Community Needs Assessment: Opioid Usage and Prevention Efforts in Preston County, West Virginia

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Disclaimer

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Contents

Abstract

Preston County, West Virginia, continues to experience significant public health challenges related to opioid misuse, overdose deaths, polysubstance use, and behavioral health disparities that reflect broader trends throughout rural Appalachia and the state of West Virginia. This community needs assessment examines the historical development of substance use within West Virginia and applies those trends to the local context of Preston County using overdose surveillance data, prescription opioid indicators, demographic information, emergency department overdose data, and youth-focused Integrated Community Engagement Collaborative (ICEC) survey findings. The assessment identifies major social determinants of health influencing substance misuse, including poverty, transportation barriers, healthcare workforce shortages, stigma, and limited access to behavioral health services. Cultural factors associated with rural Appalachian communities, such as self-reliance, privacy, and strong family networks, are also explored as both strengths and barriers to prevention and treatment engagement.

Findings demonstrate increasing concerns related to fentanyl, methamphetamine, and polysubstance use, particularly among adults ages 30–49, while ICEC youth survey data indicates early initiation of vaping, alcohol, cannabis, and nonmedical opioid use among middle and high school students. The assessment further highlights the importance of strengthening prevention infrastructure through community coalition development, data-driven planning, and evidence-based prevention strategies. Continued adult prevention and intergenerational prevention efforts are discussed, including the need to address substance misuse among older adults and strengthen family protective factors. The assessment also examines how Preston County can utilize ICEC data within the Icelandic Prevention Model to guide youth-focused prevention initiatives emphasizing parental engagement, school connectedness, and community collaboration.

Finally, the assessment identifies the need for sustainable funding opportunities through County Commission support, opioid settlement funding, and future Drug-Free Communities coalition development efforts. Recommendations emphasize strengthening coalition capacity, improving prevention leadership training, expanding collaboration between prevention and recovery systems, and investing in long-term prevention infrastructure. By continuing to utilize local data, strengthen partnerships, and implement culturally responsive prevention strategies, Preston County can build a more coordinated and sustainable response to substance misuse and improve long-term community health outcomes.

Introduction

Preston County, located in northern West Virginia, is a primarily rural Appalachian community with a population of approximately 34,000 residents (Census Reporter, 2023). The county faces a significant public health challenge with opioid misuse and overdose, a problem that reflects both statewide trends and local socioeconomic conditions. This needs assessment identifies population needs and community assets influencing opioid use, explores health disparities and underlying inequities, highlights cultural considerations for intervention programs, and examines barriers to addressing opioid misuse , with an emphasis on how injury surveillance and control data can inform youth-focused strategies.

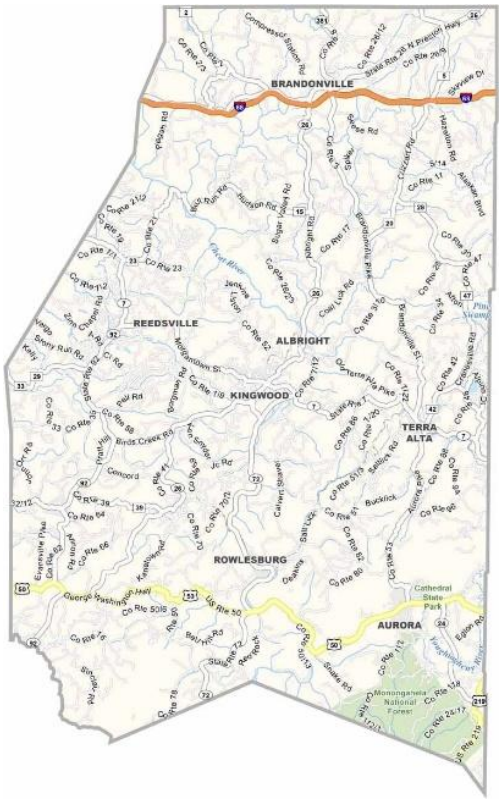

Figure 1: Map of Preston County 1

History of Substance Use in West Virginia

Substance use in West Virginia has evolved over several decades into one of the most severe public health crises in the United States. Historically, the state has faced significant socioeconomic challenges, including persistent poverty, unemployment, limited educational attainment, chronic health conditions, and geographic isolation, all of which have contributed to increased vulnerability to substance misuse and addiction. During the late 1990s and early 2000s, the widespread prescribing of opioid pain medications significantly increased throughout Appalachia and West Virginia. Prescription opioids were frequently used to treat chronic pain associated with physically demanding labor industries such as coal mining, manufacturing, and construction, contributing to high rates of opioid exposure and dependency within rural communities (Lester & Hatfield, 2023). West Virginia eventually became one of the states with the highest opioid prescribing rates in the nation, recording approximately 81.3 opioid prescriptions per 100 persons in 2017 compared to the national rate of 58.7 prescriptions per 100 persons (Lester & Hatfield, 2023).

As prescription opioid misuse increased, many individuals transitioned to heroin and illicit synthetic opioids such as fentanyl due to changes in prescribing regulations, addiction severity, and the lower cost and greater availability of illicit substances. West Virginia quickly emerged as the epicenter of the opioid epidemic, consistently reporting some of the highest overdose death rates in the United States (Lester & Hatfield, 2023). According to research examining opioid-related trends in West Virginia, the state recorded 871 overdose deaths involving all drugs in 2019, with approximately 76.8% involving at least one opioid (Lester & Hatfield, 2023). The rise of fentanyl and other highly potent synthetic opioids significantly accelerated overdose mortality rates throughout the state. Public health investigations conducted in Cabell County during 2016 identified clusters of overdoses linked to fentanyl

and fentanyl analogues, with many overdose victims requiring multiple doses of naloxone due to the potency of these substances (Lester & Hatfield, 2023).

Over time, substance use patterns within West Virginia shifted from opioid-only misuse toward widespread polysubstance use involving stimulants, benzodiazepines, cannabis, alcohol, and methamphetamine. Research conducted through West Virginia University found that approximately 72.8% of individuals with opioid use disorder in West Virginia also used at least one additional substance, with benzodiazepines, cannabis, cocaine, and amphetamines among the most common co-occurring substances (Mahoney et al., 2021). Additionally, researchers observed dramatic increases in amphetamine and methamphetamine use among individuals with opioid use disorder between 2014 and 2018, reflecting the growing prevalence of stimulant involvement in overdose deaths and substance use trends across the state (Mahoney et al., 2021). Polysubstance use has further complicated prevention, treatment, and overdose response efforts because combining opioids with stimulants or sedatives substantially increases overdose risk and worsens health outcomes.

