



## Opioid Misuse Prevention Toolkit

### Introduction

Three recent publications by subject matter experts highlight the importance of prevention in combatting the opioid epidemic.

[\*Facing Addiction In America: The Surgeon General's Spotlight on Opioids \(2018\)\*](#)

[\*The Importance of Prevention in Addressing the Opioid Crisis, Dr. Nora Volkow \(2019\)\*](#)

[\*Targeting Youth to Prevent Later Substance Use Disorder: An Underutilized Response to the US Opioid Crisis, American Journal of Public Health Perspectives \(2019\)\*](#)

All agree that addressing the documented risk and protective factors for substance use disorder through primary prevention and intervention is critical to preventing further exacerbation of the opioid epidemic. The existing research base for risk and protective factors for substance misuse and substance use disorder is robust. Additionally, the documented risk factors for future substance misuse and disorder are also risk factors for other adolescent problem behaviors (delinquency, school dropout, teen pregnancy and violence), rendering evidence-based prevention efforts and excellent return on investment.

Evidence-based prevention programs and activities are divided into the following three strategies, which are recommended by the Surgeon General of the United States in the 2018 *Spotlight on Opioids*.

“The Institute of Medicine (IOM), now known as the National Academy of Medicine, has described three categories of prevention interventions: universal, selective, and indicated. With respect to substance use interventions, **universal interventions** are aimed at all members of a given population (for instance, population-level strategies); **selective interventions** are aimed at a subgroup determined to be at high-risk for substance use (for instance, justice-involved youth); and **indicated interventions** are targeted to individuals who are already using substances but have not developed a substance use disorder surgeon (U.S. Department of Health and Human Services (HHS), Office of the Surgeon General, 2018).”

### Current Research Initiatives for Future Opioid/Substance Misuse Prevention Efforts

#### A) Longitudinal Study of Adolescent Brain Cognitive Development (ABCD Study)

- <https://abcdstudy.org/>
- Largest long-term study of brain development and child health in the US
- Recruitment 2016-2018
- Continuously publishing findings via scientific journals and NIDA Archive

## B) Prenatal and Early Childhood Brain Development – Modeled after ABCD

- [NIH HEAL \(Helping to End Addiction Long-term<sup>SM</sup>\) Initiative](#)
- Co-funded by NIDA and several other NIH institutes and offices
- *Aim: “To better understand the impact of early exposure to opioids, other substances, and social stressors on brain development in children” (National Institute on Drug Abuse, 2019).*

Table 1. Evidence Based-Interventions (EBIs) for SUD/ODU Prevention

A. Universal Prevention Programs
<p><b>PROMoting School-community-university Partnerships to Enhance Resilience (PROSPER)</b> (Blueprints Certified Promising Program)  <a href="http://helpingkidsprosper.org/">http://helpingkidsprosper.org/</a>                      Age: 12-14                      Gender: All                      Domain/Level: Multi-component                      Race/Ethnicity: All                      Setting: Community and School</p>
<p><b>Project Northland</b> (Blueprints Certified Promising Program)  <a href="https://www.hazelden.org/store/item/15546">https://www.hazelden.org/store/item/15546</a>                      Age: 12-18                      Gender: All                      Race/Ethnicity: All                      Domain/Level: Multi-component                      Setting: School</p>
<p><b>Communities that Care (CTC)</b> (Blueprints Certified Promising Program)  <a href="https://www.communitiesthatcare.net/">https://www.communitiesthatcare.net/</a>                      Age: 0-22                      Gender: All                      Race/Ethnicity: All                      Domain/Level: Multi-component                      Setting: Community</p>
<p><b>Raising Healthy Children</b> (Blueprints Certified Promising Program)  <a href="http://www.sdr.org/rhcsurvey.asp">http://www.sdr.org/rhcsurvey.asp</a>                      Age: 5-18                      Gender: All                      Race/Ethnicity: All                      Setting: School</p>
<p><b>Good Behavior Game</b> (Blueprints Certified Promising Program)  <a href="https://www.goodbehaviorgame.org/">https://www.goodbehaviorgame.org/</a>                      Age: 5-11                      Gender: All                      Race/Ethnicity: All                      Setting: School</p>
<p><b>Project Star (Midwestern Prevention Project)</b> (SGR Evidence-Based Interventions for Age 18+)                      Age: 9-18                      Gender: All                      Race/Ethnicity: All                      Domain/Level: School and Community/ Multi-component                      For more information about MPP/Project STAR, contact:  <b>Mary Ann Pentz, Ph.D.</b>                      USC Norris Comprehensive Cancer Center                      University of Southern California                      1441 Eastlake Avenue, MS-44                      Los Angeles, CA 90089-9175                      Phone: (626) 457-6691</p>

