CSTE Syndemic Approaches Toolkit

December 2024

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Introduction

In recent years, there has been increasing recognition of the interactions and common factors that contribute to concurrent epidemics of a number of health conditions affecting communities. These epidemics include infectious diseases, such as human immunodeficiency virus (HIV), viral hepatitis, and sexually transmitted infections (STIs), and non-infectious conditions such as substance use and mental health. These epidemics share common drivers as well as potential solutions that could mitigate their impact, a concept that is known as syndemic approaches.[1]

The Term "Syndemic"

To advance syndemic approaches in public health practice, in 2022, the United States (US) Department of Health and Human Services (HHS) Syndemic Steering Committee developed the following common definition for "syndemic:"[2]

> *Syndemics occur when two or more diseases or health conditions cluster and interact within a population because of social and structural factors and inequities, leading to an excess burden of disease and continuing health disparities. Syndemics arise when:*
>
> - *Social and structural factors and inequities allow for diseases or health conditions to cluster; and*
> - *The clustering of disease or health conditions results in disease interaction, either biologic or social or behavioral.*

The word syndemic comes from combing the concepts of "synergy," when the interaction of two or more conditions produce a combined effect greater than the sum of their separate contributions,[3] and "epidemic," which is an increase in the occurrence of an infection or other health condition above what would be expected for the population in that area.[4] Given the interaction of the conditions that produce an increased effect, holistic approaches that address multiple factors, including social and economic barriers, are critical to reducing the occurrence of these health conditions in the community.

Additional definitions that are relevant to syndemic approaches are provided in Appendix A. Definitions & Acronyms of this toolkit.

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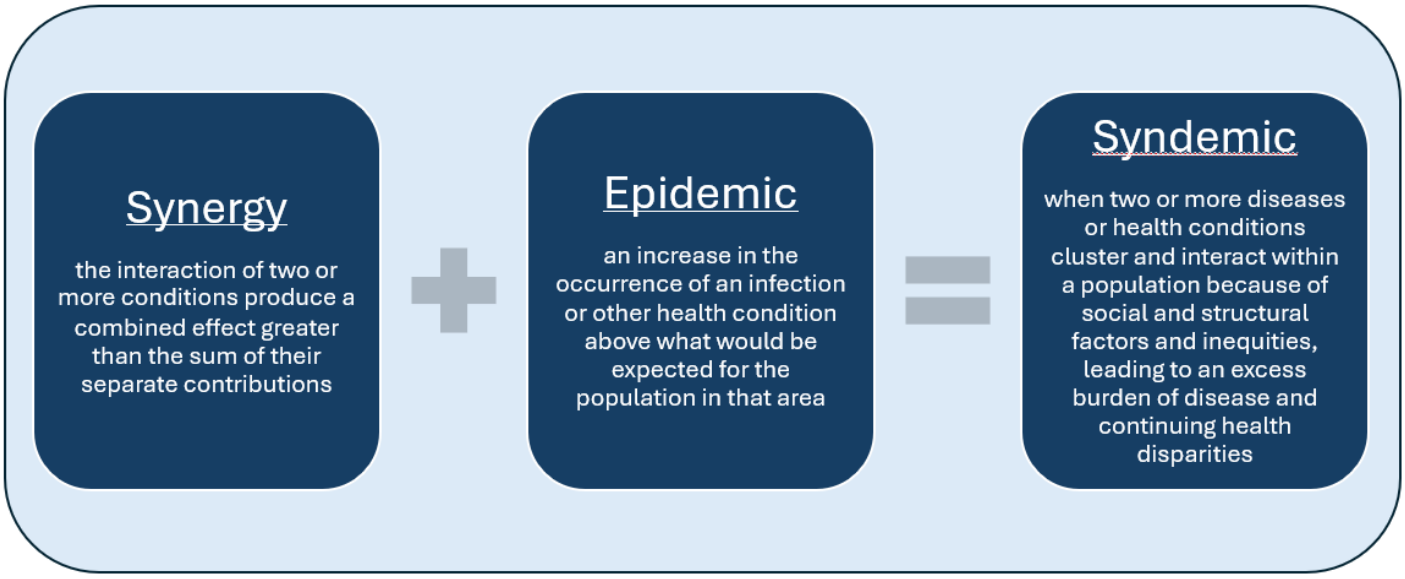
[1] HHS. The Inaugural Syndemic Solutions Summit. 8/30/2023. https://www.hiv.gov/blog/the-inaugural-syndemic-solutions-summit

[2] HHS. Defining the Term "Syndemic". 4/29/2024. https://www.hiv.gov/blog/defining-the-term-syndemic

[3] Dictionary.com. synergy. Not dated. https://www.dictionary.com/browse/synergy

[4] CDC. Principles of Epidemiology. 5/18/2012. https://archive.cdc.gov/www_cdc_gov/csels/dsepd/ss1978/lesson1/section11.html

Figure 1. Definition of the Term "Syndemic"



Source: Concept adapted from the Washington State Department of Health with definitions sourced from dictionary.com (synergy),[3] CDC (epidemic),[4] and HHS (syndemic).[2]

Syndemic Approaches

Syndemic approaches are those that holistically leverage and integrate a variety of health care and social services and other community support programs and policies to improve health and quality of life. Key elements of a syndemic approach include (as adapted from HHS & CDC resources):[5,6]

- Putting people first/person-centered services and programs.
- Centering equity in services and programs.
- Addressing upstream drivers of health (e.g., social and economic barriers) such as housing, food, transportation, and employment.
- Promoting prevention and care in related systems (e.g., housing, education, and justice systems, etc.).
- Integrating/combining existing programs, such as syringe services, substance use disorder treatment programs, and HIV testing and pre-exposure prophylaxis (PrEP) programs.
- Identifying new opportunities for collaboration and integration that promote creative solutions (e.g., partnerships with pharmacies, data sharing, etc.).
- Leveraging policy options using a "Health in All Policies" approach as a tool to improve health outcomes and quality of life.

[5] HHS. The Inaugural Syndemic Solutions Summit. 8/30/2023. https://www.hiv.gov/blog/the-inaugural-syndemic-solutions-summit

[6] CDC. STI Fact Sheet. Not dated. https://www.cdc.gov/sti/media/pdfs/syndemic-infographic.pdf

Several national strategies emphasize the importance of implementing syndemic approaches to better address the syndemic of viral hepatitis, HIV, STIs, mental health, and substance use. Supporting the implementation of integrated and coordinated syndemic approaches are included in the National HIV/AIDS Strategy,[7] the Viral Hepatitis National Strategic Plan,[8] and CDC's STI strategic plan.[9] As recognized in these plans, state, Tribal, local, and territorial (STLT) public health agencies require resources (e.g., funding) to implement syndemic approaches within their communities. Additional investments in workforce, education, and training are also necessary.[5]

A core underpinning of the syndemic framework is health equity. Additional information on health equity as it relates to syndemic approaches is provided in the Health Equity section of this toolkit.

Purpose of Toolkit

Funding for this toolkit was provided by the CDC, Division of HIV Prevention with the goal of supporting the uptake of syndemic approaches by public health agencies. The purpose of this toolkit is to provide public health agencies with promising practices and resources for taking a syndemic approach to surveillance activities and analysis relative to HIV prevention and care. While the funding was provided by CDC's Division of HIV Prevention, the promising practices and resources for syndemic approaches included in this toolkit are intended to promote use of syndemic frameworks to more broadly address interrelated health conditions affecting communities (e.g., viral hepatitis, STIs, substance use, etc.).

Additional Resources

- Video (7 mins): A Syndemic Approach to STI Interventions and Prevention
- Blog Post: The Inaugural Syndemic Solutions Summit
- Blog Post: Still Reaching: The Syndemics that Complicate and Characterize How Drugs and HIV Intersect in People's Lives
- Article: Centering People Who Use Drugs to Address the Syndemic of HIV, STIs, Hepatitis, and Overdose
- Webinar Series: Syphilis and Drug User Health
- Repository of Resources: Healthy People 2030 Evidence-Based Practices
- Guide: Basic Drug Use Epidemiology Guide
- Project Report: Community Response Planning for Outbreaks of Hepatitis and HIV Among People Who Inject Drugs
- Article: Deconstructing Syndemics: The Many Layers of Clustering Multi-Comorbidities in People Living with HIV

[7] HHS. National HIV/AIDS Strategy (2022-2025). 12/1/2023. https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025
[8] HHS. Viral Hepatitis National Strategic Plan. 6/5/2024. https://www.hhs.gov/hepatitis/viral-hepatitis-national-strategic-plan/goals/index.html
[9] CDC. STI Prevention Priorities. 1/25/2024. https://www.cdc.gov/nchhstp/priorities/std-prevention.html

Health Equity & Evaluation

Health equity is the state in which everyone has a fair and just opportunity to attain their highest level of health.[10] Pursuit of equity and elimination of health disparities should be central to all programs and services that implement syndemic approaches. People in some population groups experience higher rates of poor health and disease for a range of health conditions, including those that tend to occur as syndemics (e.g., HIV, STIs, viral hepatitis, substance use, and mental health, etc.). These disparities are experienced by many populations, including people from racial and ethnic minority groups, people with disabilities, women, people who identify as lesbian, gay, bisexual, transgender, queer, intersex, and more (LGBTQI+), people with limited English proficiency, and other groups.[10] Programs and services implemented as part of a syndemic framework should aim to integrate equity principles and reduce these health disparities from occurring within the community despite differing population groups.

Health Equity Actions

There are several health equity frameworks that STLT health agencies can refer to for guidance on how to implement services and programs centered in equity. Some key principles and actions health agencies can take include (adapted from CDC[10] and the Centers for Medicare and Medicaid Services [CMS][11]):

- Use frameworks that support practitioners in applying a health equity approach in the development, implementation, and evaluation of programs and services (see Additional Resources).
- Adopting policies, programs, and practices that support equitable access to quality and affordable health and other social services (e.g., education, housing, transportation, childcare) and accessibility within these services.
- Recognizing, respecting, and supporting the diversity of the community served, including reflecting on the community's broader historical context and experiences.
- Partnering with trusted messengers and community health workers to share clear and accurate information tailored to a community's languages, literacy levels, and cultures.
- Including community engagement efforts that can help strengthen partnerships between community members and public health entities, build trust, and promote social connection.
- Using clear, easy-to-read, accurate, transparent, and consistent information from a reputable source that is locally and culturally relevant in terms of language, messaging, tone, images, and format.

[10] CDC. What is Health Equity?. 7/1/2022. https://www.cdc.gov/healthequity/whatis/index.html
[11] CMS. CMS Framework for Health Equity 2022–2032. 1/31/2023. https://www.cms.gov/files/document/cms-framework-health-equity-2022.pdf

- Improving collection and use of comprehensive, interoperable, standardized individual-level demographic and social determinants of health data to better inform and evaluate programs and services and to adopt a culture that centers health equity as the foundation of all data collection practices.
- Assessing and addressing any identified disparities or inequities in access to programs and services to close gaps.
- Amplifying promising practices and providing staff and partners with health equity training, tools, and resources.

Key Partnerships for Health Equity

Implementing effective public health interventions to address syndemics requires public health agencies to engage broadly with partners and the communities served. By their very nature, syndemics require multisectoral approaches and strong partner and community engagement for success. Public health agencies should seek to engage people and organizations responsible for performing the proposed work, those who make decisions about the work, and those impacted by the work. It is critical to engage communities made up of those who are closest to the issues.[12] The level of engagement for these different groups will vary depending on goals, from informing them to consulting them to involving and collaborating with them.[12] Public health agencies can consider creating a new coalition or engaging an existing one to formalize partnerships, commitment, and drive community prevention efforts.

In addition to engaging people from the community being served, potential organizational partnerships that may be particularly important to engage for syndemic approaches include:

- Healthcare providers
- Hospitals
- Federally-Qualified Health Centers.
- Urgent Care Centers
- Outpatient health clinics
- Payers, insurers
- Patient and community advocacy organizations
- Academic and research institutions
- Legal and Policy Organizations
- Community-based organizations
- Substance use treatment and recovery providers
- Harm reduction and syringe services programs
- Justice system organizations and facilities
- Organizations that address housing, transportation, education and provide other supports

[12] Community Wealth Partners. Engaging Stakeholder in Developing Strategies: A Field Guide. Not dated. https://communitywealth.com/wp-content/uploads/2020/06/Stakeholder-Engagement-Field-Guide.pdf

Partner and community engagement should be evaluated as part of the overall evaluation plan to ensure that they are effectively leveraged as syndemic approaches are developed, implemented, and monitored. Resources and key questions to ask when evaluating community engagement are available under Additional Resources.

Figure 2. Key Partner Types

Equitable Evaluation & Measurement

As with all public health programs and services, those implemented as part of a syndemic approach should be systematically evaluated through the collection, analysis, and interpretation of data aimed at examining and improving the effectiveness of the activities.

