









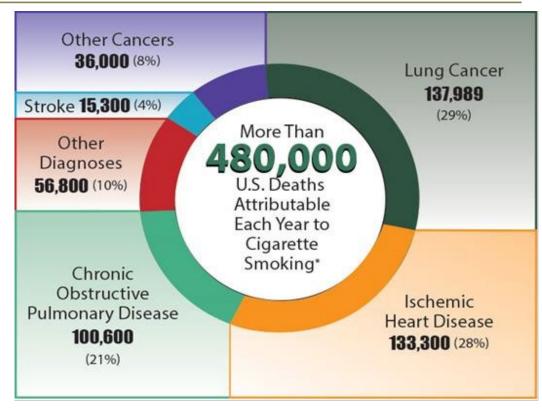
# **Addressing Tobacco Use Among People WITH OPIOID** use disorders





# Hazards of Smoking

- About 90% of those with opioid use disorders are tobacco users
- Smoking is the leading preventable cause of death and disability in the United States
  - Smoking causes more than 480,000 deaths each year
  - About 1 in 5 deaths is related to smoking



Source: The Health Consequences of Smoking—50 Years of Progress:

A Report of the Surgeon General, 2014

John et al., DAD, 2019.











# Hazards of Smoking

# Smoking increases risk for:

- Cancer
- Heart disease
- Stroke
- COPD
- Reduced fertility

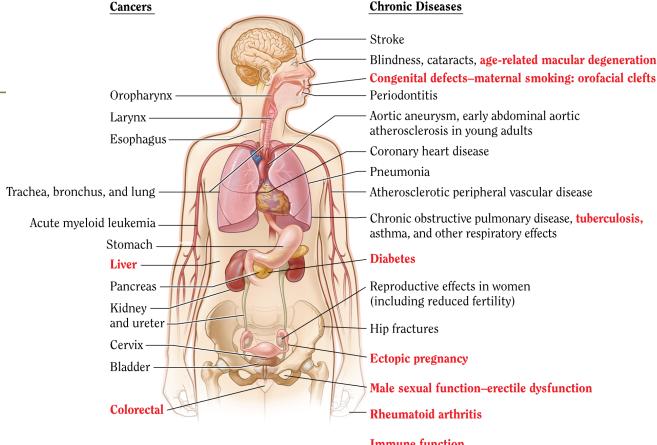
Individuals with opioid use disorders who smoke are at higher risk for lung and liver cancer as well as heart disease.

Baggett et al., JAMA Int Med, 2013; Baggett et al., AJPH, 2015; Randall et al., ANZJPH, 2011.







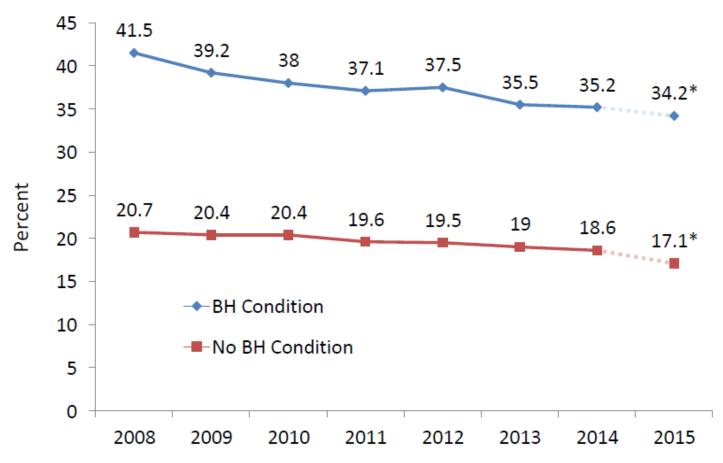


### Immune function

Overall diminished health



# High Use Rate Among People with Mental Illness



<sup>\*</sup> Due to changes in survey questions regarding substance use disorders in 2015, this data is not comparable to prior years.

NSDUH: 2008 - 2015.











# High Rate Among People with SUDs

- 70-87% of adults with substance use disorders smoke cigarettes (Knudsen et al 2016;
   Guydish et al. 2011)
- The strongest associations, however, are between opioid and tranquilizer use and nicotine
  - Why? Smokers report the expectancy that smoking assists in coping with pain (e.g., via distraction), relief from pain-related boredom, anxiety, depression, anger, and frustration (i.e., negative reinforcement), and enjoyment derived from smoking (i.e., positive reinforcement).



