



Arizona Smokers' Helpline

# DEVELOPING TAILORED CESSATION SERVICES FOR SMOKERS WITH MENTAL HEALTH CONDITIONS

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Improving the Health of Arizonans



MEL AND ENID  
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# OUTLINE

- Introduction
- PART 1:
  - ✓ Co-morbid conditions and smoking outcomes
  - ✓ Results and Discussion
- PART 2:
  - ✓ Multi-level approaches to smoking behavior change
  - ✓ AAR trainings for mental health providers
  - ✓ Development of specialized training and service protocols for coaches
  - ✓ Next steps for ASHLine

# Arizona Smokers' Helpline

## Mission

*Breathing vitality in to the lives of Arizonans:  
Inquiry. Innovation. Inspiration.*

## Vision

An Arizona where everyone achieves  
a healthy lifestyle

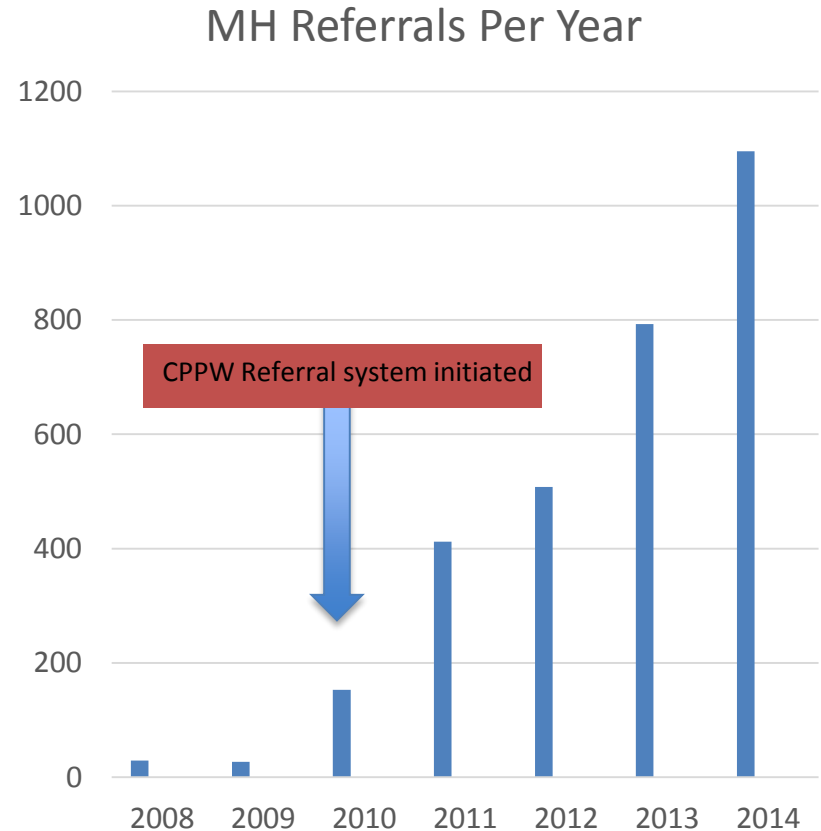
# Smoking and Mental Health: Arizona Experience



- 19% of Arizonans have a mental illness
- 37% of ASHLine clients self-report a mental health diagnosis
- Tracking of mental health diagnosis within state mental health provider networks is not uniform
- Historical data on quit rates in this high-risk population suggests the need for tailored approaches

# Early Efforts

- Communities Putting Prevention to Work (CPPW)
  - Partnered with the regional mental health service providers (RBHA)
  - Integrated systems change within the mental health (MH) care system to increase access to services
- Pfizer project
  - Through qualitative research we developed client educational materials to address key barriers to tobacco cessation





# Mental Health Materials

## Mental Health and Quitting Tobacco



Quitting tobacco is a challenge for most people. Those coping with a mental health condition may find it even more challenging. If you have a mental health condition, such as depression, anxiety, or bipolar disorder, we offer the following information and tips to help you be successful in quitting tobacco:

### TOBACCO AND MEDICATIONS

Tobacco contains more than 7,000 known chemicals including nicotine. Many of these chemicals can have a toxic effect on both your physical and mental health. The chemicals in tobacco may also change how your medications work. It is important to talk with your healthcare provider about these issues as you progress toward a successful quit. *TO HELP YOU HAVE A DISCUSSION WITH YOUR HEALTH TREATMENT TEAM, ASHLINE PROVIDES TWO CHECKLISTS OF QUESTIONS TO TAKE TO YOUR APPOINTMENTS.*

### NICOTINE WITHDRAWAL AND MENTAL HEALTH SYMPTOMS

Nicotine is addictive and when you quit tobacco you may experience some withdrawal symptoms. The symptoms may include: nicotine cravings, irritability, increase in anxiety or depression, fatigue, and increase in appetite. The use of quit tobacco aids, such as nicotine patches, gum, lozenges, inhaler, nasal spray, or prescription medications, may help lessen the effects of nicotine withdrawal symptoms. It is important that you monitor your mental health symptoms during the quit process as symptoms may be related to nicotine withdrawal. Contact your healthcare provider if you experience an increase in symptoms.

### COPING TOOLS

Everyone copes with stress and mental health symptoms differently. Finding healthy ways of coping is important when quitting tobacco. Healthy coping tools may include: deep breathing exercises, progressive muscle relaxation, medication, prayer, exercise, a healthy diet, and/or support from group programs. Your treatment team can assist you in developing new strategies and skills for symptom control and stress management.

Although nicotine withdrawal symptoms may contribute to certain psychological challenges, remember that the symptoms are temporary and the benefits of quitting tobacco far outweigh the costs of continued use.



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## Effects of Smoking on Mental Health Medications

### Smoking and Mental Health Medications

Smoking can affect how well some medications work. This includes mental health medications. There are different ways that smoking can affect some medications. Your body is not just affected by the nicotine in tobacco, but also by other chemicals in cigarettes. As a result, Nicotine Replacement Therapies (NRTs) may not reduce the effect of quitting smoking on your medications.

### Smoking Affects Some Enzymes

For some medications, smoking affects enzymes in the body causing them to breakdown the medications faster. In that case, you will have to take a higher dose of the medication to obtain the benefits. Later, when you quit smoking, the enzymes may take longer to work or may not work well. Your medication dose may now be too high and may cause side effects. Side effects may include increased sleepiness, dizziness, and restlessness. As a result, your doctor may want to adjust your medication dose.

### Discuss Concerns with a Pharmacist or Other Healthcare Provider

The effects of smoking on mental health medications vary by individual, type of medication, and pattern of tobacco use. You should discuss this issue with a pharmacist or another healthcare provider before you quit. You should never stop taking your medications without the assistance of a healthcare professional.

### Take Checklists to Appointments with Healthcare Provider

The Arizona Smokers' Helpline provides checklists of topics to discuss with your healthcare provider. One checklist has questions about how quitting may affect your mental health medications. The other has questions about how to use Nicotine Replacement Therapies (NRTs) to quit tobacco. Take the checklists to your next appointment and use them to develop a quit plan with your healthcare provider.



Quitting tobacco may affect how your medications work. How can you work with your healthcare team to quit tobacco and maintain good mental health?



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# What Can Be Learned: ASHLine Data

- High demand for tailored cessation services
- Effective referral partnerships can be formed
- Quit Rates for MH clients are lower than clients not reporting mental health issues
- Needs:
  - Evaluation of tailored protocols
  - Better understand the role of co-morbidity in relation to enrollment and quit rates

# Smoking & Co-Morbid Conditions

- Smokers have high rates of physical and/or mental health conditions
- Contributes to disproportionate rate of death and disease

## *Definition of Terms*

Chronic (physical) health condition: Asthma, Respiratory illnesses (COPD), Diabetes, Cardiovascular diseases, Hypertension

Mental health condition: Anxiety, depression, bipolar disorder, SMI, alcohol/drug use

