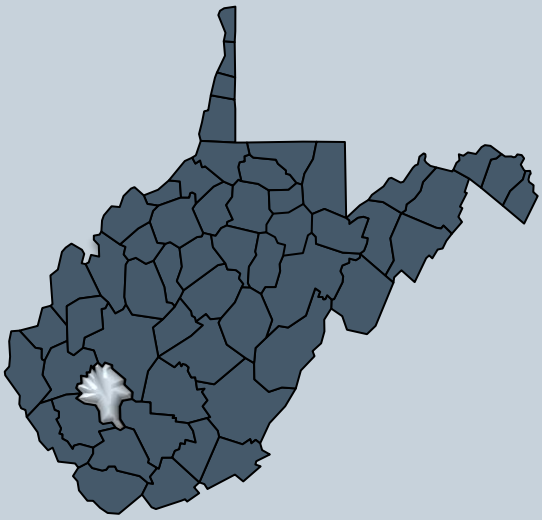
Boone County
2025



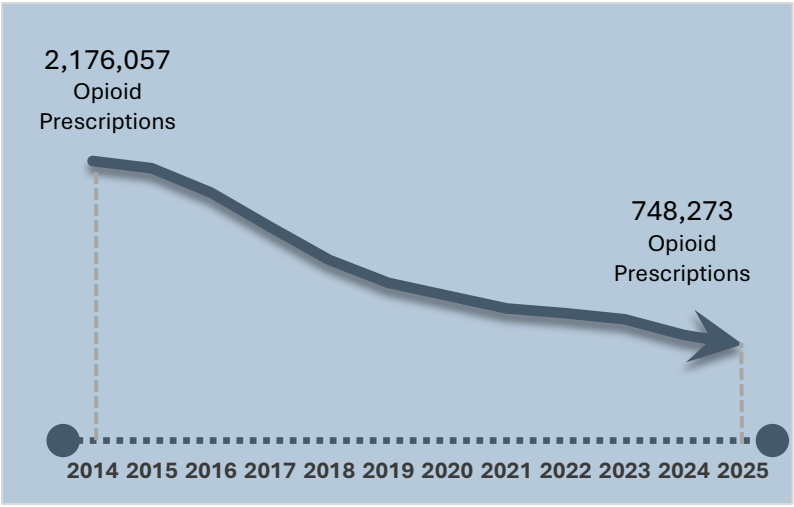
West Virginia Board of Pharmacy
Controlled Substance Monitoring Program
Prescription Opioid Indicators Report

Prescription Opioid Trends in West Virginia: A 2025 Spotlight on Boone County

The State of the Opioid Epidemic in West Virginia

The prescription drug overdose epidemic continues to represent a significant public health crisis in West Virginia. Preliminary data for 2024 reveals that more than 800 people died in association with drug misuse, a rate of 48.9 per 100,000 population which is more than two times the national average. This report is part of a crucial public health surveillance effort, representing a collaboration between the West Virginia Department of Health, the West Virginia Board of Pharmacy, and the Centers for Disease Control and Prevention (CDC). Its purpose is to analyze key opioid prescribing indicators at the county level, enabling the identification of high-risk areas and informing targeted intervention strategies and community education initiatives.

Statewide efforts to combat this epidemic have yielded significant progress. According to the West Virginia Controlled Substance Monitoring Program, there has been a **66% decrease** in the total number of opioids dispensed in West Virginia since 2014. This downward trend continued into the most recent year, with nearly **6 million fewer opioid doses** dispensed in 2025 than in 2024.



While these statewide trends are encouraging, a more granular, county-level analysis is essential for effective public health action. The following analysis provides a detailed look at these trends within Boone County to understand its unique challenges and successes.

Boone County 2025 Snapshot: Key Prescription Metrics

This section provides a high-level overview of controlled substance prescription patterns in Boone County for the year 2025. These metrics offer a baseline understanding of the prevalence of controlled substance use within the community compared to the state as a whole, which is crucial for contextualizing the more detailed trend analysis that follows.

Metric	Boone County	West Virginia
Percentage of residents with a controlled substance prescription	28.3%	21.0%
Percentage of residents with an opioid prescription	17.3%	12.0%
Percentage of residents with a benzodiazepine prescription	7.1%	5.3%

The following section will explore the multi-year data behind these summary figures to provide a more comprehensive picture of prescribing trends over time.

