

# Tobacco Use and Treatment for People Experiencing Homelessness



## Background:

- Homelessness has been on the rise in the U.S. since 2017, with an overall increase of 6% and is an independent risk factor for tobacco use.<sup>1</sup>
- Nationwide tobacco use prevalence among individuals who experience homelessness is 70%, as compared to 11% among the general population.<sup>2</sup>
- Individuals with severe mental health disorders, substance use disorders,<sup>3</sup> or both, who identify as racial/ethnic minorities, who are older, or who self-identify as a gender and sexual minority<sup>4</sup> are disproportionately represented in populations experiencing homelessness.<sup>5,6</sup> These populations carry a high burden of tobacco use and tobacco-caused morbidity and mortality.<sup>7,8</sup>
- Substance use, including stimulant, opioid, alcohol, and cannabis use, are strongly related to current cigarette smoking.<sup>9</sup>

## Tobacco-Related Inequities:

People experiencing homelessness often face structural and psychosocial challenges that make them particularly susceptible to tobacco use and complicate treatment of tobacco use such as:

- Structural racism and discrimination that impede economic and housing opportunities<sup>10</sup>
- High rates of trauma and adverse childhood experiences, for which tobacco is used as coping<sup>11</sup>
- Tobacco industry marketing<sup>12</sup>
- High rates of mental health and substance use disorders that are linked with tobacco use<sup>13</sup>
- Limited access to treatment in homeless services settings<sup>14</sup>
- Persistent myths that they are not interested in quitting<sup>2</sup>

**3x-5x**

People experiencing homelessness are **3-5** times more likely to die prematurely and smoking-caused illness is the leading cause of death for those aged 50 years and older.

**Contrary to popular belief, people experiencing homelessness are interested in quitting. In fact, 40% - 60% made a quit attempt in the past year.**

### Health Impact and Quitting:

- People experiencing homelessness are 3-5 times more likely to die prematurely and smoking-caused illness is the leading cause of death for those aged 50 years and older.<sup>15</sup>
- Contrary to popular belief, people experiencing homelessness are interested in quitting. In fact, 40%-60% made a quit attempt in the past year.<sup>13</sup>
- Factors associated with quitting and quit attempts among this population include availability of and engagement in cessation services in homeless service settings.<sup>2,13</sup>

### Treatment Recommendations:

- As with the general population, treatment should address physiological and behavioral aspects of dependence. Combination pharmacotherapy accompanied with counseling via cognitive behavioral therapy or motivational interviewing are recommended.<sup>16,17</sup>
- Incorporate intersectionality to recognize how marginalized social statuses interact with individuals' lived experiences to create structural barriers and oppression. Understand that there is no one-size-fits-all method for effective interventions.<sup>18</sup>
- Higher intensity interventions and/or longer interventions are often necessary.<sup>19</sup>
- Interventions that focus on tobacco use along with addressing co-occurring mental health and substance disorders use are most effective.<sup>13</sup>
- Use of trauma-informed care as a framework for treatment.<sup>20</sup>

### Promising Interventions:

- Community-based pharmacy linked interventions that deliver behavioral counseling and pharmacotherapy in homeless services settings
- Contingency management, i.e., providing financial incentives for smoking cessation (access webinar here)
- Peer-based and navigator programs that involve people with lived experiences of homelessness