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**Linking the Interests of Families and Teachers (LIFT) (SGR Evidence-Based Interventions for Children Under Age 10)**

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Age: Elementary School students

Gender: All

Race/Ethnicity: All

Setting: School

**Life Skills Training (LST) (Blueprints Certified Model Plus Program)**

<https://www.lifeskillstraining.com/>

Age: 12-14

Gender: All

Race/Ethnicity: All

Setting: School

**Unplugged (SGR Evidence-Based Interventions for Children Under Aged 10 to 18)**

<https://positivechoices.org.au/teachers/unplugged-program>

Age: Year 7 and 8

Gender: Male

Race/Ethnicity: "Culturally & Linguistic Diverse"

Setting: School

**Strengthening Families 10-14 (Blueprints Certified Promising Program)**

<https://www.extension.iastate.edu/sfp10-14/>Age: 10-14

Gender: All

Race/Ethnicity: All

Setting: Community, School

**Strong African American Families (Blueprints Certified Promising Program)**

<https://cfr.uga.edu/saaf-programs/>

Age: 5-11

Gender: All

Race/Ethnicity: African American

Setting: Community, School

**Guiding Good Choices (Blueprints Certified Promising Program)**

Call toll free: 1-877-896-8532

Age: 9-14

Gender: All

Race/Ethnicity: All

Setting: School

**Coping Power (Blueprints Certified Promising Program)**

<https://www.copingpower.com/>

Age: 5-11

Gender: All

Race/Ethnicity: All

Domain/Level: School

Setting: School

**Project Towards No Drug Abuse (Blueprints Certified Model Program)**

<https://tnd.usc.edu/>

Age: 15-18

Gender: All

Race/Ethnicity: All

Domain/Level: School

Setting: School

**Yale Work and Family Stress Project (SGR Evidence-Based Interventions for Age 18+)**

<http://theconsultationcenter.org/WFS%20SAMHSA.pdf>

Age: Adult

Gender: All

Race/Ethnicity: All

Domain/Level: Workplace

**Team Awareness (SGR Evidence-Based Interventions for Age 18+)**

<https://ibr.tcu.edu/manuals/team-awareness-small-business-4-hour-training-package-for-workplace-substance-abuse-prevention/>

Age: Adult

Gender: All

Race/Ethnicity: All

Domain/Level: Workplace

B) Selective Prevention Programs

**Nurse-family Partnership Program (Blueprints Certified Model Program)**

<https://www.nursefamilypartnership.org/>

Age: 0-2

Gender: Female

Race/Ethnicity:

Setting: Home

**KEEP SAFE (Blueprints Certified Promising Program)**

<https://www.oslc.org/projects/keep-safe/>

Age: 12-14

Gender: Female

Race/Ethnicity: All

Domain/Level: School and Family

Setting: Social Services

**Familias Unidas (Blueprints Certified Promising Program)**

<http://familias-unidas.info/>

Age: 12-18

Gender: All

Race/Ethnicity: Hispanic/Latino

Setting: Community, Home, and School

**Big Brothers Big Sisters of America (BBBSA) (Blueprints Certified Promising Program)**

<https://www.bbbs.org/>

Age: 5-18

Gender: All

Race/Ethnicity: All

Setting: Community

**Project Towards No Drug Abuse (Blueprints Certified Model Program)**

<https://tnd.usc.edu/>

Age: 15-18

Gender: All

Race/Ethnicity: All

Domain/Level: School

Setting: School

**Preventative Treatment Program (SGR Evidence-Based Interventions for Children Under Age 10)**

Age: 7-9

Low SES, adolescent boys who display early problem behavior

Gender: Male

Race/Ethnicity:

Setting: Multicomponent

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**Preventure/Adventure (SGR Evidence-Based Interventions for Children Under Aged 10 to 18)**

<https://positivechoices.org.au/teachers/preventure>

Youth determined by program screening to be at high risk for developing substance misuse disorder

Age: Year 7-10 (adolescents)

Gender: All

Race/Ethnicity: All

Setting: School

## Rural Specific Concerns

Approximately 60 million people, or one in five Americans, live in rural America (Rural Health Information Hub, 2018). The diversity of rural and frontier areas across the United States, in terms of geography, population density, and proximity to an urban or suburban center and has resulted in a series of competing definitions of rurality from multiple federal agencies.

