texas local health department's (LHD) journey toward selecting and purchasing an electronic health record (EHR) began with five Doctor of Nursing Practice (DNP) students: 1) conducting a needs assessment and workflow analysis; and 2) evaluating for implementation five nationally certified EHR systems meeting stage I meaningful use requirements. After evaluating the data, the DNP students determined a hosted EHR would best meet the LHD's needs. The LHD contracted with the West Texas Health Information Technology (HIT) Regional Extension Center (REC) to assist with vendor selection and provide application expertise to evaluate all aspects of the EHR system and purchasing contract. The LHD staff and HIT REC project manager participated in three online

EHR demonstrations and one onsite visit to an LHD using the system. The reasons for selecting the EHR were the Health Information Management Systems Society (HIMSS) scores and interoperability, the vaccine inventory component, the benefits of the hosted EHR, ease of use, and flexibility in creating forms and retrieving reports and data. The LHD selected and purchased the EHR in June 2011.

A Comparative Study of Pesticide Use in Homes of Pregnant Women Living at the Texas-Mexico Border and in New York City

Beatriz Tapia, Patsy G. Bortoni, Enrique Escobedo, David Camann, Lynne P. Heilbrun, Robin M. Whyatt, Claudia S. Miller

Texas Public Health Journal 2012;64(3):18-23

ABSTRACT

Pesticide exposure along the Texas-Mexico Border is of particular concern for vulnerable populations including children and pregnant women. Studies conducted by the Columbia Center for Children's Environmental Health (CCCEH) have shown that fetal and childhood exposure to pesticides can be quantified in indoor air and can adversely affect neurodevelopment. We adopted the CCCEH protocol to evaluate pesticide use and to collect and analyze indoor air samples from the homes of 25 pregnant Hispanic women. We compared our results to those of the CCCEH study of minority women in inner-city New York. We found that although there were differences in patterns of use and the types and levels of pesticides detected, most of the homes had measurable pesticides, including organophosphates, synthetic pyrethroids, organochlorines, carbamates, and synergists. These exposures are not only potentially hazardous but also eminently avoidable, e.g., by using Integrated Pest Management (IPM), which emphasizes preventing pest infestations and using the least toxic pest control methods first. Public health and medical practitioners may help reduce pesticide exposure by advocating for IPM.

Social Determinants of Health: Implications for Public Health, Medical and Social Interventions

Hardy Loe, MD, MPH

Texas Public Health Journal 2012;64(3):24-28

Summary of Audience Discussion following the Presentation to the APHA Committee on Affiliates: Social Determinants of Health: Implications for Public Health, Medical and Social Interventions

Texas Public Health Journal 2012;64(3):28-29

Radiology and Public Health: Past and Present

Texas Public Health Journal 2012;64(3):30-31

The Evolving Face of Radiation as a Public Health Issue

Carol Galeener, PhD

Texas Public Health Journal 2012;64(3):32-33

Women's Work Preparing for Disasters in the United States

Carolyn Medina, MA, MLIS

Texas Public Health Journal 2012;64(3):33-34

Are Poison Ivy (Toxicodendron Radicans) Exposures Becoming More Serious in Texas?

Mathias B Forrester, Susan Prosperie

Texas Public Health Journal 2012;64(3):35-

Texas Black Widow Spiders Take the Heat

Mathias B Forrester

Texas Public Health Journal 2012;64(3):36

Potential Pediatric Hazard: New Laundry Detergent Packs or Pods

Mathias B Forrester

Texas Public Health Journal 2012;64(3):37

Texas Public Health Training Center News

Nancy Crider, DrPH, RN
Texas Public Health Journal 2012;64(3):38

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Texas Public Health Journal 2012;64(3):39-43

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President's Message

Bobby Schmidt, MEd

Texas Public Health Journal 2012;64(2):2

Editorial Note

Texas Public Health Journal 2012;64(2):2

Commissioner's Comments: Transforming Chronic Disease Prevention in Texas

David L. Lakey, M.D.

Texas Public Health Journal 2012;64(2):3

Respiratory and Reproductive Health in Women Near Confined Animal Feeding Operations in the American Southwest

Shawn G. Gibbs, PhD, William W. Hurd, MD, Christopher F. Green, PhD, Angelina Gandara, BS, Patrick M.

Tarwater, PhD

Texas Public Health Journal 2012;64(2):4-11

ABSTRACT

Purpose: To determine if women living in proximity to Confined Animal Feeding Operations (CAFOs) have a greater frequency of self reported symptoms resulting from respiratory or reproductive health issues than women not residing near these facilities.

Methods: We performed a cross-sectional survey of 50 women who lived within one mile of a CAFO for at least 24 months and compared their results to 50 women who neither lived within one mile of a high microbial exposure facility nor had worked in a high microbial exposure profession in the previous 24 months. Study participants completed a 56- item questionnaire to determine their frequency of symptoms or treatment for microbial-based respiratory or reproductive health issues in the last 12 months.

Results: Our study populations were very similar. Our study populations showed symptoms of bacterial vaginosis, but none had been diagnosed. The clinical and public health implications of our study indicate that women living in proximity to CAFOs and those in socioeconomically matched neighborhoods may be suffering from BV or other vaginal infection, but have not been clinically diagnosed.

Evaluation of Selected Ambient Air Pollutants as a Potential Predictor of Seasonal Fungal and Bacterial Airborne Concentrations in El Paso, Texas

Linda C. Mota, PhD, Shawn G. Gibbs PhD, Christopher F. Green PhD, Carissa M. Lucero MPH, Melcher Ortiz PhD

Texas Public Health Journal 2012;64(2):12-19

ABSTRACT

The aim of this study was to evaluate seasonal correlations between bioaerosols (fungal and bacterial airborne concentrations) and certain air pollutants (carbon monoxide, ozone, particulate matter 10, particulate matter 2.5). If a relationship could be found between seasonal pollutant variations and seasonal fungal or bacterial airborne concentrations, this could allow for the better prediction of symptoms associated with fungal and bacterial exposure without costly sampling. Indoor and outdoor fungal and bacterial air samples were taken from fifty one-story houses during each of the seasons. All samples were collected from the City of El Paso of El Paso County in the state of Texas. Fungal and bacterial airborne concentrations at different size ranges were quantified. Multiple linear regression analysis was used to evaluate associations between fungal and bacterial airborne concentrations and selected air pollutants after adjusting for climatic conditions. While researchers took fungal and bacterial air samples, they were compared to pollutant measurements that were obtained from the website of the Texas Commission on Environmental Quality's El Paso, Texas office. Two of the 128 (1.5%) relationships between selected pollutants and fungal and bacterial airborne concentrations were demonstrated to be statistically significant; thus, we cannot state definitively that a true relationship exists. Use of existing monitors as a proxy for seasonal airborne fungal and bacterial exposure may not be possible within current parameters in El Paso, Texas.

Challenges Associated with Assessment and Use of Mammography Screening Rates in Rural West Texas

Yan Zhang Ph.D., Betsy Jones Ed.D, Rakhshanda Layeequr Rahman M.D., Leigh Johnson Ph.D., Marjorie Jenkins M.D., Barbara Pence Ph.D.

ABSTRACT

Objectives: This study highlights the challenges we faced when trying to assess baseline mammography screening rates and reviews those challenges by assessing the data sources explored and discussing their usefulness in estimating the breast cancer screening rates in Health Service Region 1 in Texas.

Methods: We examined mammography screening data from the Texas Behavioral Risk Factor Surveillance System (BRFSS), National Health Interview Survey (NHIS), and National Cancer Institute (NCI) Small Area Estimates (SAE) for Cancer Risk Factors & Screening Behaviors and compared their usefulness since 2000 for women 40+ years of age. Codebooks and methodology were reviewed to assess the data definition and collection procedure.

Results: BRFSS provides reliable direct state estimates by year. NHIS provides reliable direct estimates for the U.S. by census regions. NCI SAE yields data from smaller geographical areas where information couldn't be obtained from BRFSS or NHIS directly, but its data often are delayed due to the modeling process, limiting their usefulness in designing prevention programs. Texas BRFSS collects data among randomly selected adult Texans and provides cluster data for Public Health Regions (PHRs). Texas BRFSS data showed that Texas has a higher at-risk population for breast cancer compared with the nationwide rate throughout 2002 to 2010 and the at-risk rates in non-Metropolitan statistical areas (MSAs) and in rural county dominated PHRs are consistently higher.

Conclusion: Despite many potential sources of breast cancer screening information that could serve as a baseline, few accurately reflect rural communities. Texas BRFSS screening information probably is the most valid and reliable data available. Such data should be used at a clustered county level. This is particularly applicable in a rural area where some counties may not have any respondents or adequate representative sample.

The Importance of Data to Public Health: An Introduction

Carolyn Medina, MA, MLIS

Texas Public Health Journal 2012;64(2):25-28

Data to Action: Reducing Adult Potentially Preventable Hospitalizations in Texas

Mike Gilliam, Jr., MSW, MPH

Texas Public Health Journal 2012;64(2):29-30

ABSTRACT

Rates, statistical significance, and confidence intervals are all important measures to describe data. However, these data measures may not be the most effective in engaging community health stakeholders and policymakers who do not have a working knowledge of statistical methodology. This article outlines how the Texas Department of State Health Services (DSHS) transformed data on adult potentially preventable hospitalizations, a major financial burden, into more user-friendly information to use in improving community health and reducing healthcare costs. By transforming the data, DSHS significantly increased the engagement of local elected officials and community groups to deal with the problem of adult potentially preventable hospitalizations. Transformation of the data focused on making the information easier to understand and more relevant to these stakeholders. For example, policymakers are more engaged when data is presented in financial perspectives rather than risk-adjusted rates.¹ A key example of transforming data into action was when the 82nd Texas Legislature appropriated funding for DSHS to implement interventions to target adult potentially preventable hospitalizations.

An Assessment of the Distribution of Physicians in Texas

Brian King, Ramdas Menon Ph.D.

Texas Public Health Journal 2012;64(2):31-34

ABSTRACT

Objective: It has often been reported that Texas has a shortage of physicians. However, analyzing shortages based on the overall number of physicians does not paint a complete picture of the problem or fully suggest remedies. In a state as geographically large and culturally diverse as Texas, it is important to know exactly where the shortages are and which specific physician specialties are experiencing shortages, and highlight the issue of inequitable distribution of physicians statewide.

Method: We obtained data on health professionals from the licensing boards for the year 2010 and conducted statistical analyses. Physicians were grouped by county and specialty, and the population composition of counties was analyzed by county, gender, and age. Other indicators that could affect demand were considered, such as death

rates and birth rates, and the supply of other health professionals such as mid-level providers. The findings are presented in a series of maps.

Results: Outside of the major metropolitan areas, Texas has high population-to-provider ratios for many health professionals; and, there are many counties, mostly rural, that do not have any of certain types of specialists. In particular, as indicated through a series of maps, the areas west of I-35 face shortages, in some cases requiring patients to travel significant distances to see a specialist.

Conclusions: Simply increasing the number of doctors in Texas will not fully address the problem of shortages. While physicians need to be incentivized to practice in the rural and underserved areas, they should also be encouraged to practice in the areas that have a higher need for that type of specialist and where indicators show a high need for their services.

Mortality of public mental health clients treated at the Local Mental Health Authorities of Texas

Robert J. Reynolds, Alan B. Shafer, Emilie A. Becker

Texas Public Health Journal 2012;64(2):35-40

ABSTRACT

Objective: To catalog and compare the mortality experience of Public Mental Health Clients (PHMCs) in the 38 Local Mental Health Authorities (LMHAs) of Texas in the years 2006-2008.

Methods: Client service records for PHMCs from the Mental Health and Substance Abuse Division of the Texas Department of State Health Services (DSHS) were linked to death records from the DSHS Center for Vital Statistics. Age-adjusted death rates (AADRs) per 100,000 person years were calculated for PHMCs and for the general population in each of the LMHAs in Texas. Frequencies were computed for the most common causes of death in each LMHA.

Results: PHMCs had increased mortality in comparison to the general population across the three years studied in each of the 38 Texas LMHAs. Rates ranged from 645-2060 compared to 586-929 deaths per 100,000 person years. Higher rates for four of the LMHAs approached statistical significance when compared to the general population. Though there was a wide range in the magnitude of excess death, the most frequent causes of death were consistently external causes and diseases of the circulatory system.

Conclusions: Care providers in the LMHAs should focus more attention on the assessment and management of non-psychiatric medical conditions, especially circulatory diseases. Care providers in non-psychiatric settings should also learn to better assess and refer patients with psychiatric and substance abuse diagnoses to appropriate treatment programs. Such interventions may complement existing public health prevention programs in the effort to lower death rates in this vulnerable population.

