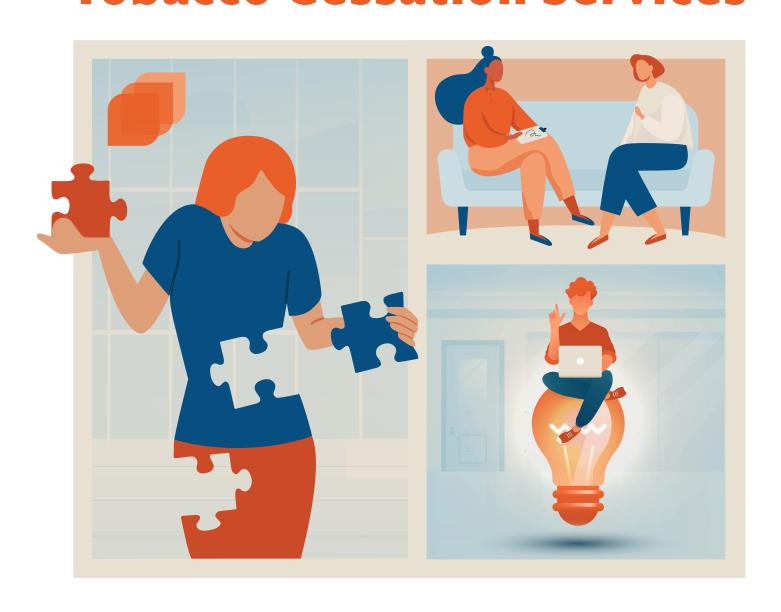


## Incorporating Trauma-informed Approaches in **Tobacco Cessation Services**





### **Contents**

**Overview Trauma and Tobacco: The Connection Recommendations** for Mental Health and **Substance Use Providers Trauma & Tobacco: Special Populations Takeaways** 



### **Overview**

Individuals with mental health and substance use (MH/SU) challenges remain at higher risk for tobacco use and have a disproportionate burden of tobacco-related illnesses and deaths. Individuals with MH/SU challenges use commercial tobacco at rates two to four times higher than the general population.<sup>1,2,3</sup> This is attributed, in part, to having less access to care, less environmental protections through tobacco-free health care facilities, diminished quality of clinical care (including provision of evidence-based tobacco cessation services) and predatorial marketing by the tobacco industry. As a result, individuals with MH/SU challenges die on average 5 to 25 years prematurely, with more than half of these deaths caused by tobacco-related diseases.<sup>4,5,6</sup>

Predatorial marketing by the tobacco industry and limited access to care are just a few reasons why individuals begin to consume commercial tobacco products. However, trauma also has a strong connection to tobacco use, yet is not often considered in tobacco prevention and cessation efforts. This brief will provide an overview of the link between trauma and tobacco and offer tools and resources for providers to integrate a trauma-informed approach into tobacco cessation services.

#### This implementation brief will:

- Educate mental health and substance use providers and clinicians about the intersection between trauma and tobacco.
- Provide guidance on best practices, tools and strategies to address tobacco use among clients with a history of trauma.
- Develop organizational capacity to implement trauma-informed resilience-oriented care across practice and policy.

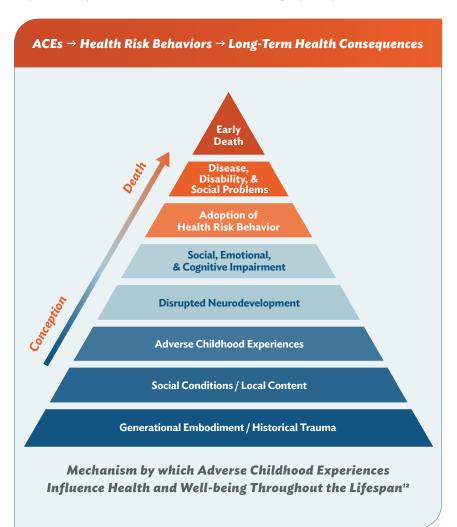




## Trauma and tobacco: The connection

Trauma is not often considered in tobacco prevention and control; however, well established research has shown that trauma experienced by individuals in childhood and early adulthood has been linked to risk of lifetime smoking. Trauma results from an **event**, **series of events** or **set of circumstances** experienced or observed by an individual as physically or emotionally harmful or life-threatening and has lasting adverse effects on the individual's functioning and mental, physical, social, emotional or spiritual wellbeing<sup>7</sup>. Traumatic experiences can include events such as **physical or emotional abuse**, **neglect**, **household dysfunction**, **violence** and **natural or manmade disasters** and can result in long-term outcomes such as high-risk behaviors, lung cancer, liver disease, as well as other MH/SUDs (for example, depression and anxiety). Furthermore, the use of tobacco products and other substances may emerge as coping mechanisms and self-medication.

Adverse childhood experiences (ACEs) are potentially traumatic events that occur in youth ages 0 – 17 such as experiencing violence, abuse or neglect; witnessing violence in the home or community; or having a family member attempt or die by suicide. In addition, aspects of the youth's environment – such as growing up in a household with substance use challenges, mental health challenges or instability due to parental separation or household members being in jail or prison – can undermine their sense of safety, stability and bonding.



## Experiencing ACEs can cause **toxic stress**: **extreme**, **frequent or extended activation of the body's stress response without the buffering presence of a supportive adult**<sup>8</sup>.

Toxic stress results from prolonged or severe early adversities and can impact the brain's structure and function by flooding it with stress hormones, leaving the child in survival (fight, flight or freeze) mode, and these neuropathways of survival mode become overdeveloped. Without an adequate support system, coping skills such as drinking, overeating, substance use and tobacco use will continue into adulthood as solutions, not challenges. Recognizing and understanding toxic stress explains why trauma, particularly childhood trauma, is detrimental.