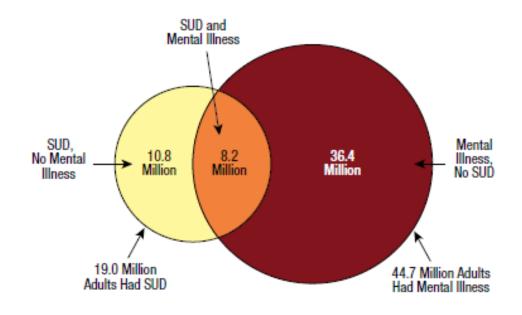






# Co-occurring Substance Use and Mental Health Disorders

Figure 1. Past Year Substance Use Disorder (SUD) and Mental Illness among Adults Aged 18 or Older: Numbers in Millions, 2016



- 44% of all cigarettes sold in the United States are consumed by those with a substance use or mental health disorder.
  - 175 billion cigarettes sold/\$39 billion annual profit

Graphic courtesy of: SAMHSA Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health, pg. 46.











# Why Such High Smoking Rates?

- Due to lower income:
  - Lack access to health insurance, health care, and help to quit
  - Often directly targeted for tobacco marketing
- Chronic stress and ineffective coping skills
- Environmental exposure and peer groups
- Lack social support systems
- Widespread misconceptions and myths about dual tobacco and substance use
- Are at higher risk because of perceived benefits of tobacco use on stress and anxiety reduction (CDC. Vital Signs, Feb. 2013)









# Tobacco Use and Pain Connections

- Smoking has some analgesic properties, but these benefits dissipate with continued smoking
- Smoking increases long-term pain 50% of patients seeking pain treatment are smokers (although only 14% of population smoke)
- Former and current smokers are more likely to have lower back pain, with increasing associations as duration/intensity of pain increases
  - Smoking associated with accelerated bone loss, faster/greater disc degeneration
- Smoking is the best-established risk factor for rheumatoid arthritis (RA)
  - 2x greater for men; 1.3x greater for women relative to nonsmokers
  - Smoking increases UTIs, UTIs associated with RA
  - Smokers have higher concentrations of serum Rheumatoid factor

Joseph W. Ditre. 2011. Pain, Nicotine, and Smoking: Research Findings and Mechanistic Considerations Psychol Bull.









# Tobacco Use and Pain Connections

- Smoking associated with headaches
  - Smokers were 1.5 times more likely to report headaches than nonsmokers
  - 80–90% of all cluster headache patients have a significant history of smoking tobacco
  - Smoking may increase the sensitivity of pain receptors in the brain
  - Efficacy of common headache medications because they may be metabolized more quickly by smokers
- Smoking associated with 30% greater chance of experiencing tooth pain, mouth ulcers, oral pain
  - Smokers have reduced salivary flow, progressive tooth decay, poor wound healing, and periodontal disease-associated exposure of root surfaces

Joseph W. Ditre. 2011. Pain, Nicotine, and Smoking: Research Findings and Mechanistic Considerations Psychol Bull.









# Tobacco Use and Pain Connections

- Tobacco smoking is associated with prevalence/severity of:
  - Fibromyalgia; Menstrual pain; Pregnancy-related pelvic pain
  - HIV-related bodily pain; painful temporomandibular joint disorders
  - Pain associated with osteoarthritis and sickle cell disease
- Smokers in pain (both postoperative and in the general population) appear to use substantially more analgesic medication than nonsmokers
  - Increased pain sensitivity may be function of chronic exposure to nicotine and tobacco smoke, which can sensitize pain receptors
- Smokers presented more maladaptive pain behaviors (i.e., decreased activity, increased medication reliance, and greater emotional distress) relative to chronic pain treatment seeking nonsmokers

Joseph W. Ditre. 2011. Pain, Nicotine, and Smoking: Research Findings and Mechanistic Considerations Psychol Bull.









# Opioid & Tobacco Dependence Connections

- Nicotine and opioid addictions are mutually reinforcing
  - Those with opioid use disorders are more likely to smoke, and
  - Tobacco use is a strong predictor of prescription opioid misuse
- Nicotine addiction may be a primer for other drug addiction and assist with development of tolerance
  - Due to similar neuropathways and dopamine release by nicotine
  - Adolescent exposure to nicotine has been shown to increase susceptibility to opioid addiction in adulthood
  - Chronic nicotine exposure may dysregulate the endogenous opioid system, leading to greater pain and cross-tolerance to opioid medications
  - Nicotine may enhance the reinforcing properties of opioids
- Smoking cessation is associated with long-term abstinence following treatment for opioid use disorder, suggesting a strong link between the neurobiology of nicotine and opioid addiction.