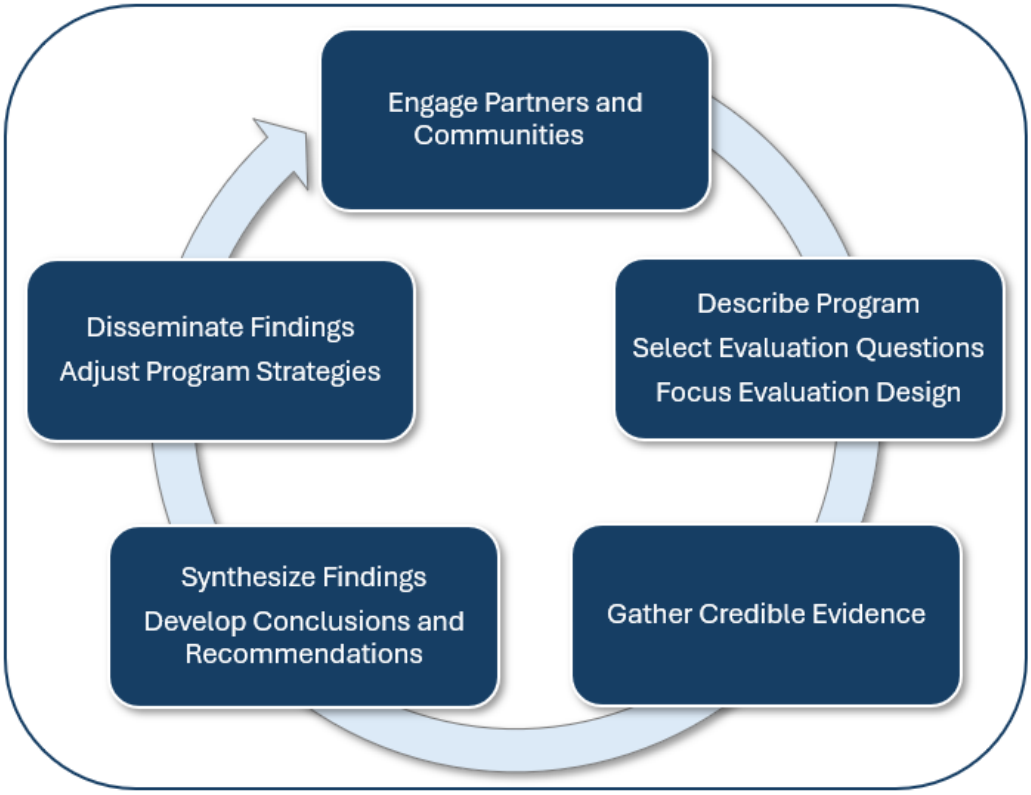
There are a number of frameworks and resources for public health agencies to refer to in developing evaluation plans. These resources are provided under Additional Resources at the end of this section and should be further referenced. As a broad overview, the evaluation process generally includes (as adapted from CDC):[13]

- Engaging partners and communities being served.
- Describing the program and focusing the evaluation design/methodology based on key questions about the program to be answered.

[13] CDC. A Framework for Program Evaluation. https://www.cdc.gov/evaluation/framework/index.htm

- Identifying indicators and data sources then gathering credible evidence/data for assessment.
- Analyzing and synthesizing findings to develop recommendations and justify conclusions.
- Disseminating findings for use and sharing lessons learned to adjust and improve program strategies.

Figure 3: Equitable Evaluation Process



The *Equitable Evaluation Framework™* was developed to promote the principles that evaluation efforts should be in service of equity, designed, and implemented with the values underlying equity work, and should answer critical equity-related questions.[14] Equitable evaluation relies on effective and robust community engagement across the program development, implementation, and evaluation processes.

A core step in developing a program evaluation plan is identifying key questions about the program to be answered through the evaluation activities. These questions will inform the subsequent selection of methods, indicators, and data sources. Questions should be

[14] Equitable Evaluation Initiative. Equitable Evaluation Framework. 5/21/2023. https://www.equitableeval.org/post/eef-expansion-principles

developed with program and community partners. Evaluation questions may need to be prioritized as it may not be feasible to include all questions of interest.

In general, there are two broad types of evaluations and associated indicators: Process and Outcome. Both types of evaluation are important and help to answer different types of evaluation questions.

- Process/Implementation: How effective was the program implementation? Was it implemented as planned?
- Outcome/Impact: Did the program achieve its intended outcomes? What are the intended and unanticipated effects (impacts) of the program?

Table 1. Example Evaluation Questions for Syndemic Approaches

Type	Evaluative Question
Process	Were community partners effectively and meaningfully engaged in the program development, implementation, and evaluation processes?
	Have barriers to access for groups experiencing disparities been adequately addressed (e.g., do potential participants have equitable access to transportation if needed to access the program?)?
	What were the key barriers or challenges to implementation and how were they addressed?
	Were there enough resources to effectively implement the program?
Outcome	Did the program or intervention achieve its intended outcomes (e.g., decreases in HIV, STIs, viral hepatitis, substance use, etc.)?
	Were outcomes experienced equitably across persons served (e.g., has the program reduced disparities in the occurrence of HIV, STIs, viral hepatitis, substance use, etc. across population groups?)?
	Were there any negative effects of the program or unintended consequences?

Programs can also consider conducting more specialized evaluations related to cost-effectiveness or cost-benefit of the program or intervention.

Resources for selecting indicators are available on the CDC program evaluation website with additional resources listed below. Public health agencies can look to identify existing and validated indicators (e.g., Healthy People 2030 Objectives, CDC HIV Prevention Goals, CDC STI Prevention Goals, CDC Viral Hepatitis Indicators) as well as developing their own that are specific to answering their evaluation questions. Data sources for evaluation activities could include a range of qualitative and quantitative data collection. Potential sources of information include, but are not limited to, the following: 1) surveys, interviews, or focus groups with providers or persons being served; 2) administrative data (e.g., claims, vital statistics, hospital discharges); 3) observations; 4) public health surveillance data (e.g., new diagnoses of HIV, STIs, viral hepatitis, etc.); 5) population-level survey data (e.g., BRFSS); and

6) data collected specifically for the intervention/program (e.g., number of syringes exchanged).

Table 2. Example Indicators for Syndemic Approaches

Type	Indicators	Possible Data Sources
Process	Partner and Community Engagement • Number and diversity of partners engaged • Frequent and regular communications • Long-lasting and robust relationships centered in trust and respect • Community participants actively engaged in leadership roles • Infrastructure needed for continued community engagement	Quantitative • Surveys • Administrative data Qualitative • Surveys • Interviews • Focus groups • Observations
	Program Implementation • Use of evidence-based practices • Effective training and education • Number and diversity of persons served • Equitable access to services	Quantitative • Surveys • Administrative data Qualitative • Surveys • Interviews • Focus groups • Observations • Document reviews • Submission of reports
	Utilization of Services • HIV, STI, and viral hepatitis screening rates • Proportion of people reporting regular condom use • Proportion of adolescents who get recommended doses of human papillomavirus (HPV) vaccine • Proportion of persons who get recommended doses of hepatitis A vaccine • Proportion of persons who get recommended doses of hepatitis B vaccine	Quantitative • Administrative data • Immunization Registry Qualitative • Document reviews • Submission of reports

	• Proportion of persons who initiate HIV PrEP • Proportion of persons with HIV who are linked to care • Proportion of people who used injection drugs • Proportion of people who received a referral for substance use treatment • Proportion of people with substance use disorder who get treatment • Proportion of people screened for depression or other mental health problems • Proportion of people with depression or other mental health problems who get treatment	
Outcome	Rate of health outcomes such as HIV, STI, viral hepatitis, substance use (e.g., overdose), and mental health (e.g., suicides) • Overall and by population group (e.g., primary and secondary syphilis rates among men who have sex with men; congenital syphilis and gonorrhea rates among Blacks and American Indians/Alaskan Natives; HIV and viral hepatitis among persons who inject drugs) • Proportion of persons who initiate PrEP who test negative for HIV	Quantitative • Surveillance data • Administrative data
	Rate of mother-to-child transmission of HIV, STIs, and viral hepatitis • Overall and by population group (e.g., primary and secondary syphilis rates among men who have sex with men; congenital syphilis, gonorrhea, and viral hepatitis death rates among Blacks and American Indians/Alaskan Natives)	Quantitative • Surveillance data • Administrative data
	Proportion of persons with HIV who are virally suppressed	Quantitative • Surveillance data • Administrative data • Survey data

	• Overall and by population group (e.g., race; sexual orientation; persons who inject drugs; youth, etc.)	

Health Equity Data & Evaluation Examples

- Health Equity Data: Explore interactive applications that provide data, maps, charts, and methodology on chronic diseases to better understand health disparities.
- Health Equity Surveillance: Access federal surveillance systems and data sets measuring health equity and social determinants of health.
- Health Equity Evaluation: Explore how CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) collects, studies, and uses data to look at the effects of programs on health disparities and inequities.

Additional Resources

- Resource Website: Center for Health Equity Practice
- Resource Website: CDC Foundation Health Equity Resources
- Health Equity Framework: ETR Health Equity Framework Reflection Tool
- Health Equity Framework: CMS Framework for Health Equity
- Health Equity Resource: Promoting Health Equity: Five Actions to Consider
- Health Equity Resource: CDC Preferred Terms for Select Population Groups & Communities
- Healthy Equity Resource: New York City Department of Health and Mental Hygiene - EpiQuery
- Guide: Health Equity Guide
- Guide: Engaging Stakeholder in Developing Strategies: A Field Guide
- Guide (Including Evaluation): CDC Principles of Community Engagement
- Evaluation Framework: CDC Framework for Program Evaluation
- Evaluation Framework: Equitable Evaluation Framework™
- Evaluation Metrics: Healthy People 2030 Objectives
- Evaluation Article: Assessing Meaningful Community Engagement: A Conceptual Model to Advance Health Equity through Transformed Systems for Health

See the Data Collection & Sources section for additional resources related to health equity considerations for data.

Collaborating Across Programs

To successfully improve population health through syndemic approaches, STLT public health agencies should prioritize collaborating across programs. Collaboration across programs can lead to improved health outcomes by reducing duplicative efforts, utilizing braided funding, sharing resources and expertise, advocating for common needs, and presenting unified outreach.

To effectively collaborate across programs, STLT public health agencies should 1) create syndemic workgroups and engage external stakeholders and 2) identify and address siloes.

Creating Syndemic Workgroups & Engaging External Stakeholders

Syndemic workgroups are a promising approach to achieving joint syndemic and health equity goals. When creating a syndemic workgroup, the following questions can be considered:

1. What is the purpose of the workgroup?
2. What are the desired outcomes of the workgroup?
3. How often will the workgroup convene?
4. Who should be included in the workgroup? Who should govern the workgroup?
5. How will information be shared within the workgroup?
6. How will information be shared with external stakeholders?
7. How will we evaluate the effectiveness of workgroup and subsequent projects?

The purpose and desired outcomes of the workgroup should outline the need for a syndemic approach and call for action. The purpose should define public health agency program areas and internal and external stakeholders that will be included in the syndemic approach (e.g., HIV prevention, STI surveillance, viral hepatitis care, harm reduction, correctional facilities, and housing/social services, etc.). Outcomes can include developing or updating syndemic policies, aligning syndemic and health equity goals and outcomes, informing creation of roadmaps or integrated plans, collaboration on syndemic surveillance and prevention activities, or advocating for syndemic needs.

Workgroups can consist of various internal public health agency programs, staff of varying seniority/decision-making authority, external county and state public health agency staff, and/or community partners and members. Recurring workgroup meetings can ensure that members stay engaged and are on track to meet the goals and outcomes of the workgroup; it is recommended that workgroups meet on at least a monthly or bimonthly basis.

When engaging with stakeholders external to the public health agency, formats of convenings may include virtual or in-person meetings, town halls, listening sessions, focus groups, and surveys. When convening members of the impacted community, the public

health agency may consider compensating participants for their time/incentivizing participation, offering materials in languages other than English, and providing transportation and scheduling accessibility to promote inclusivity, when possible.

To ensure the syndemic workgroup is meeting its purpose, plans for evaluating the effectiveness of the workgroup and any subsequent products are strongly encouraged. Please see the section above, Equitable Evaluation & Measurement for additional resources related to evaluation and measuring the progress of a syndemic approach.

Data sharing policies may apply when workgroups convene to discuss syndemic data. Syndemic data sharing may most frequently occur in internal public health agency workgroups that may or may not require data sharing agreements be in place. If data sharing agreements are not in place, data sharing protections should be. For more information about data sharing practices, please see the Data Governance section below. Other syndemic workgroup information should be shared through an accessible platform, approved by the public health agency, to ensure all members have appropriate access.

Sharing workgroup outcomes back to external stakeholders, including the impacted community, will hold the workgroup accountable, strengthen trust, and aid in advocating for strengths and gaps identified by the data. Outcomes can be shared via data dashboards, annual surveillance reports, epidemiologic profiles, and community planning groups. Workgroups can also choose to have minutes, agendas, and materials from convenings be posted online for public access.

For an example of a syndemic workgroup charter, please see the Washington State Department of Health's Syndemic Planning Group charter: https://doh.wa.gov/sites/default/files/2022-12/150-187-WASyndemicPlanningGroupCharter-English.pdf.

Example from the Field

In 2023, the Los Angeles (LA) County Department of Public Health (DPH) implemented a social network strategy to identify, engage and motivate people with undiagnosed HIV infection to get tested. Social network strategy is based on the underlying principles that people in the same social network share the same behaviors that increase the risk of HIV, and that people in the same social network know and trust each other. LA County DPH developed a "Community Health Ambassador Program" that involved recruiting ambassadors among persons diagnosed with HIV and coached them on how they can help distribute HIV self-test kits to their contacts. The program included financial incentives for both the community ambassadors and the contacts who accepted testing. Through this program, people not previously tested agreed to testing, new positive test results were identified, and PrEP referrals were given. The relationships built with the Community Health Ambassadors also provided LA County DPH with an opportunity to learn more about factors that may be driving HIV transmission and to further share knowledge and education about HIV testing.

For more information, contact EHEInitiative@ph.lacounty.gov.

Identifying and Addressing Siloes

One of the most prominent challenges identified by public health agencies for conducting syndemic work is breaking down siloes. Historically, many public health programs have been siloed, in part, due to how they are funded and the systems required to store data. Often federal funding opportunities lack flexibility and specific requirements to take a syndemic approach. When public health programs are not fully integrated, redundancy can occur, and programs may work on similar projects without awareness of one another. The stigma that co-exists with many conditions, such as HIV, STIs, and viral hepatitis, has also contributed to silos within health department programs. Increased data protections required for federally funded HIV programs amplifies the segregation of data systems and access. This can create challenges when collaborating across programs, integrating data, and developing or updating policies.

Syndemic Workgroups are encouraged to evaluate the structure of their public health agency and work toward integration of program areas. If organizational restructuring is not feasible (see below, "Program Structure & Funding"), members are encouraged to seek alignment in their data collection and storage methods and security and confidentiality policies across syndemics, to allow for accurate data comparison and analysis. Approaches that will assist public health agencies in this area might include offering regular data security and confidentiality training to allow more staff access to data sets that require advanced training,

data use agreements and continuity of operations training that allows for more staff to have access to data systems and sets.