It has been more than 20 years since the original study on ACEs showed that there is a strong correlation between exposure to adverse childhood experiences and leading causes of death in adults, such as heart disease, cancer and chronic lung disease. Studies have shown that multiple exposures to ACEs increases the likelihood of an individual engaging in health risk behaviors such as binge drinking and smoking as a coping strategy. ACEs have been linked to early initiation of tobacco use, adult tobacco use, and duration and intensity of use.

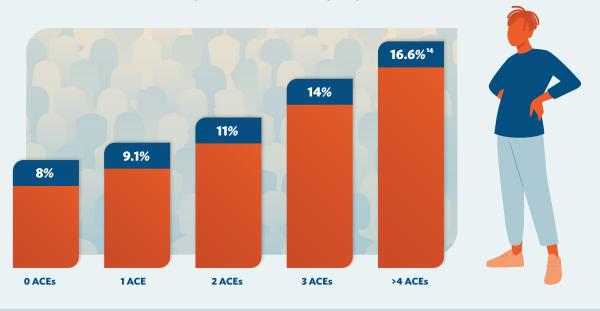


As with alcohol use, ACEs increase the likelihood of early smoking initiation (before the age of 18), with 21% of individuals with four or more ACEs reporting early initiation compared to only 5.5% of individuals reporting no ACEs. In addition to early initiation, ACEs also lead to continued use into adulthood due to nicotine dependency.<sup>13</sup>

#### ACEs and the dose-response relationship

Exposure to adverse childhood experiences (ACEs) and tobacco use has a dose-response relationship. The positive dose-response relationship between exposure to ACEs and an individual's tobacco use implies that as an individual's level of exposure to ACEs increases, their likelihood of using tobacco increases as well. In addition to smoking initiation, a significant dose-response relationship also exists between exposure to ACEs and persistent smoking, meaning that an individual with more ACEs exposure will begin smoking at a younger age and have a harder time quitting.



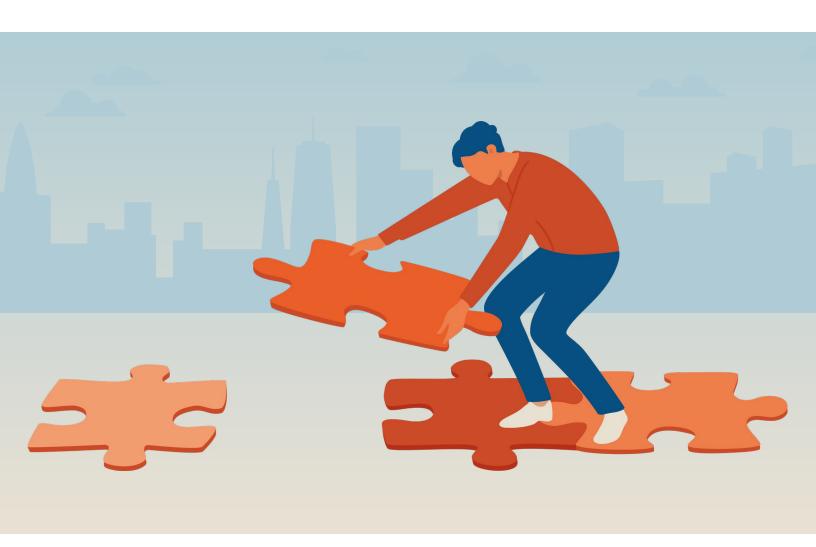


Reports have also shown that exposure to trauma in early adulthood is associated with up to a twofold increased risk of smoking.<sup>10</sup> This rate may be two to three times higher in individuals who experience post-traumatic stress disorder (PTSD) than that of the general population.<sup>15</sup> Research indicates that up to 45% of adults with a PTSD diagnosis smoke, and that individuals with such diagnosis are twice as likely to become persistent smokers.<sup>16</sup> PTSD complicates recovery from smoking, as there is a bidirectional relationship between the symptoms of PTSD and the effects of nicotine.<sup>17</sup> Common symptoms of PTSD – such as emotional reactivity, startle responses and other psychological symptoms – affect the efficacy of tobacco cessation efforts<sup>18</sup>. Individuals often use tobacco to self-medicate or cope due to the short-term pleasurable effects of tobacco, such as anxiety and distress reduction<sup>19,20</sup>. However, in the long run, tobacco use exacerbates anxiety, and withdrawal symptoms often cause further distress and discomfort. People with a PTSD diagnosis who smoke are likely to eventually endure escalating psychological and physical symptoms of PTSD. Tobacco cessation attempts are often less successful for people with PTSD diagnoses, so the integration of addressing comorbid PTSD and tobacco use is crucial.<sup>21</sup>



Similarly in individuals who have experienced ACEs, the number of events experienced (or ACEs score) directly correlates with increased smoking prevalence. Studies have also associated specific types of ACEs, such as childhood abuse, with more severe nicotine withdrawal and dependence, suggesting that some experiences may make tobacco cessation more difficult. Individuals who have been exposed to trauma also smoke more cigarettes, resulting in higher nicotine content. The pleasurable and distress-reducing effects of nicotine on the brain make it a particularly dangerous and addicting substance for individuals who have experienced trauma, explaining why some at-risk individuals may relapse.

ACEs are understood to be a fundamental contributing factor to an individual's capability to optimize long-term health. It is imperative that exposure to trauma is considered in the conversation around tobacco cessation in mental health and substance use organizations given its role in the development of both health risk behaviors and mental health and substance use challenges.





## Recommendations for Mental Health and Substance Use Providers

According to the Centers for Disease Control and Prevention, adults with mental health or substance use challenges consume almost 40% of all cigarettes smoked. Adults with psychiatric diagnoses are almost twice as likely as those without such diagnoses to smoke.<sup>25</sup> Individuals with mental health diagnoses attempt to quit at the same rate as individuals without diagnoses, but are less likely to be successful.<sup>26</sup> The use of commercial tobacco disproportionately impacts individuals with mental health and substance use challenges, and the intersection between mental health and substance use challenges, commercial tobacco use and trauma is key in addressing tobacco-related disparities.