Potassium Iodide and Its Use in Radiation Protection

Mathias B. Forrester

Texas Public Health Journal 2012;64(2):41

Product Recalls as a Public Health Problem

Mathias B. Forrester

Texas Public Health Journal 2012;64(2):41-42

Texas Public Health Training Center News

Texas Public Health Journal 2012;64(2):43

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Texas Public Health Journal 2012;64(2):43

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President's Message

Bobby Schmidt, MEd

Texas Public Health Journal 2012;64(1):2

Commissioner's Comments: Healthy Babies, Healthy Texas

David L. Lakey, M.D.

Texas Public Health Journal 2012;64(1):3

The Evaluation of a Car Seat Installation Education Program: Results of a Pilot Study

Brian D. Robertson, PhD, Rose Jones, PhD, Susan Jackson, Kristen Beckworth, Jesus Alderete, Sally Green

Texas Public Health Journal 2012;64(1):4-7

ABSTRACT

Objective: The use of child safety restraint systems has been shown to reduce the number of childhood fatalities from motor vehicle collisions by up to 70%. The purpose of this study is to determine the most effective teaching method for parents to properly install child restraint seats.

Methods: Participating parents were assigned to a "hands-off," "hands-on," or "hands-off & hands-on" condition. Participants completed the initial installation and a brief questionnaire, then returned two weeks later for an unsupervised reinstallation of the car seat and a second questionnaire.

Results: Statistically there were no significant differences between condition groups for gender, education, ethnicity, or number of children. Statistical differences were also not present between treatment groups for installation and safety confidence ratings at both Time 1 and 2, but there is a high statistically significant correlation between installation confidence and the number of times the car seat has been installed.

Conclusions: This study is similar to previous research in terms of low percentage of follow-up visits which may point to parents feeling confident enough in their ability to install safety restraint seats not to need a return visit. This lack of follow up points to a need for more effective methods to improve participant retention or the potential need for a one-time education and evaluation project focusing on high repetition and practice installing car seats. Hands-on instruction has been shown to be the most effective treatment in car seat installation studies, but parents are not properly installing safety restraint systems even after receiving this instruction. More research is required to determine the most effective method before a standardized teaching is implemented.

The Association Between Anti-Energy Drinks and Illicit Drug Use Among Fifth Ward Houstonian Youth

Ronald J. Peters, Jr, Angela Meshack, Charles Amos, Mandy Hill, Charles Savage, Regina Jones Johnson, James Essien

Texas Public Health Journal 2012;64(1):8-11

ABSTRACT

This study offers secondary analysis of cross-sectional data collected between November 2009 and December 2009 from 141 male middle and high school students participating in the Fifth Ward Enrichment Program (FWEP) in Houston, Texas, regarding their use of anti-energy drinks, that is, concoctions containing ingredients such as melatonin or valerian root which create a relaxing feeling among users. Anti-energy drink users were significantly more likely to drink alcohol (43.9% vs. 13.1%; $p=0.00$), smoke marijuana (48.8% vs 9.6%, $p=0.00$), and abuse codeine promethazine cough syrup (61.1% vs. 7.9%; $p=0.00$), crystal methamphetamine (54.5% vs. 15.8%; $p=.00$) and Viagra (57.1% vs. 17.2%, $p=.00$) compared to their counterparts who did not drink anti-energy drinks in the past 30 days. Logistic regression analyses indicated that anti-energy drink use was significantly associated with current alcohol (Adjusted odds ratio (AOR) =3.68, CI= 1.22-11.09, $p=.02$) and codeine promethazine cough syrup use (AOR=9.76, CI= 2.89-32.87, $p=.00$), after controlling for concomitant drug use. The over-the-counter sedatives in anti-energy drinks such as valerian root and/or melatonin are referred to as "downer" drinks, a term which may reflect their similarities to opiates (codeine promethazine) and depressants (alcohol). Therefore, the authors believe that anti-energy drinks are being used to achieve similar euphoric effects.

Smallpox inoculation and the Ottoman contribution: A Brief Historiography

Basil H. Aboul-Enein, MS, MPH, MA, Capt, USAF, Michael W. Ross, MA, MS, PhD, DrMedSc, MPH, MHPed, Faisal H. Aboul-Enein, DrPH, MSN, MPH, RN, FNP, BC, USPHS

Texas Public Health Journal 2012;64(1):12-14

Winter 2012 Poison Control Information

Valentine's Day is Not Just for Chocolate Anymore

Mathias B. Forrester

Texas Public Health Journal 2012;64(1):15-16

Did a Digoxin Recall Result in an Increase in Digoxin Exposures Reported to Texas Poison Centers?

Mathias B. Forrester

Texas Public Health Journal 2012;64(1):16-17

TPHA and Future Public Health Professionals

Melissa Oden, DHEd, LMSW-IPR, MPH, CHES, C. A. Galeener, PhD, MPH

Texas Public Health Journal 2012;64(1):18-19

Texas Public Health Training Center News

Nancy Crider, DrPH, RN

Texas Public Health Journal 2012;64(1):20

TPHA News and Information

Texas Public Health Journal 2012;64(1):20-21

Register Now: Texas Public Health Association 88th Annual Education Conference: "Pitching Public Health: A Home Run for ALL," March 21-23, 2012

Texas Public Health Journal 2012;64(1):22-27

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President's Message

Bobby Schmidt, MEd

Texas Public Health Journal 2011;63(4):2

From the Editor

Texas Public Health Journal 2011;63(4):2

Commissioner's Comments: Knowing and Protecting

David L. Lakey, M.D.

Texas Public Health Journal 2011;63(4):3

Treatment as a Form of HIV Prevention: Commentary

Margaret H. White

Texas Public Health Journal 2011;63(4):4-5

TPHA Scholarship Recipient Essay 2011

Andrea Kaufman

Texas Public Health Journal 2011;63(4):5

A Review of the Public Health Agency Accreditation Literature Part II

Debra McCullough, MSN, RN, FNP, Mary Fenton, DrPH, RN, ANP, FAAN

Texas Public Health Journal 2011;63(4):6-9

ABSTRACT

The journey toward public health agency accreditation in the United States began with the 1988 Institute of Medicine (IOM) Study for The Future of Public Health. In 2010, the Public Health Accreditation Board (PHAB) completed the beta test on the voluntary national public health accreditation program. Part I of this series summarizes the history of the development of the public health accreditation process in the United States. Part II examines public health agency accreditation pros and cons and reviews the quantitative and qualitative research and quality improvement data to answer the questions: "To what extent does voluntary public health accreditation improve quality, outcomes, and service operations?" and "Can the public health accreditation standards apply equally to both large urban and small rural local health departments?" The authors determined the literature provided some degree of quantitative, qualitative and quality improvement evidence that accreditation can improve quality, outcomes, and service operations. However, there was limited evidence that small local health departments will be able to meet the same accreditation standards as large urban health departments without some accommodations.

Implementation and Evaluation of a 2-1-1 Texas Awareness Campaign

Cassandra S. Diep, MS, Elizabeth Kaster, MS, Brittany Rosen, MEd, CHES, Cortney Thomsen, BS, CHES,

Matthew Lee Smith, PhD, MPH, CHES

Texas Public Health Journal 2011;63(4):10-13

ABSTRACT

Background: There are several populations considered to be underserved in the United States, especially in rural and disadvantaged areas, where health services and resources are limited and geographically dispersed. To combat these issues, federal and state governments have developed 2-1-1 Texas, a toll-free public resource for information retrieval and referral to health services (e.g., food, housing, employment, healthcare, counseling).

Objective: To assess awareness and utilization of the 2-1-1 Texas service on a large university campus in Texas.

Methods: Members of a university-sanctioned student organization distributed promotional items to tailgating fans before a college football game between two Texas teams. Members approached fans to inquire if they had ever heard of or used 2-1-1 Texas, recorded individuals' answers, and asked pre-determined follow-up questions based on a decision tree. Members also educated fans about 2-1-1 Texas and its associated benefits.

Results: A total of 890 fans provided responses. Eighty-eight percent (n=783) of respondents reported they had never heard of 2-1-1 Texas. Of those who were aware of 2-1-1 Texas (12.0%, n=107), 15.9% (n=17) reported

having called in the past. Some of the reported reasons for calling 2-1-1 Texas included seeking information about childcare services, recycling locations, drug education, hurricane relief, and free dental and healthcare clinics.

Conclusions: Findings indicate those needing health-related assistance may be unaware of the existence of free or inexpensive services. Despite the widespread availability of 2-1-1 Texas, additional marketing, awareness-raising, and educational events are needed to inform Texas residents about this and other related services.

Home Hazards Assessment among Elderly in South Texas Colonias

Genny Carrillo Zuniga, M.D., M.P.H., Sc.D, Nelda Mier, Ph.D., Yoon- Ho Seol, Ph.D., Edna Villarreal, M.P.H., Norma I. Garza, BS, MPH-C, Zuniga Miguel, MD, Dr.PH
Texas Public Health Journal 2011;63(4):14-17

ABSTRACT

The purpose of this pilot study was to assess safety hazards in the homes of older Mexican Americans living in underserved low-income neighborhoods known as colonias in a Texas-Mexico border area. This was a cross-sectional, non-randomized exploratory study with a sample of 60 Mexican American families with an older relative living at home 50 years of age and older. Certified promotoras (community health workers) conducted face-to-face interviews and used a direct observation assessment tool. The majority of households with an older person (63.3%) did not have smoke detectors or fire extinguishers (80%). The number of home hazards was presented in seven categories and the associated hazards items ranged from 2 to 6 for each category. More than one-third of homes with an older person (36.6%) had one to three home hazards and 24.9% from four to 6 hazard items. Unsafe characteristics of the households included hazardous floors (slippery surfaces (27.6%) and loose mats (26.2%) and bathrooms (no grab rails (64.9%), no slip resistant mats (52.6%), and having toilets not being close to the bedroom (19%). The study results suggest that many older border Mexican Americans are living in potentially hazardous household environments in the colonias. This population is at risk of unintentional injuries due to inadequate home safety practices. Home safety education initiatives are critical to empower this vulnerable population in improving the safety of their homes.

Estimating the Cost of Cancer Care for a State

Alai Tan, M.D., Ph.D., Daniel H. Freeman, Jr. Ph.D., Billy U. Philips, Ph.D.
Texas Public Health Journal 2011;63(4):18-21

ABSTRACT

The National Cancer Institute (NCI) has developed a framework for estimating the cost of cancer care using linked data from Surveillance Epidemiology and End Results (SEER)-Medicare databases. However, for states that are outside of SEER areas and for those lacking cancer registry-claims linked data, using the NCI framework presents a challenge. We illustrate an adaptive use of the NCI method with Texas as an exemplar. We estimated that for 2007 the cost of cancer care in Texas was \$7.7 billion; approximately \$1.0 billion for lung/bronchus cancer, \$1.1 billion for colorectal cancer, \$955.5 million for prostate cancer, and \$923.7 million for breast cancer. Our estimates include the cost of care associated with eighteen common cancer sites as well as costs for each Health Service Region (HSR) in the state. This study is the first to estimate cancer care costs using Texas Cancer Registry (TCR) incidence data, which currently meet national high quality data standards. The study demonstrates that it is feasible for a state to estimate the cost of cancer care using an adapted NCI method and state cancer registry data. This method can be used to examine issues related to cancer costs, including regional disparities in the cost of care.

African American Teenage Smoking Attitudes and Beliefs Toward Cigarette Smoking Cessation Program Advertisements: "Putting Emphasis on the Real"

Ronald J. Peters, Jr., DrPH, Regina Jones Johnson, Angela Meshack, DrPH, Mandy Hill, DrPH
Texas Public Health Journal 2011;63(4):22-25

ABSTRACT

A qualitative approach was used to investigate attitudes, beliefs and norms about participation in smoking cessation programs among a sample of African-American high school students (n = 100), aged 14 to 19 years in the United States who were current smokers. Interestingly, both males and females were drawn to advertisements that featured factual cigarette information transmission. In addition, both males and female believed that advertisements that featured attractive female smokers who were dealing with smoking related hygiene (yellow teeth, bad breath) and mortality issues were attention getters. These findings confirm that African American smokers may be more drawn

to smoking prevention and cessation advertisements that emphasize information that is “real” and sources who are female and “attractive” compared to socially reinforcing, rewarding, or facilitating themes.

Nutmeg: An Unexpected Substance of Abuse

Mathias B. Forrester

Texas Public Health Journal 2011;63(4):26-27

Potential Hazard of Button Battery Ingestions by Young Children

Mathias B. Forrester

Texas Public Health Journal 2011;63(4):27

American Mistletoe Ingestions: A Potentially Toxic Winter Exposure

Mathias B. Forrester

Texas Public Health Journal 2011;63(4):27-28

What’s in My Food and Water?