Example from the Field

The Philadelphia Department of Public Health (PDPH) identified the gap in services for people who inject drugs (PWID) during an HIV outbreak response in 2018. In 2022, PDPH also identified that 13.8% of people living with HIV (PLWH) were coinfected with hepatitis C (HCV). To address these findings, PDPH's HIV, STI, viral hepatitis, substance use prevention and harm reduction, immunization, and other programs collaborated to 1) expand syringe service program (SSP) sites, 2) expand HIV testing and wound care services in substance use and harm reduction settings, 3) conduct outreach, linkage, and re-engagement services, 3) provide technical assistance to PrEP providers, 4) provide education materials to medical providers, and 5) implement public health vending machines. PDPH had a CDC Epidemic Intelligence Service (EIS) officer deployed to the response to provide aid and expertise on HIV, hepatitis, substance use, and harm reduction projects. Philadelphia is currently working with a Pennsylvania State Rebate-funded Transitional Housing Program with the goal of transitioning participants to permanent housing using a "housing first" approach. Key areas of collaboration in this response included sharing of outreach resources, partnerships, data, and knowledge.

For more information, contact Tanner Nassau (tanner.nassau@phila.gov) and Anna Thomas-Ferraioli (anna.thomasferraioli@phila.gov).

Program Structure & Funding

Some public health agencies have addressed silos by restructuring their programs to embrace an integrated programs approach. "Syndemic approaches", in name, are relatively new, therefore many public health agencies who have elected to adopt syndemic approaches are developing policies and procedures including syndemic-specific program positions. Please see Appendix B: Syndemic Position Descriptions for more syndemic-specific program positions. Official or unofficial syndemic-specific positions can act as liaisons between programs, facilitate collaboration, and initiate data sharing discussions. It is essential for public health agencies that do not have integrated programs, are not under the same department/division/bureau/office, or do not frequently communicate with other programs to establish communication channels to reduce duplication of effort. Utilizing syndemic workgroups for this purpose is strongly encouraged.

Many health conditions that may be included in a syndemic approach have siloed federal funding, making conducting syndemic approaches difficult when these are not explicitly outlined in awards. Funding for public health programs can be diverse and often differ between public health agencies. Until syndemic or nondiscretionary funding sources are identified and widely available, syndemic workgroups are encouraged to seek opportunities to maximize braided funding approaches within the constraint of each individual funding source (federal, state, local, public, private, etc.).

Example from the Field

The New York City Department of Health and Mental Hygiene (NYCDHMH) went through a structural reorganization to bring STI, HIV, and viral hepatitis within the same Bureau. One of the goals of this restructuring was to bring a more holistic approach to data collection and use. Although the systems that are used to store data are not fully integrated, this restructuring allowed for advancements, such as integrating viral hepatitis into the STI surveillance system and collection of substance use disorder, substance use treatment and housing status. In addition, STI clinics in NYC offer referrals for mental health counseling, maternal child health services, substance use treatment, and housing services. These referrals can now be tracked within the STI surveillance system. This allows for a patient-centered approach to care and a syndemic approach to data collection and analysis.

For more information, contact Kimberly Johnson at kjohnson5@health.nyc.gov.

Data Collection & Sources

To properly monitor and respond to syndemics, public health agency staff need accurate data from syndemic program areas. This can be challenging as data systems are often siloed and may be housed in different areas of the public health agency. Data integration is essential for generating comprehensive datasets, enabling detailed analysis, and providing a unified system of information for public health agencies. In some cases, local systems are created to assist with integration. Syndemic workgroups are encouraged to conduct an assessment of their data sources and the fields that are collected within each source. These data sources and fields should then be crosswalked to determine which can be used for analysis across systems. After performing a crosswalk, data linkage can be conducted to match persons in the systems to 1) obtain additional information on existing cases for case investigation, 2) identify unreported cases, and 3) deduplicate data. Data can be linked across systems with like variables such as first name, last name, date of birth (DOB), social security number (SSN), unique identifier (UID), and state number (stateno). Jurisdictions

should explore techniques and methods for connecting individual records across different data sources and datasets. Methodologies such as exact matching, probabilistic matching, and deterministic matching to find and link patient records can greatly improve care coordination. Data linkage is a powerful tool for generating insights with siloed data, but it must be approached with careful planning and attention to privacy, data quality, and methodology.

Syndemic data can be collected from many sources and documents, such as health care providers, including, but not limited to:

- HIV Adult and Pediatric Case Report Forms
- Other communicable disease report forms
- Electronic case reporting (eCR)/electronic medical records (EMRs)
- Laboratories (e.g., laboratory reports and electronic laboratory reporting [ELR])
- Vital records offices (e.g., birth and death certificates)
- Partner services data (e.g., collected from disease investigation specialists [DIS])

Data collected can include, but is not limited to:

- Demographic (e.g., sexual orientation and gender identity [SOGI])
- Clinical
- Laboratory results
- Vital status
- Transmission risk
- Patient testing history

Other data sources such as the CDC/Agency for Toxic Substance and Disease Registry (ATSDR) Social Vulnerability Index, CDC WONDER, CDC AtlasPlus, U.S. Census Bureau American Community Survey, and U.S. Bureau of Labor Statistics might be used to provide a more holistic approach.

Jurisdictions should explore techniques and methods for connecting individual records across different data sources and datasets. Methodologies such as exact matching, probabilistic matching, and deterministic matching to find and link patient records can greatly improve care coordination. Data linkage is a powerful tool for generating insights with siloed data, but it must be approached with careful planning and attention to privacy, data quality, and methodology.

Example from the Field

The Allegheny County Health Department (ACHD) brought together staff from their infectious disease, overdose, family and child health, and chronic disease programs to collaborate on providing comprehensive data to partners interested in developing interventions aimed at improving the health of people who use drugs. The group convened in regular meetings to discuss current surveillance approaches, available data sources, communication strategies, and collaborative opportunities. Their work resulted in development and distribution of a comprehensive *Drug User Health Issue Brief*. ACHD also produced a Substance Use in Pregnancy report and maintains an overdose dashboard.

For more information, visit the ACHD website or contact IDEPI@alleghenycounty.us.

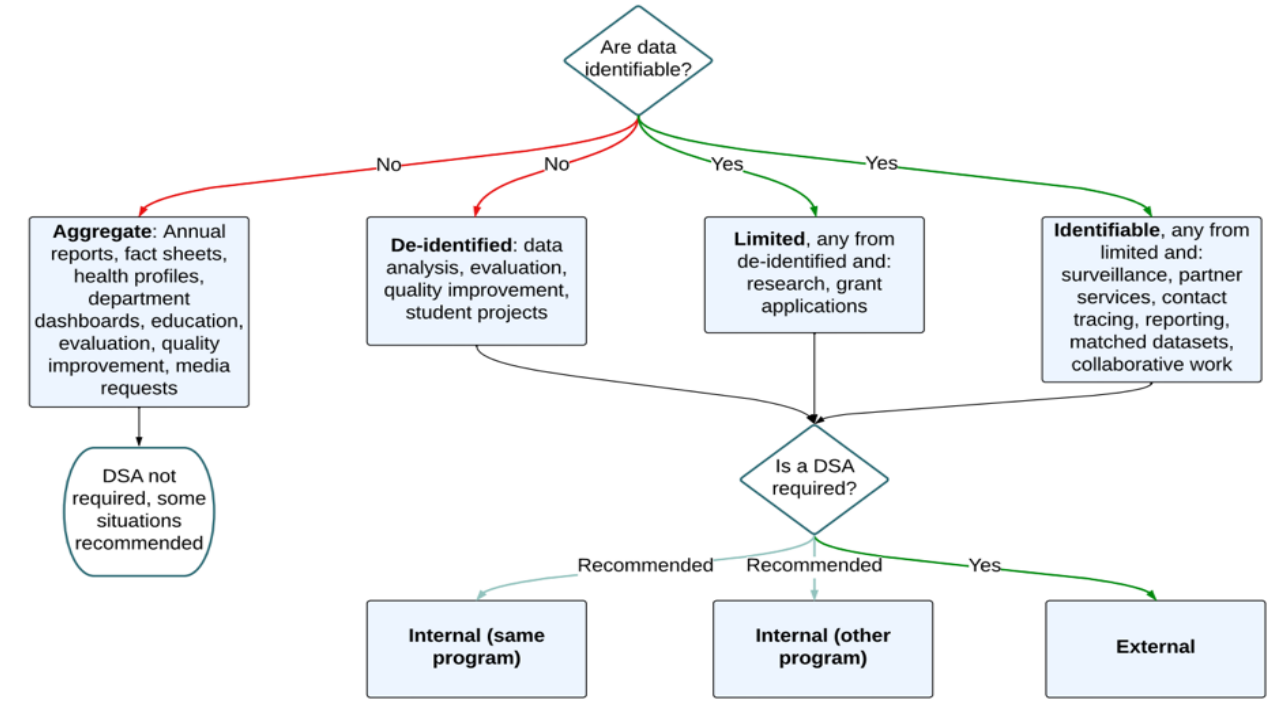
Data Governance

Due to stigmatization and criminalization, HIV data often have higher protections than most other infections and program areas. Some states have special laws protecting the confidentiality of information that may disclose a person's HIV status that go beyond the Health Insurance Portability and Accountability Act (HIPAA). To maintain data confidentiality, privacy, and protection, be sure to review and understand relevant state laws, and adhere to standard data sharing practices when conducting syndemic approaches. CDC's Confidentiality Guidelines for HIV, Viral Hepatitis, Sexually Transmitted Disease, and Tuberculosis Programs: Standards to Facilitate Sharing and Use of Surveillance Data for Public Health Action outlines standards for CDC-funded programs to help programs collect, store, and use data securely while maintaining confidentiality.

Data sharing agreements (DSAs), or data use agreements (DUAs), are legal binding agreements between entities that outline how data can be used, what data can be shared, how long data can be shared, and who has access to the data. DSAs should also describe security and confidentiality for the data. Data can be deidentified, identifiable, partially identifiable, or a limited data set. Table 3, below, describes various scenarios in which a DSA is usually not required, recommended, or usually needed.[15] See Appendix D. Data Sharing/Use Agreement Examples.

[15] Council of State and Territorial Epidemiologists. CSTE HIV, Viral Hepatitis, STD and TB Data Sharing Scenarios, Guidance, and References Workgroup Summary: Recommendations for the Data Security and Confidentiality Guidelines for HIV, Viral Hepatitis, Sexually Transmitted Disease, and Tuberculosis Programs: Standards to Facilitate the Sharing and Use of Surveillance Data for Public Health Action.

Table 3. Flowchart for DSA Recommendation.[15]



Before executing DSAs, relationships and data sharing plans should be developed between the entities to formalize the exchange and prevent conflicts. Main points of contact should be established in each entity to determine who to contact, the purpose of the data sharing, and how to execute the DSA. Please refer to the Collaborating Across Programs section for examples on building syndemic approaches collaborative relationships.

The following list of guiding questions can help spark initial conversations for initiating DUAs with internal or external partners.[15]

- What is the purpose of the data sharing agreement?
- What types of data will be shared and who owns the data? What data elements are available to address the purpose and scope of this project?
- How will data be protected and secured during transfer and storage?
- What are the specific limitations on data use and re-use? Are there any legal constraints to sharing this data?
- Who will have access to the shared data? Do they have required certifications or training?
- For research, has the protocol been approved by or submitted to a Human Subjects board for review and approval?
- What will happen to data at the end of the project? How will results from the project be reported back to the health department? How can this DSA help support both parties?

In 2025, CSTE will launch the CSTE HIV-STI-OOJ (out of jurisdiction) Contact Board as a resource for STLT public health agencies to facilitate data sharing across jurisdictions by maintaining up-to-date HIV and STI surveillance contacts. For inquiries regarding the CSTE HIV-STI-OOJ Contact board, contact the CSTE National Office at idteam@cste.org.

Example from the Field

In 2024, the Fairfax County Health Department (FCHD), worked to break down HIV and STI data silos to facilitate a syndemic approach in planning community outreach and prevention efforts. As data are stored in disparate systems, FCHD did not have a common data source to analyze and monitor all STI morbidity. The FCHD's Division of Epidemiology and Population Health and Informatics and IT collaborated to combine these data sources using SQL script to create a common dataset with standardized variables for HIV and STI surveillance data, for analysis. One analysis effort was creating a dashboard to analyze surveillance trends alongside patient interview data such as substance use. Another effort was hotspot/cluster detection analysis across conditions, where clusters of diseases were found to overlap and be prevalent along some jurisdictional boundaries. To prioritize prevention efforts to heavily impacted geographical areas, findings were shared with the Northern Virginia HIV/STI Taskforce which used the data to help plan HIV Testing Day events.

For more information, please contact HD_STI@fairfaxcounty.gov.

Additional Resources

- Guide: Principles for Using Public Health Data to Drive Equity: A guide to embedding equitable practices throughout the data life cycle
- Guide: Strategic Practice for Health Equity: Mobilize Data, Research, & Evaluation
- Guide: Do No Harm Guide: Applying Equity Awareness in Data Visualization
- Guide: Basic Drug Use Epidemiology: A Guide
- Resource: Community Response Planning for Outbreaks of Hepatitis and HIV Among People Who Inject Drugs
- Resource: Oregon Health Authority – Honoring the Diversity of People Living in Oregon
- Report: Finding a Way Forward: How to Create a Strong Legal Framework for Data Integration
- Report: Addressing Gaps in Public Health Reporting of Race and Ethnicity Data for COVID-19 (identifies and summarizes multiple factors impacting the availability of race and ethnicity in public health data)

Promising Practices/Program Models

Public health agencies vary in program structure, funding sources and allocation, data sources and collection, and have their own unique challenges. However, it is important to highlight and emphasize successful implementation of syndemic approaches. Below are examples of "promising practices" from low, medium, and high HIV morbidity public health agencies who are using syndemic approaches. Each agency has provided the background, overview, lessons learned, and evaluation of syndemic approaches in their jurisdiction.