Mental health and substance use providers can address tobacco-related disparities among individuals with MH/SU challenges with trauma histories by applying a trauma-informed framework across multiple levels and utilizing strategies to engage clients in their journey towards tobacco-free recovery.



Prevalence of trauma among individuals with MH/SU challenges

- Majority of adults and children in inpatient psychiatric and substance use organizations report a trauma history<sup>27,28,29,30</sup>
- 51% to 90% of public mental health clients report a history of trauma<sup>29,31</sup>
- More than 70% of the individuals in substance use treatment have a history of trauma exposure<sup>32,33</sup>

Exposure to trauma elevates risk for mental health and substance use challenges throughout adolescence and adulthood, with strong evidence suggesting that childhood trauma is associated with a wide variety of diagnoses.<sup>34</sup>



#### **APPLYING A TRAUMA-INFORMED FRAMEWORK**

The trauma-informed, resilience-oriented approach is "a strengths-based framework that is grounded in an understanding of and responsiveness to the impact of trauma, that emphasizes physical, psychological and emotional safety for both providers and survivors and that creates opportunities for survivors to rebuild a sense of control and empowerment." It is used most widely at the organizational level and provides a pathway for responding to the wide scope of staff and client needs during times of uncertainty, anxiety and change. This approach is built on a large body of evidence around neuroscience, basic physical science and resilience. The goal of understanding the trauma-informed framework is to be able to integrate these principles into all relational spaces across the organization, providers and clients to achieve long-term recovery from tobacco use.

Substance Abuse and Mental Health Services Administration (SAMHSA)'s trauma-informed approach is grounded in four assumptions and six key principles.<sup>36</sup>

#### Four Rs (assumptions)



**Realizes** widespread impact of trauma and understand potential paths for recovery



**Responds** by fully integrating knowledge about trauma into policies, procedures and practices



**Recognizes** signs and symptoms of trauma in clients, families, staff and others involved with the system



**Resists** re-traumatization

#### **Six Key Principles**



**Safety** 



**Collaboration and mutuality** 



**Trustworthiness and transparency** 



**Empowerment, voice and choice** 



**Peer support** 



Consideration of cultural, historical and gender issues

A trauma-informed approach requires us to shift the question from

"What is wrong with you?" to "What happened to you and your people?"



#### ORGANIZATIONAL LEVEL

Organizations must create an environment of safety and trust by infusing trauma-informed principles and should train staff with the purpose of providing trauma-specific treatment and services. A trauma-informed organization acknowledges that trauma impacts staff, as they are just as susceptible to the impact of their own trauma history as clients seeking services. During the workday, staff may be seeking to avoid re-experiencing their own emotions, responding personally to others' emotional states and perceiving behaviors as a personal threat or provocation. Organizations can create dedicated space for staff to reflect on their own capacity and commitment to compassionate and trauma-informed care.

Applying a trauma-informed framework may require complex change and can be very challenging, especially for organizations with many competing demands such as mental health and substance use organizations. National Council for Mental Wellbeing's <u>Fostering</u>. Resilience and Recovery Change Packet outlines the following <u>steps</u> to assist organizations in creating the conditions for change:

- 1. Develop a Core Implementation Team (CIT) committed to addressing the intersection between trauma and tobacco in your work.
- 2. Gauge and foster support from leadership.
- 3. Identify champions within the organization and educate CIT members.
- 4. Conduct an organization self-assessment.
- 5. Align trauma-informed initiatives with existing initiatives.
- **6.** Garner stakeholder buy-in for engagement and support.
- Develop a plan and monitor progress.
- 8. Consider trauma-informed action steps:
  - » Help all individuals feel safety, security and trust.
  - » Develop a trauma-informed workforce.
  - » Build compassion resilience in the workforce.
  - » Identify and respond to individuals around stress, distress and trauma.
  - » Finance and sustain trauma-informed initiatives.





When building a trauma-informed organizational culture, it can be helpful to assess all avenues of potential change. Consider the following questions when planning to integrate a trauma-informed approach.

#### **Training and Information:**

- Have you trained staff around how ACEs impact smoking initiation risk and use?
- Have you trained staff about how trauma responses can show up in many ways?
- Have you trained staff on the mind-body connection in regard to stress?
- Have you trained staff in trauma-informed motivational interviewing?

#### Screening and assessment:

Are you reminding staff to screen for tobacco use, given the high rates of overlap between trauma and tobacco use?

#### Communicate sensitivity to trauma issues:

- Are your staff trained to explain to a client how trauma impacts smoking and recovery?
- Does your organization have a culture of communicating for consent?

#### Safe environment:

- Where are services provided and what safety provisions (physical, psychological, moral, cultural) should be considered?
- Is your organization working on building a resilient, compassionate staff culture?

#### Provision of services in a trauma-informed manner:

- Have your staff been trained on person-first language around tobacco use?
- Does your organization provide peer-to-peer services or referrals?
- Are you using non-stigmatizing language around tobacco use as an addiction versus just a personal preference and behavior?
- Does your organization intentionally make space to prepare for relapse?



#### **PROVIDER LEVEL**

Infusing trauma-informed principles on a practice level and creating a safe relational space between the client and provider is key. A sense of connection is a crucial ingredient in providing an environment in which an individual can find grounding and self-regulation while engaging in conversations around tobacco cessation.

Here are four main considerations for creating a trauma-informed space in your approach to tobacco cessation:

#### Communicate sensitivity to trauma history:

- Do I share information about how trauma impacts smoking?
- Do I frame smoking as a coping mechanism that can be replaced?
- Am I attentive to signs of client confusion, discomfort and unease?
- Are there possible triggers for re-traumatization in my cessation efforts? Do I attempt to minimize these possible triggers?
- Do I consider gender biases and other societal factors such as socioeconomic status, racism and other forms of discrimination the participant may experience?