According to Prevention Solutions@EDC, the Education Development Center, Inc., “Though the stereotypical rural community is small, homogeneous, and embedded in a rolling agricultural landscape, rural communities actually vary widely in both location and demographics. The U.S. Census Bureau defines “rural” as “anything not urban,” and includes all localities with a small population (less than 10,000) located outside an urban cluster area. This broad definition has inadvertently come to include very different types of localities such as:

- Densely settled small towns
- Exurban pockets with secluded neighborhoods located on the outskirts of cities
- Frontier areas comprising fewer than six people per square mile—the remote, sparsely populated areas most often described as “rural.””

For an overview and comparison of the most popular definitions of rural versus urban from U.S. Census Bureau, the U.S. Office of Management and Budget, and the Economic Research Service of the U.S. Department of Agriculture (USDA-ERS), see [Comparison of Rural Definitions](#). (link to table below).

Definition & Agency	Geographic Unit Used	For each definition, using 2010 Census data	
		What is Included in “Rural”	U.S. Rural Population
<b>Urban and Rural Areas</b> U.S. Census Bureau  Urbanized Areas (UAs) are geographic areas of 50,000 or more people. Urban Clusters (UCs) are geographic areas of 2,500 to 50,000 people.	Census Blocks and Block Groups	Rural areas encompass all population, housing, and territory not included within an urban area. (Excludes P.R.)	59,492,267  <b>Percent of Total Population:</b> 19.3%
<b>Core Based Statistical Areas</b> (Metropolitan, Micropolitan, Noncore) U.S. Office of Management & Budget  Metropolitan areas contain a core urban area population of 50,000 or more. Nonmetropolitan areas contain a population of less than 50,000. This includes both micropolitan areas, with urban cluster populations of 10,000 to 50,000, and all counties that lack an urban core, which are referred to as noncore counties.	County	All nonmetropolitan areas (counties) including micropolitan and noncore counties	46,293,406  <b>Percent of Total Population:</b> 14.99%
<b>Rural-Urban Commuting Areas (RUCAs)</b> Economic Research Service  Utilizes the U.S. Census Bureau’s UAs and UCs definitions with information on work commuting. Classification delineates metropolitan, micropolitan, small town, and rural commuting areas with whole numbers 1-10 and further subdivides into 21 secondary codes based on commuting flows — local or to another census tract.	Census Tract, ZIP Code approximation	Primary RUCA codes 4 and above (Micropolitan Area Core, population up to 49,999)	51,112,552  <b>Percent of Total Population:</b> 16.55%

Sources: [2010 Census Urban and Rural Classification and Urban Area Criteria, Urban, Urbanized Area, Urban Cluster, Rural Population, 2010 and 2000: United States](#), U.S. Census Bureau; [2010 Rural Urban Commuting Area Codes](#), USDA-ERS; [Urban Influence Codes, Documentation, 2013](#), USDA-ERS

According to the 2019 report, This Life in Rural America—Part II, based on a 2019 survey conducted for NPR, the Robert Wood Johnson Foundation, and the Harvard T.H. Chan School of Public Health, “A majority of rural Americans are satisfied with their quality of life, and rural Americans are more likely to see their communities as safe compared to adults nationally. A majority also express optimism that people like them can make an impact on their local community and are civically and socially engaged.” Unfortunately, several challenges endemic to rural and frontier areas of the United States have given rise to health disparities, particularly in

terms of the opioid epidemic. See Table 1 for a summary of the barriers to prevention and treatment of substance misuse among rural residents of Nevada and the United States. Fortunately a vast array of evidence-based interventions are available for use in rural America. For a list of highly rated evidence-based intervention programs, see Table 2.