Program Integration: New Hampshire

Background

The New Hampshire Division of Public Health Services (DPHS) embraced program collaboration and service integration early, even prior to that initiative being launched by CDC. As a geographically small and primarily rural jurisdiction with limited public health financial and human resources, a nimble approach to program integration was necessary to carry out basic STI, HIV and viral hepatitis public health activities.

Overview

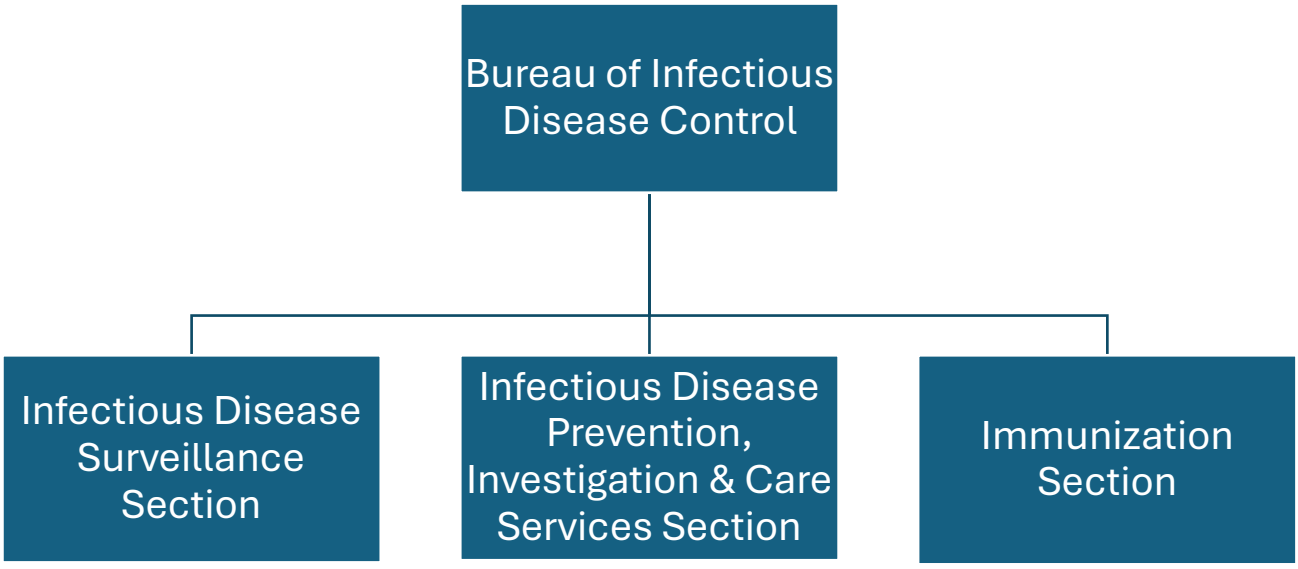
NH DPHS moved towards structural integration by merging Communicable Disease Control with the STD/HIV Section to form the Bureau of Infectious Disease Control (BIDC). This co-located STI, HIV and viral hepatitis prevention and care (including the Ryan White CARE Program) and STI, HIV and viral hepatitis surveillance within the same bureau and allowed for a unified approach to program leadership, management, and activities. The merger was especially fruitful in supporting data sharing and access between programs and was the inspiration behind bureau-wide application of the enhanced security and confidentiality standards required for HIV. This also promoted NH DPHS' efforts to reduce HIV, STI, and viral hepatitis stigma.

Today, two sections within the NH DPHS Bureau of Infectious Disease Control house STI, HIV, and viral hepatitis programs: the Infectious Disease Surveillance Section (IDSS) and the Infectious Disease Prevention, Investigation and Care Services Section (IDPICSS). BIDC is also home to the Immunization Section, allowing for an integrated approach to vaccine promotion and distribution for hepatitis A, hepatitis B, and Mpox. This integration of services within a single infectious disease bureau is particularly helpful in responding to cluster and outbreak responses and other situations that benefit from a syndemic approach, including the

multistate outbreak of hepatitis A spread through person-to-person contact and the 2022 Mpox outbreak.

HIV, STI, and viral hepatitis surveillance is conducted by a dedicated team within IDSS and overseen by one Program Manager. This organizational structure supports consistency of approach, continuity of operations, and strong situational awareness across these syndemic conditions, while also supporting collaboration with other surveillance and informatics programs. This team is responsible for case ascertainment; data quality and management; epidemiology; and shares responsibility for conducting case, cluster, and outbreak investigations with IDPICSS.

Within IDPICSS, five units contribute to an integrated and collaborative approach. The Linkage to Care Program conducts HIV, STI and hepatitis C case investigations and linkage to care, and provides partner services. The Infectious Disease Emergency Response Team conducts hepatitis A, hepatitis B, and all other communicable disease investigations. Each of these teams may be called upon to provide surge capacity, especially in the event of co-infections, outbreaks in specific priority populations, and situations requiring fieldwork. The Prevention Services Unit provides oversight of public health-supported STI clinics and syringe services programs and other STI, HIV, and viral hepatitis prevention activities. The Public Health Education & Detailing Program provides cross-cutting support related to communications and community engagement, including public health detailing to providers throughout the state regarding infectious disease programs, recommendations, and reporting. The Care Program houses both the Ryan White CARE Program and the NH Tuberculosis (TB) Financial Assistance Program.



Lessons Learned

The approach taken by NH recognizes that the success of programs intended to improve health outcomes for Granite Staters are dependent on collaboration and integration. Effective implementation and evaluation of IDPICSS-led prevention, intervention and care programs is dependent on data managed and analyzed by IDSS. Likewise, the ability of IDSS to provide complete and accurate data and to meaningfully conduct applied epidemiology is reliant on the work of teams within IDPICSS. Regular data sharing and effective communication are needed to ensure aligned approaches to data collection and use, and to support development of interventions across syndemic conditions.

Program integration takes time, patience, and support from public health leadership, especially when it comes to breaking down the funding silos. NH's approach required revisiting distribution of federal funds for syndemic programs, creative approaches to funding cross-cutting positions and activities, and support from the DPHS finance team to ensure braided funds were expended according to their individual funding stream requirements. In addition, when moving toward program integration, a significant amount of time needs to be spent socializing the concept with the staff doing the work. Finally, true integration must be understood as a dynamic project: funding sources and programmatic priorities may change over time, and continued success requires ongoing coordination and sustained commitment to the approach by all involved to adapt to this changing landscape. These approaches are most successful when supported by data that shows meaningful benefit to the public.

Evaluation

Although NH does not currently conduct a formal evaluation of their integrated approach, regular data sharing occurs between programs to ensure shared metrics and data tracking takes place. Routine communication and strong coordination assist with continuous evaluation and mitigation of any barriers.

End the Syndemic: Tennessee

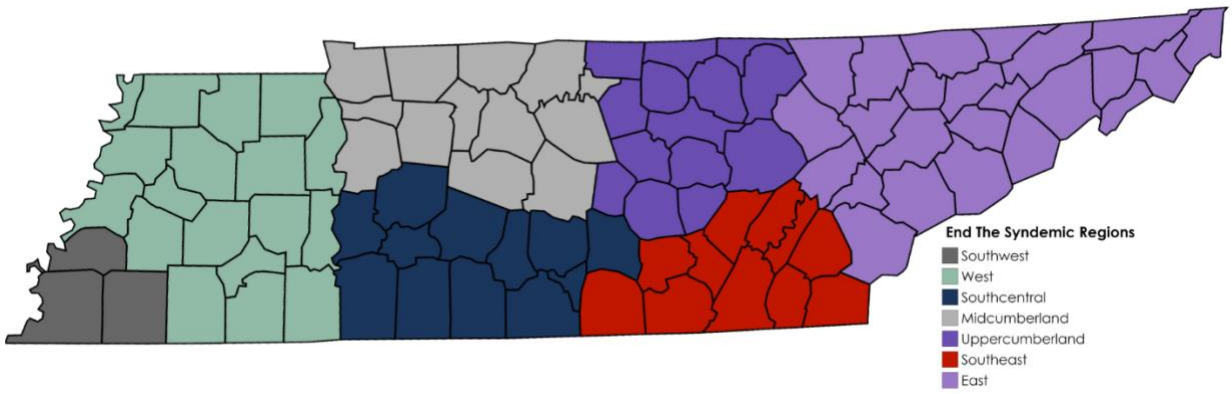
Background

Following the HIV and hepatitis C outbreak associated with injection drug use in Scott County, Indiana, CDC identified 220 counties throughout the US who were vulnerable to such outbreaks. Forty-one of the 220 counties were in Tennessee. This prompted Tennessee Department of Health (TDH) to conduct their own vulnerability assessment and through the analysis of more recent data, they found the vulnerability to be even greater than earlier data indicated, finding that every county is Tennessee was to some degree vulnerable to a similar outbreak.

The Tennessee Department of Health (TDH) and the Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) came together to establish *End the Syndemic: Tennessee*. The conditions Tennessee includes in their syndemic approach are HIV, chlamydia, gonorrhea, syphilis, hepatitis A, hepatitis B, hepatitis C, and substance misuse/substance use disorder.

Overview

The first step for *End the Syndemic: Tennessee* was to develop an Internal Syndemic Workgroup that met every two weeks during the planning process. Members of the Internal Syndemic Workgroup included program directors and epidemiologists across the HIV, STI, viral hepatitis, Overdose Response Coordination Office, and the Office of Informatics and Analytics within the TDH and several partners at the TDMHSAS. After several months of internal engagement, these staff then identified regional champions across the syndemic to help recruit community members to seven regional planning groups. By the end of the planning process, 407 people had registered for *End the Syndemic: Tennessee*. These represented people with living/lived experience, local health department staff, health care providers, academics, case managers, industry partners, and more. A regional approach was taken to community engagement to ensure that metro and rural voices were both captured throughout the planning process.



The *End the Syndemic: Tennessee* strategic plan was primarily developed though 80+ regional community planning meetings and a statewide syndemic needs assessment process that included a statewide survey, focus groups, and key informant interviews with priority populations. Strategies were also informed by consulting statewide subject matter experts and by aligning strategies with existing local Ending the HIV Epidemic (EHE) Plans, previous integrated HIV plans, federal HIV/STI/viral hepatitis/substance use prevention plans, and federal planning guidance.

To lead the implementation of this strategic plan TDH created a Syndemic Coordination Program that sits beside the HIV, STI, and viral hepatitis programs. The Syndemic Coordination program is made up of the Syndemic Coordination Director, the Director of

Harm Reduction Initiatives, a Syndemic Data Analyst, and the Syndemic Screening and Testing Coordinator.

Lessons Learned

Throughout the *End the Syndemic: Tennessee* strategic planning process, responsive adjustments were made. The regional planning meetings spontaneously fostered connections, prompting planning members to seek ways to strengthen these ties between monthly gatherings. In response, the *End the Syndemic Tennessee* Virtual Networking Platform was launched. This fully interactive space allowed regional planning members to remain actively and engaged throughout the planning process by providing an online space for private and group chats, and a space to share announcements, funding opportunities, events, resources, trainings, and more.

After receiving feedback that planning members felt in the past their voices were engaged without being able to see the impact of their input, leadership at TDH decided to start funding syndemic work before the strategic planning process ended to demonstrate TDH's commitment to a syndemic approach. In July of 2021, using HIV prevention and surveillance funds, TDH released a funding opportunity to pilot innovative prevention and linkage to care projects focused on populations most impacted by the HIV/STI/viral hepatitis/substance use disorder syndemic. Projects needed to address HIV prevention at their core and two or more of the other conditions included in *End the Syndemic Tennessee.* Five projects were awarded $154,000 dollars each to implement unique syndemic projects between July 1, 2021 – December 31, 2023. Lessons learned from these projects not only informed the strategic planning but also programmatic work more broadly at TDH and set the project pilot agencies up to be more competitive for further funding opportunities and to build on and sustain the best practices they identified throughout their pilot project period. To encourage participation, attendance was incentivized for the community planning meetings using federal HIV prevention and surveillance funds. Community members that were not funded by an HIV prevention program were given a $20.00 gift card for each meeting they attended that could be redeemed at a number of grocery stores and food establishments.

To assess engagement equity, halfway through the regional planning meetings, a demographic survey was introduced to assess ongoing engagement to ensure priority populations and individuals with living/lived experience were well represented among planning body membership. The survey data were then used to enhance focused recruitment efforts and to identify key groups for focus groups and in-depth interviews.

Then *End the Syndemic Tennessee* Needs Assessment survey was launched to gain a deeper understanding of the needs, gaps, barriers, and facilitators associated with HIV, STIs, substance use disorder, and viral hepatitis prevention and care services from both consumer and provider perspectives. While the survey was predominately conducted online, to ensure accessibility, some surveying was also conducted in-person and by phone to accommodate those without internet access. In addition to the survey, focus groups and in-depth interviews

were conducted to glean further insights into the data from the survey. Data from the demographic survey were used to identify what groups were prioritized for focus groups and in-depth interviews and this included: rural consumers of prevention and treatment services across the syndemic, people who use drugs, transgender people, latinx men who have sex with men, and people experiencing homelessness. Using data from the demographic survey, great care was taken to tailor marketing materials for the needs assessment to meet specific priority populations. In addition, all marketing materials as well as the needs assessment process itself were offered in English and Spanish including the survey as well as the facilitation for the qualitative efforts. Finally, as the regional planning meetings drew to a close, emerging strategies were presented back to the planning groups for further feedback and to ensure congruence. When the *End the Syndemic Tennessee* strategic planning process first began TDH anticipated a one-year engagement process with approximately four meetings per region (28 meetings total). However, with being responsive to community needs and in recognition of the complexity in syndemic planning, the process evolved into 80 meetings, 5 pilot projects, an extensive needs assessment process, the creation of online networking platform, and establishing a new program at TDH. All of this represented the most extensive community-informed planning process Tennessee has ever undertaken to address the syndemic of HIV, STIs, substance use disorder, and viral hepatitis.

Evaluation

TDH's Syndemic Coordination Program individually developed monitoring and evaluation plans in collaboration with the *End the Syndemic Tennessee* Pilot Projects. The data from these projects have been presented at the Synchronicity 2024 Conference as well as the inaugural Appalachian Syndemic Summit. The Syndemic Coordination Program looks forward to releasing a public report in the future.