#### Assist clients to identify their own strengths and to develop alternative coping skills:

- Do I make space to check in whether the client is feeling grounded and safe in our conversation?
- Do I provide clients with clear explanations of smoking interventions in a way that is individually tailored to them?
- Do I actively involve clients in the planning of smoking cessation services and are their priorities validated in the plan?
- Does my smoking cessation approach cultivate a model that is doing "with" rather than "to" or "for"?

#### **Emphasize client choice and control:**

- Do I offer choices to clients regarding how and when the intervention takes place?
- To what extent are the client's priorities given weight in terms of services received and goals established?
- What message is received about unsuccessful quit attempts?
- Do I support the slow process of change and healing?
- Have I tried all seven of the FDA-approved methods for supporting cessation?

#### Use trauma-informed Motivational Interviewing:

- Do I use open-ended questions to invite discussion and collaboration with the client in a way that establishes trust and safety?
- How have I reflected and affirmed the client's perspective and motivation to change their tobacco use in discussion?
- Do I understand the client's willingness and motivation to quit tobacco use?
- Do I know the appropriate intervention for the client's stage of change, even if they are pre-contemplative?
- If the client is not ambivalent around changing tobacco use, will it be revisited during their next appointment, no matter what the presenting problem is?



#### **CLIENT LEVEL**

In addressing tobacco cessation, it is critical to ensure a sense of emotional safety with all individuals. Experiencing trauma can cause dysregulation to an individual's nervous system in many ways, including hyperactivity of the "fear center", the amygdala. When an individual has trouble connecting to a sense of safety as an impact of experiencing trauma or toxic stress, their strategizing and prioritizing brain, the pre-frontal cortex, cannot be as effective. Recognizing that there may be times that individuals may not feel safe or able to focus on activities at hand due to triggers or feelings of activation is important.

Top-Down	Bottom-Up
Top-down approaches support an individual to think and address challenges differently in a more cognitive manner.	Bottom-up approaches support an individual to practice self- regulation in response to somatic experiences such as a fear response. These must be done prior to top-down approaches.
<ul> <li>Examples of top-down approaches include:</li> <li>Journaling / Reflecting</li> <li>Practicing self-compassion, healthy boundaries and gratitude</li> <li>Setting clear expectations</li> <li>Problem-solving</li> </ul>	<ul> <li>Examples of bottom-up approaches include:</li> <li>Focused breathing</li> <li>Sensory and calming tools</li> <li>Exercise and movement</li> <li>Listening to or playing music</li> </ul>
In Relation with Others	
Relational support can be very effective in providing a sense of s	afety and connection. Some relational strategies include:
Relational support can be very effective in providing a sense of some support groups	afety and connection. Some relational strategies include:
Relational support can be very effective in providing a sense of some support groups  Mentor and buddy systems	afety and connection. Some relational strategies include:
Relational support can be very effective in providing a sense of some support groups  Mentor and buddy systems  Vulnerability / Empathy exercises	afety and connection. Some relational strategies include:
Relational support can be very effective in providing a sense of some support groups  Mentor and buddy systems	afety and connection. Some relational strategies include:
Relational support can be very effective in providing a sense of some support groups  Mentor and buddy systems  Vulnerability / Empathy exercises  Group movement exercises	afety and connection. Some relational strategies include:



#### SAMPLE SCRIPTS

Acknowledging and discussing an individual's history of trauma is a broad and sensitive process that cannot be distilled into one simple conversation. However, there are ways to acknowledge the influence of trauma and toxic stress on an individual's journey to recovery from smoking and create a sense of safety for further discussion. Here are brief sample scripts to help you get started on having conversations about trauma and smoking:

#### At first appointment

"Hello, my name is [name], and I am [role]. Is [name] your preferred name? Thank you; I'll make a note of this for future appointments. I'm glad you are here today. I have some questions to ask you about your history. As providers, we are becoming more and more aware of how current and past experiences can affect our health in the here and now, including our smoking cessation efforts. We want to make this a safe and comfortable place for your health care and efforts to stop smoking. How would you feel about answering a few brief questions about your personal and family history?"

#### At follow-up appointments

"Hello, [name]. (Be sure to use the preferred name noted in their chart from the first appointment.) Each year we like to check in about experiences in your life that might affect how we help you with your medical care and smoking cessation efforts. Would you be willing to look at this survey about your current or past experiences again and update our understanding of you as a person and how we can best support you? During high periods of stress, it can take a toll on your ability to think clearly, concentrate, eat, sleep and engage in life at times. Have you experienced or noticed any stress symptoms lately?"

#### **Open-ended questions**

"Difficult life experiences, like growing up in a family where you were hurt, or where there was mental illness or drug/alcohol issues, or witnessing violence, can affect our health. Do you feel like any of your current or past experiences affect your physical or emotional health? Trauma can continue to affect our health and our smoking cessation efforts. If you would like, we can talk more about services that are available that can help."

#### Response to trauma disclosure

"What a difficult/terrible experience and/or it sounds like it has been really challenging. Thank you for sharing this with me. This information can help me understand how best to care for you. Trauma can continue to affect our lives and health and impact our smoking cessation efforts. Do you feel like this experience affects your health or wellbeing?"

"In light of what you've shared today, is there anything I can do to make you feel more comfortable during our appointments together? Do you have any concerns we should address before moving forward?"

"Thank you for sharing this. I will note it in the record for future appointments, and you can always change or add to it later. What questions do you have?"



#### MOTIVATION INTERVIEWING, TOBACCO AND TRAUMA

Motivational Interviewing (MI) is characterized as a "collaborative conversation style for strengthening a person's own motivation and commitment to change."<sup>37</sup> MI is used in a variety of settings to explore an individual's ambivalence and increase their motivation towards behavior change. While MI does not directly address trauma, its collaborative philosophy makes the tool very compatible with a trauma-informed approach to addressing tobacco use.

MI is rooted in four elements: Partnership, Evocation, Compassion and Autonomy. Partnership invites the understanding that the provider is collaborating with the individual as the expert of their own life and behaviors. The element of autonomy ensures that the individual's independence is honored. Compassion is exercised throughout MI through using active empathy and refraining from judgment. Finally, the element of evocation means staying curious about the inherent motivation for change that resides within the individual.