Table 2. Barriers to the Prevention and Treatment of Substance Misuse among Rural Residents of Nevada and the United States

<p style="text-align: center;"><b>Access to Health Care</b></p> <p><i>Compared to their urban counterparts, rural residents of Nevada and the United States are more likely to:</i></p> <ul style="list-style-type: none"> <li>• encounter a persistent work force shortage of health care providers</li> <li>• be provided with fewer resources and poorer health care facilities</li> <li>• experience challenges obtaining transportation to needed health care services</li> <li>• have less access to health insurance</li> <li>• have less access to a local physician</li> <li>• have less access to primary care and patient monitoring for substance use</li> </ul>	<p style="text-align: center;"><b>Health</b></p> <p><i>Compared to their urban counterparts, rural residents of Nevada and the United States are more likely to:</i></p> <ul style="list-style-type: none"> <li>• be in poor health or have a chronic illness</li> <li>• exhibit higher rates of substance misuse (all substances)</li> <li>• experience higher rates of unintentional injury</li> <li>• have chronic pain</li> <li>• experience higher rates of suicide</li> <li>• experience higher rates of infant mortality</li> </ul>
<p style="text-align: center;"><b>Pain Management</b></p> <p><i>Compared to their urban counterparts, rural residents of Nevada and the United States are more likely to:</i></p> <ul style="list-style-type: none"> <li>• be engaged in physical work that can lead to injuries</li> <li>• be prescribed opiates</li> <li>• have either medical or social access to prescription opioids</li> <li>• travel greater distances for medical care</li> <li>• receive greater quantities of opioids for pain in recognition of the difficulty in returning for consistent follow-up care</li> </ul>	<p style="text-align: center;"><b>Alcohol Use Disorder (AUD), Substance Use Disorder (SUD), and Opioid Use Disorder (OUD)</b></p> <p><i>Compared to their urban counterparts, rural residents of Nevada and the United States are more likely to:</i></p> <ul style="list-style-type: none"> <li>• die from drug overdoses</li> <li>• use methamphetamine and natural and semisynthetic opioid-related drugs at higher rates</li> <li>• drive under the influence of alcohol (youth and adults)</li> <li>• experience negative consequences of illicit drug use (heroin, fentanyl, cocaine, and methamphetamines)</li> <li>• begin using alcohol at an earlier age</li> </ul> <p>Additionally,</p> <ul style="list-style-type: none"> <li>• Perception of harm related to alcohol use is lower and teen drinking is considered a “rite of passage.”</li> <li>• Hispanics living in rural areas are more likely to engage in higher-risk alcohol consumption and meet criteria for AUD</li> </ul>
<p style="text-align: center;"><b>Socio Cultural Factors</b></p> <p><i>Compared to their urban counterparts, rural residents of Nevada and the United States are more likely to:</i></p> <ul style="list-style-type: none"> <li>• experience poverty</li> <li>• place higher value on self-sufficiency that impedes help seeking behaviors related to treatment and recovery programming for substance use disorders</li> <li>• face social stigma related to seeking treatment for behavioral health concerns</li> <li>• experience a lack commitment to school (a protective factor for substance misuse and other adolescent problem behaviors)</li> </ul>	

- have wider social networks and closer ties to neighbors and families than urban residents in
- to share prescription opioids or know how to access others' prescribed opioids
- share a reduced perception of harm related to substance misuse (children and adults, including parents)
- be elderly

*Compared to their urban counterparts, rural residents are less likely to publicly admit problems related to substance misuse or abuse due to increased social stigma*

Table 3. Effective Evidence Based-Interventions (EBIs) for SUD/ODU Prevention across the Lifespan - Rural

<p><b>Nurse-family Partnership Program</b> (Blueprints Certified Model Program)  <a href="https://www.nursefamilypartnership.org/">https://www.nursefamilypartnership.org/</a>            Age: 0-2            Gender: Female            Race/Ethnicity: All            Setting: Home</p>
<p><b>Raising Healthy Children</b> (Blueprints Certified Promising Program)  <a href="http://www.sdr.org/rhcsurvey.asp">http://www.sdr.org/rhcsurvey.asp</a>            Age: 5-18            Gender: All            Race/Ethnicity: All            Setting: School</p>
<p><b>Life Skills Training (LST)</b> (Blueprints Certified Model Plus Program)  <a href="https://www.lifeskillstraining.com/">https://www.lifeskillstraining.com/</a>            Age: 12-14            Gender: All            Race/Ethnicity: All            Setting: School</p>
<p><b>Project Towards No Drug Abuse</b> (Blueprints Certified Model Program)  <a href="https://tnd.usc.edu/">https://tnd.usc.edu/</a>            (Risk factor, School domain: Lack of commitment to school – Rural concern)            Age: 15-18            Gender: All            Race/Ethnicity: All            Domain/Level: School            Setting: School</p>
<p><b>Familias Unidas</b> (Blueprints Certified Promising Program)  <a href="http://familias-unidas.info/">http://familias-unidas.info/</a>            Age: 12-18            Gender: All            Race/Ethnicity: Hispanic/Latino            Setting: Community, Home, and School</p>
<p><b>Coping Power</b> (Blueprints Certified Promising Program)            Age: 5-11            Gender: All            Race/Ethnicity: All            Domain/Level: School            Setting: School <a href="http://www.copingpower.com/">http://www.copingpower.com/</a></p>
<p><b>Strong African American Families – Teen</b> (Blueprints Certified Promising Program)  <a href="https://cfr.uga.edu/saaf-programs/">https://cfr.uga.edu/saaf-programs/</a>            Age: 15-18            Gender: All            Race/Ethnicity: African American            Setting: Community, School</p>