Rural West Virginia communities have been particularly impacted by injection drug use and overdose mortality. Studies conducted among people who inject drugs in Cabell County found that approximately 42.6% of participants reported experiencing an overdose within the previous six months, while polysubstance use was highly prevalent among participants (Schneider et al., 2020). These findings highlight the importance of harm reduction efforts such as naloxone distribution, syringe service programs, medication-assisted treatment, and rapid linkage to behavioral health services. West Virginia has also experienced substantial increases in infectious diseases associated with injection drug use, including hepatitis B, hepatitis C, and HIV outbreaks linked to reduced access to harm reduction services in some counties (Lester & Hatfield, 2023).

Current substance use data continues to demonstrate the ongoing behavioral health challenges facing West Virginia residents. According to the 2021–2022 National Survey on Drug Use and Health (NSDUH), approximately 242,000 West Virginians age 12 and older reported illicit drug use in the past month, while an estimated 60,000 individuals reported opioid misuse within the past year (Substance Abuse and Mental Health Services Administration [SAMHSA], 2022). The same report estimated that 272,000 West Virginians met criteria for a substance use disorder, while more than 232,000 individuals who needed substance use treatment did not receive services (SAMHSA, 2022). These findings demonstrate that substance misuse in West Virginia remains a significant public health issue requiring continued investment in prevention, treatment, recovery support, harm reduction, and community-based interventions

Application of West Virginia Substance Use Trends to Preston County

The historical patterns of substance use observed across West Virginia are also reflected within Preston County, although many challenges present differently due to the county's rural geography, smaller population, and proximity to neighboring counties and interstate travel corridors. Like many rural Appalachian communities, Preston County has experienced the effects of prescription opioid overprescribing, increasing polysubstance use, behavioral health disparities, and the growing presence of fentanyl and methamphetamine within the illicit drug supply. These issues have been influenced by broader social determinants of health, including transportation barriers, poverty, limited healthcare access, workforce shortages, and stigma associated with substance use and behavioral health treatment (Lester & Hatfield, 2023).

Data from the West Virginia Board of Pharmacy's 2022 Prescription Opioid Indicators Report demonstrates that Preston County has experienced trends similar to statewide reductions in opioid prescribing while still maintaining indicators associated with overdose risk and substance misuse. Between 2014 and 2022, the number of opioid analgesics dispensed in Preston County decreased from 30,727 prescriptions to 16,081 prescriptions, reflecting a substantial decline in prescribing practices over time (West Virginia Board of Pharmacy, 2023). Additionally, the county's opioid prescribing rate per 1,000 residents steadily declined during this period, mirroring statewide efforts to reduce opioid prescribing and improve monitoring systems. However, Preston County continued to report percentages of patients receiving greater than 90 morphine milligram equivalents (MME) above the state average for multiple years, indicating continued risk for opioid dependence and overdose among some residents (West Virginia Board of Pharmacy, 2023).

The Preston County report also identified improvements in several prescribing-related risk indicators, including decreases in overlapping opioid prescriptions, reductions in opioid-naïve patients receiving long-acting opioids, and reductions in multiple provider episodes often associated with "doctor shopping" behaviors (West Virginia Board of Pharmacy, 2023). Despite these improvements, approximately 12% of Preston County residents still received an opioid prescription in 2022, while 4.3% received benzodiazepine prescriptions, demonstrating the continued prevalence of controlled substance prescribing within the county (West Virginia Board of Pharmacy, 2023).

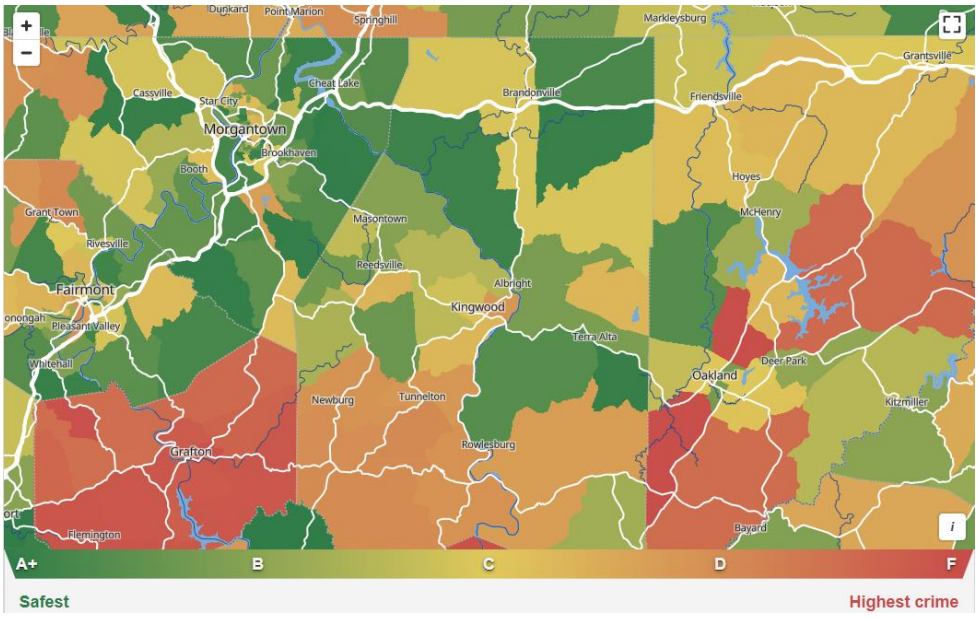

Figure 2: Crime grade map of Preston county 1

The attached CrimeGrade map further illustrates how drug-related crime patterns within Preston County may cluster around more populated and traveled areas, particularly near Kingwood and major transportation corridors. The figure demonstrates that areas surrounding Kingwood appear to have elevated drug-related crime activity compared to more rural northern and eastern portions of the county, which are represented by lower-risk green areas. This pattern is consistent with broader research showing that drug-related activity often concentrates near population centers, commercial areas, and transportation routes where access, distribution, and service utilization are more likely to occur (CrimeGrade.org, 2025). While Preston County overall maintains lower general crime rates than many neighboring areas, the presence of drug-related crime hotspots demonstrates the continued impact of substance misuse within the community and the importance of localized prevention and intervention efforts.