#### MI shifts the conversation from deficit-oriented approaches to competence-oriented approaches.

**Deficit-oriented** approaches assume that lack of insight and knowledge is the obstacle to change.

**Deficit-oriented** approaches are often associated with verbs such as "fix" or "tell".

**Competence-oriented** approach assumes that the capacity to enact change comes from within the individual.

**Competence-oriented** approaches are often associated with verbs such as "Ask" or "Listen".

#### MI involves reflecting both sides of ambivalence using the framing of "Change Talk" versus "Sustain Talk".

"Change Talk" is "any self-expressed language that is an argument for change". "Sustain talk" is "the individual's own arguments for not changing, for sustaining the status quo" (Miller & Rodnick, 2013).

Recognizing when "Sustain Talk" arises while evoking and encouraging Change Talk is key to cultivating motivation for change.

Key considerations in MI include establishing a trusting relationship in which empathy and acceptance allow a person to tell their story and express ambivalence with honesty, adapting with open-ended questions to seek curiosity towards the person's perception, and reflecting on the individual's goals and values and their willingness and ability to change.<sup>38</sup>





Below are just a few examples of MI strategies and skills providers can use.

Open-ended Inquiry: Using open-ended questions to invite discussion from the individual		
Instead Of	tead Of Try	
"Can you cut back on smoking?"	"What do you like and dislike about smoking?"	
"Do you know about our tobacco cessation group?"	"What do you know about our tobacco cessation group?"	
"Why haven't you been able to quit?"	"How have you approached quitting in the past?"	

Affirmations / Reflections		
Client says	Provider responds	
"I've been coming here for 6 months, ever since I got out of the hospital. I'm working really hard to take my meds and show up for therapy, so I don't need you taking away the one thing that seems to help the most – my cigarettes."	"It feels as though cigarettes help with your symptoms."	
	"You don't want to be in the hospital again."	
	"You've been committed to your treatment plan."	

Scripts for dual diagnosis			
Skill	Considerations	Example	
Open-ended Inquiry	Avoid compound questions	"What is most important to you? If you decided to quit, how would you do it?"	
Affirmations	Use often to counter social stigma, feeling invalidated and incapable	"You're not someone who gives up easily."	
Reflections	Use often, with simple terms; allow time to process and respond	"Quitting smoking is not something you want to do right now – and you've thought about whether it's actually making things worse."	

Additional information on Motivational Interviewing, trauma and tobacco can be found <u>here</u>.



# Trauma & tobacco: Special populations

In addition to individuals with MH/SU challenges, commercial tobacco use disproportionately affects marginalized and underserved populations due to a variety of factors, including predatorial marketing by the tobacco industry, stigma and lack of access to appropriate resources. Other priority populations are impacted by the intersection between MH/SU challenges, tobacco and trauma; however, many limitations exist to discussing how to provide effective tobacco cessation services. Tobacco has historically been excluded as a priority in mental health and substance use research and intervention. In addition, silos continue to exist among other priority populations experiencing tobacco-related disparities and are often not considered in research. Discussions on mental health, substance use, tobacco and trauma need to be bridged across these other priority populations to understand and design effective approaches to trauma-informed tobacco cessation efforts.

#### Lesbian Gay Bisexual Transgender Queer (LGBTQ) Community

It is well documented that commercial tobacco disproportionately affects LGBTQ populations. In 2020, 25% of LGB adults used commercial tobacco as compared to 19% of heterosexual adults.<sup>39</sup> Transgender youth and adults are significantly impacted, with transgender youth reporting use of commercial tobacco products three to four times as much as cisgender youth, and transgender adults reporting use of e-cigarettes four times as much as cisgender adults.<sup>40</sup> While there are a variety of factors that contribute to this disparity, LGBTQ individuals face an alarming rate of exposure to trauma, including gender violence and discrimination.

#### Youth

Approximately 20% to 48% of youth are exposed to trauma and traumatic events, which can include child abuse and neglect, domestic violence, bullying, serious accidents or injuries, discrimination, extreme poverty and community violence. Research shows that such experiences can have serious consequences, especially when they occur early in life, are chronic and/or severe, or accumulate over time.<sup>41</sup> Trauma, including ACEs, is strongly correlated with smoking initiation before the age of 18, smoking in adulthood, duration and intensity of smoking. The recent trend of vaping, or e-cigarette use, among youth and young adults is a primary concern as it may lead to the use of other tobacco products, increasing the potential for harmful effects.<sup>42</sup> A survey conducted in August of 2021 found that 81% of those who had used e-cigarettes said they started vaping to decrease stress, anxiety or depression.<sup>43</sup>

#### **Pregnancy and Smoking**

Tobacco use during pregnancy can have negative impact on both the mother and child. Women who have experienced trauma, especially childhood trauma, are more likely to become nicotine dependent while pregnant and least likely to quit during pregnancy or benefit from tobacco cessation interventions.<sup>44</sup> Additionally, women who are pregnant and use tobacco have 10% higher rates of current and lifetime PTSD than women who quit smoking while pregnant.<sup>45</sup>

#### Race/Ethnicity

African Americans, American Indian/Alaskan Native, and Asian/Native Hawaiian and Pacific Islanders are also disproportionately impacted by tobacco-related disparities and experience trauma through racial bias and ethnic discrimination, racism and hate crimes, subsequently experiencing mental health challenges including PTSD and depression.<sup>46,47</sup> Current commercial tobacco use is 19.4% among Black adults; 8.2% among Hispanics adults; 18.7% among Native Hawaiian/Pacific Islander adults; 34.9% among American Indian or Alaska Native adults; and 11.5% among Asian adults.<sup>48,49</sup> Tobacco use rates vary among diverse Asian population groups and Hispanic groups.<sup>50</sup>

### **Takeaways**

A clear and significant relationship exists between trauma and tobacco use. To effectively address tobacco-related disparities among individuals with MH/SU challenges, providers must consider the impact of trauma on clients' journey to recovery through tobacco cessation services. Creating space to understand the influence of trauma should be present across multiple levels, from the widest lens of organizational policy and practice to how a provider engages with a client by prioritizing safety, trust and compassion. Lastly, providers should consider the many facets of clients' identities when designing and implementing trauma-informed tobacco cessation services.



