



April 2025

Disability & Public Health: Intersections and Actionable Strategies

This fact sheet explores the intersection of disability and public health, emphasizing how accessible design benefits everyone. One key example is the **curb cut effect**—when curb cuts are installed to support wheelchair users, they also benefit people pushing strollers, shopping carts, construction equipment, and more.¹ By prioritizing accessibility, public health programs become not only more inclusive for individuals with disabilities, but also easier, safer, and more efficient for the broader population.

In Utah, **between 12% and 25% of adults live with a disability**, underscoring the importance of inclusive public health initiatives that meet diverse needs.² Nationally, an estimated 80% of people with disabilities also live with a co-occurring chronic health condition.³ This overlap makes it critical that public health campaigns aimed at managing or preventing chronic illness are designed with accessibility in mind, ensuring they reach and effectively support this high-risk population.

This document provides an overview of three public health focus areas—diabetes, tobacco cessation, and emergency preparedness—to demonstrate how **disability commonly intersects with public health**. While not exhaustive, it offers actionable strategies that can be adapted to any public health project to improve accessibility and effectiveness.

Diabetes & Disability	
Increased Risk	<ul style="list-style-type: none"> In 2020, 16.2% of U.S. adults with disabilities had diabetes—more than double the 7.5% among those without disabilities.⁴
Higher Prevalence in Certain Groups	<ul style="list-style-type: none"> People with intellectual disabilities are more than twice as likely to develop diabetes than the general population.⁵
Impact of Diabetes on Functioning	<ul style="list-style-type: none"> Diabetes complications (e.g., vascular, neurological, cardiac, renal) can limit daily and instrumental activities, reducing quality of life and increasing disability.⁶
Psychosocial Impact	<ul style="list-style-type: none"> Depression and anxiety related to diabetes further challenge individuals with disabilities, creating a greater overall burden.⁷

Smoking Cessation & Disability

Higher Smoking Rates	<ul style="list-style-type: none"> • 18.5% of U.S. adults with disabilities smoke vs. 10.9% without disabilities. • Smoking rates are especially high among: <ul style="list-style-type: none"> ○ Individuals with cognitive limitations (43.8%) ○ Individuals with self-care difficulties (32.4%)⁸
Mental Health & Nicotine Dependence	<ul style="list-style-type: none"> • Adults with mental illness are significantly more likely to smoke. In fact, they account for nearly one-third of all cigarettes smoked by U.S. adults.⁹ • Conditions such as ADHD,¹⁰ depression,¹¹ and schizophrenia¹² are often associated with nicotine use as a form of self-management, which can make quitting more challenging due to the perceived relief of symptoms.
Screening for Disability in Smoking Cessation	<ul style="list-style-type: none"> • Including disability status in smoking screening protocols helps identify individuals with disabilities and tailor cessation programs to their needs. • Screening for disability in smoking cessation research ensures that data reflects the unique challenges faced by individuals with disabilities, leading to more effective and inclusive interventions.

Emergency Preparedness & Disability

Disability & Emergency Preparedness Gaps	<ul style="list-style-type: none"> • People with disabilities are 1.22 times more likely to be unprepared for emergencies than those without disabilities. <ul style="list-style-type: none"> ○ Less likely to have emergency supplies (e.g., for power/water outages). ○ Evacuation is often more difficult or impossible.¹³
Compounding Risk Factors	<ul style="list-style-type: none"> • Risk is higher among those who are: Female, nonwhite, unmarried/living alone, low income/education, urban residents.¹⁴ • <i>Example:</i> An older woman, living alone on a fixed income, who uses a wheelchair and supplemental oxygen.
Barriers During Emergencies	<ul style="list-style-type: none"> • Shelters may lack physical access or needed accommodations. • Communication may be inaccessible (e.g., no ASL, Braille, or plain language)



Barriers During Emergencies (continued)	<p>instructions).</p> <ul style="list-style-type: none"> • Transportation issues limit evacuation and care. • Built environments often hinder safe exit (e.g., power-dependent elevators). • Discrimination and poor planned can lead to denial of services.¹⁵
--	--

Action Strategies to Increase Accessibility

To create inclusive, accessible public health programs, interventions must intentionally address the needs of individuals with disabilities. Below are actionable strategies to improve accessibility and **ensure public health efforts are equitable and effective**. For more details, look up community-based participatory research in public health projects.¹⁶