Carolyn Medina, M.A., MLIS

Texas Public Health Journal 2011;63(4):28-29

Texas Public Health Training Center News

Nancy Crider, DrPH, RN

Texas Public Health Journal 2011;63(4):29-30

Public Health Practicum Program: Practical Approach to Train Tomorrow’s Leaders is a “Win-Win” Experience for All

Texas Public Health Journal 2011;63(4):30-31

TPHA News and Information

Texas Public Health Journal 2011;63(4):31-33

Call for Nominations for the 2012 TPHA Awards

Texas Public Health Journal 2011;63(4):33

Save the Date: Texas Public Health Association 88th Annual Education Conference: “Pitching Public Health: A Home Run for ALL,” March 21-23, 2012

Texas Public Health Journal 2011;63(4):34-38

The TPHA Public Health Presentations Committee Competition At TPHA’s 88th Annual Education Conference: Call for Abstracts

Texas Public Health Journal 2011;63(4):39

Volume 63, Issue 3: Summer 2011

President's Message

Bobby Schmidt, MEd

Texas Public Health Journal 2011;63(3):2

From the Editor

Texas Public Health Journal 2011;63(3):2-3

Commissioner's Comments: The Faces of Disasters

David L. Lakey, M.D.

Texas Public Health Journal 2011;63(3):3-4

A Review of the Public Health Agency Accreditation Literature: Part 1

Debra McCullough, MSN, RN, FNP, Mary Fenton, DrPH, RN, ANP, FAAN

Texas Public Health Journal 2011;63(3):5-6

ABSTRACT

The journey toward public health agency accreditation in the United States began with the 1988 Institute of Medicine (IOM) Study for The Future of Public Health. In 2010, the Public Health Accreditation Board (PHAB) completed the beta test on the voluntary national public health accreditation program. Part I summarizes the history of the development of the public health accreditation process in the United States. Part II examines public health agency accreditation pros and cons and reviews the quantitative and qualitative research and quality improvement data to answer the questions: "To what extent does voluntary public health accreditation improve quality, outcomes, and service operations?" and "Can the public health accreditation standards apply equally to both large urban and small rural local health departments?" The authors determined the literature provided some degree of quantitative, qualitative and quality improvement evidence that accreditation can improve quality, outcomes, and service operations. However, there was limited evidence that small local health departments will be able to meet the same accreditation standards as large urban health departments without some accommodations.

Peanut Butter Recall Calls Received by Texas Poison Centers

Mathias B. Forrester

Texas Public Health Journal 2011;63(3):7-10

ABSTRACT

Background: On February 14, 2007, the Food and Drug Administration issued an alert warning to consumers not to eat certain jars of peanut butter because of possible Salmonella contamination, and the peanut butter was recalled. This investigation tested whether the Texas poison center system call volume was affected by this recall. **Methods:** Cases were all peanut butter recall calls received by Texas poison centers from February 14 through June 30, 2007. The pattern of calls was examined with respect to the date of the calls and location from which the calls originated. **Results:** A total of 988 such calls were received. Twelve calls were received the day of the recall. Most calls (499) were received on February 15, accounting for 50.5% of all peanut butter recall calls. The next highest number of calls was received on February 16 (179), followed by February 17 (65). Calls continued to be received through April (12), May (5), and June (3). Most of the calls came from counties in the eastern part of Texas. **Conclusion:** Texas poison centers began to receive calls relating to the peanut butter recall shortly after the recall was announced. Most of the calls were received on the day after the announcement and declined over following days but continued for a relatively long period of time.

Novel Activity Reduces Nursing Home Depression

Rick Nauert PT, MHF, MHA, PhD, Peggy Johnson RT, MPH, PhD

Texas Public Health Journal 2011;63(3):11-14

ABSTRACT

As a result of medical advances and improved self-care, people are living longer. For many, advanced age is accompanied by reduction in mental and ambulatory capabilities creating a need for medical care and/or assistance to perform everyday activities. For the older, old (> 85 years), the fastest growing elder population segment, this

often means living in a longterm care facility. Women and special populations comprise more than 70% of nursing home residents, and 40% of the nation's nursing homes are found in rural areas. The transition to a long-term care facility is a significant life event. Although sadness and depression are not a normal characteristic of aging, up to 50% of nursing home residents have some degree of depression. Depression increases medical costs, may lessen life span, and severely undermines quality of life for nursing home residents. Interventions that provide mental stimulation, help overcome loneliness, foster social interaction and social support, aid functional capabilities, and improve perception of care, are needed to combat the disorder. Among rural nursing homes budgets and services are often limited. In an effort to address these issues, we initiated a pilot study of a low-cost intervention that blended active music therapy and modified dance therapy. Nineteen elders from senior facilities in two mid-size Central Texas towns were studied. All nursing facility residents were wheelchair user females who ranged in age from 73 years to 98 years. The intervention consisted of twice a week, 45-60 minute activity sessions for a period of 8 weeks. Pre-and post-study instruments were used to assess cognitive status, depression symptoms, and functional abilities. Independent samples ttests determined depression symptoms declined significantly ($p = 0.0031$), with mild improvements in mental status and functional abilities.

Not Everything Behaves in Moderation: Drought and Flood in Texas

Carolyn Medina, MA, MLIS

Texas Public Health Journal 2011;63(3):15-16

Summer Poison Control Alerts:

Secondary Effects of Public Health Emergencies: Example of West Nile Virus and DEET

Mathias B. Forrester

Texas Public Health Journal 2011;63(3):16-17

Potential Impact of Coral Snake Antivenin Shortage

Mathias B. Forrester

Texas Public Health Journal 2011;63(3):17-18

Texas Public Health Training Center News

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TPHA 2011 Annual Education Conference Summary and "Thank You"

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Public Health Poetry Announcement

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Save the Date: Texas Public Health Association 88th Annual Education Conference: "Pitching Public Health: A Home Run for ALL," March 21-23, 2012

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TPHA Membership Form

Texas Public Health Journal 2011;63(3):27

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President's Message

Adriana Babiak-Vazquez, M.A., M.P.H.
Texas Public Health Journal 2011;63(3):2

From the Editor

Texas Public Health Journal 2011;63(3):2

Commissioner's Comments: A Healthy Texas

David L. Lakey, M.D.
Texas Public Health Journal 2011;63(3):3

Community-based participatory approach to reducing perinatal disparities in Tarrant County: The Aintie-Tia Program

Kathryn M. Cardarelli, Ph.D., Kim Parish Perkins, Mieshia Beamon, M.S.H.S., Ralph Anderson, M.D., F.A.C.O.G., Jamboor K. Vishwanatha, Ph.D., Scott B. Ransom, D.O., M.B.A., M.P.H.
Texas Public Health Journal 2011;63(3):4-6

ABSTRACT

Background: Disparities in pregnancy outcome by race and ethnicity remains one of the most persistent, costly, and challenging public health problems in Texas. Strategies to reduce such disparities are numerous, but few interventions overtly incorporate the wisdom and experience of community members in their development and implementation. Because successful approaches to eliminating health disparities require participation on the part of the affected communities, academic investigators and community partners collaborated to design and evaluate the Aintie-Tia Program, with the goal of reducing perinatal disparities in Tarrant County. This paper describes the significance of a community-based participatory approach in targeting disparities and shares the experiences of the Aintie-Tia Program. **Methods:** Community-based participatory research [CBPR] is a collaborative approach to research that emphasizes community capacity-building strategies to bridge the gap between knowledge produced through research and what is practiced in communities to improve health. CBPR has been successfully used to address perinatal disparities in developing nations but may deserve greater attention in the United States. **Results:** This report does not provide results for the efficacy trial. Rather, it discusses the challenges and enabling factors related to conducting CBPR and provides examples from the Aintie-Tia Program. CBPR provides an opportunity for community members to invest in the processes and products of research, but must be executed carefully in order to succeed. **Conclusions:** CBPR holds much promise for mitigating perinatal outcome disparities, and the experiences of the Aintie-Tia Program may assist other Texas communities to build similar successful endeavors.

Pediatric Brain Injury: A Study of Prehospital Transport in a Rural Texas County

Brian D. Robertson, PhD, MPH, and Charles E. McConnel, PhD
Texas Public Health Journal 2011;63(3):7-11

ABSTRACT

Introduction: Time and distance are two key factors in delivering effective emergency medicine. The purpose of this study was to obtain an overview of pediatric traumatic brain injury in a rural county, examining severity of injury, method of transportation, response times, transport times, outcome, and physical location in which the injury was sustained. **Methods:** Patients were identified using a hospital trauma registry for all patients admitted with head injuries between 2005 and 2009. Data was collected on response times, distance, mode of transport, and whether the transport was direct indirect. **Results:** No statistical differences could be found for mode of transport, time, or distance on patient outcome. Helicopters were utilized primarily for severe and moderate brain injuries and had consistently faster response times. Helicopter crews spent less time at the scene, spent less time in transit, and arrived at a trauma center faster. Despite the advantages of speed and the fact that Henderson County is approximately 100 miles from a Level I pediatric trauma center, the average time between the injury and admission to the trauma center was two hours and forty-nine minutes for helicopter transports, and eight hours and twenty-eight minutes for ground ambulances. **Conclusion:** This study provides a unique snapshot of traumatic brain injury in a rural county and the EMS systems available to rural county residents. While inadequately powered to show evidence for immediate public health intervention, it provides a sound benchmark for future public health research

on traumatic injuries in rural areas, and in trying to improve the delivery of emergency medical services to rural areas.

The Social Norms of Texting and Driving among African American Young Adults

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Texas Public Health Journal 2011;63(3):12-16

ABSTRACT

Objective: To investigate the relevant cultural norms and beliefs of cellular phone use among African American young adults while driving. **Participants:** Eighty African American students, aged 18 to 34 years, attending a historically black university comprised the study population. **Methods:** Focus groups were conducted among a student population by trained researchers and were audio tape- recorded and transcribed verbatim. Transcripts were coded and abstracted to identify themes related to beliefs and perceived norms related to texting and driving.

Results: Themes revealed suggest male participants believed that zealous response to opposite sex and intimate partner pressure are major barriers to not texting while driving vehicles. Among females, high perceived importance and intimate partner pressure are major contributors to perceived urgency allowing texting while driving. Students reported that stronger penalties for texting while driving could help transform this potentially dangerous behavior.

Conclusions: Future interventions are recommended for young adults to educate them about hands free technological alternatives to texting and driving and stricter penalties may prove useful in reducing the dangers associated with texting and driving.

The Texas Public Health Journal brings you our tribute to National Public Health Week, April 4-10, 2011

Texas Public Health Journal 2011;63(3):17-18

Texas Public Health Journal Continues Our Tribute to National Public Health Week and the theme: Safety is NO Accident: Live Injury Free: Interview with Centers for Disease Control and Prevention, Injury Center, Dr. Shults

Carol Galeener, PhD

Texas Public Health Journal 2011;63(3):19

How Texas Will Celebrate National Public Health Week April 4-8, 2011

Texas Public Health Journal 2011;63(3):20-24

A TALHO White Paper (abridged): The Future of Public Health in Texas: A Summary Report

Catherine L. Troisi, Ph.D., Stephen L. Williams, M.Ed., MPA, Lee Lane, and the Board and Membership of the Texas Association of Local Health Officials

Texas Public Health Journal 2011;63(3):25-29

An Offer Cash-Strapped Lawmakers Can't Refuse: Save Money, Save Lives

Texas Public Health Coalition

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Student Opinion/Editorial Pieces Illustrate the Breadth of Public Health

Carol Galeener, PhD

Texas Public Health Journal 2011;63(3):31

Ban Trans Fat and Fight for Healthy Texans

Noor Alzarka

Texas Public Health Journal 2011;63(3):31-32

Smoke Free Workplaces for All Texas

Jon Law

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Supply and Demand

Noah Strohacker
Texas Public Health Journal 2011;63(3):33

A Rose by Any Other Name: High Fructose Corn Syrup Rebranded

Sam Stubblefield
Texas Public Health Journal 2011;63(3):34-35

Mandatory Flu Vaccination for Healthcare Workers

Stephanie Younts
Texas Public Health Journal 2011;63(3):35-36

Oleander: A Poisonous Plant That Does Not Live Up to Its Urban Legend

Mathias B. Forrester
Texas Public Health Journal 2011;63(3):36-37

The Long and Winding Road to Automobile Safety

Carolyn Medina, MA, MLIS
Texas Public Health Journal 2011;63(3):37-38

Around Texas: Friends of the School of Rural Public Health” Kicks Off, “This is Public Health” With First Lady of Texas, Anita Perry

Texas Public Health Journal 2011;63(3):39

Texas Public Health Training Center - March 2011

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Message from TPHA's President and Executive Director

Texas Public Health Journal 2011;63(1):2

Commissioner's Comments: Money Matters

David L. Lakey, M.D.

Texas Public Health Journal 2011;63(1):3

Health Disparities

Kenneth R. McLeroy, Ph.D.

Texas Public Health Journal 2011;63(1):5-7

Rural and Minority Disparities

Jeffrey J. Guidry, Ph.D.