Co-morbid Condition: Co-occurring chronic health and mental health condition



# Smoking Rates by Mental Health Status

Schizophrenia	62-90%
Bipolar Mood Disorder	51-70%
Substance Abuse	49-98%
Post-Traumatic Stress Disorder	45-60%
Attention Deficit/Hyperactivity Disorder	38-42%
Major Depression	36-80%
Alcohol Abuse	34-93%
Anxiety Disorders	32-60%

***\*Compared to 18.1% of adults in the general population***

# Smoking and Mental Health

- Smokers with co-occurring mental health are historically underserved
- Smokers with mental health conditions (MHCs):
  - Are more likely to have chronic health conditions
  - Have reduced/lack of access to cessation services
  - Are more likely to be targeted by tobacco companies
  - Are less likely to be referred to cessation services by their providers (mental health)

# Co-morbidity: A Barrier to Quitting

- Smoking is multi-determined disorder
- Evidence-based cessation strategies yield low-to-moderate quit rates
- Having a co-morbid health condition is a barrier to quitting
- Little is known if quit rates vary by chronic and/or mental health conditions, especially within a quitline setting.

**Purpose:** To examine quit rates among the Arizona Smokers Helpline (ASHLine) callers reporting a chronic health (CH) and/or mental health (MH) vs. no co-morbid condition.

# Hypotheses

- Hypothesis 1:  
Smokers with a chronic condition (CHC) will have significantly lower quit rates compared to smokers with no CHC
- Hypothesis 2:  
Smokers with mental health condition (MHC) will have significantly lower quit rates compared to smokers without a MHC
- Hypothesis 3:  
Smokers reporting a co-morbid condition (CHC+MHC) will have the lowest quit rates compared to other sub groups of smokers

# Variables of Interest

Dependent Variable: Quit status at 7M follow-up (Yes/No)

Co-morbid condition:

Chronic health condition (CHC only): asthma, COPD, diabetes, heart disease, hypertension, or cancer.

Mental health condition (MHC): In tx for anxiety, depression, bipolar disorder, schizophrenia, alcohol/drug use Co-morbid Condition (CHC+MHC): At least 1 chronic health and a mental health condition

No Co-morbid condition (NC): No CHC and/or MHC

# Controlling Variables

## Demographic:

Age, Gender, Education, Insurance, Ethnicity

## Mode of Entry:

Referred by provider vs. proactive callers

## Smoking-related:

Nicotine Dependence, Medication/NRT use

## Psychosocial factors:

Social support for quitting



# Analysis Plan

- Direct entry logistic regression
- Analysis of variance and chi squares to analyze group differences
- Final model was tested for multicollinearity (Pearson coefficients; cut off of .30)
- Data analyzed using SAS 9.4.

# Sample Characteristics

- 30% self-reported at least one CHC; 37% had a MHC.
- 64% of clients with MHC reported a CHC.
- 74% White; 71% non-Hispanic
- 57% female
- 48% uninsured/Medicaid: low-income, underserved
- Mean cigs/day = 17.5 (sd=11.4)
- Mean coaching sessions = 5.1 (sd=5.6)

# Smoking Outcomes

- Responder rate used to calculate quit rates (N= 18,197)
- Overall 7M quit rates: 36%

Health Condition	7 M Quit rates
Chronic Health Condition	39%
Mental health Condition	33%
Co-morbid Condition	29%
No Chronic or Mental Health Condition	40%

# Results

- CHC vs. no CHC hypothesis supported

Smokers with at least 1 chronic health condition had a 17% reduced odds of being quit at 7M

- MHC vs. no MHC hypothesis supported

Smokers with mental health condition had a 26% reduced odds of being quit compared to those without MHC