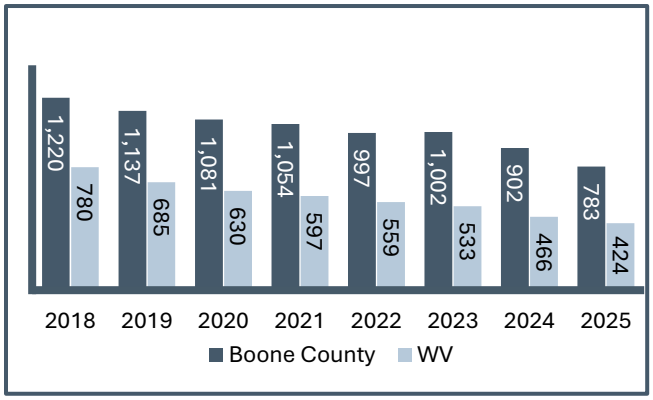
Deep Dive: Analysis of CDC Opioid Prescribing Indicators (2018-2025)

To understand the dynamics of the opioid crisis at a local level, CDC has identified several key prescribing indicators that serve as markers for risk. This section systematically analyzes six of these indicators for Boone County from 2018 to 2025, comparing local trends to the statewide average. This comparative analysis helps to identify areas of clear progress and those that may warrant potential concern and further investigation.

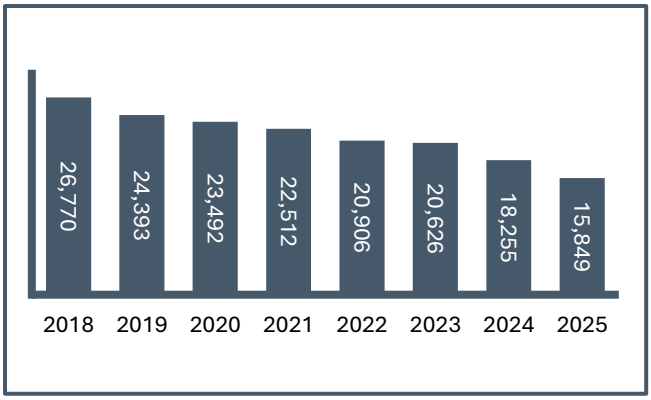
**Please note that this report shows the trends from 2018. To view trends from 2014, please check out the previous county profile reports here.*

Indicator 1: Number and Rate of Opioid Prescriptions

This indicator measures the number rate of all opioid analgesic prescriptions classified as Schedule II, III, IV, or V per 1,000 residents. It provides a direct measure of the volume of prescription opioids in the community, helping to identify areas with high quantities of available opioids that could be misused or diverted.



Rate of opioid prescriptions per 1,000 population



Number of opioid prescriptions dispensed

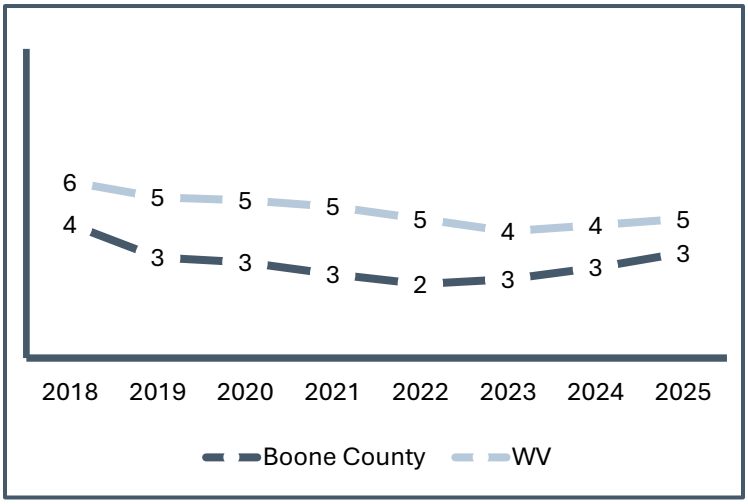
From 2018 to 2025, there was a significant and consistent overall decrease in the rate of opioids prescribed in both Boone County (from 1,220 to 783 per 1,000 residents) and West Virginia as a whole (from 780 to 424 per 1,000 residents). However, Boone County's prescribing rate has remained consistently higher than the state average throughout this period.

Key Takeaway: This indicator is important because it provides information about prescription opioid use for each county. This data will help determine areas where high prescribing/dispensing are occurring around the state and allow for education on responsible opioid prescribing. High rates of opioid dispensing mean there are large quantities of opioids that are out in the community. While the rate of opioid prescriptions remains significantly higher than the state, the sustained downward trend in the overall volume of opioid dispensing represents a significant public health success for both Boone County and the state, reflecting a broad shift towards more cautious prescribing practices.