Use disability-specific examples	<ul style="list-style-type: none"> • Include realistic scenarios relevant to different disabilities. This makes content more relatable and easier to understand.
Include images of individuals with disabilities	<ul style="list-style-type: none"> • Use visuals that represent people with disabilities to promote inclusivity and signal that programs are for everyone.
Provide disability-specific recommendations	<ul style="list-style-type: none"> • Offer tailored advice (e.g., adaptable exercise plans for mobility impairments, or accessible nutrition guidance).
Simplify educational materials	<ul style="list-style-type: none"> • Use plain language for those with learning or intellectual disabilities. Clear content increases understanding and action.
Create targeted educational materials	<ul style="list-style-type: none"> • Develop materials for specific disability groups (e.g., address impulsivity in ADHD-focused smoking cessation resources).
Engage the disability community in program design	<ul style="list-style-type: none"> • Apply participatory methods to design programs that reflect real needs and preferences of people with disabilities.
Ensure physical accessibility	<ul style="list-style-type: none"> • Confirm spaces are fully accessible. Provide maps or instructions for entrances and ensure easy navigation.
Advertise accessibility features	<ul style="list-style-type: none"> • Clearly list available accommodations (e.g., ASL interpreters, accessible online content) in all materials.



Authors

Smith, E. R.

References

- ¹ Blackwell, A. G. (2017). *The curb cut effect*. Stanford Social Innovation Review. https://ssir.org/articles/entry/the_curb_cut_effect
- ² Kem C. Gardner Policy Institute. (2024, May). *Utah demographic characteristics: disability*. Kem C. Gardner Policy Institute. <https://d36oiwf74r1rap.cloudfront.net/wp-content/uploads/2024/05/DiversityData-Disability-May2024.pdf>
- ³ Juhasz, A. C., & Byers, R. (2025). Prevalence of Chronic Health Conditions Among People with Disabilities in the United States. *Archives of Physical Medicine and Rehabilitation*. doi: 10.1016/j.apmr.2025.02.002
- ⁴ CDC. (2024, Dec 16). *Disability and diabetes prevention*. CDC. <https://www.cdc.gov/disability-and-health/articles-documents/diabetes-prevention.html>
- ⁵ Vancampfort, D., et al. (2022). Prevalence of diabetes in people with intellectual disabilities and age-and gender-matched controls: A meta-analysis. *Journal of Applied Research in Intellectual Disabilities*, 35(2), 301-311.
- ⁶ Oyewole, O. O., et al. (2023). Burden of disability in type 2 diabetes mellitus and the moderating effects of physical activity. *World journal of clinical cases*, 11(14), 3128-3139. doi: 10.12998/wjcc.v11.i14.3128
- ⁷ Oyewole, O. O., et al. (2023). Burden of disability in type 2 diabetes mellitus and the moderating effects of physical activity. *World journal of clinical cases*, 11(14), 3128-3139. doi: 10.12998/wjcc.v11.i14.3128
- ⁸ Courtney-Long, E., et al. (2014). Disparities in current cigarette smoking prevalence by type of disability, 2009–2011. *Public Health Reports*, 129(3), 252-260. doi: 10.1177/003335491412900307.
- ⁹ Gfroerer, J., et al. (2013). Vital signs: current cigarette smoking among adults aged ≥ 18 years with mental illness—United States, 2009–2011. *Morbidity and mortality weekly report*, 62(5), 81-7. PMID: 23388551
- ¹⁰ Levin, E. D., et al. (1996). Nicotine effects on adults with attention-deficit/hyperactivity disorder. *Psychopharmacology*, 123, 55-63. doi.org/10.1007/BF02246281.
- ¹¹ Mendelsohn, C. (2012). Smoking and depression: a review. *Australian family physician*, 41(5), 304-307.
- ¹² Kumari, V., & Postma, P. (2005). Nicotine use in schizophrenia: the self medication hypotheses. *Neuroscience & Biobehavioral Reviews*, 29(6), 1021-1034. doi.org/10.1016/j.neubiorev.2005.02.006.
- ¹³ Smith, D.L., Notaro, S.J.. (2009) Personal emergency preparedness for people with disabilities from the 2006-2007 Behavioral Risk Factor Surveillance System. *Disability Health Journal*, 2(2):86-94. doi: 10.1016/j.dhjo.2009.01.001.
- ¹⁴ Smith, D.L., Notaro, S.J.. (2009) Personal emergency preparedness for people with disabilities from the 2006-2007 Behavioral Risk Factor Surveillance System. *Disability Health Journal*, 2(2):86-94. doi: 10.1016/j.dhjo.2009.01.001.
- ¹⁵ CDC. (2024, Sept 11). *Emergency preparedness and disability inclusion*. CDC. <https://www.cdc.gov/disability-emergency-preparedness/about/index.html>
- ¹⁶ Pomeranz, J. L., et al. (2014). Creating a tobacco cessation program for people with disabilities: a community based participatory research approach. *Journal of addiction research & therapy*, 5(4), 1-15. doi: 10.4172/2155-6105.1000204.