# Results (continued)

## Hypothesis 3: Quit rates by comorbid conditions

VARIABLES	ODDS RATIO
<b>PREDICTOR VARIABLES (HEALTH CONDITION STATUS)</b>	
None (no chronic or mental health condition)	Referent
Chronic Condition only	0.90 (0.82, 1.00)
Mental health condition only	0.81 (0.71, 0.92)
Co-morbid condition (Chronic + Mental health Condition)	0.65 (0.59, 0.72)
<b>CONTROLLING VARIABLES</b>	
Age	1.00 (1.00, 1.01)
Fagerstrom Dependence	0.68 (0.63, 0.73)
Social Support	1.19 (1.09, 1.31)
Quit Meds Used	1.36 (1.26, 1.47)
Referral	0.80 (0.73, 0.88)
Insurance	1.05 (0.99, 1.11)
Education	1.00 (0.93, 1.09)
Ethnicity	1.07 (0.97, 1.18)
Gender	1.08 (1.00, 1.17)

# Discussion

- Associations between chronic health condition and quit rates were not significant after controlling for mental health status
- Smokers with comorbid conditions had the lowest quit rates
- Smokers with MHCs were less likely to be referred but more likely to proactively call services... need for specialized provider-level training to increase referrals
- Smokers with MHCs could benefit from tailored cessation services
  - These services need to be tested within a quitline setting



# Using Multi-Level Approaches for Smoking Behavior Change

- Most smoking cessation interventions in quit lines focus on a single level of analysis (Anderson, 1998)
  - Focus is largely on individual factors (e.g., self-efficacy, motivation)
- Smoking is multi-determined and may require interventions targeted at different levels (e.g., community, provider, social, individual)
- Multi-level strategies are examined in research settings, but unexplored in a quitline setting

# Need for a Multi-Level Approach

ASHLine is currently implementing a two-pronged approach for increasing treatment access and services for mental health populations in AZ:

- a. Provider-level training in brief interventions (AAR) for smoking cessation in mental health clinics
- b. Training quitline coaches in specialized protocols that focus on tobacco cessation among behavioral health populations

# ‘AAR’ Training in Mental Health Clinics

- ASHLine’s community development team works with 35 mental health organizations in AZ (257 locations).
- In FY2015, sites referred 1457 clients
- 26% enrollment rate
- Brief intervention includes training providers on “ASK”, “ADVISE”, “REFER”