Preston County's proximity to Morgantown in Monongalia County and surrounding areas with elevated overdose and drug-related crime trends may also influence local substance use patterns through regional drug trafficking routes, commuting patterns, and access to illicit substances. Rural residents often travel between counties for employment, healthcare, shopping, and social activities, increasing regional interconnectedness related to both prevention opportunities and substance misuse risks. Additionally, the increasing presence of fentanyl and stimulant co-use seen across West Virginia likely impacts Preston County similarly, particularly given statewide trends showing rising methamphetamine involvement and polysubstance overdose patterns (Mahoney et al., 2021).

These findings demonstrate that Preston County's substance use challenges are part of the larger Appalachian and West Virginia opioid epidemic while also reflecting unique rural community characteristics. Continued investment in prevention infrastructure, coalition development, youth engagement, treatment access, harm reduction services, recovery supports, and data-driven decision-making will be necessary to address both current substance misuse trends and future emerging behavioral health concerns within the county.

Population Needs and Assets

Preston County, like other rural Appalachian counties, has experienced growing concerns related to drug misuse. Local reporting from early 2024 indicates that overdose rates, particularly involving methamphetamine and fentanyl, are increasing in the county, raising concerns among health officials about substance misuse within the region (Martin, 2024). Meanwhile, prescription reports show an overall decrease in both the rate and number of

opioids being prescribed in Preston County between 2018 and 2024, suggesting some progress in regulated prescribing (WV DHHR, 2024).

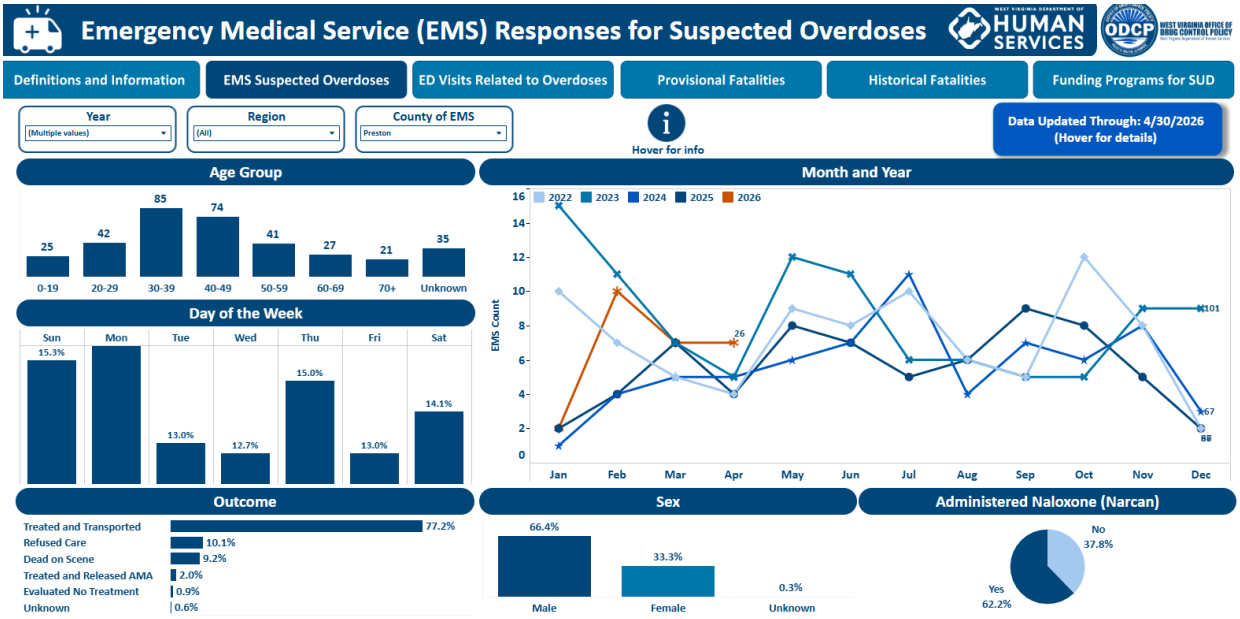

Figure 3 : Emergency Medical Service Response for Suspected Overdoses 2022-2026 (ODCP, 2026)

The county's economic and social conditions intersect with substance use risk. Rural communities experiencing limited economic opportunity and social resources are often more vulnerable to substance misuse. Preston County's unemployment rate in 2024 was estimated at 4.1%, reflecting rural economic challenges that can contribute to stress and reduced access to health care (Bureau of Labor Statistics, 2025). Despite these challenges, local assets include active health departments, collaborations with state injury prevention programs, and community coalitions providing education and health and safety promotion resources.

Health Disparities and Inequities

Health disparities related to opioid misuse in Preston County are shaped by structural, economic, and social inequities that significantly impact community well-being. A key

socioeconomic factor is the poverty rate: approximately 14.2% of Preston County residents live below the federal poverty line, higher than the nationwide rate of 12.4% and comparable to regional rural Appalachian conditions (Census Reporter, 2023). Elevated poverty is linked to stress, limited access to stable employment, and constrained resources for health care, all of which increase vulnerability to substance misuse and complicate prevention and recovery efforts.

West Virginia has long experienced a disproportionate burden of drug overdose deaths, consistently reporting some of the highest rates in the nation. In recent years, the opioid epidemic has continued to evolve with fentanyl and other synthetic opioids driving fatal overdoses across the state (SHADAC, 2023). Although county-specific overdose death data for Preston County is limited in public surveillance systems, statewide trends illustrate the severity of the epidemic and suggest that rural counties share in these challenge.