Partners across TDH and TDMHSAS are continuing to explore ways to best capture ways to collect, report, and display progress made towards goals, strategies, and objectives outlines in *End the Syndemic Tennessee*.

To learn more about *End the Syndemic Tennessee* please access their website: https://endthesyndemictn.org/.

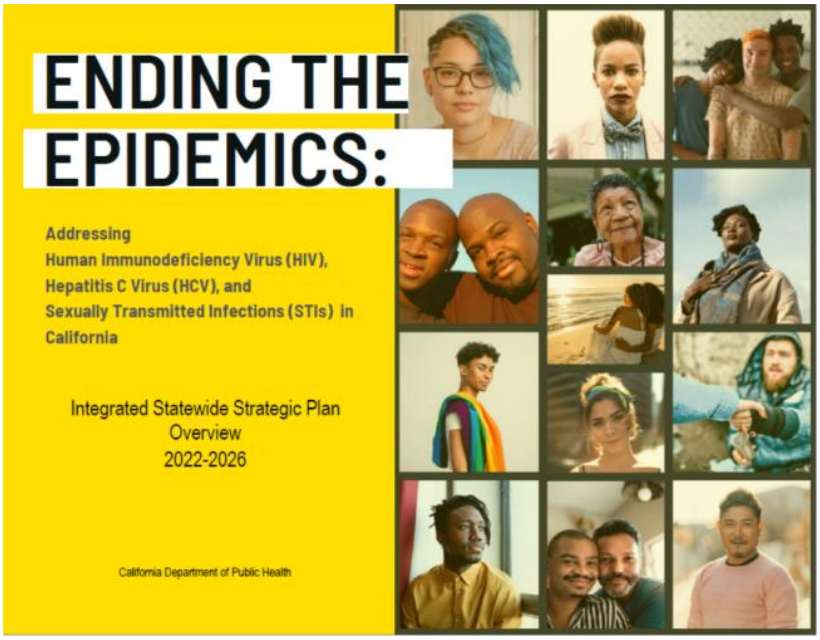
Ending the Epidemics: California

Background

The California Department of Public Health (CDPH) Office of AIDS and the Sexually Transmitted Diseases (STD) Control Branch partnered with Facente Consulting to develop a 5-year strategic plan for addressing HIV, hepatitis C, and STIs. To accomplish this, they assembled a 25-member workgroup composed of approximately half CDPH employees and half community representatives. This workgroup met weekly from July to October 2021 to create the strategic plan.

Overview

The workgroup aimed to address HIV, hepatitis C, and STIs as a "syndemic". They intentionally avoided creating a strategic plan with separate sections for HIV, hepatitis C, and STIs to prevent the re-establishment of silos in prevention, care, testing, or data, even though these are fundamental aspects of the collective work. Ultimately, the group determined that the most effective approach was to examine these issues through the lens of social determinants of health, ensuring that all Californians can thrive.



Lessons Learned

CDPH brought in over two dozen speakers from organizations such as the California Department of Corrections and Rehabilitation, the Department of Health Care Services, the Department of Education, the Department of Social Services, UCLA's Williams Institute, the California Pan-Ethnic Health Network, and the Transitions Clinic Network. These experts shared their work and collaborated with CDPH to develop the strategies included in the final plan. Additionally, they conducted an open survey in both English and Spanish, receiving input from over 640 people across California to gather diverse ideas and perspectives. After multiple rounds of revisions, they finalized a plan that is believed to be both visionary and actionable, especially when paired with an implementation blueprint.

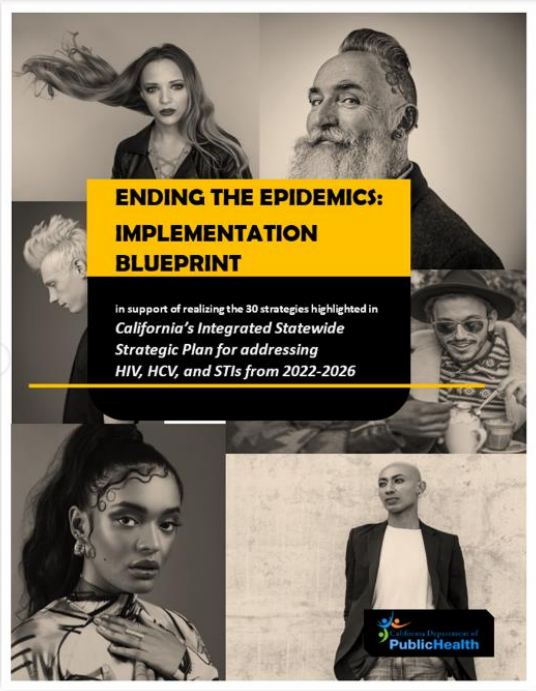
The Ending the Epidemics Strategic Plan is founded on the belief that new approaches must be explored to address HIV, hepatitis C, and STIs by tackling the social factors that impact the health and well-being of Californians. This does not mean abandoning the core public health strategies that have proven effective in preventing and treating these infections. Instead, it means building on successes while intensifying commitment to dismantling systemic

injustices by rethinking and reshaping work, all while preserving the essential functions of public health.

A supporting document, *Ending the Epidemics: Implementation Blueprint* was developed as a template to empower local health jurisdictions to modify the plan to suit the unique needs of their communities. The *Implementation Blueprint* was developed through a community engagement process that involved 17 community-based meetings across the state, held in both rural and urban areas in collaboration with local health jurisdictions to ensure locally focused discussions. In addition to the in-person meetings, five virtual meetings took place to ensure broad statewide representation and to offer an opportunity for participation to those unable to attend in person. California residents could also share their input through an online survey. Over 300 service providers, public health agency staff, and community members took part in the process.

Evaluation

California's *Ending the Epidemics: Implementation Blueprint* includes 30 strategies each with its own template that outlines activities, overall considerations, local considerations, key populations notes, partners and resources and monitoring and metrics. The monitoring and metrics ensure that each strategic area is evaluating their efforts. In addition, the *Implementation Blueprint* includes a *Measure and Indicators* section to promote the use of common indicators and strategies.



To learn more about *Ending the Epidemics: California* please access their website: https://eteca.org/.

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Appendix A. Definitions & Acronyms

Definitions

- Epidemic: an increase in the occurrence of an infection or other health condition above what would be expected for the population in that area.
- Health equity: the state in which everyone has a fair and just opportunity to attain their highest level of health.
- HIV Community: those who are living with HIV or are at an elevated risk of
- Public Heath Agency: a state, Tribal, local or territorial agency that provides public health services. This may include health departments.
- Stakeholders: persons or groups who have an interest or concern in a project, activity, or course of action.
- Syndemic: two or more diseases or health conditions cluster and interact within a population because of social and structural factors and inequities, leading to an excess burden of disease and continuing health disparities.
- Synergy: when the interaction of two or more conditions produce a combined effect greater than the sum of their separate contributions.

Acronyms:

- AI/AN: American Indian and Alaskan Native
- ATSDR: Agency for Toxic Substances and Disease Registry
- BRFSS: Behavioral Risk Factor Surveillance System
- CDC: Centers for Disease Control and Prevention
- CMS: Centers for Medicare and Medicaid Services
- CSTE: Council of State and Territorial Epidemiologists
- DOB: Date of birth
- DIS: Disease Investigation Specialist
- DUA: Data Use Agreement
- eCR: Electronic case reporting
- ELR: Electronic laboratory reporting
- EMR: Electronic medical record
- HHS: United States Department of Health and Human Services
- HIV: Human immunodeficiency virus
- LGBTQI+: lesbian, gay, bisexual, transgender, queer, intersex, and more
- MOA: Memoranda of Agreement

- MOU: Memoranda of Understanding
- NCCDPHP: National Center for Chronic Disease Prevention and Health Promotion
- NCHHSTP: National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention
- OOJ: Out of jurisdiction
- PLWH: People living with HIV
- PrEP: Pre-exposure prophylaxis
- PWID: People who inject drugs
- SOGI: Sexual orientation and gender identity
- SSN: Social security number
- Stateno: State number
- STD: Sexually transmitted disease
- STI: Sexually transmitted infection
- STLT: State, Tribal, local, and territorial
- TB: Tuberculosis

Appendix B. Syndemic Position Descriptions

Listed below are position descriptions for syndemic-specific roles submitted by CSTE Syndemic Approaches Workgroup Members. Positions are categorized into entry- to mid-level positions, senior and manager level positions, and director level positions.

Entry- to Mid-Level Positions

Jurisdiction: Iowa Department of Health and Human Services

Position Title: Epidemiologist

Job Summary: Under supervision of the bureau chief and functional oversight of the Data and Epidemiology Program Manager, serves as a staff epidemiologist for the collection and analysis of data with the goal of identifying common populations, risks, and protective factors associated with HIV, STIs, and viral hepatitis. Works collaboratively with epidemiologists in the HIV, STI, and viral hepatitis programs to develop analytical approaches to identify social determinants of health and other inequities related to vulnerability of populations to HIV, STIs and viral hepatitis.

Routinely analyzes HIV, STI, viral hepatitis, and other population data using analytical tools and software, and prepares epidemiological reports based upon schedules and priorities determined by the Data and Epidemiology Program Manager and other bureau program managers. Helps to identify and prioritize populations for prevention and care interventions and urgent responses. Makes recommendations for additional analyses and reports. Presents updates to key staff and stakeholders. Reviews epidemiological, programmatic, and environmental data and reports from national, state, and local jurisdictions to understand and contextualize bureau data. Makes recommendations for use of additional datasets or analytical techniques Ensures consistency across all outbreak response plans, including the department's emergency response protocols. Serves as a member of, and actively participates in, outbreak detection and response teams in the bureau, including HIV and viral hepatitis cluster detection and outbreak response. Assists with data collection opportunities, develops consistent mechanisms to collect data across programs and populations, and suggests quality control methodologies. Works with epidemiology and other data-related staff in the bureau to ensure data systems are of high quality, and that data are timely and complete. Makes recommendations to improve quality and efficiency of data collection and reporting. Conducts analyses and follow up related to aberrant or anomalous HIV or STI laboratory results. Works with the Data and Epidemiology Program Manager on data-sharing opportunities to enable assessment of data needs and to synthesize identified data.

Collaborates with Health Equity team, Syndemic Work Advisory Group, and other internal and external stakeholders as a subject matter expert. Supports other staff in the bureau. Provides surge capacity and acts as a backup in times of extended vacancy of other epidemiology staff.

Essential Duties:

- Manages large electronic datasets;
- Ensures confidentiality of data by following precise protocols and procedures for handling confidential data, and trains other bureau staff on confidentiality of data;
- Conducts epidemiological surveillance, disease investigation, and case follow up for people reported with sexually transmitted infections, including HIV, viral hepatitis, syphilis, gonorrhea, and chlamydia;
- Recommends prevention and control measures based upon changes in trends, populations impacted, or geography;
- Provides epidemiological technical expertise to local public health, medical providers, Syndemic Work Advisory Group; Disease Intervention Specialists, laboratorians, the Community Planning Group, and others;
- Conducts analyses of epidemiological data using SAS and other software products;
- Communicates epidemiological findings through reports, epidemiological profiles and surveillance reports;
- Performs performance management and quality improvement projects to ensure accuracy of data through program evaluation, data quality assurance activities, and other procedures;
- Develops and delivers presentations to medical providers, community members, and laboratorians;
- Communicates with health care providers about medical information, the Iowa code and administrative rules, and reporting procedures;
- Tracks information and maintains a database on the delivery of STI partner services;
- Uses alternate databases to locate information on people who are out of care or living in other jurisdictions;
- Leads epidemiological investigations of cases, clusters, outbreaks, and cases of public health importance;
- Exchanges epidemiological information with state, federal, and local public health investigators and epidemiologists;
- Develops geographic information systems (GIS) maps;
- Travels to national meetings and conferences.

Minimum Qualifications:

- Graduation from an accredited college or university with a graduate degree in public health with at least two courses related to the principles and practice of epidemiology.
- All of the following (a and b):

- A) Graduation from an accredited college or university with a non-public health graduate degree with at least two courses related to the principles and practice of epidemiology; and
- B) Three years of experience in applied epidemiology in an infectious, noninfectious, or chronic diseases; environmental poisonings or conditions; injury prevention; or a substance misuse related epidemiology program.

Jurisdiction: New Hampshire Department of Health and Human Services

Position Title: Sexually Transmitted Infection (STI) Epidemiologist

Job Summary: The STI Epidemiologist conducts statewide surveillance activities within the STI/HIV/Viral Hepatitis Surveillance Program. Analyzes and interprets statewide data, policies, and procedures for use in identifying and monitoring trends. Makes recommendations for the planning and development of disease surveillance, prevention, and care program activities.

Essential Duties:

- Conducts and coordinates case, cluster or outbreak, and epidemiological investigations following approved protocols. Analyzes and interprets surveillance data using statistical software. Develops, reviews, and presents reports on infectious disease trends, investigations, and outbreaks, as well as program status and other reports, to inform Bureau of Infectious Disease Control decision-making.
- Serves as a resource for internal and external partners regarding current information regarding epidemiology and infectious diseases, specifically HIV and STI; disease reporting requirements and other policies and procedures; and ethical and legal issues related to epidemiologic data collection, dissemination, and use. Applies appropriate cultural, social, and/or political framework to interpret quantitative and qualitative data in context.
- Manages HIV/STI/Viral Hepatitis Surveillance Program data in a confidential and secure manner. Develops, implements, and evaluates procedures and methods for monitoring and improving surveillance data completeness and quality. Collaborates with federal and state partners as well as vendor staff to maintain and improve electronic disease surveillance databases.
- Initiates, develops, and presents reports and other materials to support the development and implementation of improved HIV/STI/Viral Hepatitis Surveillance Program objectives and activities in conjunction with state and federal government agencies and other partners. Prepares and analyzes statistical reports to ensure compliance with reporting and other requirements.
- Reviews, develops, modifies, and implements policies and procedures for STI/HIV/Viral Hepatitis Surveillance Program operations.
- Prepares competitive grant applications and progress reports for new and continuing federal grants. Provides statistical data and contributes to work plans, program narratives, and budget items for STI surveillance activities.
- Plans, implements, monitors, and reports on HIV/STI/Viral Hepatitis Surveillance Program activities. Develops and maintains protocols for program activities to ensure consistency and adherence to policies and procedures.
- Cooperates and collaborates with federal and state officials and agencies, healthcare providers, public and private laboratories, and other partners to ensure complete and

timely disease reporting, coordinate and implement surveillance projects, and meet regulations governing agency programs.