Yoon et al, 2015; Klein et al, 2015; Mannelli et al, 2001











# Myths and Facts About Smoking Among People with SUDs

# **Myths**

- They don't want to quit
- They can't quit

 Quitting will jeopardize substance use recovery

# **Facts**

- They are as motivated to quit as smokers without SUDs
- They are able to quit, especially when offered proven treatments
- Actually, quitting smoking lowers risk of relapse and overall substance use and promotes abstinence

Source: CDC. Vital Signs, Feb. 2013; Prochaska et al, 2004











# Tobacco Use and Recovery

Quitting smoking does not jeopardize sobriety or treatment outcomes

- Smoking cessation interventions were associated with 25% increased likelihood of long-term alcohol and drug abstinence (Prochaska, 2004)
- In a recent review of quitting smoking programs on substance use, the majority of studies found:
  - For alcohol and other substances decreased consumption, decreased relapse,
     and increased past year abstinence (McKelvey et al, 2017)
  - Continued tobacco use can harm recovery and trigger other substance use (Williams, 2005; Kohut, 2017)











# Mental Health Improvements Associated with Quitting Tobacco

- Quitting smoking associated with significant decreases in anxiety, depression, stress
- Increase in psychological quality of life and positive affect
- Associated improvements greater than or equal to effect of antidepressants in depressive and anxiety disorders (Taylor et al., 2014)











# Not Treating Tobacco Dependence has Negative Treatment Outcomes

# Treatment Outcomes for Smokers

- Increased opioid withdrawal
- Increased cravings
- Lower detox completion/ Methadone taper

Clinicians mistakenly believe smoking has positive psychological functions

- Use smoking as an indirect coping strategy
- Reinforces coping through addiction
- Perceived stress reduction is often relief of withdrawal symptoms

Smoking cessation correlated with opiate and cocaine abstinence (Shoptaw et al, 2002)





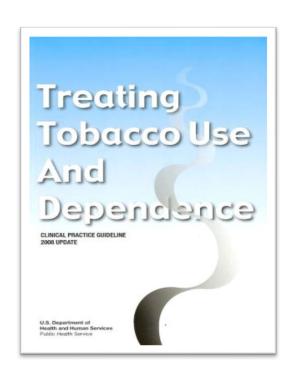






# What Can and Should Be Done By substance use professionals & treatment centers

- Make quitting tobacco part of an overall approach to wellness for clients and employees
- Assess clients for tobacco use and offer evidence-based treatments to quit tobacco – will discuss electronic cigarettes later
- Monitor substance use and adjust any psychiatric medication as needed (<a href="http://www.takingtexastobaccofree.com/toolkit">http://www.takingtexastobaccofree.com/toolkit</a>)
- Make entire workplace 100% tobacco-free
- Stop practices that encourage tobacco use (cigarettes as rewards, smoke breaks during groups, staff smoking with clients, etc.)









# **OUR MISSION**

The mission of Taking Texas Tobacco Free is promoting wellness among Texans by partnering with healthcare organizations to build capacity for system-wide, sustainable initiatives that will reduce tobacco use and secondhand smoke exposure among employees, consumers, and visitors.



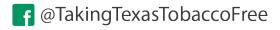
# Recruiting a Few Good Centers

TTTF seeks to add another 8 substance use treatment centers in 2019

- Provide technical assistance to write and adopt 100% tobacco-free policy
- Provide hour and half tobacco treatment/education training for all staff
- Provide regional Motivational Interviewing training for staff
- Send one staff member to Certified Tobacco Treatment Specialist (CTTS) training at MD Anderson Cancer Center in Houston
- Provide print materials & permanent signage to inform/remind people about the tobacco-free policy
- Provide starter kit (\$2,000 \$3,000) of nicotine replacement therapy











# TAKING TERAS TOBACCO FREE

**y** @TTTF\_ **f** @TakingTexasTobaccoFree www.takingtexastobaccofree.com

# INTERESTED IN JOINING OUR PROJECT?

## **Dr. Lorraine Reitzel**

TTTF Primary Investigator, University of Houston

Office: (713) 743-6679 Irreitze@Central.UH.EDU

# Bryce Kyburz, MA

TTTF Project Manager, Integral Care

Office: (512) 440-4091 Cell: (970) 988-5595

bryce.kyburz@integralcare.org

# www.takingtexastobaccofree.com

- Articles, presentations, fact sheets
- Tobacco-free worksite implementation guide
- Videos
- Posters
- Quit plans
- Training module



"You can't find the tobacco sales display because we replaced it with the nicotine patch display."

# RESOURCES

### **Clients:**

- Quit Line 1-877-YES-QUIT
- Nicotine Anonymous (support groups, online, phone)
- Non-smoking AA & NA meetings (majority are smoke-free)
- On site NRT

### **Employees:**

- EAP
- PCP co-pay and prescription reimbursement (spouses and eligible dependents included)
- Nicotine Anonymous, as well as non-smoking NA and AA groups
- On site NRT
- Quit Line 1-877-YES QUIT