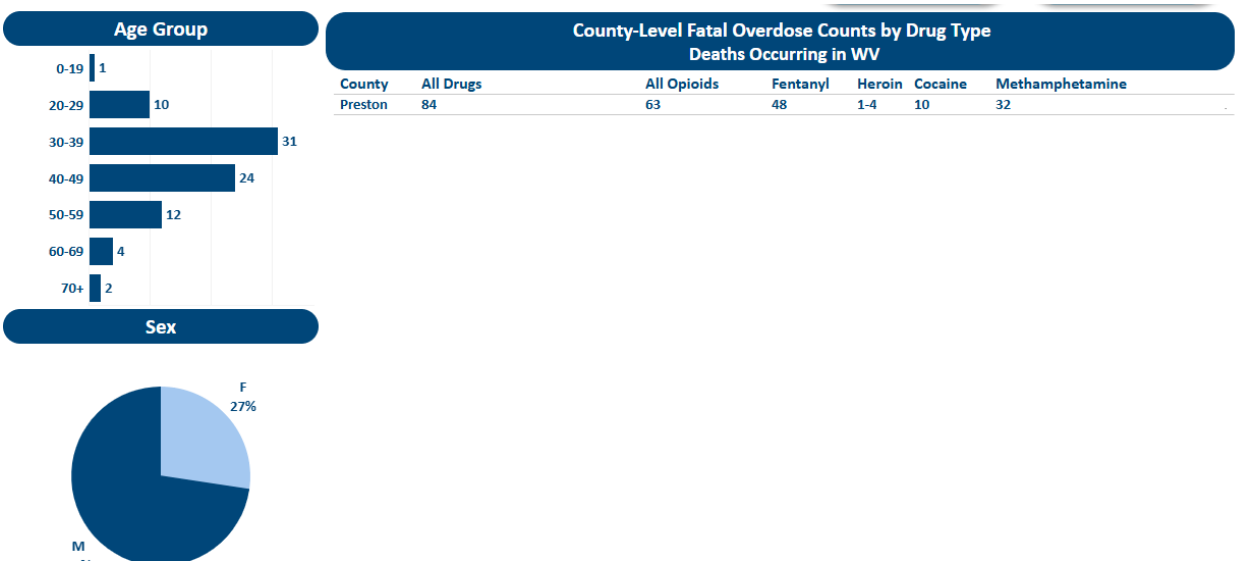

Figure 4: Preston County Fatal Overdose (ODCP, 2026)

The above figure highlights the significant impact of overdose deaths in Preston County and demonstrates important demographic and substance use trends that should guide prevention and intervention strategies. According to the data, Preston County experienced 84 overdose deaths involving all drugs, with opioids accounting for 63 of those fatalities and fentanyl involved in 48 deaths, emphasizing the continued severity of the opioid and fentanyl crisis within the county. Methamphetamine was also identified in 32 overdose deaths, suggesting an increasing presence of polysubstance use and stimulant involvement in overdose mortality.

The age distribution indicates that adults between the ages of 30–39 experienced the highest number of overdose deaths (31), followed by individuals aged 40–49 (24), reflecting the disproportionate burden of substance use disorders among working-age adults. Additionally, males accounted for the majority of overdose deaths, representing approximately 73% of fatalities, while females accounted for 27%.

These findings demonstrate the need for targeted efforts focused on adults in their prime working years and youth before they reach those years, expanded health and safety promotion services, increased access to treatment and recovery supports, and community education surrounding fentanyl and polysubstance use. The data further supports the importance of collaborative prevention initiatives within Preston County, including community coalition development, public awareness campaigns, naloxone distribution, and evidence-based

prevention programming designed to address both opioid and stimulant misuse.

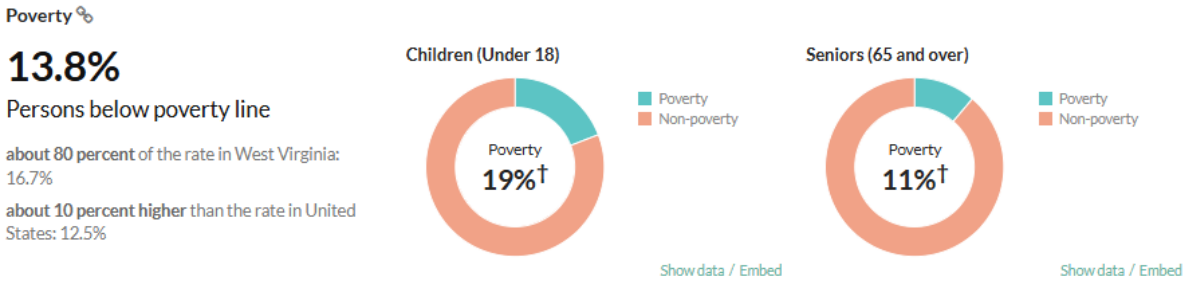

Figure 5: Preston County Poverty (Census Reporter, 2023)

Poverty compounds other disparities. Rural counties with higher poverty often have fewer healthcare providers per capita and limited addiction treatment resources, including medication-assisted treatment (MAT) and behavioral health professionals. Federal regulatory barriers have historically restricted the distribution of specialized services in rural regions, leading to gaps in prevention and treatment access for individuals and families affected by opioid misuse. Additionally, cultural stigma around addiction, often stronger in close-knit rural communities, may delay or deter individuals from seeking mental health or substance use treatment until crises occur.

Cultural Needs for the Population of Focus

The cultural context of Preston County plays a significant role in shaping how opioid misuse is understood and addressed. Rural Appalachian culture values self-reliance, close family networks, and privacy. These cultural strengths support community resilience and mutual aid;

however, they can also contribute to stigma around substance misuse and reluctance to seek help due to fear of community judgment.

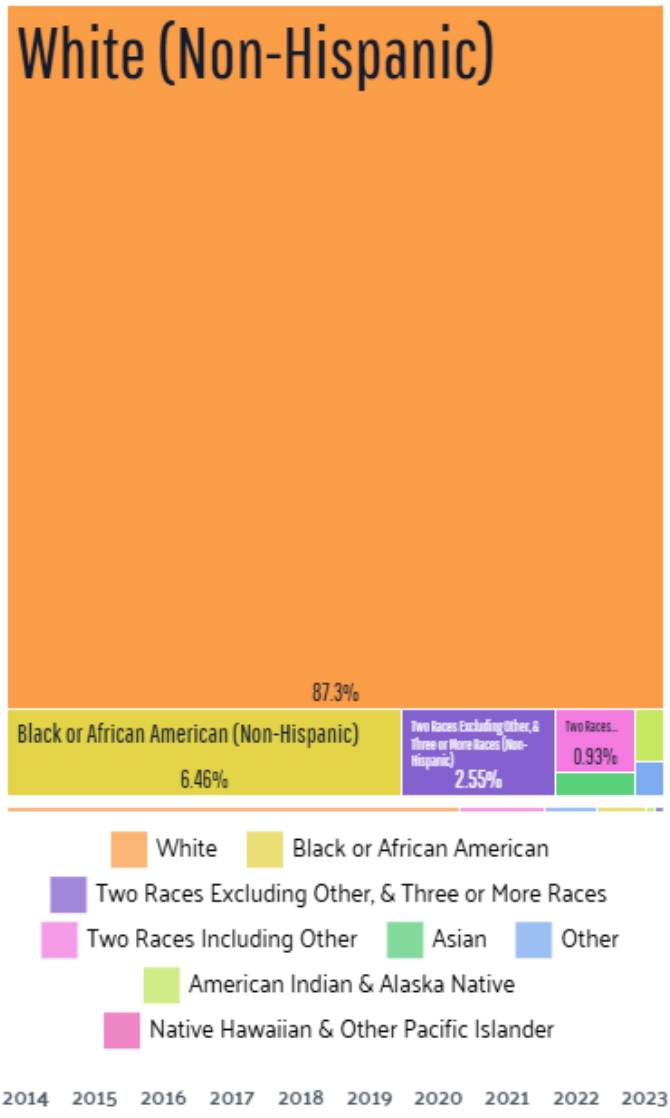

Figure 6: Preston County Demographic Data (Data USA, 2024)