- Provides technical guidance to other professional staff and in support of Department approved internships. Provides and facilitates relevant education and support to clinical staff, the public, healthcare providers, Department staff, and others. Makes formal presentations to internal and external partners and stakeholders, and attends conferences, meetings, and trainings, as requested by supervisor.
- Ensures availability to support the Department as needed in the event of a public health emergency.

Minimum Qualifications:

Education: Master's degree from a recognized college or university with a major study in epidemiology, biostatistics, public health, or related health field. Each additional year of approved formal education may be substituted for one year required work experience.

Experience: Four years' professional experience in epidemiology, biostatistics, data analysis, or a public health-related field, with responsibilities in program research, planning, monitoring, and evaluation.

OR

Education: Bachelor's degree from a recognized college or university with a major study in epidemiology, biostatistics, public health, or related health field.

Experience: Five years' professional experience in epidemiology, biostatistics, data analysis, or a public health-related field, with responsibilities in program research, planning, monitoring, and evaluation. Each additional year of approved work experience may be substituted for one year of required formal education.

LICENSE/CERTIFICATION: Eligibility for New Hampshire driver's license and/or access to transportation for statewide travel required.

Jurisdiction: New Hampshire Department of Health and Human Services

Position Title: Viral Hepatitis Epidemiologist

Job Summary: The Viral Hepatitis Epidemiologist conducts statewide surveillance activities within the STI/HIV/Viral Hepatitis Surveillance Program. Analyzes and interprets statewide data, policies, and procedures for use in identifying and monitoring trends. Makes recommendations for the planning and development of disease surveillance, prevention, and care program activities.

Essential Duties:

- Conducts and coordinates case, cluster or outbreak, and epidemiological investigations following approved protocols. Analyzes and interprets surveillance data using statistical software. Develops, reviews, and presents reports on infectious disease trends, investigations, and outbreaks, as well as program status and other reports, to inform Bureau of Infectious Disease Control decision-making.
- Serves as a resource for internal and external partners regarding current information regarding epidemiology and infectious diseases, specifically Hepatitis A, Hepatitis B, and Hepatitis C virus infection; disease reporting requirements and other policies and procedures; and ethical and legal issues related to epidemiologic data collection, dissemination, and use. Applies appropriate cultural, social, and/or political framework to interpret quantitative and qualitative data in context.
- Manages HIV/STI/Viral Hepatitis Surveillance Program data in a confidential and secure manner. Develops, implements, and evaluates procedures and methods for monitoring and improving surveillance data completeness and quality. Collaborates with federal and state partners as well as vendor staff to maintain and improve electronic disease surveillance databases.
- Initiates, develops, and presents reports and other materials to support the development and implementation of improved HIV/STI/Viral Hepatitis Surveillance Program objectives and activities in conjunction with state and federal government agencies and other partners. Prepares and analyzes statistical reports to ensure compliance with reporting and other requirements.
- Reviews, develops, modifies, and implements policies and procedures for STI/HIV/Viral Hepatitis Surveillance Program operations.
- Prepares competitive grant applications and progress reports for new and continuing federal grants. Provides statistical data and contributes to work plans, program narratives, and budget items for viral hepatitis surveillance activities.
- Plans, implements, monitors, and reports on HIV/STI/Viral Hepatitis Surveillance Program activities. Develops and maintains protocols for program activities to ensure consistency and adherence to policies and procedures.
- Cooperates and collaborates with federal and state officials and agencies, healthcare providers, public and private laboratories, and other partners to ensure complete and

timely disease reporting, coordinate and implement surveillance projects, and meet regulations governing agency programs.

- Provides technical guidance to other professional staff and in support of Department approved internships. Provides and facilitates relevant education and support to clinical staff, the public, healthcare providers, Department staff, and others. Makes formal presentations to internal and external partners and stakeholders, and attends conferences, meetings, and trainings, as requested by supervisor.
- Ensures availability to support the Department as needed in the event of a public health emergency.

Minimum Qualifications:

Education: Master's degree from a recognized college or university with a major study in epidemiology, biostatistics, public health, or related health field. Each additional year of approved formal education may be substituted for one year required work experience.

Experience: Four years' professional experience in epidemiology, biostatistics, data analysis, or a public health-related field, with responsibilities in program research, planning, monitoring, and evaluation.

OR

Education: Bachelor's degree from a recognized college or university with a major study in epidemiology, biostatistics, public health, or related health field.

Experience: Five years' professional experience in epidemiology, biostatistics, data analysis, or a public health-related field, with responsibilities in program research, planning, monitoring, and evaluation. Each additional year of approved work experience may be substituted for one year of required formal education.

LICENSE/CERTIFICATION: Eligibility for New Hampshire driver's license and/or access to transportation for statewide travel required.

Jurisdiction: Washington State Department of Health

Position Title: Syndemic Screening & Testing Coordinator

Job Summary: As the Syndemic Screening & Testing Coordinator, you will be at the forefront of infectious disease prevention. In this role, you'll be the lead expert in HIV, STI, and viral hepatitis testing, guiding a statewide program that ensures equitable access to high-quality prevention services. Your work will be crucial in improving public health outcomes, collaborating with diverse communities, and working with partners to provide essential services, including testing, linkage to care, and retention in appropriate health care, social services, and treatment.

You'll manage a wide range of responsibilities, from developing state testing guidelines to overseeing quality assurance and providing training and technical assistance to testing partners. You'll also play a key role in training and supporting staff, ensuring compliance with federal and state requirements, and leading innovative efforts to enhance testing access across Washington. Your leadership will drive community-focused initiatives and strategic resource allocation, contributing to the overall mission of improving the health of Washington residents.

Essential Duties:

- Develop and implement testing guidance for HIV, STI, and viral hepatitis.
- Lead quality assurance efforts to improve testing capacity and performance.
- Develop and coordinate training sessions and capacity-building assistance.
- Provide technical assistance and updates to testing partners.
- Collaborate with diverse communities and external partners.
- Monitor testing programs for compliance with federal and state requirements.
- Request, review, and analyze data to monitor program outcomes.
- Strategically prioritize testing resources in collaboration with management.
- Implement innovative strategies to improve access to testing.
- Use consumer feedback to elevate community voices in testing activities.
- Manage contracts with test kit vendors and laboratories.
- Develop and maintain a list of testing sites statewide.
- Lead site visits and meetings to guide program development.
- Supervise and review staff work, providing performance appraisals and training.
- Serve as an expert on testing laws, policies, and administrative rules.
- Consult with healthcare systems on testing recommendations.
- Monitor and enhance routine testing, especially during pregnancy.
- Support new community test sites in developing testing programs.
- Respond to public inquiries about infection and testing.
- Contribute to progress reports and maintain documentation for guidelines and policies.

Minimum Qualifications:

- Management or consultative experience in a health service program, specifically with experience directly providing and coordinating infectious disease testing at a program/clinic site that includes testing services in a public health or community agency. **You must meet one of the following qualification options.**
    - **Option1:** 9+ years of experience
    - **Option 2:** Bachelor's degree in Public Health, Biology, Health Science Healthcare, Administration, or a related field AND 5+ years of experience
    - **Option 3:** Master's degree in Public Health, Biology, Health Science Healthcare, Administration, or a related field AND 3+ years of experience
- 3+ years of experience providing technical assistance in person, by phone or computer.
- 3+ years working within a culturally diverse environment.
- Experience managing multiple complex projects simultaneously.
- Demonstrated experience providing outreach and testing services for infectious diseases, particularly within communities disproportionately affected by HIV, STIs, and viral hepatitis (such as BIPOC communities, LGBTQ+ communities, individuals who use drugs, people engaged in sex work, and immigrant communities)
- Familiarity with Washington state laws and policies concerning infectious disease testing.
- Experience working in programs that serve communities using syndemic, bodily autonomy, harm reduction, and sex positivity frameworks in service provision.
- Experience communicating technical information effectively through both oral presentations and written materials to individuals and groups with varying levels of education and learning styles.
- Experience creating and using visual aids for education including using graphs, charts, and other visual media to deliver educational content.

Jurisdiction: Washington State Department of Health

Position Title: Health Disparities and Syndemic Epidemiologist

Job Summary: The Health Disparities and Syndemic Epidemiologist position contributes to the organization by providing epidemiological support in the pursuit of health equity across the domains of HIV, STI (including syphilis and gonorrhea), hepatitis C, and drug user health. The key contributions that this position makes to creating a safer and healthier Washington are (1) Advocating for and educating about the concept of equity in data across OID and with partners; (2) Proposing and conducting analyses to identify and characterize health disparities that intersect with the topics listed above; (3) Proactively and upon request, using data to guide and support OID programmatic activities to reduce health disparities and increase equity; (4) Providing input on health disparities reduction programs within the OID; and (5) Describing the overlap between the above conditions and their social determinants to help establish a syndemic framework for the office.

Essential Duties:

- Independently proposes epidemiologic investigations related to health disparities, syndemic overlap of infectious conditions, and community-focused social determinants of health.
- Conducts analysis, interprets data, and reports findings on surveillance and other sources of population-level information with a focus on health disparities and syndemic planning.
- Provides program evaluation, identifies areas of unmet need, and inform disparities reduction and syndemic planning for leadership and programs within OID
- Centers the concept of equity in data when proposing, coordinating, or leading epidemiologic studies; uses trauma-informed and equity-focused methods for epidemiologic study design.
- Identifies novel uses of existing data sources for characterization and analysis of health disparities topics including the combination and linkage of distinct sources of data
- Identifies existing data gaps and proposes, designs, and implements primary data collection to fill gaps using culturally responsive approaches. Primary data collection can include but is not limited to surveys and interviews of PLWH, medical providers, and service providers.
- Develops quality assurance and automation procedures for collecting and analyzing new sources of data using SAS, R and other software.

- Produces oral and graphical presentations of health disparities data for communication to community organizations, public agencies, providers, planning bodies, policy makers, and other constituent groups.
- Provides analytical and epidemiologic consultation to public health staff and stakeholders who use health equity and syndemic data.

- Includes advocacy, leadership, and education for the concept of equity in data in grant and research applications and OID program projects.
- Serves as subject matter expert in health disparities, data resources, and measurement tools for subject-specific OID epidemiologist and OID program staff.
- Identifies and leads efforts to apply for additional research or program opportunities through collaboration, research funding, or data access.
- Assist other Assessment Unit programs as needed.
- Attends meetings, community coalitions, taskforces, and planning sessions as needed.
- Support the agency's role as a First Responder in public health emergencies by obtaining role specific training and acting in that assigned role during training activities and actual events.

Minimum Qualifications:

EPI 2

Option 2: A Bachelor's degree in Epidemiology, Public Health, or a closely allied field **AND** four (4) or more years of experience working in a public health agency or similar setting.
Option 1: A Master's degree or higher in Epidemiology, Public Health, or a closely allied field; **AND** two (2)or more years of experience working in a public health agency or similar setting.

EPI 1 In-Training to EP2

Option 2: A Bachelor's degree in Epidemiology, Public Health, or a closely allied field **AND** three (3) years of related full-time experience in public health or an allied field.

Option 1: A Master's degree in Epidemiology, Public Health, or a closely allied field AND one (1) or more years of experience working in a public health agency or similar setting.

AND

- One (1) or more years of experience in the following:
  - Working and manipulating large datasets with SAS analytic software and programming language.
  - Analyzing complex statistical information to develop reports, recommendations, and presentations.
  - Proficiently convey complex technical or health-related information to diverse audiences through clear and articulate written and verbal communication.
  - Establishing and maintaining collaborative, productive working relationships, and maintaining open communication with co-workers and external partners.

A minimum intermediate level understanding and usage of Word, Excel, Outlook, PowerPoint, database software, web conferencing tools and technology

Senior and Manager Level Positions

Jurisdiction: Cook County Health & Hospital System

Position Title: Program Manager (Syndemic)

Job Summary: The Program Manager is responsible for case investigations, surveillance activities and outbreak investigations in the Communicable Disease (CD) Unit's Tuberculosis (TB) Program, Sexually Transmitted Infections/Diseases and (STI/HIV) Program, and hepatitis C program. They will provide direct supervision to epidemiology/health educator staff working within these programs. The Program Manager collaborates with Enhanced Surveillance and Informatics staff to produce periodic data reports and works closely with CD leadership team to develop and implement holistic infection prevention initiatives to reduce morbidity and mortality among persons at risk for TB, STI/HIV and hepatitis C. The Program Manager assists relevant program staff in meeting performance standards established internally and by the Illinois Department of Public Health. The Program Manager helps staff enforce rules and regulations pertaining to communicable disease control, providing information to healthcare professionals on reporting requirements and control measures for communicable diseases.