This publication is supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$250,000 with 100 percent funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, or the U.S. Government.



- <sup>1</sup> Health and Human Services, Centers for Disease Control and Prevention. (2019, December 23). Tobacco use. Retrieved September 2020. <a href="https://www.cdc.gov/vitalsigns/tobaccouse/smoking/index.html">https://www.cdc.gov/vitalsigns/tobaccouse/smoking/index.html</a>
- <sup>2</sup> Prochaska, J. J., Das, S., & Young-Wolff, K. C. (2017). Smoking, mental illness, and public health. Annual Review of Public Health, 38(1), 165–185. https://doi.org/10.1146/annurev-publhealth-031816-044618
- <sup>3</sup> Cummins, S. E., Zhu, S. H., Tedeschi, G. J., Gamst, A. C., & Myers, M. G. (2014). Use of e-cigarettes by individuals with mental health conditions. Tobacco Control, 23 (Suppl 3), iii48-iii53. https://doi.org/10.1136/tobaccocontrol-2013-051511
- <sup>4</sup> Druss, B.G., Zhao, L., Von Esenwein, S., Morrato, E.H., Marcus, S.C. (2011). Understanding excess mortality in persons with mental illness: 17-year follow up of a nationally representative U.S. survey. Medical Care, 49(6), 599–604. <a href="https://doi.org/10.1097/MLR.obo13e31820bf86e">https://doi.org/10.1097/MLR.obo13e31820bf86e</a>
- <sup>5</sup> Bandiera, F. C., Anteneh, B., Le, T., Delucchi, K., & Guydish, J. (2015). Tobacco-related mortality among persons with mental health and substance abuse problems. PLOS ONE, 10(3): e0120581. https://doi.org/10.1371/journal.pone.0120581
- <sup>6</sup> Colton, C. W., & Manderscheid, R. W. (2006). Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. Preventing Chronic Disease, 3(2), A42.
- <sup>7</sup> Substance Abuse and Mental Health Services Administration (2014). SAMHSA's Concept of Trauma and Guidance for a Trauma Informed Approach. <a href="https://ncsacw.samhsa.gov/userfiles/files/SAMHSA\_Trauma.pdf">https://ncsacw.samhsa.gov/userfiles/files/SAMHSA\_Trauma.pdf</a>.
- 8 Nelson, C. A., Bhutta, Z. A., Harris, N. B., Danese, A., & Samara, M. (2020). Adversity in childhood is linked to mental and physical health throughout life. BMJ, 371. https://doi.org/10.1136/bmj.m3048
- <sup>9</sup> Substance Abuse and Mental Health Services Administration. (2020). Reducing Toxic Stress in Childhood. <a href="https://www.samhsa.gov/hpr-resources/hpr-resources/reducing-toxic-stress-childhood">https://www.samhsa.gov/hpr-resources/hpr
- <sup>10</sup> Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, 14(4), 245-258. https://doi.org/10.1016/S0749-3797(98)00017-8
- "Campbell, J. A., Walker, R. J., & Egede, L. E. (2016). Associations between adverse childhood experiences, high-risk behaviors, and morbidity in adulthood. American Journal of Preventive Medicine, 50(3), 344-352. https://doi.org/10.1016/j.amepre.2015.07.022
- <sup>12</sup> Centers for Disease Control and Prevention (2021, April 6). About the CDC-Kaiser Ace Study. Centers for Disease Control and Prevention. Retrieved September 15, 2022, from <a href="http://www.cdc.gov/violenceprevention/aces/about.html">http://www.cdc.gov/violenceprevention/aces/about.html</a>
- <sup>13</sup> Anda, R. F., Croft, J. B., Felitti, V. J., Nordenberg, D., Giles, W. H., Williamson, D. F., & Giovino, G. A. (1999). Adverse childhood experiences and smoking during adolescence and adulthood. Journal of the American Medical Association, 282, 1652–1658. <a href="https://doi.org/10.1001/jama.282.17.1652">https://doi.org/10.1001/jama.282.17.1652</a>
- <sup>14</sup> Edwards, V. J., Anda, R. F., Gu, D., Dube, S. R., & Felitti, V. J. (2007). Adverse childhood experiences and smoking persistence in adults with smoking-related symptoms and illness. The Permanente journal, 11(2), 5–13. <a href="https://doi.org/10.7812/TPP/06-110">https://doi.org/10.7812/TPP/06-110</a>
- <sup>15</sup> Roberts M, Fuemmeler B, McClernon F, Beckham J. (2008). Association between trauma exposure and smoking in a population-based sample of young adults. The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 42, 266-74. 10.1016/j.jadohealth.2007.08.029
- <sup>16</sup> Kearns, N. T., Carl, E., Stein, A. T., Vujanovic, A. A., Zvolensky, M. J., Smits, J., & Powers, M. B. (2018). Posttraumatic stress disorder and cigarette smoking: A systematic review. Depression and Anxiety, 35(11), 1056–1072. https://doi.org/10.1002/da.22828