Demographic and socioeconomic data further demonstrate several community factors that may contribute to health disparities and substance use outcomes within Preston County. Preston County is a predominantly rural county with a population of approximately 34,000 residents and a median age of 43.3 years, reflecting an aging population compared to many areas of the United States. The county is primarily White (86.2%), and educational attainment remains lower than national averages, with only 17.5% of residents age 25 and older holding a bachelor's degree or higher. Economic indicators also highlight potential social determinants of health concerns, as approximately 13.8% of residents live below the poverty line and the median household income is approximately $61,880. Additionally, residents experience an average commute time of 31.1 minutes, which may create transportation and access barriers to healthcare, behavioral health treatment, and recovery support services in this rural region. These demographic and socioeconomic conditions can increase vulnerability to

substance misuse, mental health concerns, and limited healthcare access, further emphasizing the importance of prevention-focused initiatives, community partnerships, and expanded behavioral health resources within Preston County (Data USA, 2024).

Designing effective opioid intervention programs, especially for youth, requires honoring these cultural values. Program planners should build trust within community institutions such as schools, churches, and civic organizations to leverage social networks that can support recovery and prevention. Interventions should emphasize community empowerment and non-stigmatizing language around addiction, framing substance use prevention as a tool to support youth autonomy and community well-being.

Challenges and Barriers to Addressing Opioid Misuse

Despite community assets, multiple barriers impede efforts to address opioid misuse in Preston County. One major challenge is data limitations. County-level overdose data is often sparse or delayed, hindering precise targeting of interventions. Here, Integrated Community Engagement (ICE) data, including injury surveillance systems tracking overdose incidents and emergency department visits, can be especially valuable. ICE data can identify geographic and demographic trends, revealing patterns that can inform youth prevention efforts. For example, identifying neighborhoods or age groups with higher nonfatal overdose rates can help schools and community organizations tailor substance misuse education before fatal outcomes occur.

Social determinants of health, such as poverty, limited transportation, and workforce shortages, and further complicate access to prevention and treatment services. Transportation barriers in rural areas often make it difficult for residents to reach counseling or MAT providers

located outside the county. Additionally, stigma and limited behavioral health literacy may prevent early help-seeking, especially among families concerned about confidentiality or community perceptions.

Recent Integrated Community Engagement Collaborative (ICEC) survey data further highlights concerns related to youth substance use and risk behaviors in Preston County. According to the 2025 ICEC high school report, approximately 14% of surveyed students across participating counties reported ever trying e-cigarettes or vaping devices, while 8% reported vaping within the past 30 days. Additionally, 22% of surveyed students reported ever consuming alcohol, and 8% reported ever using cannabis substances. The report also found that 4% of students across participating high schools reported ever using opioids without a doctor's prescription. These findings demonstrate the continued importance of early prevention strategies targeting youth substance use behaviors before they escalate into long-term addiction or overdose risks.

Middle school ICEC data also revealed early initiation of substance use behaviors among adolescents. The 2025 middle school report found that 12% of surveyed students reported ever trying e-cigarettes or vaping devices, while 5% reported current vaping within the last 30 days. Approximately 19% reported ever consuming alcohol, and 3% reported ever using cannabis substances. The reports further indicated that some students initiated alcohol, nicotine, and vaping use before the age of 13, emphasizing the need for prevention education and protective factor development during early adolescence.

ICEC findings also reinforce the importance of protective community factors. The ICEC framework emphasizes strengthening family engagement, school connectedness, positive peer relationships, and healthy leisure activities as evidence-based approaches for reducing youth substance use. These findings support the need for Preston County to continue expanding collaborative prevention initiatives between schools, health departments, community coalitions, and local organizations to address both opioid misuse and broader substance use trends among youth populations.

Collaborative strategies that leverage state resources and federal funding are essential. For instance, expanding telehealth behavioral services and integrating ICE data dashboards with school and health department planning can improve early identification and response.