Indicator 2: High-Dosage Prescriptions (>90 MME)

This indicator is the percentage of patients receiving an average daily dose of more than 90 morphine milligram equivalents (MME). MME is a standard clinical measure used to calculate the potency of different opioids relative to morphine, which helps identify patients who may be at a higher risk for overdose. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V.

**Note that the MME conversion factors for fentanyl, hydromorphone, methadone, and tramadol were updated in the 2022 Opioid Prescribing Guidelines in November 2022.*



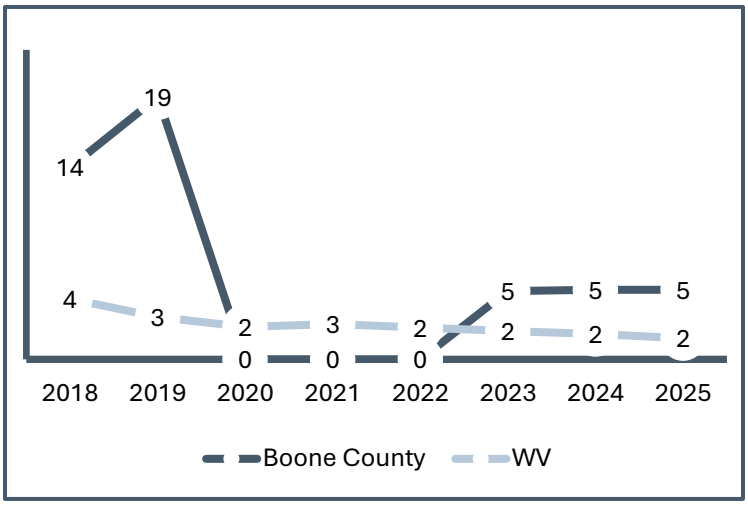
Percentage of patients ≥90 MME/day

Boone County's percentage of patients on high-dose opioids has consistently been lower than the state average. While the overall trend from 2018 (4.3%) to 2025 (3.4%) shows a slight decrease, a more recent pattern is noteworthy: Boone County has seen an increase over the last four years, rising from 2.4% in 2022 to 3.4% in 2025.

Key Takeaway: While the overall number of patients on high-dose opioids remains relatively low, the recent three-year increase in Boone County runs counter to long-term progress. This trend is a point of concern that requires further monitoring to ensure it does not escalate.

Indicator 3: Rate of multiple provider episodes (MPE)

This metric tracks the rate of patients utilizing five or more prescribers and five or more pharmacies within a six-month period, calculated per 100,000 residents. It is a critical indicator for identifying potential drug-seeking habits (i.e., “doctor shopping”), a behavior strongly associated with a greater risk of overdose.



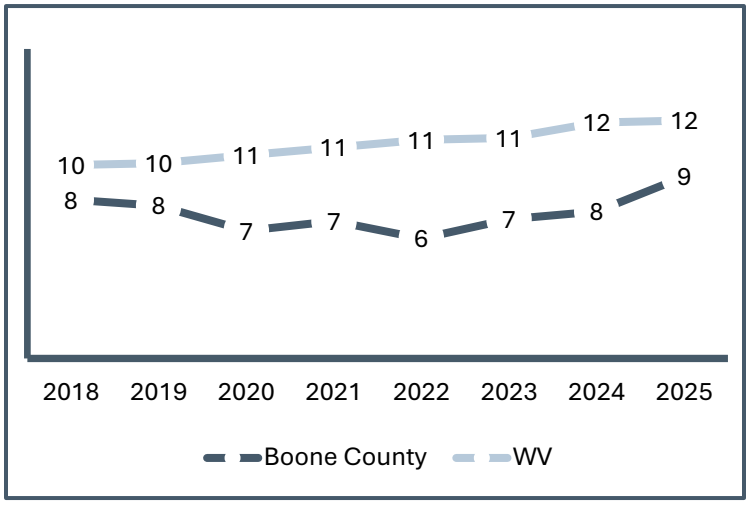
Rate of MPE per 100,000 population

At the state level, West Virginia has seen a considerable decrease in the MPE rate, falling from 4 to 2 per 100,000 residents between 2018 and 2025. The data for Boone County is even more definitive: there has been a significant decrease in the number of cases of MPEs during this entire eight-year period.

Key Takeaway: The variations in the rate, while relatively low, have been higher than the state during the past 3 years. This trend runs counter to long-term progress and is a point of concern that requires further monitoring to ensure it does not escalate.