**Strengthening Families 10-14** (Blueprints Certified Promising Program)

<https://www.extension.iastate.edu/sfp10-14/>Age: 10-14

Gender: All

Race/Ethnicity: All

Setting: Community, School

**PROMoting School-community-university Partnerships to Enhance Resilience (PROSPER)** (Blueprints Certified Promising Program/Rural Health Information Hub)

<http://helpingkidsprosper.org/>

Age: 12-14

Gender: All

Domain/Level: Multi-component

Race/Ethnicity: All

Setting: Community and School

**Team Awareness** (SGR Evidence-Based Interventions for Age 18+)

<https://ibr.tcu.edu/manuals/team-awareness-small-business-4-hour-training-package-for-workplace-substance-abuse-prevention/>

Age: Adult

Gender: All

Race/Ethnicity: All

Domain/Level: Workplace

**Team Resilience**

<https://www.beaconhealthoptions.com/resilience-trainings-team-resilience-teamupnow/>

Age: Adult

Gender: All

Race/Ethnicity: All

Domain/Level: Workplace

**keepin' it REAL Rural** (Rural Health Information Hub)

<https://real-prevention.com/product/keepin-it-real-rural/>

Age: Grades 6-8

Gender: All

Race/Ethnicity: All

Domain/Level: School, Community

**Project Lazarus** (Rural Health Information Hub)

**Comprehensive - Multi-component programs** combine multiple strategies in order to address the various factors that influence NMUPD. Project Lazarus, has five major components:

- (1) Community activation and coalition building to raise community awareness and actively engage the community in intervention design;
- (2) Monitoring data on overdose, prescribing behavior, and other relevant data;
- (3) Prevention program implementation at multiple levels throughout the community;
- (4) Education on overdose antidote use for prescribers and the general community in order to change attitudes toward opioid misuse and abuse; and
- (5) Evaluation to assess program impact and identify areas needing improvement. Project Lazarus activities have been linked to decreases in overdose death rates. (Albert et al., 2011)

Project Lazarus Model

<https://www.projectlazarus.org/the-model>

Rural Prevention Toolkit

<https://www.ruralhealthinfo.org/toolkits/substance-abuse/2/prevention>

Source: Rural Health Information Hub

<https://www.ruralhealthinfo.org/>

**Additional Strategies shown to be effective for prevention of substance use disorder, opioid use disorder, and opioid related overdose**

- Community Education  
<https://www.nvopioidresponse.org/>
- Provider Education  
[http://dpbh.nv.gov/Resources/opioids/Prescriber\\_Education/](http://dpbh.nv.gov/Resources/opioids/Prescriber_Education/)  
[http://dpbh.nv.gov/Resources/opioids/Prescriber\\_Information/](http://dpbh.nv.gov/Resources/opioids/Prescriber_Information/)
- Prescription Drug Monitoring Programs (PDMP) and Triplicate Prescription Programs (TPP)
- <http://bop.nv.gov/links/PMP/>
- Proper medication storage and disposal
- <https://www.nvopioidresponse.org/storage-and-disposal-of-medication/>
- Harm Reduction: Opioid Education and Naloxone Distribution (OEND)  
<https://www.nvopioidresponse.org/what-is-naloxone/>
- Harm Reduction: Medication Assisted Treatment (MAT) for substance use and opioid use disorders
- <https://www.nvopioidresponse.org/become-a-mat-waivered-provider/>