Texas Public Health Journal 2011;63(1):7

An Investigative Study on Health Disparities-Related Research at Texas A&M University System Institutions

Tya M. Arthur, Katrina J. Serrano, Monica L. Wendel, Marcia G. Ory

Texas Public Health Journal 2011;63(1):8-11

ABSTRACT

Background: In an effort to advance the national health agenda to improve health and eliminate health disparities, the Program for Rural and Minority Health Disparities Research was established. One of its objectives is to strengthen the ability of Texas A&M University System (TAMUS) institutions to recruit and train faculty and students in health disparities research.

Methods: The Health Disparities Research Survey was designed as an online instrument to collect data on scholarly work related to health disparities at TAMUS institutions.

Results: A total of 98 out of 208 potential participants began the online Health Disparities Research Survey, a response rate of 47 percent. About half of faculty and research staff at TAMUS institutions have conducted health disparities research, and many more were interested.

Conclusions: Establishing a research investigator network could prove to be beneficial for interested investigators and for the overall expansion of health disparities research throughout the TAMUS.

Dissemination of a Low-literacy Diabetes Education Kiosk Tool in South Texas to Address Diabetes Health Disparities

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Texas Public Health Journal 2011;63(1):12-15

ABSTRACT

Introduction: Persons with type 2 diabetes often do not have access to diabetes self-management education.

Reasons for inability to find self-management education vary from patients' inability to pay for self-management education to difficulty in finding educators and nurses who are trained to provide the diabetes education. The purpose of this study was to evaluate and assess the feasibility of touch-screen diabetes self-management education kiosk (Diosk©) in low income settings for the purpose of providing needed education in managing diabetes.

Methods: The Diosk© was strategically implemented in five (5) sites in Corpus Christi, Texas, each site serving low-income populations, a majority of which are uninsured, or underinsured. These sites included outpatient hospital and grocery store pharmacies, neighborhood community arts center, and a federally qualified health clinic. We collected usage data tracked through the Diosk© software and collected surveys of Diosk© users in English and Spanish for seven months. Through IRB approved data capture the research team was able to track all Diosk© usage for each site.

Results: The Diosk© has been used over 4,000 times since implementation in March 2010. A majority of the surveyed users has indicated that they plan to make lifestyle changes including exercise and change in diet. Over 200 user surveys have been conducted.

Conclusions: The Diosk© serves as a valuable and easily accessible diabetes education tool in a low income population, supplementing care received from health care providers. Users particularly value recipes and advice for lifestyle change in order to manage diabetes better.

Geospatial Characteristics of the Chronic Disease Self-Management Program: Reaching Diverse Ethnic Populations in San Antonio, Texas

Camerino I. Salazar, MS, Matthew Lee Smith, PhD, MPH, CHES, Adriana G. Perez, BS, Sang-Nam Ahn, PhD, MPSA, Marcia G. Ory, PhD, MPH
Texas Public Health Journal 2011;63(1):16-20

ABSTRACT

Background: Hispanics carry a higher burden of disease including morbidity and mortality associated with obesity, limited physical activity, and poor nutrition compared to non-Hispanic whites. Evidence-based disease prevention programs have the potential to delay the onset chronic disease and related disability, yet, traditionally, these health programs have been less available to the older populations, and those from underserved backgrounds.

Purpose: The primary purposes of this study are to describe the geospatial characteristics and distribution of Chronic Disease Self-Management Program (CDSMP) participants and class delivery sites in Bexar County, Texas and compare these characteristics by ethnicity.

Methods: Data were collected from a total of 484 participants enrolled in CDSMP in Bexar County, Texas.

Results: Geospatial analysis indicates that Hispanic participants often traveled further distances to attend CDSMP classes, and that service gaps exist in the predominately Hispanic residential areas.

Conclusions: Geospatial analyses have potential to improve the tools and strategies available to identify service delivery gaps and highlight areas where recruitment methods should be intensified to combat ethnic/minority disparities related to the burden of chronic disease.

Too Sad to Care: The Relationship Between Depression-Related Symptoms and Delay in Seeking Medical Care

Mandy Hill, Michael Ross, Ronald Peters, Christine Markham, Misha Granado
Texas Public Health Journal 2011;63(1):21-27

Objective: 1. To determine whether five symptoms of depression are correlated to delayed medical care among an at-risk, majority African American population in Houston, TX; 2. To assess gender differences regarding the influence of symptoms of depression on delayed medical care among an at-risk predominately African American, community population.

Methods: Questionnaires administered to 215 Houston residents. Participants were recruited from clinics and club/bars locally. A chi-square analysis revealed symptoms of depression were associated with delayed medical care. Logistic regression models calculated odds ratios and 95% confidence intervals for five symptoms of depression, individually and collectively, among the study population. Obvious differences were revealed by a gender stratification of the logistic regression. Findings were stratified by 1) individual or collective entry into the regression model, 2) gender, and 3) a total analysis of cases and places, cases only, and/or places only.

Results: Women who reported feelings of worthlessness (OR=1.59, 1.18-2.14), feelings of hopelessness (OR = 1.33, 1.02-1.74), a change in appetite (OR=1.33, 1.01-1.76) and a loss of pleasure and interest in enjoyable activities (OR = 1.41, 1.06-1.87) revealed a significantly stronger correlation to delayed medical care than men. Conversely, trouble sleeping was significantly correlated with delayed medical care among men (OR=1.70, 1.02- 2.82).

Conclusion: This assessment of symptoms of depression in association with delayed medical care revealed a gender difference in the relationship between symptoms of depression and willingness to sustain physical health among an at-risk, African American population. Findings such as this have not been published to date. Future research should explore this correlation among similar populations for the purpose of generalizing the findings and designing interventions purposed to improve medical care access at the onset of depression symptoms.

Incidence of Breast Cancer in Hispanic and White Women in a Large County on the Texas-Mexico Border

Lakshmanaswamy Rajkumar, PhD, Javier C. Corral, MD, Zuber D. Mulla, MSPH, PhD, CPH
Texas Public Health Journal 2011;63(1):28-34

ABSTRACT

Objective: To determine the incidence of breast cancer in Hispanic and white women and quantify the association between Hispanic ethnicity and late stage at diagnosis in El Paso County, Texas.

Methods: The 1995-2004 Texas Cancer Incidence file was analyzed. The records of female Hispanics and white non-Hispanic residents of El Paso County were included in our analyses. Annual age-adjusted breast cancer incidence rates were calculated (age >19 years). Odds ratios (OR) for late stage at diagnosis were calculated.

Results: 2310 Hispanic and 1322 white cases were identified. The age-adjusted incidence of breast cancer in whites was approximately 238 per 100,000, in both 1995 and 2004. The age-adjusted incidence in Hispanics increased 13% between 1995 and 2004 from 128 to 145 cases per 100,000. Hispanic women were 88% more likely than whites to be diagnosed at a late stage of breast cancer (unadjusted OR=1.88, $p<0.0001$). Adjusting for age did not alter the OR appreciably.

Conclusions: White women in El Paso County are at a higher risk for developing breast cancer than Hispanics; however, the age-adjusted incidence in Hispanic women has increased over time and Hispanics are more likely to be diagnosed at a late stage of breast cancer than whites.

A Skin Cancer Prevention and Early Detection Program Disseminated Through Cosmetologists Using Evidence-Based Curriculum: Talkin' About Better Skin (TABS)

Melody Dorman, MPH, Meghan Wernicke, MPH, Richard Wood, MHA, Ninfa Peña-Purcell, PhD, CHES, Marcia Ory, PhD, MPH

Texas Public Health Journal 2011;63(1):35-38

ABSTRACT

Objective: Cosmetologists have previously been shown to effectively deliver health promotion messages to disparate populations, and may be well-suited to address the problem of skin cancer in Texas. This study assesses cosmetologists' readiness to talk about health concerns with their clients, reports on the development of an innovative skin cancer prevention program to be disseminated by cosmetologists; and evaluates if cosmetologists' knowledge, motivation and skills could be increased by the two-hour skin cancer prevention and early detection program.

Methods: Data were collected from 189 cosmetologists through a survey to assess their current attitudes, skills, and knowledge of skin cancer prevention and early detection with their clients. Based on survey responses, the Talkin' About Better Skin (TABS) training program was developed, and a pilot study collected data from 11 cosmetologists who attended training.

Results: The survey results revealed that cosmetologists talked about health concerns 89% of the time with their clients. Sun safety and skin care were described by 73% of cosmetologists as part of their job. Sixty-three percent of cosmetologists knew how to tell if a skin area needed to be examined by a doctor for possible cancer. Forty-nine percent of cosmetologists had referred a client to a doctor for examination of suspicious skin. TABS training increased the number of cosmetologists who were completely comfortable with (1) talking to clients about skin cancer prevention from 55% to 100%, (2) talking with clients about skin cancer early detection from 64% to 100%, and (3) referring a client to a health care provider from 73% to 100%.

Conclusions: Cosmetologists are in a unique position to deliver health promotion messages, and they can improve their skin cancer prevention and early detection skills with training. Public health practitioners should reach out to cosmetologists who are often willing to deliver evidence-based health programming that can reduce health disparities in rural and minority populations.

Concept Analysis of Nutritional Literacy: The Association between Nutritional Literacy and Childhood Obesity

Lisa A. Campbell, MSN, RN, GNP-BC, J. Carolyn Graff, PhD, RN

Texas Public Health Journal 2011;63(1):39-41

ABSTRACT

Background/Objective: The authors present a novel concept analysis of low nutritional literacy in parents and its association with childhood obesity.

Methods: The concept analysis method developed by Walker and Avant was followed and will provide the reader with a comprehensive understanding of nutritional literacy. Determinants of health such as income, education, and culture that disproportionally impact minorities are considered.

Results: This paper will add to the resources health professionals can use to develop strategies that will aid in closing the gap in nutritional literacy.

Discussion/Conclusions: Expanding research to examine the association between childhood obesity and low nutritional literacy among parents may provide insights and links to mitigating childhood obesity.

¡Sí yo puedo! (Yes I can!): Investigating low-income Hispanic caregivers' consumption of Fruits and Vegetables and their knowledge and efficacy to feed them to their children

Reynollette Ettienne-Gittens, MS, RD, Cassandra S. Diep, MS, Yan Li, MS, Carol J. Spaulding, Ph.D., E. Lisako J. McKyer, Ph.D., MPH, Peter S. Murano, Ph.D.

Texas Public Health Journal 2011;63(1):42-45

ABSTRACT

Background: Hispanics are the largest and fastest growing minority group in the United States, and they may be more at risk for dietary practices that can adversely affect health. Public health interventions should particularly consider consumption patterns among Hispanics and associated attitudes and beliefs. This article considers the consumption of fruits and vegetables – the focus of many years of public health, governmental, and marketing efforts. Despite this, consumption remains low, especially among minority populations.

Methods: This study utilized the Texas Food and Nutrition (TEXFAN) survey to examine the intake of fruits and vegetables (F&V) among adult Hispanic WIC participants and their knowledge and self-efficacy to feed F&V to their children. Logistic regressions were conducted to determine whether adults' intake of F&V, knowledge of feeding F&V to their children, and self-efficacy in providing F&V to their children influenced their children's consumption of F&V.

Results: After controlling for the covariate of whether Spanish was spoken at home, there was a strong relationship between adult consumption and child consumption for both fruits and vegetables. A relationship also existed between caregivers' perceptions and knowledge of feeding their children F&V and their children's consumption. Children of caregivers who spoke Spanish at home were less likely to eat fruit one or more times daily. However, language spoken at home did not affect children's daily vegetable consumption.

Conclusions: These findings can be used to tailor future nutrition education to increase Hispanic caregivers' F&V intake and perceptions about feeding F&V to their children.

Development and Testing of the Texas WIC's Food and Nutrition Questionnaire

E. Lisako J. McKyer, Ph.D., MPH, Kelly Vaughan, MS, Peter S Murano, Ph.D., Asha Girimaji, MS, Sandra Baxter, MS, R.D., L.D., Carol J. Spaulding, Ph.D., Christine A. Tisone, Ph.D., MPH, Marcia G. Ory, Ph.D., MPH

Texas Public Health Journal 2011;63(1):46-49

ABSTRACT

Background: Over 60% of the nearly 1 million monthly Texas WIC participants are Hispanic and/or African American, and established to be at risk for nutrition related health disparities. Yet, there is a paucity of culturally sensitive tools developed specifically for research to assess food and nutrition behaviors and preferences within this population. This paper focuses on the development and field testing of a questionnaire designed for use with populations with marked health disparities.

Methods: Mixed methods approach was utilized across two phases: 1) Qualitative phase with cognitive interviews, group discussions, and expert reviews, and 2) Quantitative phase focused on feasibility testing of the instrument format.

Results: Phase 1 resulted in a questionnaire with breadth and depth of content appropriate for study aims and target population. Phase 2 field tests yielded a scannable questionnaire easy to administer, complete in content, and sensitive to contexts in which health disparities research takes place.