## References

1. National Alliance to End Homelessness. State of Homelessness: 2023 Edition. Available at: <https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness/>
2. Kerry Cork, Tobacco Control Legal Consortium, Underserved and Overlooked: Tobacco Addiction Among the Homeless Population (2017), Available at: <https://www.publichealthlawcenter.org/sites/default/files/resources/Underserved-Overlooked-Tobacco-Addiction-Homeless-2017.pdf>
3. Gutwinski S, Schreiter S, Deutscher K, Fazel S. The prevalence of mental disorders among homeless people in high-income countries: An updated systematic review and meta-regression analysis. *PLoS Med.* Aug 2021;18(8):e1003750. doi:10.1371/journal.pmed.1003750
4. Kidd JD, Paschen-Wolff MM, Mericle AA, Caceres BA, Drabble LA, Hughes TL. A scoping review of alcohol, tobacco, and other drug use treatment interventions for sexual and gender minority populations. *J Subst Abuse Treat.* Feb 2022;133:108539. doi:10.1016/j.jsat.2021.108539
5. Culhane DP, Metraux, S., Byrne, T., Stino, M and Bainbridge, J. The age structure of contemporary homelessness: evidence and implications for public policy. *Analysis of Social Issues and Public Policy.* 2013;13(1):228-244.
6. Fazel S, Geddes JR, Kushel M. The health of homeless people in high-income countries: descriptive epidemiology, health consequences, and clinical and policy recommendations. *Lancet.* Oct 25 2014;384(9953):1529-40. doi:10.1016/S0140-6736(14)61132-6
7. Prochaska JJ, Das S, Young-Wolff KC. Smoking, Mental Illness, and Public Health. *Annu Rev Public Health.* Mar 20 2017;38:165-185. doi:10.1146/annurev-publhealth-031816-044618
8. Schroeder SA, Morris CD. Confronting a neglected epidemic: tobacco cessation for persons with mental illnesses and substance abuse problems. *Annu Rev Public Health.* Apr 21 2009;31:297-314 1p following 314. doi:10.1146/annurev.publhealth.012809.103701
9. Harris T, Winetrobe H, Rhoades H, Wenzel S. The Role of Mental Health and Substance Use in Homeless Adults' Tobacco Use and Cessation Attempts. *J Dual Diagn.* Apr-Jun 2019;15(2):76-87. doi:10.1080/15504263.2019.1579947
10. Pearson JL, Waa A, Siddiqi K, Edwards R, Nez Henderson P, Webb Hooper M. Naming Racism, not Race, as a Determinant of Tobacco-Related Health Disparities. *Nicotine Tob Res.* May 24 2021;23(6):885-887. doi:10.1093/ntr/ntab059
11. Baggett TP, Campbell EG, Chang Y, Magid LM, Rigotti NA. Posttraumatic Stress Symptoms and Their Association With Smoking Outcome Expectancies Among Homeless Smokers in Boston. *Nicotine Tob Res.* Jun 2016;18(6):1526-32. doi:10.1093/ntr/ntv238
12. Apollonio DE, Malone RE. Marketing to the marginalised: tobacco industry targeting of the homeless and mentally ill. *Tob Control.* Dec 2005;14(6):409-15. doi:14/6/409 [pii]
13. Vijayaraghavan M, Elser H, Frazer K, Lindson N, Apollonio D. Interventions to reduce tobacco use in people experiencing homelessness. *Cochrane Database of Systematic Reviews* 2020, Issue 12. Art. No.: CD013413. DOI: 10.1002/14651858.CD013413.pub2. Accessed 02 July 2024.
14. Alizaga NM, Nguyen T, Petersen AB, Elser H, Vijayaraghavan M. Developing Tobacco Control Interventions in Permanent Supportive Housing for Formerly Homeless Adults. *Health Promot Pract.* Apr 11 2019;1524839919839358. doi:10.1177/1524839919839358
15. Baggett TP, Hwang SW, O'Connell JJ, et al. Mortality among homeless adults in Boston: shifts in causes of death over a 15-year period. *JAMA Intern Med.* Feb 11 2013;173(3):189-95. doi:1556797 [pii]10.1001/jamainternmed.2013.1604Vijayaraghavan M, Elser H, Frazer K, Lindson N, Apollonio D. Interventions to reduce tobacco use in people experiencing homelessness. *Cochrane Database of Systematic Reviews* 2020, Issue 12. Art. No.: CD013413. DOI: 10.1002/14651858.CD013413.pub2. Accessed 02 July 2024
16. Rigotti NA, Kruse GR, Livingstone-Banks J, Hartmann-Boyce J. Treatment of Tobacco Smoking: A Review. *JAMA.* Feb 8 2022;327(6):566-577. doi:10.1001/jama.2022.0395
17. Krist AH, Davidson KW, et al. Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons: US Preventive Services Task Force Recommendation Statement. *JAMA.* Jan 19 2021;325(3):265-279. doi:10.1001/jama.2020.25019
18. Tan ASL, Hinds JT, Smith PH, Antin T, Lee JP, Ostroff JS, Patten C, Rose SW, Sheffer CE, Fagan P. Incorporating Intersectionality as a Framework for Equity-Minded Tobacco Control Research: A Call for Collective Action Toward a Paradigm Shift. *Nicotine Tob Res.* 2023 Jan 1;25(1):73-76. doi: 10.1093/ntr/ntac110. PMID: 35439321; PMCID: PMC9717371.
19. Alizaga NM, Hartman-Filson M, Elser H, Halpern-Felsher B, Vijayaraghavan M. Alternative flavored and unflavored tobacco product use and cigarette quit attempts among current smokers experiencing homelessness. *Addict Behav Rep.* Dec 2020;12:100280. doi:10.1016/j.abrep.2020.100280
20. Shevorykin, A., Hylanf, B.M. Robles, D., Ji, M., Vantucci, D., Bensch, L., ... Sheffer, C.E. (2024). Tobacco use, trauma exposure and PTSD: a systematic review. *Health Psychology Review*, 1-32. <https://www.tandfonline.com/doi/full/10.1080/17437199.2024.2330896>
21. Hartman-Filson M, Chen J, Lee P, Phan M, Apollonio DE, Kroon L, Donald F, Vijayaraghavan M. A community-based tobacco cessation program for individuals experiencing homelessness. *Addict Behav.* 2022 Jun;129:107282. doi: 10.1016/j.addbeh.2022.107282. Epub 2022 Feb 16. PMID: 35184003.
22. De Los Reyes G, Ng A, Valencia Chavez J, Apollonio DE, Kroon L, Lee P, Vijayaraghavan M. Evaluation of a Pharmacist-Linked Smoking Cessation Intervention for Adults Experiencing Homelessness. *Subst Use Misuse.* 2023;58(12):1519-1527. doi: 10.1080/10826084.2023.2231060. Epub 2023 Jul 3. PMID: 37401115.
23. Molina MF, Hall SM, Stitzer M, Kushel M, Chakravarty D, Vijayaraghavan M. Contingency management to promote smoking cessation in people experiencing homelessness: Leveraging the electronic health record in a pilot, pragmatic randomized controlled trial. *PLoS One.* 2022 Dec 16;17(12):e0278870. doi: 10.1371/journal.pone.0278870. PMID: 36525405; PMCID: PMC9757562.
24. Noland DH, Morris CD, Kayser AM, Garver-Apgar CE. Results of a Peer Navigator Program to Address Chronic Illness Among Persons Experiencing Homelessness. *J Community Health.* 2023 Aug;48(4):606-615. doi: 10.1007/s10900-023-01194-9. Epub 2023 Feb 19. PMID: 36802004.