Essential Duties:

- Serves as the Program Manager for TB, STI/HIV, and hepatitis C (HCV) programs in the CD Unit
- Works with staff to direct investigations and follow-up activities involving tuberculosis cases, sexually transmitted infections, HIV cases and hepatitis cases
- Manages clusters and outbreak investigations for TB/STI/HIV/hepatitis C in cooperation with the Illinois Department of Public Health and/or other entities (e.g., Centers for Disease Control and Prevention) as necessary
- Oversees the collection, reporting, analysis and collaborates with CD leadership staff to generate periodic data reports
- Develops and monitors a central data repository for health indicator data specific to tuberculosis, sexually transmitted diseases, HIV/AIDS and hepatitis. Assures quality of agency service and health status data reports. When appropriate, presents area and community health data and analytical findings at local, state and national meetings
- Assists, as appropriate, in all CD-approved research projects including, but not limited to, tuberculosis, sexually transmitted diseases, HIV/AIDS and hepatitis C
- Assists CD leadership in the recruitment, training, supervision, and evaluation of all staff in the CD Unit, but especially those working in TB and STI/HIV programs
- Monitors case investigation and follow-up for communicable diseases to ensure that they are conducted in accordance with IDPH standards and procedures, including completeness, validity, and accuracy
- Develops, monitors, and implements productivity metrics and quality projects in collaboration with CD team

- Develops and maintains protocols and procedures
- Coordinates activities with staff from other service units, especially in relation to TB/STI/HIV/hepatitis C and community outreach, collaboration and education
- Makes recommendations to health care professionals concerning appropriate control and prevention strategies related to treatment of persons exposed to these various communicable diseases
- Available for "on-call" duties for communicable disease emergencies on evenings and weekends

Minimum Qualifications:

- Master's degree or higher in epidemiology or biostatistics from an accredited college
- Four (4) years professional experience in communicable disease prevention and control in tuberculosis, STI/HIV, hepatitis, or another communicable disease program with Two (2) years of direct supervisory experience
- Proficiency in Microsoft Office (Word, Excel, Access and PowerPoint)
- Proficiency in SAS, R, Python or other software/packages used in data science and/or for data analyses
- Position may require local travel for which the employee must possess a valid driver's license and insured vehicle or otherwise provide an acceptable and reliable means of transportation

Jurisdiction: New Hampshire Department of Health and Human Services

Position Title: HIV/STD/Viral Hepatitis Program Manager

Job Summary: Provides administrative and programmatic supervision to the Human Immunodeficiency Virus (HIV), Sexually Transmitted Diseases (STD), and Viral Hepatitis Program. Develops and implements surveillance projects, conducts epidemiological analyses on data sets, and provides epidemiologic oversight and support for data analysis and interpretation. Collaborates with infectious disease prevention and other programs to develop educational, prevention, and equity initiatives to reduce HIV, STD, and viral hepatitis infections in NH residents. Develops policies and procedures to improve the state's epidemiologic capacity for HIV, STD, and viral hepatitis surveillance. This position is eligible for routine and occasional telework.

Essential Duties:

- Supervises, trains, and provides programmatic oversight of surveillance staff within the various surveillance programs to ensure quality of work and that program objectives are on track.
- Evaluates existing program policies, procedures or systems in order to recommend effective changes to enhance capacity for investigation, control, and reporting of outbreaks or other public health threats.
- Develops, monitors and implements contracts and grants with agencies for the delivery of services for surveillance activities.
- Evaluates and helps develop program narratives and financial reports, including federal grant applications and reports. Regularly reviews the grant objectives and state plans to ensure goals are met.
- Collects information and works with partners to determine and prioritize program strategies for incorporation in the State HIV Plan or other plans (e.g., STD and viral hepatitis).
- Oversees surveillance systems and databases to track the occurrence of HIV, STD, and viral hepatitis in New Hampshire as required by law.
- Provides epidemiologic oversight and support for HIV,STD, and viral hepatitis data analysis, interpretation, report publications, and data requests. Initiates and conducts complex surveillance projects following independent judgment regarding the public health necessity for such information.
- Directs the development of quality assurance standards and criteria for public health programs. Reviews reports summarizing the epidemiology of HIV, STD, and viral hepatitis in the State to ensure accurate and consistent statistical information is disseminated to various audiences.
- Collaborates with state and local officials and stakeholders, including: the Public Health Laboratories, HIV/STD/Viral Hepatitis prevention programs, the Centers for

Disease Control and Prevention, State HIV planning group, private laboratories, medical providers, and others to ensure coordination of surveillance activities.

- Serves as a resource for current HIV/STD/Viral hepatitis data, recommendations, and guidelines, as well as ethical and legal issues related to epidemiologic data collection, dissemination, and use, while applying appropriate cultural/social/political framework. Makes formal presentations for HIV, STD, and viral hepatitis surveillance regulations, data and trends as requested.
- Attends conferences, meetings and trainings as requested by supervisor to interface with stakeholders, meet grant requirements, gain job training, or present information.

Minimum Qualifications:

Education: Bachelor's degree from an accredited institute of higher education with major study in health administration, public health, nursing, social or physical sciences, psychology, or other allied health field. Each additional year of approved formal education may be substituted for one year of required work experience.

Experience: Six years of experience in a public health or social service agency providing planning, consultation or direct services with at least two years in a supervisory capacity, one year of which shall be in a health related setting.

Jurisdiction: Tennessee Department of Health (TDH)

Position Title: Public Health Administrator 1 (PHA1)

Job Summary: This Public Health Administrator 1 position will serve as the Syndemic Coordination Director for the Syndemic Coordination Program within the HIV/STI/Viral Hepatitis section at the Tennessee Department of Health (TDH).

Essential Duties:

- Convene section leadership, facilitate, and identify opportunities to implement cross-cutting projects to address the HIV, STI, substance misuse, and viral hepatitis syndemic in Tennessee
- Provide leadership and oversight to the Syndemic Coordination Program and leverage grants and fellowship/internship opportunities to expand the capacity of the program
- Advance the implementation of the statewide syndemic strategic plan by seeking external funding opportunities and overseeing completion and submission of all grant applications, narratives, budgets, budget justifications, progress reports, continuing applications, carryover requests, and other required documents • Serve as a liaison between state partners and community-based partners implementing syndemic initiatives across Tennessee to facilitate coordination and collaboration
- Provide capacity building and technical assistance related to syndemic strategic planning and implementation
- Direct the Syringe Services Program (SSP) team and aid in the expansion of harm reductions services in Tennessee with an emphasis on rural counties and counties ranked highly vulnerable to an HIV and hepatitis C outbreak associated with injection drug use
- Foster a community-of-practice through maintaining and growing a statewide syndemic networking platform
- Oversee the implementation of Tennessee's first integrated HIV, sexually transmitted infection, and hepatitis C mail-based syndemic self-testing program
- Create and disseminate community education materials related to the syndemic

Minimum Qualifications:

At least 5years of experience working in either HIV, STI, substance misuse, or viral hepatitis prevention and treatment programming a Master's level degree in public health or related field

Jurisdiction: Washington State Department of Health

Position Title: Health Equity and Syndemics Section Manager

Job Summary: The Health Equity and Syndemics Section Manager position contributes to the organization by managing a multi-tiered section of epidemiologists and program staff working to support and expand the agency's priority fields of health equity across the syndemic domains of HIV, STI, viral hepatitis, and drug user health. The key contributions that this position makes to creating a safer and healthier Washington are as follows: (1) overseeing a team of supervisory and non-supervisory epidemiologists including the client services data team, drug user health team, and supplemental surveillance team; (2) serving as PI and overseeing the management of multiple CDC and NIH grants including MMP 5 NU62PS924606, NHBS 5 NU62PS924762-02-00, and NIH 1R21AI157618-01A1; (3) serving as technical expert to provide the highest level of expertise on using data to support OID programmatic activities to increase equity, local laws and departmental regulations regarding epidemiologic analysis and health equity, and institutional board review processes; and (4) identifying and establishing new funding and data sources and opportunities for collaboration to advance the goals of equity and disease prevention.

Essential Duties:

- Partners with and provide recommendations to AU management on the Section's future state and strategic direction.
- Establishes expectations for performance, products, and outcomes for health equity and syndemics staff.
- Promotes staff development by delivering timely performance appraisals.
- Addresses disciplinary issues, following all labor contract requirements and agency policies.
- Evaluates workloads and shifting priorities to ensure work is completed.
- Oversees plans for long term development of the syndemic and health equity program including the client services data systems and drug user health programs to inhabit a more central role in syndemic planning.
- Works with HIV, STD, hepatitis C surveillance and DUH leaders to ensure that health equity is represented in programmatic work.
- Develops and assigns epidemiologic projects related to health disparities, syndemic overlap of infectious conditions, and community-focused social determinants of health.
- Builds relationships and identifies opportunities for collaboration with external experts and program managers including faculty at the University of Washington, governmental partners, and community health organizations. Leads collaborations in the planning and execution of epidemiologic, assessment, and evaluation studies.
- Identifies existing data sources for characterization and analysis of health disparities topics including the combination and linkage of distinct sources of data.

- Identifies opportunities for collaboration between the client services program and assessment unit staff to improve public health programs funded by OID.
- Identifies existing data gaps and proposes, designs, and implements primary data collection to fill gaps using culturally responsive approaches. Primary data collection can include but is not limited to surveys and interviews of affected populations, medical providers, and service providers.
- Centers the concept of equity in data when proposing, coordinating, or leading epidemiologic studies. Ensures that unit research and evaluation activities adhere to trauma-informed and equity focused principles.
- Directs and performs analyses requiring a high level of technical proficiency; serves as subject matter expect on advanced epidemiologic methods.
- Is knowledgeable of laws and departmental rules and regulation and their relationship to health equity and syndemic disease control efforts. Supports office legislative efforts.
- Translates needs of office leadership into epidemiologic research with a focus on communicating and on both technical and non-technical levels.
- Oversees and develops oral and graphical presentations of health disparities data for communication to office staff, community organizations, public agencies, providers, planning bodies, policy makers, and other constituent groups.
- Identifies successful strategies, analytic methodologies, and areas of concern for statewide DOH programs and disparities reduction efforts. Plans program evaluation, identifies areas of unmet need, and inform disparities reduction and syndemic planning for leadership and programs within OID.
- Serves as expert on human subjects and IRB applications for office and external partnerships
- Oversees grant and research applications within OID program projects including partnering with fiscal staff to manage budgets, working with contract staff to develop data sharing agreements, and external partners to manage joint activities.
- Identifies and leads efforts to apply for additional research or program opportunities through collaboration, research funding, or data access.
- Serves as subject matter expert in health disparities, data resources, and measurement tools for subject-specific OID grant and research applications.
- Assists other Assessment Unit programs as needed.
- Supports the agency's role as a First Responder in public health emergencies by obtaining role specific training and acting in that assigned role during training activities and actual events.

Minimum Qualifications:

Option 1: A Doctoral degree in public health, health care administration, public or business administration, or allied field and five years of professional management or consultative experience in a health services or similar program.

OR

Option 2: A Masters' degree in public health, health care administration, public or business administration, or allied field and eight years of professional management or consultative experience in a health services or similar program.

AND

- Demonstrated experience applying laws and departmental rules and regulations to problems of disease control
- Demonstrated experience establishing and maintain cooperative working relationships with governmental, voluntary, and private organizations, and groups concerned with public health services
- Demonstrated experience communicating orally and in writing on both technical and non-technical levels
- Demonstrated experience in preparing grant proposals and budgets

Director Level Positions

Jurisdiction: Northwest Portland Area Indian Health Board

Position Title: Syndemic Support Director

Job Summary: This position will be part of a team that seeks to deliver quality and significant work directly to the communities we serve. Our work includes programing geared towards engaging with and listening to community and health facilities. Our programs listen to our communities and share wisdom from best practices from across Indian Country and external experts. This position will require a combination of attention to detail and thinking strategically; of ensuring quality of existing programs and looking for innovative ways to improve the needs of the community and healthcare.

The Syndemic Support Director will be responsible for managing, planning, implementing, and evaluating HIV/STI/hepatitis C programs at NPAIHB. This position intersects with and provides guidance to the NPAIHB's overarching National Center for Clinical Support and Preventive Health Program and is also responsible for developing policy and recommendations and providing support for related program activities.

This Syndemic Support Director will provide supervision of designated staff within the National Center for Clinical Support and Preventive Health Program.
The Syndemic Support Director ensures compliance with all State, Federal, and other regulatory agency requirements and will shape the overall clinical programs portfolio.
This scope of work is housed within the National Center for Clinical Support and Preventive Health Program of the Northwest Portland Area Indian Health Board (NPAIHB) and reports directly to the Director of National Cener for Clinical Support and Preventive Health Services.
Activities must be accomplished with minimal day-to-day supervision.

Essential Duties:

- Provides general clinical programs management and direction
- Facilitates delivery of all programs listed below. This would include specific training and experience in:
    - strategic planning and implementation
    - statistical analysis and research design
- Executes continuous learning for program development and project improvement
- Develop and pursue grant opportunities (as needed)
- Facilitates and enhances day-to-day operating relations with colleagues, community partners, advisory groups and other stakeholders
- Assists local and national partners toward expansion and support of HIV/STI/hepatitis C programs

- Provides supervision of assigned staff

Minimum Qualifications:

Minimum Qualifications/Transferable Skills:

- Master's in Public Health, Epidemiology or equivalent
- At least five (5) years of professional experience in Public Health
- At least three (3) years of professional experience in Indian Country. Experience with NW tribes is preferred.
- Knowledge and familiarity with IHS, Tribal and urban Indian Health Facilities
- Experience in Program Management
- Knowledge of HIV, STI and hepatitis C in AI/AN people and existing programming
- Ability to assess and build programs in a culturally-competent manner

Jurisdiction: Tennessee Department of Health (TDH)

Position Title: Public Health Program Director 2

Job Summary: This Public Health Program Director 2 position will serve as the Syndemic Screening and Testing Coordinator in the HIV/STI/Viral Hepatitis section at TDH.

Essential Duties:

- Convene section leadership to identify data elements required for reporting screening and testing results.
- Ensure patients with positive screening and testing results have appropriate linkage to care, treatment, and partner services.
- Collaborate with TDH and Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) partners to identify a validated rapid substance misuse screening assessment.
- Create an integrated HIV, STI, and viral hepatitis vulnerability screening tool that captures all required data elements required for reporting and includes the validated rapid substance misuse screening assessment.
- Develop a status neutral algorithm detailing appropriate recommendations for testing, prevention, and care linkage to pair with the integrated HIV, STI, and viral hepatitis vulnerability screening tool.
- Work with HIV, STI, and viral hepatitis programs to identify a partner agency to provide self-testing kits for HIV, STIs, and viral hepatitis.
- Work with the identified partner agency to develop a custom landing page for self testing kit ordering that aligns with the integrated HIV, STI, and viral hepatitis vulnerability screening tool to determine eligibility.
- Oversee, monitor, and evaluate the syndemic at-home testing program.
- Create client-facing campaigns, social media toolkits, and infographics about the syndemic at-home testing program and current testing recommendations.
- Increase provider awareness of HIV, STIs, and viral hepatitis testing recommendations and best practices.
- Increase community and provider awareness of Expedited Partner Therapy (EPT) as a STI prevention and treatment tool.
- Support the implementation of EPT services prioritizing local health departments and external agencies in counties with the highest rates of new STI diagnoses.
- Support the implementation of post exposure prophylaxis for the prevention of STIs in alignment with best practices and federal guidance.
- Participate in committees and meetings related to screening and testing across syndemic conditions.