# ASHLine's Recommended Model

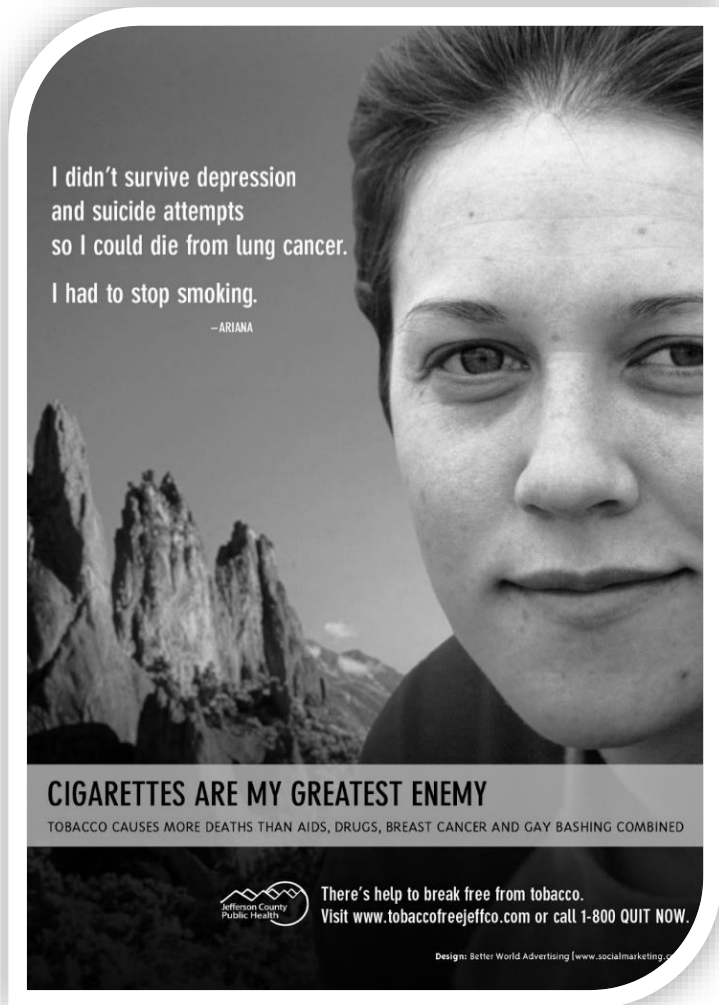


**Follow 3 simple steps:**

**Ask,  
Advise,  
Refer**

***We'll do the rest!***

# Quitting Tobacco is Possible for EVERYONE



- Tobacco users with behavioral health conditions **CAN** and **DO** quit successfully
- Without evidence-based support, most will slip or relapse
- Behavioral health providers can play a significant role in helping people quit!

# ASK

## STRENGTH OF EVIDENCE: A

US PHS Clinical Practice Guideline: *Treating Tobacco Use and Dependence: 2008 Update*

- **Identify and document the tobacco use status of every patient at every visit**
- Significantly increases rates of clinician Tx and patient cessation





# Advise

## STRENGTH OF EVIDENCE: A

US PHS Clinical Practice Guideline: *Treating Tobacco Use and Dependence: 2008 Update*

- In a clear, strong, and personalized manner, urge every tobacco user to quit
- Capitalize on “teachable moments” with patients



# Refer

**STRENGTH OF EVIDENCE: A**

US PHS Clinical Practice Guideline: *Treating Tobacco Use and Dependence: 2008 Update*

- **Proactive telephone counseling, group counseling, and individual counseling formats are effective and should be used in smoking cessation interventions**



# 'AAR' Training in Mental Health Clinics

- Case workers are primary targets of intervention
- 35% of mental health providers are smokers
- Focus on the '*ADVISE*' to:
  - Integrate 'advice' at multiple points of contact (not only at the time of intake)
  - Integrate 'advice' when discussing coping skills training, dealing with life transitions
  - Health education that includes dispelling myths on using smoking to maintain sobriety

# Improving ASHLine's Clinical Services

- Protocols to train coaches on cessation services tailored for smokers with MHCs are currently being implemented
- Smokers who self-report a MHC or are referred from mental health settings are directed to coaches trained on specialized protocols
- Combination of evidence-based CBT and motivational interviewing skills

# Training Protocols for Coaches

- Coaches demonstrate competencies on types of mental health/addictions and identify and problem-solve unique barriers to behavior change for smokers with MHCs
- Coach training involves:
  - Provide didactics/information on
    - Prevalence rates of smoking rates and MHCs
    - Unique challenges that MH populations face
    - Interplay between MH medication and nicotine use
    - Importance of social support and enhanced coping skills training
  - Conduct role plays/case studies
  - Making appropriate referrals as needed and handling emergency situations

# Improving ASHLine's Clinical Services

## Specialized coaching topics:

- Awareness of relationship between smoking and mental health issues (e.g., bio-psycho-social inter-relationships)
- Educating clients on myths related smoking cessation (e.g., cessation will impair sobriety)
- Extending urge coping skills training to manage mood and anxiety (stimulus and urge control strategies)
- Determining current level of functioning at each session ...
  - Sample opening questions
    - ‘How stable are your mental health systems currently?’
    - How is your mental health treatment going
- Exploring past experiences with quit attempts in relation to change in mental health symptoms



# Handouts and Mailings

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# Next Steps For ASHLine

- Use an integrated multi-level approach to track clients referrals from mental health clinics that receive specialized services.
- Evaluate specialized counseling protocols
- Determine influence of an integrated multi-level strategy on
  - service utilization
  - readiness to quit
  - quit outcomes
  - relapse

# Acknowledgements

## **ASHLine Community Development Team:**

- Ryan Reikowsky (Manager, Community Development Team)
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**Courtney Ward, MPA** (*Chief, Office of Tobacco Prevention and Cessation Programs*)

# Questions?

## Contact Information

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