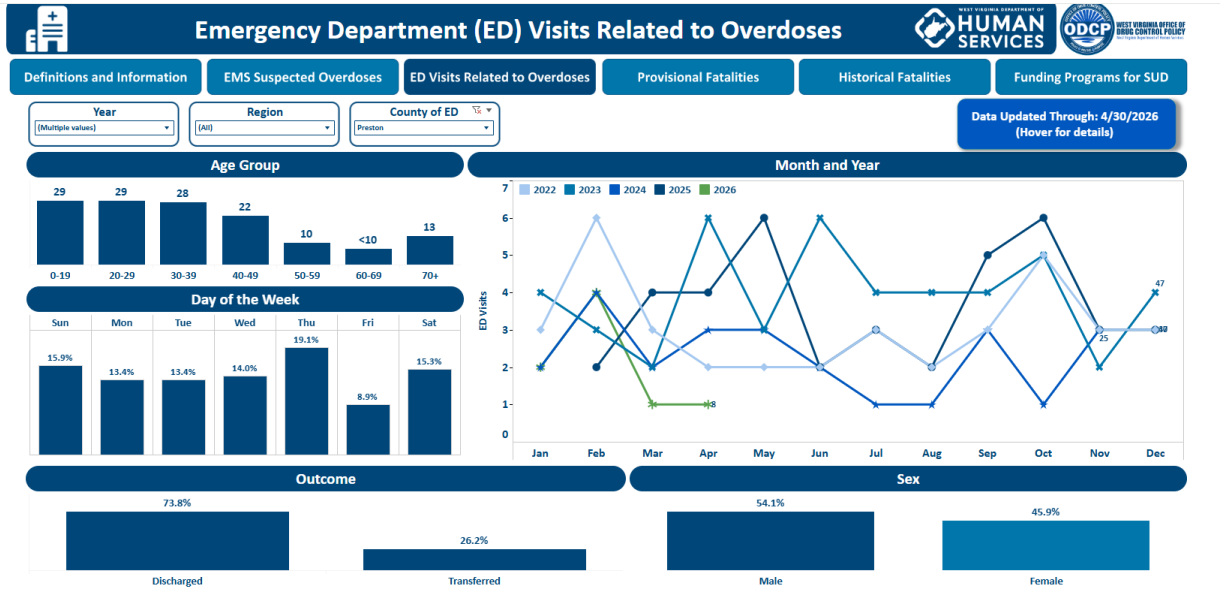

Figure 7 Emergency Department Visits Related to Overdoses 2022-2026 1

Data from the West Virginia Office of Drug Control Policy Overdose Dashboard indicates that suspected overdose-related emergency department visits continue to impact Preston County across multiple age groups, highlighting substance misuse as a significant community

health concern. Individuals between the ages of 20–29 and 30–39 represented some of the highest rates of emergency department overdose visits, with additional concerning trends among adolescents and young adults ages 0–19. The data also demonstrates that overdose incidents occur consistently throughout the week, with Saturdays showing the highest percentage of reported visits. Most overdose-related emergency department encounters resulted in discharge, suggesting ongoing opportunities for prevention education, treatment linkage, recovery support services, and health and safety promotion interventions following emergency care encounters.

These findings reinforce the need for comprehensive community-based prevention strategies, increased behavioral health resources, youth-focused prevention programming, and stronger coordination between healthcare providers, public health agencies, schools, and community coalitions to address substance use and overdose risks within Preston County.

Prevention Efforts

The Preston County Health Department (PCHD) has continued to strengthen local prevention infrastructure through the development of coordinated substance use prevention initiatives, coalition capacity building, and cross-sector collaboration. A significant advancement in these efforts was the hiring of a dedicated Prevention Coordinator to oversee countywide prevention planning, community engagement, youth substance use prevention programming, and coordination of opioid-related initiatives. The addition of a prevention-focused position allows PCHD to expand evidence-based prevention strategies, improve data collection and evaluation practices, and increase collaboration among schools, healthcare providers, law

enforcement, recovery organizations, and community stakeholders. Research demonstrates that communities with dedicated prevention infrastructure and sustained coalition leadership are more effective at reducing youth substance use and improving long-term behavioral health outcomes **(**Substance Abuse and Mental Health Services Administration [SAMHSA], 2020).

In addition to staffing enhancements, the Preston Prevention Partnership (PPP) has begun implementing leadership development and coalition restructuring efforts designed to align more closely with the Drug-Free Communities (DFC) Support Program framework. The DFC model emphasizes broad sector representation, strategic planning, sustainability, youth involvement, data-driven decision-making, and community-level environmental strategies to reduce substance misuse among youth (Office of National Drug Control Policy [ONDCP], 2023)**.** As prevention science and funding expectations continue to evolve, PPP leadership has recognized the importance of formalizing coalition structure, clarifying member roles, developing strategic action plans, and strengthening community capacity to pursue future state and federal funding opportunities. These efforts include expanding community sector engagement, incorporating local epidemiological data into planning efforts, and utilizing the Strategic Prevention Framework to guide prevention activities and evaluation.

To further strengthen collaboration between prevention and recovery systems, it has been proposed that members of the Preston County Commission's Opioid Advisory Board serve as guiding members of the Preston Prevention Partnership and be its own domain of the PPP. This partnership model would allow for improved communication between county leadership, prevention stakeholders, and recovery-focused initiatives while maintaining the independence of each entity. Integrating advisory board participation within PPP meetings could assist in

identifying emerging substance use trends, aligning prevention priorities with county opioid settlement funding goals, and ensuring continuity between prevention, health and safety promotion, treatment, and recovery supports.

Public health literature consistently supports collaborative community coalitions as an effective strategy for addressing complex behavioral health challenges through shared planning, resource coordination, and systems-level approaches (Fertman & Allensworth, 2017). Strengthening coordination between prevention and recovery stakeholders may improve community responsiveness, reduce duplication of services, and support a more comprehensive continuum of care for Preston County residents affected by substance use disorders.

Continued Adult Prevention and Intergenerational Prevention Efforts

While youth prevention remains a critical priority, Preston County must also continue investing in adult-focused prevention efforts to support long-term intergenerational change and reduce the ongoing impact of substance misuse within families and communities. Research consistently demonstrates that parental behaviors, family environments, adverse childhood experiences, and adult substance use patterns significantly influence youth attitudes and behaviors related to alcohol, tobacco, opioids, and other substances. Intergenerational prevention strategies recognize that reducing substance misuse among adults can directly strengthen protective factors for children and adolescents by improving family stability, increasing parental engagement, and reducing exposure to substance use within the home environment.

Continued adult prevention efforts in Preston County should include community education initiatives focused on opioid misuse, fentanyl awareness, alcohol misuse, mental health promotion, stigma reduction, and safe medication storage and disposal practices. Expanding access to recovery support services, peer recovery resources, SMART Recovery programs, behavioral health education, and health and safety promotion initiatives can also improve outcomes for adults while helping to reduce the normalization of substance use behaviors among youth. Additionally, adult prevention programming should incorporate trauma-informed approaches that recognize the long-term effects of adverse childhood experiences, poverty, chronic stress, and generational substance use patterns that are common within many rural Appalachian communities.

Prevention efforts should also address the growing concerns surrounding substance misuse among older adults. Older adults are particularly vulnerable to substance misuse due to factors such as chronic pain, social isolation, grief and loss, declining physical health, retirement, mental health conditions, and the increased use of prescription medications (National Institute on Drug Abuse [NIDA], 2020). Older adults are also more susceptible to the effects of drugs and alcohol because aging bodies process substances differently, increasing the risk of overdose, falls, cognitive impairment, medication interactions, and chronic disease complications. According to NIDA (2020), alcohol remains the most misused substance among older adults, while prescription opioid and benzodiazepine misuse continues to increase within this population.

In rural communities such as Preston County, older adults may experience additional barriers including transportation limitations, social isolation, stigma surrounding behavioral

health treatment, and limited access to specialized geriatric behavioral health services, and raising their Grandchildren. Prevention initiatives should therefore include targeted education for older adults, caregivers, healthcare providers, and families regarding prescription medication safety, overdose prevention, behavioral health screening, and substance misuse warning signs. Expanding community support networks, recovery services, peer support programs, and opportunities for social engagement among older adults may also help reduce isolation and improve overall quality of life.