Indicator 4: Opioid-Naïve Patients Prescribed LA/ER Opioids

This indicator measures the percentage of patients prescribed a long-acting/extended-release (LA/ER) opioid who had no other opioid prescriptions in the preceding 45 days. CDC guidelines recommend against initiating treatment with LA/ER opioids for opioid-naïve patients due to the increased risks of developing dependence and accidental overdose. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V.



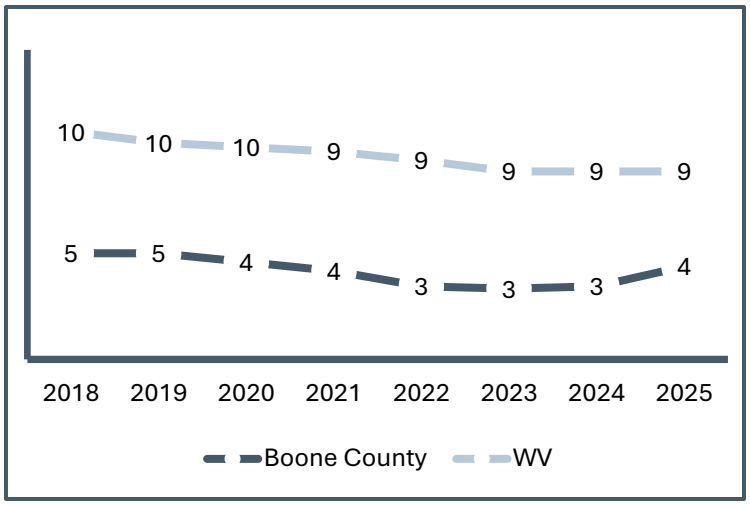
Percentage of opioid-naïve patients

The trends for Boone County and the state diverge significantly on this metric. Boone County demonstrated an overall increase from 2018 to 2025 (from 8% to 9%). Similarly, the state has seen a continual and concerning increase over the same period, rising from 10% to 12%.

Key Takeaway: Boone County's performance on this metric is comparable to the negative statewide trend. This upward trend runs counter to long-term progress and is a point of concern that requires further monitoring to ensure it does not escalate.

Indicator 5: Overlapping Opioid Prescriptions

This indicator measures the percentage of days where a patient had overlapping prescriptions for more than one opioid. This metric can signal that prescriptions are not being used as directed or that drug diversion may be occurring, and it elevates the risk for dependency and overdose. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V.



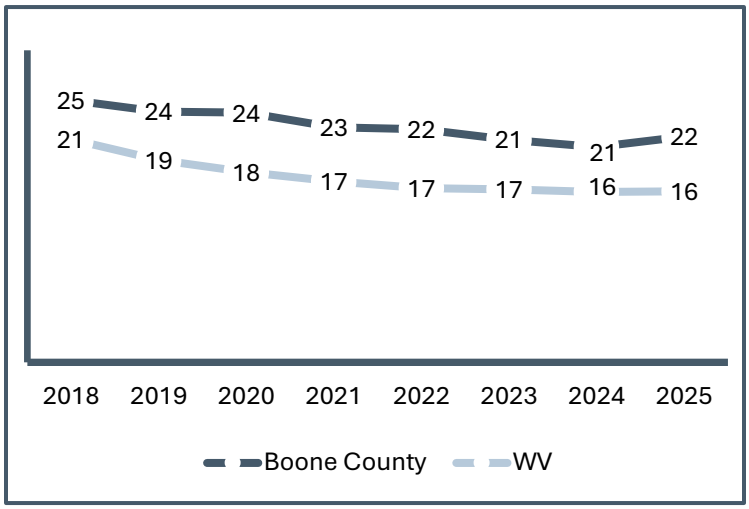
Percentage of overlapping opioid prescriptions

Boone County has consistently maintained a lower percentage of prescription overlap compared to the state average. However, after several years of stability, the county has seen an increase since 2024, with the rate rising from 3.3% to 4.2% in 2025.

Key Takeaway: This trend presents a mixed result for the county. While the overall performance remains better than the state average, the recent increase during the past two-year period is a negative development that runs counter to broader public health goals and warrants attention from the medical community.