Conclusions: Mixed methods approaches utilizing Texas WIC participants provide an ideal context for efforts to develop instruments tailored for health disparities research.

Reaching At-Risk Populations to Improve Clinical Measures of Physical Activity: Delivery of EnhanceFitness to Low-Income African American Adults in Houston, Texas

Matthew Lee Smith, PhD, MPH, CHES, Andrew J. Lorino, M.Ed, Ashley D. Wilson, MPH, Chris Pollet, MSW, Marcia G. Ory, PhD, MPH

Texas Public Health Journal 2011;63(1):50-53

ABSTRACT

Background: Although the benefits of physical activity for older adults are widely recognized, evidence-based exercise programs for seniors have not traditionally reached minority and other at-risk subgroups.

Purposes: The purposes of this study are to describe the reach of EnhanceFitness to underserved older African Americans in the Greater Houston area and examine the effectiveness of the program to improve clinical measures of physical activity.

Methods: Data were analyzed from 423 participants who enrolled in EnhanceFitness in the Greater Houston area. Changes in three clinical measures (i.e., Ten Foot Up-and-Go Test, Arm Curl Test, and 30-Second Chair Stand Test) were assessed from baseline to the first 4-month follow-up period (i.e., 63 matched cases).

Results: Results indicate significant improvements in all clinical measures from baseline to follow-up.

Conclusions: Findings show that evidence-based physical activity programs are efficacious for older lower-income African American populations. To continue reaching these underserved and at-risk populations in the Greater Houston area, efforts are being initiated to incorporate a train-the-trainer model for broader dissemination and sustainability as well as the development of a partnership network for enhancing the adoption of other evidence-based chronic disease management programs.

Serving Rural Communities for Falls Prevention: The Dissemination of A Matter of Balance in the Brazos Valley Region of Texas

Matthew Lee Smith, PhD, MPH, CHES, Cindy Quinn, BS, Ronnie Gipson, MPA, Ashley D. Wilson, MPH, Marcia G. Ory, PhD, MPH

Texas Public Health Journal 2011;63(1):54-58

ABSTRACT

Background: As Americans age, they increasingly become at risk for falls and fall-related injuries. The risks for falling and associated health outcomes may differ by an individual's residence due to the varying prevalence of services and resources in rural communities.

Purpose: The purposes of this descriptive study are to identify and compare the participant characteristics and program effectiveness of A Matter of Balance/Volunteer Lay Leader model (AMOB/VLL) in the Brazos Valley of Texas.

Methods: Data were analyzed from 273 Brazos Valley residents enrolled in AMOB/VLL. Changes in health status indicators were assessed from baseline to post-intervention (i.e., 190 matched cases).

Results: Results indicate that, overall, participants significantly improved their falls efficacy, reduced health interference, and decreased their number of falls from baseline to post-intervention. Although rural and urban participants improved their scores for all health status indicator scores, rural participants reported comparable if not higher effect sizes for falls efficacy, poor mental health days, and number of falls.

Conclusions: Findings from this study indicate that AMOB/VLL has promise to improve rural health among older adults, especially with local and statewide efforts to implement and deliver AMOB/VLL to reach more geographically diverse participants.

A Brief Report of College Student Health within a Historically Black College and University

William Davis Hale, PhD, Angela Branch-Vital, PhD, Kentya Ford, DrPH

Texas Public Health Journal 2011;63(1):59-61

ABSTRACT

Background: The American College Health Association conducts the largest college student health survey in the United States. The National College Health Assessment (ACHANCHA) is designed to report student health behaviors and health perceptions. However, of the 400 Colleges and Universities participating in the ACHANCHA, less than one percent are Historically Black Colleges and Universities (HBCU). Health disparity research is lacking at minority institutions which result in lack of evidence based health promotion programs for students. The purpose of this study is to report the ten most pertinent health issues (behaviors) at a HBCU as reported by data collected via the ACHANCHA.

Methods: Students at a HBCU, located in the south central part of the United States, were solicited to participate in the electronic version of the ACHANCHA. A random sample of 174 students (mean age = 21.5) provided valid responses for data reporting. Items for health behaviors were ranked according to frequency of valid responses. Ten items with the highest number of frequencies and percentages were retained for descriptive data reporting.

Results: The top ten negative health behaviors were drunk driving (n = 25; 14.5%), marijuana use (n = 36; 21%), emotionally abusive relationships (41; 23.6%), lack of contraception during sexual intercourse (n = 51; 23.9%),

overweight/obesity (n = 64; 36.8%), campus student safety (n = 74; 42.8%), lack of condom use during sexual intercourse (n = 80; 46.5%), alcohol/liquor use (n = 97; 56%), lack of regular physical activity (n = 120; 69%), and campus stalking (n = 148; 85.1%).

Conclusion: Descriptive data, collected with the ACHANCHA, can be used to bridge gaps in student health disparities research and health programs at minority institutions.

Why Do We Count What We Count?

Carolyn Medina, MA, MLIS

Texas Public Health Journal 2011;63(1):62-63

Poinsettia Ingestions by Young Children: A Non-Toxic Wintertime Exposure

Mathias B. Forrester

Texas Public Health Journal 2011;63(1):63-64

Texas Public Health Training Center

Nancy Crider

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President's Message

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Texas Public Health Journal 2010;62(4):2

Commissioner's Comments

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Book Review: Predictably Irrational, Revised and Expanded Edition: The Hidden Forces That Shape Our Decisions by Dan Ariely (Paperback - Apr 27, 2010)

Carol Galeener, PhD
Texas Public Health Journal 2010;62(4):3

Identification of Overweight in Young Children: Is Use of Body Mass Index Percentiles Alone Sufficient?

Mallory Boylan, PhD, RD, LD, Du Feng, PhD, Ming Chyu, PhD, Yoona Chin, MA, Christina Esperat, PhD, Debra Flores, MS, Thu Dinh, MS, Debra Reed, PhD, Joaquin Borrego, PhD, Lynda Billings, MFA, PhD, Ceci Ochoa, BS
Texas Public Health Journal 2010;62(4):4-8

ABSTRACT

Context: Percentage body fat (PBF) and waist circumference (WC) may be useful tools for confirmation of overweight or obese status in young children based on the body mass index (BMI) percentiles. Purpose: The BMI percentiles are the most common method used to determine overweight and obesity in children but other indicators of adiposity such as WC, and waist-to-height ratio (WHTR) are also in use. The purpose of this study is to evaluate the correlation of percentage body fat (PBF) measured by bioelectrical impedance analysis (BIA) to other measures of adiposity including BMI, WC, and WHTR in young children and present percentile values for WC, PBF, and BMI in 5-to 8-year old children.

Methods: Subjects were boys (n=249) and girls (n=297) aged 5-8 years old. Hispanic children composed the majority (93.3%) of the sample. PBF was measured using BIA and weight (Wt) was measured on an electronic scale. Height (Ht) was measured on a stadiometer and WC was measure using a non-stretch tape. The BMI [$\text{Wt (kg)} \div \text{Ht}^2 \text{ (m}^2\text{)}$] and WHTR were calculated. Pearson r correlation coefficients transformed using Fisher's z transformation and Q statistics were employed to test for heterogeneity between correlations.

Results: Based on the BMI percentiles, 31.8% of the children (18.1% of males, 13.7% of females) were either overweight or obese. Significant ($p < 0.01$) correlations between PBF and BMI for the various age and sex groups ranged from $r = .779$ to $.918$. The WC and BMI were more significantly correlated to each other ($r = .937$ -. $.978$) than either was to PBF ($r = .822$ -. $.914$; $.779$ -. $.918$, respectively). The WHTR was also more highly correlated to BMI ($.918$ -. $.957$) than to PBF ($r = .725$ -. $.916$).

Conclusions: While all the measures of adiposity in the current study were significantly correlated, the BMI, WC, and WHTR are more strongly correlated to each other than they are to the actually measured PBF by BIA. As BMI is not a direct measure of adiposity, public health practitioners should consider using additional methods to confirm that children are overweight or obese.

Disaster Preparedness Program Evaluation at a Senior Center: Implications for Community Partnerships Serving Ethnically Diverse Older Adults

Rebecca W. Grizzle, PhD, RN, Britney Reeves, RN, BSN, Kim McAlister, MSN, RN, Lisa K. Zottarelli, PhD
Texas Public Health Journal 2010;62(4):9-11

Health Care in the Texas Prison System: A Looming Fiscal Crisis

Ben G. Raimer, MD, Owen J. Murray, DO, MBA, John S. Pulvino, PA
Texas Public Health Journal 2010;62(4):12-17

ABSTRACT

The Texas Department of Criminal Justice operates one of the largest correctional systems in the Western world. The challenge of ensuring that Texas prisoners continue to receive constitutionally mandated medical care is becoming increasingly difficult as the number of incarcerated persons with mental illness and chronic and infectious

diseases continues to grow, as treatment standards become more sophisticated and expensive, and as the state grapples with funding prison health care in the face of a near-universal budget crisis.

Community outbreak of acute hepatitis B detected by the infection control program at a public hospital system

Pranavi V. Sreeramaju, MD, MPH, Jose Cadena, MD, Kristin R. Fiebelkorn, MD, Roger Sanchez, MPH, Fernando A. Guerra, MD, MPH, Ronald C. Hershow, MD, MPH
Texas Public Health Journal 2010;62(4):18-22

ABSTRACT

An outbreak investigation was conducted at a large tertiary public academic hospital system following identification of a cluster of patients with acute hepatitis B in the fall of 2005. The objectives were to describe the patient characteristics and identify potential sources of the outbreak. All patients with positive or indeterminate anti-hepatitis B core IgM during January 2004 to October 2006 were included. Review of medical records was performed. During the study period, 82 patients were found to have acute hepatitis B defined as positive anti-hepatitis B core IgM in addition to positive hepatitis B surface antigen or elevated liver enzymes, and absence of other reasons for elevated liver enzymes. The median age of the patients was 38 years (range 20-72); 62% were Hispanic. The onset of clinical presentation in these patients occurred in the community. About half (40, 49%) of all patients were from two geographically clustered areas in the inner city. An epidemic curve confirmed clustering of cases during fall in 2005 and 2006. Co-infection with hepatitis C was present in 33 (40%) and history of injection drug use was documented to be present in 26 (32%), absent in 20 (24%), and undocumented in others. None of the patients received prior hepatitis B vaccination. High risk adults who are not immune to hepatitis B, mainly minorities who live in the inner city and injection drug-users were at risk for developing acute hepatitis B. The timing of temporal clusters indicates that the infection occurred in these cases during spring or early summer.

An Evaluation of Water Quality Indicators for Cypress Creek, A Major Tributary of Lake Houston

Courtney Rose Bock Standlee, BS, RS, MPH, Irina Cech, Ph.D., Maximea E. Vigilant, BS, RS, MPH, Tommy C. Douglas, Ph.D.
Texas Public Health Journal 2010;62(4):23-29

ABSTRACT

Background: Lake Houston, a source of drinking water for the City of Houston and the surrounding area, is frequently used for recreation. The watershed of Cypress Creek, which is a major tributary of Lake Houston, has come under increasing population pressure during the last several decades 88% of its length is classified as impaired with respect to bacteria and nutrients.^{1,2} Water quality indicators for this stream are therefore deserving of close scrutiny, both with respect to the environment and to human health.

Methods: Water samples collected by researchers from the University of Texas School of Public Health during August 2009 were analyzed for bacteria, nutrients, and other indicators of water quality using standard laboratory methods. Mapping software was utilized to create maps showing the distribution of these indicators across the watershed and their spatial relationship to the numerous permitted outfalls of treated wastewater.

Results: All samples were positive for the presence of total coliform bacteria and E. coli. The level of nitrates at one site, which was very close to the Maximum Contaminant Level allowed for drinking water, coincided with a local concentration of free chlorine. A local peak in total chlorine further downstream occurred together with a peak in turbidity. Levels of dissolved oxygen in the upper part of the drainage fell below the Texas Surface Water Quality Standard, and water temperatures further downstream exceeded the State's standard. Land uses observed near Cypress Creek included natural areas, agriculture, construction, industry, established communities of homes, parks, golf courses, and a slaughterhouse.

Conclusions: Better understanding of the levels of microbes and nutrients in these waterways is of importance to the health of persons who engage in contact recreation and utilize drinking water from this source. Our findings suggest inputs both from non-point sources and wastewater treatment.

Concentrations of Inorganic Chemicals in Cypress Creek, A Major Tributary of Lake Houston

Maximea E. Vigilant, BS, RS, MPH, Irina Cech, Ph.D., Courtney Rose Bock Standlee, BS, RS, MPH, Tommy C. Douglas, Ph.D.
Texas Public Health Journal 2010;62(4):30-35

ABSTRACT

Background: Of the seven tributaries of Lake Houston, Cypress Creek is the third largest, lies nearest to the city, and is particularly subject to pressure from development. The quality of source water for the lake directly affects the complexity and cost of treating drinking water for the City of Houston and surrounding region. Both the lake and creek are used for contact recreation.