Intergenerational prevention efforts should emphasize strengthening family protective factors through parenting education, family engagement activities, mentoring opportunities, and increased communication between schools, parents, and community organizations. The Icelandic Prevention Model highlights the importance of parental monitoring, time spent with family, school connectedness, and positive social environments in reducing youth substance use initiation (Kristjansson et al., 2021). Preston County can utilize ICEC survey findings to identify areas where family engagement and protective factors may need additional support and develop community-based initiatives that encourage healthy family relationships and increased parental involvement.

Collaborative prevention efforts involving the Preston Prevention Partnership, Preston County Health Department, schools, healthcare providers, recovery organizations, faith-based groups, senior service organizations, and local government can help create a more comprehensive prevention system that supports both youth and adults across the lifespan. By combining youth-focused prevention initiatives with continued adult education, older adult prevention efforts, recovery support, and family-centered programming, Preston County can

move toward a sustainable intergenerational prevention approach designed to reduce substance misuse, strengthen families, and improve long-term community health outcomes.

Utilizing ICEC Data Within the Icelandic Prevention Model

The Integrated Community Engagement Collaborative (ICEC) survey data provides Preston County with an important opportunity to implement prevention strategies using principles from the Icelandic Prevention Model (IPM), an internationally recognized, community-based prevention framework focused on reducing youth substance use through strengthening protective factors and reducing environmental risk factors. The Icelandic Prevention Model emphasizes that adolescent substance use is heavily influenced by social environments, including parental engagement, school connectedness, peer relationships, organized activities, and community norms rather than solely focusing on individual behavior change (Kristjansson et al., 2021).

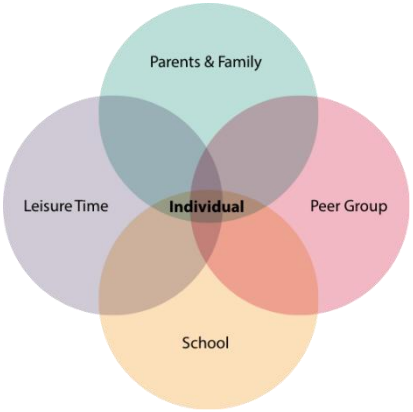

Figure 8: ICEC Domains 1

The ICEC survey already measures many of the same risk and protective factors identified within the Icelandic Prevention Model, including parental monitoring, school engagement, peer influences, mental health indicators, substance use behaviors, and participation in healthy extracurricular activities. By utilizing ICEC data annually, Preston County can identify emerging trends among youth populations, monitor changes in protective factors over time, and tailor prevention efforts to address the specific needs of local schools and communities. This data-driven approach aligns closely with the Icelandic model's emphasis on

annual community assessment, rapid dissemination of findings, and collaboration between researchers, schools, policymakers, families, and community organizations (Kristjansson et al., 2021).

ICEC findings showing early initiation of vaping, alcohol use, cannabis use, and nonmedical opioid use among middle and high school students demonstrate the need for prevention efforts focused on delaying substance use initiation as long as possible. Research supporting the Icelandic model indicates that delayed initiation significantly reduces the likelihood of long-term substance misuse and addiction later in life (Kristjansson et al., 2021). Using ICEC data, Preston County can identify schools or age groups with elevated risk behaviors and implement targeted prevention strategies that strengthen protective factors such as family engagement, positive peer networks, structured extracurricular activities, and school connectedness.

The Icelandic Prevention Model also emphasizes the importance of community collaboration and environmental prevention strategies rather than relying solely on individual education campaigns. ICEC data can support coalition planning efforts by helping the Preston Prevention Partnership, Preston County Health Department, schools, law enforcement, healthcare providers, and community organizations identify priority areas and align prevention activities around shared local data. For example, if ICEC data reveals increased substance use among youth reporting low school engagement or limited parental monitoring, prevention efforts can focus on improving family communication initiatives, after-school programming, mentoring opportunities, and school-based protective factor development.

Additionally, ICEC data can help Preston County establish measurable prevention outcomes and evaluate the effectiveness of community interventions over time. The Icelandic Prevention Model relies heavily on continuous evaluation, local ownership of data, and long-term investment in prevention infrastructure rather than short-term programming alone (Kristjansson et al., 2021). By integrating ICEC data into coalition strategic planning, funding proposals, and community decision-making processes, Preston County can strengthen evidence-based prevention practices, improve community engagement, and develop a sustainable public health approach focused on reducing youth substance use and improving long-term behavioral health outcomes.

Funding Needs and Sustainability Opportunities

Sustainable funding will be essential for Preston County to expand prevention infrastructure, strengthen coalition capacity, improve data-driven decision-making, and develop long-term strategies to address substance misuse and overdose trends. While Preston County has demonstrated strong community engagement through the Preston Prevention Partnership (PPP), the Preston County Health Department, local schools, healthcare systems, and recovery organizations, additional investment is needed to build a more structured and sustainable prevention system capable of meeting future state and federal funding expectations. As prevention science and grant requirements continue to evolve, PPP leadership has recognized the need to formally restructure the coalition to align more closely with the Drug-Free Communities (DFC) Support Program model, which emphasizes sector engagement, strategic planning, sustainability, youth involvement, evaluation, and community-level environmental

prevention strategies. Before pursuing future DFC funding opportunities, coalition infrastructure and leadership capacity must be strengthened through strategic planning, member development, governance restructuring, community mapping, and enhanced data collection and evaluation practices.