Indicator 6: Overlapping Opioid and Benzodiazepine Prescriptions

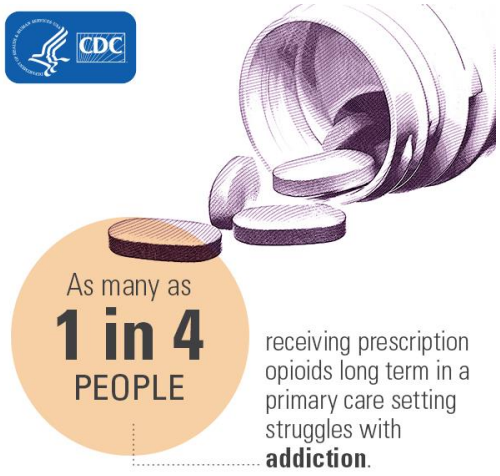
This indicator tracks the percentage of days where a patient had overlapping prescriptions for both an opioid and a benzodiazepine. This is a critical safety indicator, as the concurrent use of these two drug classes significantly increases the risk of overdose and death due to compounded central nervous system depression. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V and benzodiazepines.



Percentage of overlapping opioid and benzo prescriptions

Both Boone County and West Virginia have shown a steady and significant decrease in this dangerous co-prescribing practice from 2018 to 2025. Boone County's rate fell from 25% to 22%, while the state's rate fell from 21% to 16%. Throughout this period, Boone County's rate has remained slightly higher than or equal to the state average.

Key Takeaway: This consistent downward trend is a major public health achievement for both the county and the state. It reflects successful education and intervention efforts aimed at prescribers and patients regarding the life-threatening dangers of this specific drug combination.



Having examined the eight-year trends, the following section contextualizes Boone County's performance by ranking it against all 55 West Virginia counties.

Comparative Performance: Boone County's Statewide Ranking

To contextualize the county's progress, this section provides a comparative view of Boone County's performance on each indicator against all 55 counties in West Virginia. In this ranking system, a rank of 1 represents the worst performance (i.e., the highest rate), and a rank of 55 signifies the best performance (the lowest rate). This analysis helps to pinpoint the county's specific challenges and successes within the broader state landscape. It is important to note that when multiple counties have identical performance (e.g., zero incidents of a behavior), they share an averaged rank.

Metric	Rank
• Inidcator 1 (Opioid Rate)	2nd
• Indicator 2 (High-dose >90 MME)	44th
• Indicator 3 (Multiple Provider Epidsodes)	5th
• Inidcator 4 (Opioid-Naïve on LA/ER)	6th
• Indicator 5 (Opioid Overlap)	44th
• Indicator 6 (Opioid & Benzo Overlap)	3rd

This analysis reveals distinct areas of relative strength and weakness. Boone County's success is its 44th place ranking for Indicator 2 and 5, placing it among the state's better-performing counties. Conversely, the county's rank of 2nd for the rate of opioid prescriptions, 5th for multiple provider episodes, 6th for LA/ER opioids, and 3rd for opioid/benzodiazepine overlaps highlight that the county is still in the group of counties with the highest rates for these major risk factors.

Conclusion

The data presents a nuanced portrait of prescribing in Boone County. Boone County has made commendable progress in reducing the risks associated with opioid prescribing over the last seven years. While the significant decline in overlapping prescriptions and dangerous co-prescribing practices shows the effectiveness of current controls, the county's relative ranking in several categories highlights that there is still significant work ahead to reduce the overall rate of prescriptions and address high-risk behaviors.

The county's primary successes can be summarized as follows:

1. A sustained, multi-year reduction in the overall rate of opioid prescribing.
2. A significant and steady decline in the dangerous co-prescribing of opioids and benzodiazepines.

Despite these achievements, areas of concern persist. The high rankings in several indicators—specifically the rate of opioid prescriptions, opioid-naïve patients, and multiple provider episodes—serve as warning signs that require attention. Future efforts should focus on these higher-ranking indicators to bring the county into closer alignment with broader statewide success.

Ultimately, this report underscores the importance of granular, data-driven public health surveillance. The insights gathered should be used to guide targeted community education and clinical intervention efforts, ensuring that Boone County can address these emerging risk areas and sustain the hard-won progress it has made in the fight against the opioid epidemic.

To access the individual 2025 County Profile Reports, please follow the link below:
https://dhhr.wv.gov/vip/county-reports/Pages/default.aspx

Also, check out the interactive county profile dashboard here.

Contact Information:

Nathan Wood, CSMP Epidemiologist
Phone: (304) 414-0789
Email: Nathan.G.Wood@wv.gov

Justin Lee, CSMP Epidemiologist
Phone: (304) 414-0537
Email: Justin.A.Lee@wv.gov

Mike Goff, Board of Pharmacy Executive Director
Phone: (304) 558-8411
Email: Michael.L.Goff@wv.gov