- Participate in meetings with End the Syndemic Tennessee partners across TDH and TDMHSAS to increase collaboration and communication.

Minimum Qualifications:

- **Education and Experience:** Graduation from an accredited college or university with a bachelor's degree and experience equivalent to substantial (five or more years of) full-time increasingly responsible professional health program work including, at least, two years of full-time supervisory work or statewide program oversite.
- **Substitution of Education for Experience:** Additional graduate coursework in a business or health related field may be substituted, on a year-for-year basis, for one year of the required nonsupervisory experience.
- **Substitution of Experience for Education:** Additional qualifying professional experience may be substituted for the required education, on a year-for-year basis, to a maximum of four years.

Appendix C. Syndemic Data Disclaimer Examples

Listed below are data disclaimers accompanying syndemic data and/or addressing health equity submitted by CSTE Syndemic Approaches Workgroup Members.

1. "Racial inequities in STI rates can be attributed to long-term structural racism, not biological or personal traits. The disproportionate burden of GC and P&S syphilis among females who are Black or Latino in NYC reflects the impact of structural racism, which prevents communities of color from accessing vital resources and opportunities, and negatively affects overall health and well-being. Read more about health equity from the NYC Department of Health and Mental Hygiene (DOHMH) and CDC."

   New York City Department of Health and Mental Health Hygiene. 2022 Health Alert #3. "Increases in gonorrhea and syphilis among females in New York City"

2. "The interrelated socioeconomic factors of race and geography continue to contribute to pronounced disparities in the incidence of sexually transmitted infections (STIs) in St. Louis County. Rates of chlamydia, gonorrhea, and early syphilis are much higher – often by an order of magnitude – among St. Louis County's Black population and people living in the Inner North region of the County, than among White residents and residents of West County. These disparities likely reflect differences in access to sexual health care and in sexual network characteristics rather than differences in sexual behavior. In communities where STIs are more prevalent, each sexual encounter carries a higher probability of encountering an infected partner than in communities with a lower prevalence of STIs."

   St. Louis County Public Health. Sexually Transmitted Infections Monthly Surveillance Report July 2024.

3. “The charts on this page display mpox case counts and rates among different demographic groups in Oregon. You will see that some demographic groups are experiencing a greater burden of illness relative to others, but it is important to understand that higher incidence of mpox is not caused by race, ethnicity, gender, sexual orientation, language or disability.”

   Oregon Health Authority. Oregon's Monkeypox (Mpox) Data Dashboard. Oregon's Mpox (Monkeypox) Case Demographics.

Appendix D. Data Sharing Agreement Outline and Examples

The following data sharing agreements outline and examples have been adapted for the use of the CSTE HIV Syndemic Approaches Toolkit.

Outline for a Data Sharing Agreement

The following is an outline for a DSA.[15,16,17] Consult with legal teams, your Overall Responsible Part (ORP), and others to identify local laws, policies, and regulations you need to consider and include in all DSAs.

- Introduction: include a brief explanation for the purpose of the document
- Parties:
    - Identify all parties involved in the DSA
    - Include information (names, titles, programs, and contact information) for persons requesting data and program responsible for data
    - Explain each party's role in data sharing
- Communications: Contact information for involved parties and when and who to contact for dispute resolution
- Definitions: Include definitions for key terms used throughout the agreement
- Purpose: Defines purpose and project scope for the DSA
- Data to be provided:
    - Information on data elements, frequency, format, and method of exchange
    - Specify any data use limitations
- Privacy and security requirements:
    - Information on how data will be stored, and in what format over the course of the agreement
    - Requester assurances to meet data security and confidentiality requirements. Consider using a checklist with statements to document adherence
    - Describe any required certifications or training
    - If applicable, outline data breach notification procedures

[16] Milam S. Improving Data Sharing for Tribal Health: What Public Health Departments Need to Understand About HIPAA Data Privacy Requirements. Network for Public Health Law. Accessed February 13, 2023. https://www.networkforphl.org/news-insights/improving-data-sharing-for-tribal-health-what-public-health-departments-need-to-understand-about-hipaa-data-privacy-requirements/

[17] Health Care Systems Research Network. DUA Toolkit A Guide to Data Use Agreements.

    - If applicable, explanation of any penalties for noncompliance with the agreement
- Period of agreement: Include the proposed time frame of the agreement, whether ongoing or a termination data
- Termination:
    - Explain the procedures for termination or modification of the agreement
    - If applicable, include the date of termination
    - Identify parties responsible for initiating termination or modification
- Signatures: Signed and dated agreements should be sent to all parties for record keeping
- Appendices: list of any relevant supporting documents, data sharing protocols, and confidentiality agreements

The full data sharing agreement template from the Northwest Portland Area Indian Health Board can be downloaded here.

Note: This template was developed by the Northwest Portland Area Indian Health Board for use in data sharing partnerships with Tribes and other Native-serving entities. We **strongly recommend** obtaining legal review from your legal counsel before utilizing this template. If you need assistance with legal review, consider reaching out to one of these **Tribal legal supports**.

DATA SHARING AGREEMENT
between
[DATA PROVIDER]
and
[DATA RECEIVER]

I. ENTITIES RECEIVING AND PROVIDING DATA

ENTITY RECEIVING DATA:
OFFICE:
CONTACT PERSON:
TITLE:
ADDRESS:

PHONE NUMBER:
EMAIL:
FAX NUMBER:

ENTITY PROVIDING DATA:
OFFICE:
CONTACT PERSON:
TITLE:
ADDRESS:

PHONE NUMBER:
EMAIL:
FAX NUMBER:

II. PURPOSE, AUTHORITY AND TERM OF AGREEMENT

A. PURPOSE

To assist the [DATA PROVIDER] with [insert purpose, e.g., identifying community needs and establishing baseline data for priority health issues] in the [TRIBE/COMMUNITY], the [DATA RECEIVER] and [DATA PROVIDER] are entering into an agreement that will allow the exchange of data and clarification of data access and utilization.

B. LEGAL AUTHORITY

The full data sharing agreement template from the New Hampshire Department of Health and Human services can be found here,

DATA SHARING AGREEMENT BETWEEN
STATE OF NEW HAMPSHIRE DEPARTMENT OF HEALTH AND HUMAN SERVICES
AND
[NAME OF ENTITY WITH WHOM DHHS IS SHARING INFORMATION]
FOR
DATA SHARING AGREEMENT No. 202_-XXX

I. PURPOSE AND LEGAL AUTHORITY

A. Purpose

This Data Sharing Agreement (DSA), all definitions, exhibits, and attachments the (Agreement) establish the terms, conditions, safeguards, and procedures under which the State of New Hampshire Department of Health and Human Services, **[Program Area]** (DHHS), agrees to share [See Guidance in comments.] with **[Name of Requestor]** and acronym (**Acronym or Entity**), (Collectively, the "Parties").

Use of the DHHS data shared with ENTITY under this Agreement is limited to the following: [See Guidance in comments.]

B. Legal Authority

This Agreement supports the responsibilities of the Parties and is permissible pursuant to NH RSA _____, NH Administrative Rule He-_ _____, and the Privacy and Security Rules of the Health Information Portability and Accountability Act (HIPAA), 45 CFR 160, and 162, 164, and _____. [See Guidance in comments] This Agreement is established to ensure compliance with all applicable state and federal confidentiality and privacy laws and regulations.

II. DESCRIPTION OF CONFIDENTIAL DATA TO BE DISCLOSED TO ENTITY

ENTITY agrees the CONFIDENTIAL Data provided by DHHS listed below shall be restricted to the following use: [See Guidance in comments.]

A. Source or Systems of Records

DHHS shall provide Data from the following systems of records: [See Guidance in comments.]

B. Number of Records Involved and Operational Time Factors: [See Guidance in comments.]

C. Data Elements Involved

Appendix E. Syndemic Report and Data Dashboard Examples

Listed below are data dashboards accompanying syndemic data and/or addressing health equity submitted by CSTE Syndemic Approaches Workgroup Members.

Syndemic and Health Equity Reports

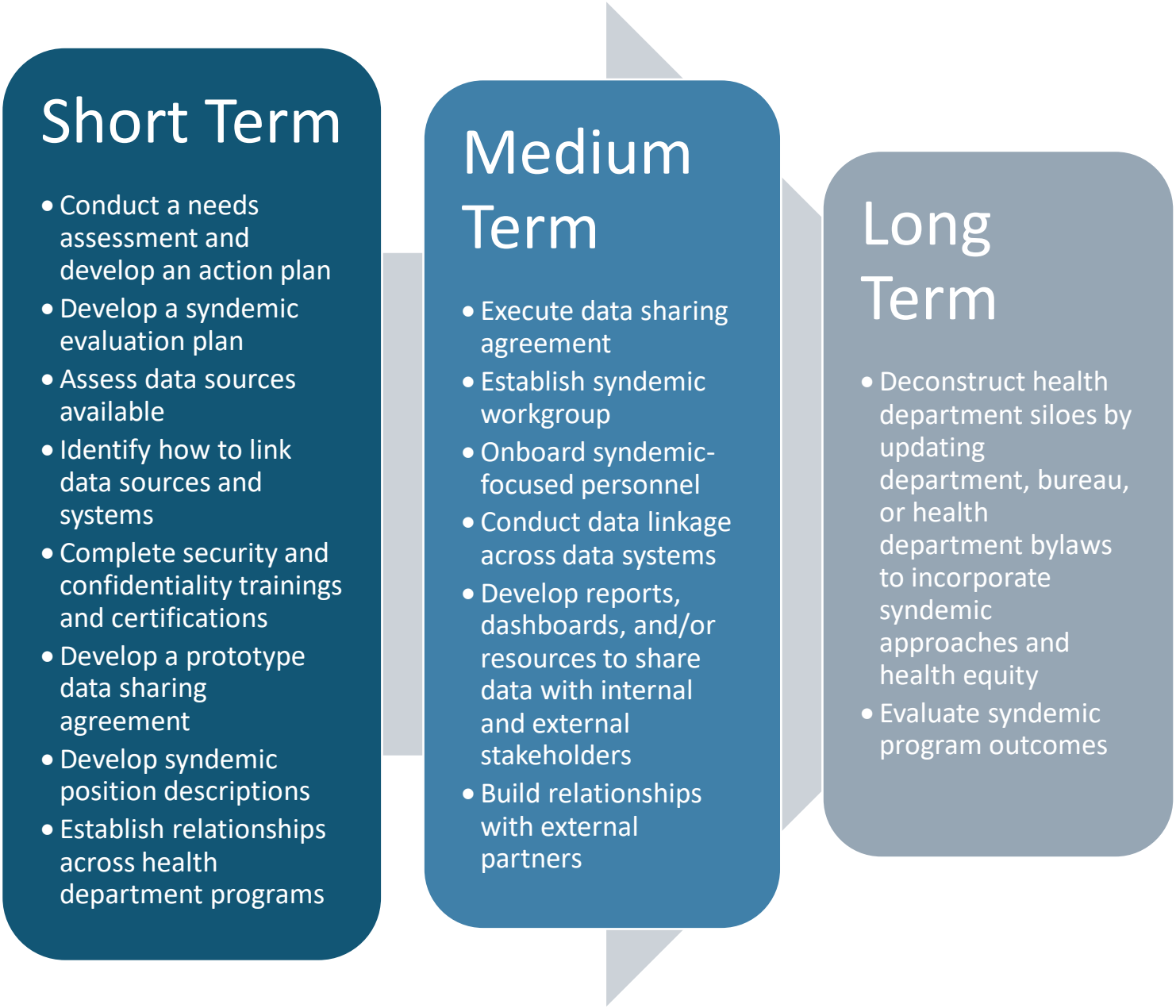
- California Department of Public Health: Ending the Epidemics: Addressing HIV, Hepatitis C, and STIs in California – Integrated Statewide Strategic Plan, 2022-2026
- Fairfax County Health Department: Calendar Year 2024 Equity Impact Plan
- New York City Department of Health and Mental Hygiene: HIV and viral hepatitis co-infection in New York City, 2000–2010: prevalence and case characteristics
- Northwest Portland Area Indian Health Board: Extension for Community Healthcare Outcomes (ECHO) - The Indigenous HIV/AIDS Syndemic Strategy: Weaving Together the National HIV, STI, and Viral Hepatitis Plans
- Oregon Health Authority: HIV, STD, and TB State and County-Level Data
- St. Louis County Department of Public Health: Health Data and Reports
- Tennessee Department of Health: Syndemic Needs Assessment Consumer Report, 2022
- Philadelphia Health of the City: https://www.phila.gov/documents/health-of-the-city/
- Philadelphia Plan for Health & Racial Equity: https://www.phila.gov/documents/plan-for-health-and-racial-equity-2022-2026/

Syndemic and Health Equity Data Dashboards

- Oregon Health Authority: HIV, STD, and TB State and County-Level Data
- New York State Department of Health: New York State Community Health Indicator Reports (CHIRS) Dashboard
- Tennessee Department of Health: County-Level Vulnerability to HIV and Hepatitis C Outbreaks Due to Injection Drug Use – Tennessee, 2021 Update
- New York State Department of Health: https://a816-health.nyc.gov/hdi/epiquery/

Appendix F. Implementing Syndemic Approaches Roadmap

In addition to the content in the toolkit, this roadmap may be used to guide implementation of syndemic approaches in STLT public health agencies.



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