- <sup>17</sup> Fu, S. S., McFall, M., Saxon, A. J., Beckham, J. C., Carmody, T. P., Baker, D. G., & Joseph, A. M. (2007). Post-traumatic stress disorder and smoking: A systematic review. Nicotine & Tobacco Research: Official journal of the Society for Research on Nicotine and Tobacco, 9(11), 1071–1084. https://doi.org/10.1080/14622200701488418
- <sup>18</sup> Chou, C. Y., Herbst, E., Cloitre, M., & Tsoh, J. Y. (2018). An emotion regulation-focused theoretical framework for co-occurring nicotine addiction and PTSD: Comments on existing treatments and future directions. Cogent Medicine, 5(1), 1558731. <a href="https://doi.org/10.1080/2331205X.2018.1558731">https://doi.org/10.1080/2331205X.2018.1558731</a>
- <sup>19</sup> Kassel, J. D., Stroud, L. R., & Paronis, C. A. (2003). Smoking, stress, and negative affect: Correlation, causation, and context across stages of smoking. Psychological Bulletin, 129(2), 270. <a href="https://doi.org/10.1037/0033-2909.129.2.270">https://doi.org/10.1037/0033-2909.129.2.270</a>
- <sup>20</sup> Kassel, J. D., & Unrod, M. (2000). Smoking, anxiety, and attention: Support for the role of nicotine in attentionally mediated anxiolysis. Journal of Abnormal Psychology, 109(1), 161–166. https://doi.org/10.1037/0021-843X.109.1.161
- <sup>21</sup> Kelly, M. M., Jensen, K. P., & Sofuoglu, M. (2015). Co occurring tobacco use and posttraumatic stress disorder: Smoking cessation treatment implications. The American journal on addictions, 24(8), 695-704. https://doi.org/10.1111/ajad.12304
- <sup>22</sup> Smith, P. H., Saddleson, M. L., Homish, G. G., McKee, S. A., Kozlowski, L. T., & Giovino, G. A. (2015). The relationship between childhood physical and emotional abuse and smoking cessation among U.S. women and men. Psychology of Addictive Behaviors, 29(2), 338. <a href="https://doi.org/10.1037/adbooo0033">https://doi.org/10.1037/adbooo0033</a>
- <sup>23</sup> Roberts, M. E., Fuemmeler, B. F., McClernon, F. J., & Beckham, J. C. (2008). Association between trauma exposure and smoking in a population-based sample of young adults. Journal of Adolescent Health, 42(3), 266-274.
- <sup>24</sup> Kassel, J.D., Stroud, L.R., & Paronis, C.A. (2003). Smoking, stress, and negative affect: Correlation, causation, and context across stages of smoking. Psychological Bulletin, 129 2, 270-304. <a href="https://doi.org/10.1037/0033-2909.129.2.270">https://doi.org/10.1037/0033-2909.129.2.270</a>
- <sup>25</sup> Lasser, K., Boyd, J. W., Woolhandler, S., Himmelstein, D. U., McCormick, D., & Bor, D. H. (2000). Smoking and mental illness: A population-based prevalence study. JAMA, 284(20), 2606-2610. https://doi.org/10.1001/jama.284.20.2606
- <sup>26</sup> Smith, P. H., Mazure, C. M., & McKee, S. A. (2014). Smoking and mental illness in the U.S. population. Tobacco Control, 23(e2), e147-e153. https://doi.org/10.1136/tobaccocontrol-2013-051466
- <sup>27</sup> Lipschitz, D. S., Winegar, R. K., Hartnick, E., Foote, B., & Southwick, S. M. (1999). Posttraumatic stress disorder in hospitalized adolescents: Psychiatric comorbidity and clinical correlates. Journal of the American Academy of Child & Adolescent Psychiatry, 38(4), 385-392. <a href="https://doi.org/10.1097/00004583-199904000-00010">https://doi.org/10.1097/00004583-199904000-00010</a>
- <sup>28</sup> Suarez, L. M., Belcher, H. M., Briggs, E. C., & Titus, J. C. (2012). Supporting the need for an integrated system of care for youth with co-occurring traumatic stress and substance abuse problems. American Journal of Community Psychology, 49(3), 430-440. <a href="https://doi.org/10.1007/s10464-011-9464-8">https://doi.org/10.1007/s10464-011-9464-8</a>
- <sup>29</sup> Goodman, L. A., Rosenberg, S. D., Mueser, K. T., & Drake, R. E. (1997). Physical and sexual assault history in women with serious mental illness: Prevalence, correlates, treatment, and future research directions. Schizophrenia Bulletin, 23(4), 685–696. <a href="https://doi.org/10.1093/schbul/23.4.685">https://doi.org/10.1093/schbul/23.4.685</a>
- <sup>30</sup> Gillece, J. (2010). Understanding the Effects of Trauma on the Lives of Those We Serve Developing Trauma Informed Systems of Care. [Powerpoint Slides]. <a href="https://www.psykiatri-regionh.dk/centre-og-social-tilbud/Psykiatriske-centre/Psykiatrisk-Center-Sct.-Hans/forskning/Nationalt-TBT-Center/Oplæg---PowerPoint/Documents/TIC%20-%20Joan%20Gillece%20-%20NASMHPD.pdf">https://www.psykiatri-regionh.dk/centre-og-social-tilbud/Psykiatriske-centre/Psykiatrisk-Center-Sct.-Hans/forskning/Nationalt-TBT-Center/Oplæg---PowerPoint/Documents/TIC%20-%20Joan%20Gillece%20-%20NASMHPD.pdf</a>