County Commission support and opioid settlement funding represent critical opportunities to build this prevention infrastructure and expand evidence-based community programming. Opioid settlement resources administered through the West Virginia First Foundation (WVFF) provide an opportunity for Preston County to invest in sustainable prevention systems that address the long-term impact of the opioid epidemic. In May 2026, WVFF announced a Request for Applications (RFA) for the Community Catalyst Grant (CCG), a three-year, $9.87 million funding initiative focused on prevention, rehabilitation, public safety response, and community recovery efforts. One of the grant's targeted funding categories, Generational Prevention, allocates approximately $215,000 annually per award to support early intervention and prevention services for at-risk youth ages 12–18 and their families. The grant model emphasizes measurable outcomes, long-term sustainability, performance accountability, and cross-sector collaboration, all of which align closely with Preston County's current prevention goals and coalition development efforts

Additional funding opportunities would also allow local prevention leaders, coalition members, and youth-serving professionals to participate in advanced prevention leadership training and professional development opportunities. Conferences and training such as the Community Anti-Drug Coalitions of America (CADCA) Leadership Forum, the West Virginia Rural Health Conference, and the Share the Vision Conference provide evidence-based education on

prevention science, coalition sustainability, grant management, evaluation, youth engagement, health and safety promotion, and emerging substance use trends. Participation in these events would strengthen local leadership capacity, improve collaboration between sectors, and ensure that Preston County's prevention initiatives remain aligned with the best national practices and evidence-based approaches. Investing opioid settlement and County Commission resources into prevention workforce development and coalition infrastructure would help create a sustainable, data-driven prevention system capable of reducing substance misuse and improving long-term health outcomes for Preston County residents.

Conclusion

Preston County continues to face significant challenges related to opioid misuse, overdose deaths, polysubstance use, and behavioral health disparities that mirror broader trends across rural Appalachia and West Virginia. Local surveillance data, ICEC youth survey findings, and demographic indicators demonstrate the urgent need for comprehensive prevention, treatment, recovery, and health and safety promotion strategies. The growing presence of fentanyl and methamphetamine in overdose deaths, along with evidence of early substance use initiation among youth, highlights the importance of strengthening prevention efforts across all age groups.

Social determinants of health, including poverty, transportation barriers, workforce shortages, stigma, and limited access to behavioral health services, continue to impact community health outcomes in Preston County. Addressing these issues will require culturally responsive, community-driven strategies that strengthen collaboration among public health

agencies, schools, healthcare providers, law enforcement, recovery organizations, and community coalitions.

The Preston County Health Department and Preston Prevention Partnership have taken important steps toward improving local prevention infrastructure through coalition development, hiring a dedicated Prevention Coordinator, expanding partnerships, and aligning prevention efforts with the Drug-Free Communities framework. Continued coalition restructuring and leadership development will be necessary to improve sustainability and prepare for future state and federal funding opportunities.

County Commission support and opioid settlement funding, including opportunities through the West Virginia First Foundation Community Catalyst Grant, will be critical for expanding prevention programming, strengthening coalition capacity, improving data collection and evaluation, and supporting youth-focused initiatives. Funding may also provide leadership development opportunities through training and conferences such as CADCA, the West Virginia Rural Health Conference, and the Share the Vision Conference. By continuing to strengthen prevention infrastructure, utilizing local data, and build collaborative partnerships, Preston County can create a more coordinated and sustainable response to substance misuse and improve long-term health outcomes for the community**.**

References

Bureau of Labor Statistics. (2025). *Unemployment rate in Preston County, WV* [Data set]. Federal Reserve Bank of St. Louis. https://fred.stlouisfed.org/series/LAUCN540770000000003A

Census Reporter. (2023). *Preston County, WV — Poverty and income data*. https://censusreporter.org/profiles/05000US54077-preston-county-wv/

CrimeGrade.org. (2025). *Drug-related crime rates and maps for Preston County, West Virginia*. https://crimegrade.org/drug-crimes-preston-county-wv/

Data USA. (2024). *Preston County, WV*. Data USA Preston County Profile. https://datausa.io/profile/geo/preston-county-wv

Integrated Community Engagement Collaborative (ICEC). (2025). *County report: Communities served by Fayette, Nicholas and Preston County high schools (Fall 2025)*. West Virginia University School of Public Health.

Integrated Community Engagement Collaborative (ICEC). (2025). *County report: Communities served by Nicholas and Preston County middle schools (Fall 2025)*. West Virginia University School of Public Health.

Kristjansson, A. L., Lilly, C. L., Thorisdottir, I. E., Allegrante, J. P., Mann, M. J., Sigfusson, J., Soriano, H. E., & Sigfusdottir, I. D. (2021). Testing risk and protective factor assumptions in the Icelandic model of adolescent substance use prevention. *Health Education Research, 36*(3), 309–318. https://doi.org/10.1093/her/cyaa052

Lester, K., & Hatfield, C. (2023). *The epidemic of opioid usage in West Virginia*. Marshall University Digital Scholar. https://mds.marshall.edu/etd/1827

Mahoney, J. J., III, Winstanley, E. L., Lander, L. R., Berry, J. H., Marshalek, P. J., Haut, M. W., Marton, J. L., Kimble, W. D., Armistead, M., Wen, S., Cai, Y., & Hodder, S. L. (2021). High prevalence of co-occurring substance use in individuals with opioid use disorder. *Addictive Behaviors, 114*, 106752. https://doi.org/10.1016/j.addbeh.2020.106752

Martin, J. (2024). *Preston County officials express concerns for increase in drug rates*. West Virginia News. https://www.wvnews.com/prestoncountynews/news/preston-county-west-virginia-officials-express-concerns-for-increase-in-drug-rates/article_3730dd92-c540-11ee-8e3c-135d48771109.html

National Institute on Drug Abuse. (2020, July). *Substance use in older adults DrugFacts*. National Institutes of Health. https://nida.nih.gov/publications/drugfacts/substance-use-in-older-adults-drugfacts

Office of Drug Control Policy. (n.d.). *Overdose dashboard*. https://odcp.wv.gov/page/overdose-dashboard

Schneider, K. E., O'Rourke, A., White, R. H., Park, J. N., Music, R. J., Kilkenny, M. E., Sherman, S. G., & Allen, S. T. (2020). Polysubstance use in rural West Virginia: Associations between latent classes of drug use, overdose, and take-home naloxone. *International Journal of Drug Policy, 76*, 102642. https://doi.org/10.1016/j.drugpo.2019.102642

SHADAC. (2023). *The opioid epidemic in the United States: State trends in opioid overdose mortality*. https://www.shadac.org/opioid-epidemic-united-states

Substance Abuse and Mental Health Services Administration. (2022). *2021–2022 National Survey on Drug Use and Health state estimates: West Virginia tables*. U.S. Department of Health and Human Services.

West Virginia Board of Pharmacy. (2023). *Prescription opioid indicators report: Preston County – 2022*. West Virginia Department of Health and Human Resources.

WV DHHR. (2024). *Preston County prescription opioid indicators report* [Report]. West Virginia Department of Health & Human Resources. https://dhhr.wv.gov/vip/county-reports/CountyReports/County%20Reports%202024/Preston%202024.pdf