**Additional Strategies shown to be effective for prevention of substance use disorder, opioid use disorder, and opioid related overdose**

- Community Education  
<https://www.nvopioidresponse.org/>
- Provider Education  
[http://dpbh.nv.gov/Resources/opioids/Prescriber\\_Education/](http://dpbh.nv.gov/Resources/opioids/Prescriber_Education/)  
[http://dpbh.nv.gov/Resources/opioids/Prescriber\\_Information/](http://dpbh.nv.gov/Resources/opioids/Prescriber_Information/)
- Prescription Drug Monitoring Programs (PDMP) and Triplicate Prescription Programs (TPP)
- <http://bop.nv.gov/links/PMP/>
- Proper medication storage and disposal
- <https://www.nvopioidresponse.org/storage-and-disposal-of-medication/>
- Harm Reduction: Opioid Education and Naloxone Distribution (OEND)  
<https://www.nvopioidresponse.org/what-is-naloxone/>
- Harm Reduction: Medication Assisted Treatment (MAT) for substance use and opioid use disorders
- <https://www.nvopioidresponse.org/become-a-mat-waivered-provider/>

## References

- Borders, T. (2018). Portraying a more complete picture of illicit drug use epidemiology and policy for rural America: a competing viewpoint to the CDC's *MMWR* Report [Commentary]. *The Journal of Rural Health*, 34, 3-5.
- Centers for Disease Control and Prevention (HHS). (2017) Illicit drug use, illicit drug use disorders, and drug overdose deaths in metropolitan and nonmetropolitan areas – United States. *Morbidity and Mortality weekly report: CDC Surveillance Summaries*, 66 (45).
- Compton, W.M., Jones, C.M., Harding, F.M., & Wargo, E.M. (2019). Targeting youth to prevent later substance use disorder: an underutilized response to the U.S. opioid crisis. *The American Journal of Public Health*, 109 (6), S185-S189.
- Hamlin, T. & Disselkoen, M. (2018). The state of substance use disorder treatment nationally and regionally, 2018 PBHCI Regional Meeting [PowerPoint slides]. Mountain Plains Addiction Technology Transfer Center Network (ATTC). Retrieved from [https://integration.samhsa.gov/pbhci-learning-community/regional\\_clusters/Hamblin.Disselkoen.Mountain\\_Plains.ATTC\\_PBHCI\\_SUD\\_Presentation.pdf](https://integration.samhsa.gov/pbhci-learning-community/regional_clusters/Hamblin.Disselkoen.Mountain_Plains.ATTC_PBHCI_SUD_Presentation.pdf)
- Keyes, K., Cerdá, M., Brady, J., Havens, J., & Galea, S. (2014) Understanding the rural–urban differences in nonmedical prescription opioid use and abuse in the United States. *American Journal of Public Health*, 104 (2).
- McLuckie, C., Pho, M., Ellis, K., Navon, L., Walblay, K., Jenkins, W., . . . Zahnd, W. (2019). Identifying areas with disproportionate local health department services relative to opioid overdose, HIV and hepatitis C diagnosis rates: A study of rural illinois. *International Journal of Environmental Research and Public Health*, 16(6), 989.
- Prevention Solutions@EDC, Education Development Center, Inc., (n.d.), *Preventing substance misuse in rural settings*. Developed under the Substance Abuse and Mental Health Services Administration's Center for the Application of Prevention Technologies task order. Reference #HHSS283201200024I/HHSS28342002T.
- National Advisory Committee on Rural Health and Human Services. (2017). *Understanding the impact of suicide in rural America*. Department of Health and Human Services.
- Pullen, E. & Oser, C. (2014). Barriers to substance abuse treatment in rural and urban communities: counselor perspectives. *Substance Use & Misuse*, 49:891–901.
- The Blueprints for Healthy Youth Development (2019). Retrieved from <https://www.blueprintsprograms.org/>

U.S. Department of Health and Human Services (HHS), Office of the Surgeon General (2018).

*Facing addiction in America: The Surgeon General's spotlight on opioids.* Washington, DC: HHS.

U.S. Department of Health and Human Services (HHS), Office of the Surgeon General (2016).

*Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health.* Washington, DC: HHS, November 2016.

Volkow, N. (2019). The importance of prevention in addressing the opioid crisis. Retrieved from

<https://www.drugabuse.gov/about-nida/noras-blog/2019/06/importance-prevention-in-addressing-opioid-crisis>