Methods: Samples from 29 sites along Cypress Creek were collected by University of Texas School of Public Health (UTSPH) researchers. These samples were analyzed for 29 metals and metalloids at the United States Environmental Protection Agency (EPA) Region 6 Inorganic Laboratory in Houston, Texas. EPA Methods 200.7, 200.8 and 245.1 employed Inductive Coupled Plasma (ICP), Inductive Coupled Plasma/Mass Spectrometry (ICP/MS), and Cold Vapor Atomic Absorption Spectrometry (CVAAS), respectively.

Results: Of the 19 metals and metalloids detected in Cypress Creek, five are regulated under EPA primary drinking water regulations. Four of those detected are subject to EPA secondary drinking water regulations, and another five are covered by recommendations or guidelines established by the EPA or World Health Organization (WHO). Aluminum, iron, and sodium were found at levels far exceeding those recommended by the EPA in almost all samples tested. Manganese exceeded the EPA secondary drinking water regulation in five of the sampling locations. Calcium, magnesium, and potassium occurred at high levels, but these are not covered by drinking water guidelines. The appearance of high sodium levels in the upper reaches of the watershed coincided with a detection of elevated boron. In the middle portion of the creek, we detected a small, localized peak of chromium and nickel, as well as a broader peak of potassium and strontium. Site 21, in the lower portion of Cypress Creek, yielded the highest values of seven different metals, and a minor peak for ten others.

Conclusions: The distribution patterns of metals in Cypress Creek are highly suggestive of anthropogenic origins. The area around Site 21 requires more detailed investigation to identify the source(s) of contamination, so that they can be addressed.

Public Health in Action:

Real Talk for Real Girls: Enhancing Communication Between Mothers and Daughters About Sexual Health Issues

Melissa Oden, DHEd(c), LMSW-IPR, MPH, CHES, Lakeshia Brown, MPH, CHES
Texas Public Health Journal 2010;62(4):37-38

ABSTRACT

Girls who have at least one female adult in their lives whom they trust and feel comfortable talking with about sexual health issues tend to make better decisions concerning their own sexual health and delay their first sexual experience. The Real Talk For Real Girls program addresses these issues by providing a safe, fun, interactive environment for mothers and daughters to connect and to learn how to talk with each other about sensitive health issues with limited restrictions for topic discussion.

HIP HOP for HIV Awareness

Marlene McNeese-Ward
Texas Public Health Journal 2010;62(4):39-40

Mummy Dust: Studying Ancient Diseases in a Modern World

Carolyn Medina, MA, MLIS
Texas Public Health Journal 2010;62(4):41-42

Change in Glow Product Exposures Reported to Poison Control Centers on Halloween

Mathias B. Forrester, BS, Jeanie E Jaramillo, PharmD
Texas Public Health Journal 2010;62(4):43-46

Ciguatera Poisoning in Texas

Mathias B. Forrester
Texas Public Health Journal 2010;62(4):47

Texas Public Health Training Center Receives Five-Year Grant

Texas Public Health Journal 2010;62(4):48

News from the University of Texas Health Science Center

Angela D. Lloyd

Texas Public Health Journal 2010;62(4):48

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Public Health Presentations Call for Abstracts

Texas Public Health Journal 2010;62(4):50

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Texas Public Health Journal 2010;62(4):51

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President's Message

Adriana Babiak-Vazquez, M.A., M.P.H.
Texas Public Health Journal 2010;62(3):2

From the Editor

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Commissioner's Comments: Our Job is to Prepare, Respond and Recover

By David L. Lakey, M.D.
Texas Public Health Journal 2010;62(3):3

Days of Haze

Umair A. Shah, MD, MPH
Texas Public Health Journal 2010;62(3):4-6

My Experiences in Haiti

Lynne Hudson, RN, NP
Texas Public Health Journal 2010;62(3):7

Public Health Practice Short Communication: Awareness and Perceived Usefulness of the Website Designed to Facilitate Access and Informed Health Insurance Decisions

Ravi K. Goyal, BPharm, MS (c); Davonda H. Williams, MS; Sujit S. Sansgiry, PhD; Harshali K. Patel, BPharm, MS (c); Jeffrey T. Sherer, PharmD, MPH; E. James Essien, MD, DrPH
Texas Public Health Journal 2010;62(3):8-11

ABSTRACT

Objectives: The website www.HoustonHealthChoice.org was launched by the mayor of Houston in April 2008 to facilitate informed decision making among consumers seeking affordable health insurance plans. The objectives of this study were to explore consumers' awareness of this website and to assess the perceived usefulness of available information from the consumer perspective.

Methods: A cross-sectional survey of consumers in the Houston area was conducted from December 2008 through April 2009 using a pretested, self-administered questionnaire to evaluate consumers' awareness and perceived usefulness of the website. Participants irrespective of their awareness were requested to review the website using a provided laptop computer before responding to the questions that evaluated the website's ease of use and perceived usefulness. English-speaking individuals were recruited from two primary locations, those at identified shopping centers in the Houston metropolitan area and those enrolled at the University of Houston.

Results: A total of 201 completed surveys were received. A majority (80%) of the respondents were not aware of the website. Of those respondents without health insurance, 97% were unaware of this website. After reviewing the information on the website respondents indicated that information on the website was clear and easy to understand. They indicated that the website provided affordable insurance options available within self-specified price range and that the overall content of the website was useful in decision making for health insurance needs. They also indicated that the 'frequently asked questions' and 'glossary of terms' sections provided useful information.

Conclusion: Although the website (HoustonHealthChoice.org) provided useful information and may facilitate access to affordable health insurance policies, most consumers may not be aware of its existence. The website should be promoted adequately to achieve its purpose. Promoting such websites may contribute toward effective delivery of health insurance information to the consumers in need.

Identification of Overweight in Young Children: Is Use of Body Mass Index Percentiles Alone Sufficient?

Mallory Boylan, PhD, RD, LD; Du Feng, PhD; Ming Chyu, PhD; Yoona Chin, MA; Christina Esperat, PhD; Debra Flores, MS; Thu Dinh, MS; Debra Reed, PhD; Joaquin Borrego, PhD; Lynda Billings, MFA, PhD; Ceci Ochoa, BS
Texas Public Health Journal 2010;62(3):12-15

ABSTRACT

Context: Percentage body fat (PBF) and waist circumference (WC) may be useful tools for confirmation of overweight or obese status in young children based on the body mass index (BMI) percentiles.

Purpose: The BMI percentiles are the most common method used to determine overweight and obesity in children but other indicators of adiposity such as WC, and waist-to-height ratio (WHTR) are also in use. The purpose of this study is to evaluate the correlation of percentage body fat (PBF) measured by bioelectrical impedance analysis (BIA) to other measures of adiposity including BMI, WC, and WHTR in young children and present percentile values for WC, PBF, and BMI in 5-to 8-year old children.

Methods: Subjects were boys (n=249) and girls (n=297) aged 5-8 years old. Hispanic children composed the majority (93.3%) of the sample. PBF was measured using BIA and weight (Wt) was measured on an electronic scale. Height (Ht) was measured on a stadiometer and WC was measure using a non-stretch tape. The BMI [$\text{Wt (kg)} \div \text{Ht}^2 (\text{m}^2)$] and WHTR were calculated. Pearson r correlation coefficients transformed using Fisher's z transformation and Q statistics were employed to test for heterogeneity between correlations.

Results: Based on the BMI percentiles, 31.8% of the children (18.1% of males, 13.7% of females) were either overweight or obese. Significant ($p < 0.01$) correlations between PBF and BMI for the various age and sex groups ranged from $r = .779$ to $.918$. The WC and BMI were more significantly correlated to each other ($r = .937-.978$) than either was to PBF ($r = .822-.914$; $.779-.918$, respectively). The WHTR was also more highly correlated to BMI ($.918-.957$) than to PBF ($r = .725-.916$).

Conclusions: While all the measures of adiposity in the current study were significantly correlated, the BMI, WC, and WHTR are more strongly correlated to each other than they are to the actually measured PBF by BIA. As BMI is not a direct measure of adiposity, public health practitioners should consider using additional methods to confirm that children are overweight or obese.

The Relation between Vitamin D and Depression in a Rural Dwelling Sample: A Project Frontier Study

Leigh A. Johnson, Ph.D.; Marjorie Jenkins, M.D.; Cortney Mauer, MA4, James R. Hall, PhD; Sid O'Bryant, Ph.D
Texas Public Health Journal 2010;62(3):16-19

ABSTRACT

Vitamin D is considered to play an integral role in brain function and development. Additionally, vitamin D serum levels are thought to influence affective status. The purpose of the present study was to investigate the influence of vitamin D status on depression in a sample of rural dwelling adults in West Texas. This pilot study investigated the association between vitamin D serum levels and scores on the Geriatric Depression Scale in a sample of 68 rural dwelling individuals from Project FRONTIER. The results indicated that vitamin D serum levels significantly influenced GDS scores ($\beta = -.30$; $p < .05$). In follow up regression analyses, the researchers examined the influence of vitamin D on the GDS factor scores. The results indicated that vitamin D status was significantly related to scores on the Dysphoria sub scale ($\beta = -.30$, $p < .05$). Vitamin D status was not related to Meaninglessness, Apathy, or Cognitive Impairment sub scales of the GDS.

Dietary Intake and Body Mass Index in a Multi- ethnic Sample of Adolescent Girls

Abida B. Solomon, PhD.; Andrea J. Shelton, PhD.; Regina J. Johnson, Dr. PH.
Texas Public Health Journal 2010;62(3):20-24

ABSTRACT

Purpose: To cross-culturally examine the association between dietary intake and Body Mass Index (BMI) in a sample of adolescent girls. For many chronic diseases with suggested dietary determinants, the incidence and mortality rates across cultures is strikingly different.

Methods: A cross-sectional study design with 190 participants provided demographic information and completed a self-administered food frequency questionnaire.

Results: Adjusted BMI was not significantly associated with energy intake but significantly association with fats, saturated fat, and sodium consumption. Overweight girls significantly consumed more fat by 7%, saturated fat by 11%, sodium by 5%, and protein by 6% less compared to normal weight girls. Ethnic differences were noted with significant higher consumption of nutrients: total fat by 10%, saturated fat by 14%, and Fiber intake was 6% less among African-American compared to non-Hispanic white girls. Protein consumption was by 8% less among Mexican American compared to non-Hispanic white girls. No significant dietary difference was found among African-American compared to Mexican-American girls.

Conclusions: These results suggest early intervention and education of culturally sensitive and relevant nutrition information to adolescents, suggesting practical ways that they can practice sound eating habits which may reduce the risk of obesity and chronic diseases in adulthood.

Infamous Environmental Disasters of the Past

Carolyn Medina, MA, MLIS

Texas Public Health Journal 2010;62(3):25-26

Potential Toxicity of Hand Sanitizer

Mathias B. Forrester

Texas Public Health Journal 2010;62(3):27

Pythons: An Unusual Cause of Snake Bites in Texas

Mathias B. Forrester

Texas Public Health Journal 2010;62(3):28-29

Call for Papers

Texas Public Health Journal 2010;62(3):29

TPHTC Training Center News: Developing the Community Health Worker (CHW)/Promotor(a) Workforce in Texas

Nancy Crider

Texas Public Health Journal 2010;62(3):30-31

TPHA News and Announcements

Texas Public Health Journal 2010;62(3):31-36

Texas HIV/STD Conference, awards ceremonies attract 850 attendees

Texas Public Health Journal 2010;62(3):36-37

Participation by the Texas Public Health Association in the Statewide Conference Sponsored by the Texas Cardiovascular Disease and Stroke Partnership: "Building Bridges - Improving Health through Program Integration"- June 15-17, 2010, Wyndham Garden Hotel, Austin, Texas

Hardy Loe, M.D., M.P.H.