- <sup>31</sup> Mueser, K. T., Salyers, M. P., Rosenberg, S. D., Goodman, L. A., Essock, S. M., Osher, F. C., ... & 5 Site Health and Risk Study Research Committee. (2004). Interpersonal trauma and posttraumatic stress disorder in patients with severe mental illness: Demographic, clinical, and health correlates. Schizophrenia Bulletin, 30(1), 45-57. <a href="https://doi.org/10.1093/oxfordjournals.schbul.a007067">https://doi.org/10.1093/oxfordjournals.schbul.a007067</a>
- <sup>32</sup> Funk, R. R., McDermeit, M., Godley, S. H., & Adams, L. (2000). Maltreatment issues by level of adolescent substance abuse treatment: The extent of the problem at intake and relationship to early outcomes. Child Maltreat, 8, 6-45. <a href="https://doi.org/10.1177/1077559502239607">https://doi.org/10.1177/1077559502239607</a>
- <sup>33</sup> Deykin, E. Y., and Buka, S. L. (1997). Prevalence and risk factors for posttraumatic stress disorder among chemically dependent adolescents. Am J Psychiatry, 154(6), 752-7. <a href="https://doi.org/10.1176/ajp.154.6.752">https://doi.org/10.1176/ajp.154.6.752</a>
- <sup>34</sup> McLaughlin, K. A., Colich, N. L., Rodman, A. M., & Weissman, D. G. (2020). Mechanisms linking childhood trauma exposure and psychopathology: A transdiagnostic model of risk and resilience. BMC Medicine, 18(1), 1-11. https://doi.org/10.1186/s12916-020-01561-6
- <sup>35</sup> K Hopper, E., L Bassuk, E., & Olivet, J. (2010). Shelter from the storm: Trauma-informed care in homelessness services settings. The Open Health Services and Policy Journal, 3(1). <a href="https://dx.doi.org/10.2174/1874924001003020080">https://dx.doi.org/10.2174/1874924001003020080</a>
- <sup>36</sup> Substance Abuse and Mental Health Services Administration. (2014). SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach. <a href="https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA\_Trauma.pdf">https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA\_Trauma.pdf</a>
- <sup>37</sup> Miller, W. R., & Rollnick, S. (2012). Motivational interviewing: Helping people change. Guilford press.
- <sup>38</sup> Dobber, J., Latour, C., de Haan, L., Scholte op Reimer, W., Peters, R., Barkhof, E., & van Meijel, B. (2018). Medication adherence in patients with schizophrenia: A qualitative study of the patient process in motivational interviewing. BMC Psychiatry, 18(1), 1-10. <a href="https://doi.org/10.1186/s12888-018-1724-9">https://doi.org/10.1186/s12888-018-1724-9</a>
- <sup>39</sup> Centers for Disease Control and Prevention. (2022, June 27). LGBTQ+ people experience a health burden from commercial tobacco. Centers for Disease Control and Prevention. Retrieved August 26, 2022 from https://www.cdc.gov/tobacco/health-equity/lgbtq/health-burden.html
- <sup>40</sup> Tobacco use in LGBT communities. Truth Initiative. (n.d.). Retrieved August 26, 2022 from <a href="https://truthinitiative.org/research-resources/targeted-communities/tobacco-use-lgbt-communities">https://truthinitiative.org/research-resources/targeted-communities/tobacco-use-lgbt-communities</a>
- <sup>41</sup> Saunders, B. E., & Adams, Z. W. (2014). Epidemiology of traumatic experiences in childhood. Child and Adolescent Psychiatric Clinics of North America, 23(2), 167–vii. <a href="https://doi.org/10.1016/j.chc.2013.12.003">https://doi.org/10.1016/j.chc.2013.12.003</a>
- <sup>42</sup> U.S. Department of Health and Human Services. (2016). E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. <a href="https://www.cdc.gov/tobacco/data\_statistics/sgr/e cigarettes/pdfs/2016\_sgr\_entire\_report\_508.pdf">www.cdc.gov/tobacco/data\_statistics/sgr/e cigarettes/pdfs/2016\_sgr\_entire\_report\_508.pdf</a>
- <sup>43</sup> Nicotine Use and Stress. Truth Initiative (2022). <a href="https://truthinitiative.org/sites/default/files/media/files/2022/03/Nicotine%20Use%20">https://truthinitiative.org/sites/default/files/media/files/2022/03/Nicotine%20Use%20</a> and%20Stress\_FINAL.pdf
- <sup>44</sup> Blalock, J. A., Nayak, N., Wetter, D. W., Schreindorfer, L., Minnix, J. A., Canul, J., & Cinciripini, P. M. (2011). The relationship of childhood trauma to nicotine dependence in pregnant smokers. Psychology of Addictive Behaviors: Journal of the Society of Psychologists in Addictive Behaviors, 25(4), 652–663. https://doi.org/10.1037/a0025529.
- <sup>45</sup> Lopez, W. D., Konrath, S. H., & Seng, J. S. (2011). Abuse related post traumatic stress, coping, and tobacco use in pregnancy. Journal of Obstetric, Gynecologic, & Neonatal Nursing: Clinical Scholarship for the Care of Women, Childbearing Families, & Newborns, 40(4), 422–431. https://doi.org/10.1111/j.1552-6909.2011.01261.x



- <sup>46</sup> Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. (2022). Commercial Tobacco & Health Equity. <a href="https://www.cdc.gov/tobacco/health-equity/index.htm">https://www.cdc.gov/tobacco/health-equity/index.htm</a>
- <sup>47</sup> Racial Trauma. (2022). Mental Health America. <a href="https://www.mhanational.org/racial-trauma">https://www.mhanational.org/racial-trauma</a>
- <sup>48</sup> Cornelius, M. E., Loretan, C. G., Wang, T. W., Jamal, A., & Homa, D. M. (2022). Tobacco product use among adults—United States, 2020. Morbidity and Mortality Weekly Report, 71(11), 397. <a href="http://dx.doi.org/10.15585/mmwr.mm7111a1">http://dx.doi.org/10.15585/mmwr.mm7111a1</a>
- <sup>49</sup> Substance Abuse and Mental Health Services Administration. (2019). Results from the 2018 National Survey on Drug Use and Health: Detailed Tables. Table 2.12B-Cigarette use in Past Year among Persons Aged 12 or Older, by Age Group and Demographic Characteristics Percentages, 2018 and 2019. <a href="https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables">https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables</a>
- <sup>50</sup> Mattingly, D. T., Hirschtick, J. L., & Fleischer, N. L. (2020). Unpacking the Non-Hispanic Other category: Differences in patterns of tobacco product use among youth and adults in the United States, 2009-2018. Journal of Immigrant and Minority Health, 22(6), 1368–1372. <a href="https://doi.org/10.1007/s10903-020-01089-0">https://doi.org/10.1007/s10903-020-01089-0</a>