Texas Public Health Journal 2010;62(3):38

Texas Public Health Association Membership Application

Texas Public Health Journal 2010;62(3):39

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President's Message

Patricia Diana Brooks, MEd, MS
Texas Public Health Journal 2010;62(2):2

From the Editor

Texas Public Health Journal 2010;62(2):2-3

Commissioner's Comments: Tough Times, Hard Decisions

David L. Lakey, M.D.
Texas Public Health Journal 2010;62(2):3

How Texas Celebrates National Public Health Week

Texas Public Health Journal 2010;62(2):4-11

Physical Activity is Associated with Cognitive and Affective Status among Rural-Dwelling Texans: A Project FRONTIER Study

Sid E. O'Bryant, Ph.D., DeAnna Richardson, Cheyenne Perez, Lupita Nevarez, Julianna Rice, Laura Wilbanks, Valerie Hobson, M.A.
Texas Public Health Journal 2010;62(2):12-15

ABSTRACT

Prior work has demonstrated a significant link between physical activity and mental functioning. However, little research has been conducted on this topic among rural-dwelling American adults and elders and none among rural Texans. The Whiteface Elementary School, Cochran County Texas, has participated for the last several years in the eCYBERMISSION national science competitions. The current project was proposed by one of the "Science Rocks U" science club groups to examine data through the ongoing rural health study, Project FRONTIER in order to test the hypothesis that physical activity would be significantly related to cognitive and affective status among cognitively normal adults and elders. Analyses revealed a significant relationship that varied according to level of physical activity (moderate versus vigorous), gender, and type of mental functioning assessed (global cognition, executive functioning, or depressive symptom clusters). The findings extend prior work supporting the hypothesis of a beneficial impact of physical activity on mental functioning demonstrating that there are complex interactions between type of activity, gender, as well as mental functioning. This information supports the notion of community-based physical activity programs to improve both physical and mental health among rural-dwelling adults and elders.

Physical Activity and Senior Centers in Texas

James H. Swan, Keith Turner, Shilpa Shashidhara, David Sanders
Texas Public Health Journal 2010;62(2):16-18

Impact of ENHANCE Study on Lipid-lowering Agent Exposures Reported to Texas Poison Centers

Mathias B. Forrester, BS
Texas Public Health Journal 2010;62(2):19-21

ABSTRACT

In January 2008, the early release of the results of the ENHANCE study indicated that ezetimibe in combination with simvastatin was comparable to simvastatin alone in the reduction of atherosclerosis. The objective of this study was to determine whether the ENHANCE study affected the reporting of lipid-lowering agent exposures to poison centers. Exposures to lipid-lowering agents (bile acid sequestrants, ezetimibe, fibrates, and statins) reported to Texas poison centers during 2007-2008 were identified. The number of exposures for various groups of lipid-lowering agents was determined for six-month periods and the relative change between different time periods compared. The number of exposures during July-December 2007 and July-December 2008, respectively, were 447 and 482 (+8%) for total lipid-lowering agents, 223 and 235 (+5%) for statins excluding simvastatin, and 161 and 179 (11%) for simvastatin, and 83 and 48 (-42%) for ezetimibe. The release of the ENHANCE study results appears to have affected the reporting of ezetimibe, but not statins and lipid-lowering agents in general, to Texas poison centers.

Thus, poison centers may be useful for evaluating the utility of public health recommendations in changing healthcare practices.

Body Art and the Primary Care Provider's Responsibilities

Virginia G. Miller, PhD, RN, FNP-BC,
Texas Public Health Journal 2010;62(2):22-26

Evaluating the Impact of the Fitness in Nutrition and Exercise (FINE) Program Within Shared Medical Appointments (SMA) on Reducing Childhood Obesity in a Community-Based Clinic

Nora Gimpel, MD; Rebecca Teng, MD; Tiffany Billmeier, MPH; Donna Persaud, MD; Emeka Ohagi, MS, MPH; Barbara Foster, PhD; Jayne Wiggins, RD; Teresa Garry, RN
Texas Public Health Journal 2010;62(2):28-31

ABSTRACT

Objectives: The purpose of this study was to measure the clinical effectiveness of four pediatric SMAs on a Latino population and assess parents' perceptions of the SMA for childhood overweight and obesity.

Methods: Participants included Spanish-speaking overweight pediatric patients (7-14 years old) participating in at least two Fitness in Nutrition and Exercise (FINE) shared medical appointments (SMAs). A retrospective review of electronic medical records was conducted in order to report changes in body mass index (BMI), systolic blood pressure (SBP) and diastolic blood pressure (DBP) among pediatric patients attending the SMAs. Post-SMA, parents were contacted by direct mail and telephone to examine self-reported changes in dietary and physical activity of the patients after participation in the FINE SMA.

Results: We found statistically significant improvements in BMI (student's t-test, $p=0.0276$) and DBP (student's t-test, $p=0.0013$) between the first and second visits. Parents reported overall program satisfaction and increases in their child's exercise participation, sport participation, duration of exercise per activity and the number of fruits and vegetables consumed per day ($p<.05$).

Conclusions: Although we found limited improvements in patient BMI and blood pressure per SMA, parents' perceptions of the program were favorable. Parents found that the FINE SMA positively influenced physical activity, diet, and health for the patient and their families. In collaboration with health education efforts in schools and communities, SMAs can be an effective tool for eliminating the rising rates of childhood overweight.

Pertussis Among Children and Adolescents with Persistent Cough in El Paso-Cd. Juárez

Delfina C. Domínguez, PhD Rosana Lopes, PhD, Gina M. Donato, PhD, Erik L. Hewlett MD, Zuber D. Mulla PhD, Karina Cabrera, BS MT (ASCP)
Texas Public Health Journal 2010;62(2):32-37

ABSTRACT

Background: Despite high vaccination coverage worldwide, circulation of *B. pertussis* persists. For the past few years, pertussis has been a concern in Texas. The purpose of the present pilot study was to document pertussis cases in El Paso, Texas, and Cd. Juárez, México; to analyze *Bordetella pertussis* isolates for polymorphisms in the pertactin (prnA) and pertussis toxin (ptxA) genes, and to document and localize the adenylate cyclase toxin (ACT) in *B. pertussis* cells.

Methods: Nasopharyngeal samples were collected from patients presenting with persistent cough. Culture and PCR were used for laboratory diagnosis. *B. pertussis* isolates were analyzed for genetic variation within the pertactin and pertussis toxin genes. ACT activity was measured to determine relative distribution in *B. pertussis* cells.

Results: Twelve pertussis cases (33.3%) were detected and confirmed in El Paso, TX in 2006. All patients included in the study (36 cases) presented with persistent cough for at least 2 weeks. Eight cases (22.2%) met CDC criteria for pertussis, and 12 (33.3%) cases were PCR positive (95% confidence interval 18.6%-51.0%). *B. pertussis* was isolated from 2 (5.5%) cases. *Bordetellae* isolates were type ptxA1 and prnA2. ACT activity was detected only in one strain.

Conclusions: Pertussis infection appears to be underreported in El Paso-Cd. Juárez area. In most physicians offices confirmation is not done and consequently cases are not reported. The present study contributed to the detection of 12 additional cases for the year 2006. The circulating *B. pertussis* strains were the same type as the prevalent strains reported in 1989-90. Further studies to analyze clinical *Bordetellae* isolates should be considered to investigate virulence factors present in laboratory versus clinical strains.

Parent Teacher Organizations as Partners To Reduce Obesity and Prevent Diabetes in a Hispanic Community

Amy Harris, MPH, Lindsey Reichlin, Kara McArthur, MA, Angeles Nava, RN, MS, Judith McFarlane, PhD
Texas Public Health Journal 2010;62(2):38-40

ABSTRACT

Background: The high rates of obesity in Houston's Hispanic communities contribute to an elevated prevalence of type 2 diabetes. Community-based participatory research (CBPR) can increase program effectiveness and sustainability by involving community members in the design and evaluation of interventions. A team of public health specialists used principles of CBPR to reduce the high prevalence of obesity and risk for type 2 diabetes among Hispanic parents of school age children in an inner city community in Houston.

Methods: Based on a community needs assessment and discussions with community members, parent teacher organizations in the local public schools emerged as the best potential partners in reaching obese Hispanic adults at risk of type 2 diabetes. A group of mothers formed a community advisory group which worked with the public health specialists to design an educational program that met their needs for information about nutrition, family issues related to food, and diabetes prevention.

Conclusions: School-based groups can form a hub of communication and increase the level of trust between researchers and community members in Hispanic communities. Also relying on trusted partners within the community to deliver program content served to build capacity for sustainable future health projects, because the community could continue to arrange for additional educational sessions without depending on the public health team for facilitation.

The Red Cross: Always There in a Time of Need

Carolyn Medina, MA, MLIS
Texas Public Health Journal 2010;62(2):41-42

Poisoning Among the Elderly in Texas

Mathias B. Forrester, BS
Texas Public Health Journal 2010;62(2):42-43

TPHA News and Announcements

Texas Public Health Journal 2010;62(2):43-44

Undergraduate Certificate Program

Texas Public Health Journal 2010;62(2):45

Annual Education Conference

Texas Public Health Journal 2010;62(2):46-50

Membership Application

Texas Public Health Journal 2010;62(2):51

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President's Message

Patricia Diana Brooks, MEd, MS
Texas Public Health Journal 2010;62(1):2

Commissioner's Comments: Thanks and Think

David L. Lakey, M.D.
Texas Public Health Journal 2010;62(1):3

2010 APHA Get Ready Scholarship: Now accepting entries!

Texas Public Health Journal 2010;62(1):3

Falls Prevention: Public Health Approaches at the Local, State, and National Levels

Marcia G. Ory, PhD, MPH; Matthew Lee Smith, PhD, MPH, CHES
Texas Public Health Journal 2010;62(1):4

Initiatives to Prevent Falls Among Older Americans: A National Perspective

Bonita Lynn Beattie, PT, MPT, MHA; Howard Bedlin, JD, MPS
Texas Public Health Journal 2010;62(1):5-6

Falls Among Older Adults in Texas: Profile from 2007 Hospital Discharge Data

Matthew Lee Smith, PhD, MPH, CHES, CPP; Marcia G. Ory, PhD, MPH; Crystal Beasley, MS; Kristi N. Johnson; Meghan M. Wernicke, MPH; Reuben Parrish, MPH
Texas Public Health Journal 2010;62(1):7-13

ABSTRACT

In 2006, approximately 1.8 million American seniors sustained a non-fatal injury fall and over 16,600 died from fall-related trauma. The purposes of this study are to utilize the most currently available Texas data to: (1) document the prevalence of fall-related hospitalizations and event characteristics and (2) examine differences based on geographic dispersion and age. Population estimates and hospital discharge data from the year 2007 were obtained and analyzed for all counties and places in Texas to generate counts and prevalence rates of fall-related hospitalizations, associated injuries, and causes of fall-related events. Statewide, results showed high fall-related hospitalization prevalence rates among females (313 per 100,000), non-Hispanic Whites (369 per 100,000), and those age 85 years and older (5,937 per 100,000). Slips, trips, and stumbles were the most common specified cause of falls resulting in hospitalization (33%). Among those admitted to the hospital, the oldest old sustained more fractures from fall-related events (49%) of which 66% were hip fractures. Fall-related hospital charges exceeded \$1.8 billion statewide for adults age 50 and older with an average hospitalization lasting approximately 6 days. Falls among the senior population in Texas are a large and important public health issue and require constant surveillance from state and local health authorities. To combat fall events and offset the associated health sequelae, there is a need to build the capacity to create and deliver evidence-based fall prevention programs statewide.

Building A Statewide Coalition for Falls Prevention: The Texas Experience

Reuben Parrish; Glenda Rogers; Debbie Billa; Carol Zernial
Texas Public Health Journal 2010;62(1):14

Addressing Falls in Texas: Evidence-Based Fall Prevention Programming for Older Texans

Marcia G. Ory, PhD, MPH; Matthew Lee Smith, PhD, MPH, CHES, CPP; Angie F. Wade, MPH; Jennifer C. Wright; Reuben Parrish, MPH
Texas Public Health Journal 2010;62(1):15-20

ABSTRACT

Falls among the aging population, and associated sequelae, are preventable and contribute to increases in hospitalization, loss of independence, institutionalization, and death. The purpose of this study is to describe the implementation of A Matter of Balance/Volunteer Lay Led Program (AMOB/VLL), an evidence based fall prevention intervention intended to offset the negative health ramifications attributed to falls in Texas. AMOB/VLL

consists of 8 sessions, meeting 2 hours per session, which are hosted over a 4- to 8-week period. Educational activities of the intervention incorporate the cognitive-behavioral principles of behavior change to reduce the fear of falling and increase physical activity levels. This paper addresses the following questions: (1) Who is AMOB/VLL reaching?; (2) What is the completion rate for AMOB/VLL?; and (3) Is AMOB/VLL effective in yielding desirable health outcomes? Data were analyzed from 2,136 older Texans enrolled in AMOB/VLL through July 2009. Findings revealed that the majority of participants were female (82.7%), non-Hispanic White (65.5%), lived alone (56.0%), and had successfully completed the program (77.8%). Hispanic participants had the highest completion rates (89.7%) compared to participants of other races/ethnicities. Individuals over age 84 years had the lowest completion rates (77.3%) relative to their younger counterparts. Comparing results from baseline to post- intervention, participants reported improvement in general health status ($t=3.890$, $p<.01$), less days limited from usual activity ($t=2.771$, $p<.01$), increased falls efficacy ($t=119.439$, $p<.01$), and fewer falls in the previous month ($t=3.807$, $p<.01$). AMOB/VLL is supported by the Texas Falls Prevention Coalition through a partnership with 26 of the 28 Area Agencies on Aging. With the potential of reaching 236 of the 254 counties in Texas, this established infrastructure to deliver AMOB/VLL statewide is an effective strategy to combat falls and improve the health of older Texans.

Local perspectives on the Implementation of an Evidence-Based Falls Prevention Program: The Brazos Valley Experience

Ronnie Gipson; Cindy Quinn

Texas Public Health Journal 2010;62(1):21

Commentary: The Primary Care Physician Shortage Calls for an Expanded Role of Physician Assistants and Nurse Practitioners in the Health Care System

Eric Crowell

Texas Public Health Journal 2010;62(1):22-23

Use of household safety devices among South Texas Colonia Residents

Genny Carrillo Zuniga, M.D., M.P.H., M.S.P.H., Sc.D., Nelda Mier, Ph.D., Yoon Ho Seol, Ph.D., Miguel A Zuniga, M.D., Dr.P.H.

Texas Public Health Journal 2010;62(1):24-27

ABSTRACT

We investigated the prevalence of home safety hazards among Hispanic households with young children living in underserved low income neighborhoods known as colonias in Hidalgo County at the Texas-Mexico Border. The methodology followed was a cross-sectional, non-randomized pilot study using survey-based responses. The sample consisted of 60 colonia households with Hispanic children less than 6 years of age. Trained community health workers also known as “promotoras” identified the household parents and administered the survey. The results showed that 90 percent of the children’s parents considered that injury prevention is important. However, 24 families (40%) did not use electrical outlet plugs; 63.3% did not have smoke detectors; 80% did not have fire extinguishers; and 45% did not have stove guards. The number of home hazards ranged from 2 to 15 out of 27 possible hazards (mean=8.5, SD=3.4). This pilot study suggests that the colonia population is at risk of unintentional injuries due to inadequate home safety practices. There is a need to promote home safety through education interventions for children and their families in the Texas-Mexico border colonias.

A One Page History of Medicare and Medicaid

Carolyn Medina, MA, MLIS

Texas Public Health Journal 2010;62(1):28

Books on Health Care Reform

Texas Public Health Journal 2010;62(1):29-30

Texas Public Health Training Center

Nancy Crider

Texas Public Health Journal 2010;62(1):30-31

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Texas Public Health Journal 2010;62(1):32

**Texas Public Health Association Annual Education Conference: Cresting the Wave: 2010 and Beyond
conference announcement**

Texas Public Health Journal 2010;62(1):33

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President's Message

Patricia Diana Brooks, MEd, MS

Texas Public Health Journal 2009;61(4):2-3

Commissioner's Comments: The Time Has Come

David L. Lakey, M.D.

Texas Public Health Journal 2009;61(4):3-4

Texas Public Health Training Center:

2009 Summer Institute – “When Disaster Strikes: Planning for and Responding to Natural Disasters”

Nancy Crider

Texas Public Health Journal 2009;61(4):4-5

Around Texas:

SEIS Earns National Acclaim

Sarah Michel, BJ

Texas Public Health Journal 2009;61(4):5

2010 NuStep Pinnacle Award Goes to Texas Senior Physical Fitness Center

James H. Swan, PhD,

Texas Public Health Journal 2009;61(4):5

Public Health Primer

Camille Miller

Texas Public Health Journal 2009;61(4):5-6

Spotlight on Public Health Professionals

Texas Public Health Journal 2009;61(4):6

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Texas Public Health Journal 2009;61(4):7-9

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Texas Public Health Journal 2009;61(4):10-11

The Human Side of a Disaster

Carolyn Medina, MA, MLIS

Texas Public Health Journal 2009;61(4):12-13

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Texas Public Health Journal 2009;61(4):13

The Texas Public Health Journal Presents the Fall 2009 Issue Focused on Public Health Preparedness In Texas

Texas Public Health Journal 2009;61(4):14

Introduction to Public Health Preparedness

John Herbold, DVM, MPH, PhD

Texas Public Health Journal 2009;61(4):15-21

Syndromic Surveillance in Texas: a Brief Overview of Current Activities

Joshua C. Calcote, MPH, MBIOT; Keith B. Gaddi; Jason A. Phipps, B.S.; John R. Herbold, DVM, MPH, PhD

Texas Public Health Journal 2009;61(4):22-24

Risk Communication Considerations for Volunteer Surge Capacity Disaster Response Organizations

R.J. Emery, D.D. Sprau, R.C. Morecook, J.R. Herbold
Texas Public Health Journal 2009;61(4):25-29

Viral Vector-Borne Diseases in Texas and Effective Surveillance Strategies

Carolyn Z. Grimes, DrPH; Christopher M. Walker, MPH; Kristy O. Murray, DVM, PhD
Texas Public Health Journal 2009;61(4):30-32

Abstract

In Texas, mosquito-borne arboviral disease outbreaks are mainly caused by West Nile virus, St. Louis encephalitis virus, dengue virus, and eastern equine encephalitis virus. The transmission of arboviral illness depends on the interaction between environmental factors that influence the populations of vector insects, infection levels in vertebrate hosts and the behavior of susceptible human populations in endemic areas. In this paper, we discuss the clinical and epidemiological characteristics of arboviral diseases present in Texas, effective and novel techniques for surveillance of these diseases, and the importance of data sharing between various departments and agencies that implement different types of surveillance activities across jurisdictions.

A Graduate Student Epidemiology Response Program's Partnership with Local Health Departments to Meet H1N1 Surge Capacity Needs

Jane R. Montealegre, MSPH; Jamie M. Emert, BS; Susan C. Lackey, BS; Rebecca S Bryson, MPH; Kristy O. Murray, DVM, PhD
Texas Public Health Journal 2009;61(4):33-34

Abstract

Graduate student epidemiology response programs (GSERPs), through which public health students volunteer their time and expertise at local health agencies, are an innovative solution to resolving the acknowledged deficit in epidemiologic capacity at the local level. They not only help meet the immediate needs for surge capacity, but also offer hands-on training and experience to prepare the next generation of public health workers. The Student Epidemic Intelligence Society (SEIS) is a GSERP at The University of Texas School of Public Health (UTSPH) that has assisted local health departments with infectious disease outbreak investigations, community needs assessments, and post-hurricane assessments and surveillance since its inception in 2003.

School Closures as a Mechanism for Interruption of Novel Influenza A H1N1 Transmission: The Denton County Experience

Jessica Smartt Gullion, PhD
Texas Public Health Journal 2009;61(4):35-38

Abstract

On April 21, the Centers for Disease Control and Prevention (CDC) issued a Morbidity and Mortality Weekly Report detailing report of two children infected with a novel influenza virus. Within weeks the virus travelled across the globe and the World Health Organization declared "Phase 6" influenza pandemic. Early attempts to control the pandemic focused on social distancing, including school closure. This paper provides a brief overview of school closure as a mitigation technique during an influenza pandemic and describes the experience of the Denton County Health Department (DCHD) with novel Influenza A (H1N1) strain control at the school level.

Emergency Preparedness and Response Considerations for the Geriatric Population

CE Barney; RE Roush; Carolyn Elizabeth Barney, M.S.; Robert Ellis Roush, Ed.D., M.P.H.
Texas Public Health Journal 2009;61(4):39-41

Abstract

Persons over the age of 85 constitute the fastest growing group in the U.S., and those persons over 65 are a group that will double in 20 years; it is among this group of Americans that frailty places at greater risk of adverse outcomes in disasters than younger adults. As frail elders have been identified as a vulnerable population, all agency planners, first responders, first receivers and other healthcare providers, need to be aware of the unique needs and considerations relating to preparedness and response in all types of disasters. The growing need for local training of

staff at sites of care for frail elders, including nursing homes and long-term care facilities, will be discussed in this paper.

Applying Informatics to Improve Vulnerable Population Registration for Emergency Preparedness in the Gulf Coast Region of Texas

Akom Phosuwan, MS, RN; Chiehwen Ed Hsu, PhD, MPH; Kim Dunn, MD, PhD; Marc Mansueto; Lauren Salisbury

Texas Public Health Journal 2009;61(4):42-47

Abstract

The application of information technology to improve public health programs has gained increased attention in recent years. This paper discusses an informatics-facilitated evaluation program for a federally supported vulnerable population registration system (also known as the 2-1-1 registration system) for emergency preparedness and response in the Gulf Coast region of Texas. This program is part of a larger project, "HealthQuilt," which is an evaluation of the Harris County catchment area using emerging web-based technologies. The goal of this project is to assess registration system use, with a focus on how to use the information to improve enrollment in ZIP codes with low registration. We created three interactive map displays of 2-1-1 registrants and the location of participating clinics using a geo-reference service on the Google mapping system (a free web-based geospatial map service). The results show geographically diverse distributions of 2-1-1 registrants by ZIP code in relation to collaborating clinics in greater Houston. These displays provide potential insight into recruitment of service providers to meet the needs of registrants. This project presents a potential prototype system for monitoring the progress of 2-1-1 enrollment in the target area and for increasing the number of registrants. The lessons learned may provide a valuable reference for other jurisdictions with similar needs in implementing informatics in public health preparedness for vulnerable populations.

The Pandemic Influenza Preparedness Planning Project: An Evaluation of Strategies for Engaging Rural Community Partners

J.J. Artzberger, MPH; S.K. Carpender, BS; J.M. Griffith, DrPH, MPH; C.L. Penne, MPH; B.J. Quiram, PhD; Jill J Artzberger, MPH

Texas Public Health Journal 2009;61(4):48-51

Abstract

Rural communities frequently lack resources and sufficient formal government structures, requiring these communities to engage a diverse group of stakeholders in order to facilitate effective preparedness, response, and recovery processes. The Pandemic Influenza Preparedness Planning Project was an interagency partnership between the USA Center for Rural Public Health Preparedness and the Texas Department of State Health Services Region 2/3 (HSR 2/3) to engage public and private rural community partners within HSR 2/3 in the development of pandemic influenza response plans. The USA Center conducted an evaluation focused on county participation, types of stakeholders participating, local versus regional delivery, and interactive versus non-interactive/didactic delivery strategies. These results suggest that interactive strategies held locally within communities over a period of time increase participation rates and diversity of stakeholder groups represented.

Voluntary Infectious Disease Precautions and Non-Pharmaceutical Interventions among Students at a University in Texas during the Spring 2009 Novel H1N1 Outbreak

Lisa K. Zottarelli; T. S. Sunil; Erin Rider

Texas Public Health Journal 2009;61(4):52-57

Abstract

This study examines the influence of perceptions of general threat of the novel H1N1 virus and individual risk of contracting the virus on the voluntary adoption of infectious disease controls and non-pharmaceutical interventions among students attending a university in Texas during the spring 2009 outbreak. The data are from online surveys conducted one week after the CDC announcement of the outbreak. The results suggest that perception of the general health threat contributes to the adoption of infectious disease controls and non-pharmaceutical interventions.

Assessing Public Health Preparedness in Texas Local Health Departments

James R. Langabeer II, MBA, CMA, PhD; Jami L. DelliFraine, MHA, PhD; Sandra Tyson, MA; Jamie M. Emert, BS; John Herbold, MPH, DVM, PhD
Texas Public Health Journal 2009;61(4):58-63

Abstract

Since the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, local health departments (LHDs) in Texas have worked to meet the challenges of their expanded roles while relying on federal grants. Due to funding fluctuations and the potential for further reduction, or loss, the Texas Association of Local Health Officials (TALHO) initiated a study to examine the state of 'readiness' of LHDs in Texas, the alignment of goals and plans with state health officials, and the impact of funding changes on LHDs. The 68 members of TALHO, who provide service to over 80% of the Texas population, were asked to answer an online questionnaire, which resulted in a 51.4% response rate. Results demonstrated high levels of preparedness activity due to large-scale disasters, varying regional issues, and significant organizational change, along with shrinking financial resources. Planning for future events was considered key for preparedness, and there was concern over evaluating performance and outcomes. The main barriers to preparedness were shortage of time, money, and staff. Based on the results of the study, researchers put forward a model of preparedness using ten 'readiness' dimensions, which could be implemented and evaluated in phases, based on the needs of each LHD.

Advocacy in Action - The Public Health Legislative Breakfast Series 2009

Sharon Shaw; George T. Roberts, Jr. MHA FACHE
Texas Public Health Journal 2009;61(4):64-66

Abstract

From conversations with local health officials and policy experts, a need for legislator education on public health issues was identified. A grant was to devise such a program. The objectives of this project were: To demonstrate the way public health plays an invaluable, necessary, and important role in the day-to-day life of all citizens; to increase the knowledge about all of the services that Public Health provides to each individual on a daily basis; to increase the understanding and appreciation on the part of elected officials about the need and value that Public Health brings to their communities. This article summarizes the steps taken to plan and organize this education project. The lessons learned by the organizers are presented as well.

CALL FOR ABSTRACTS 86th Annual Educational Conference "Cresting the Wave: 2010 and Beyond"

Texas Public Health Journal 2009;61(4):67