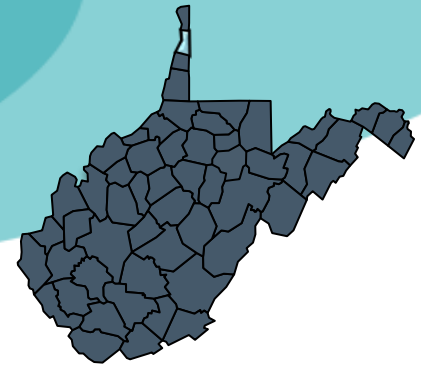
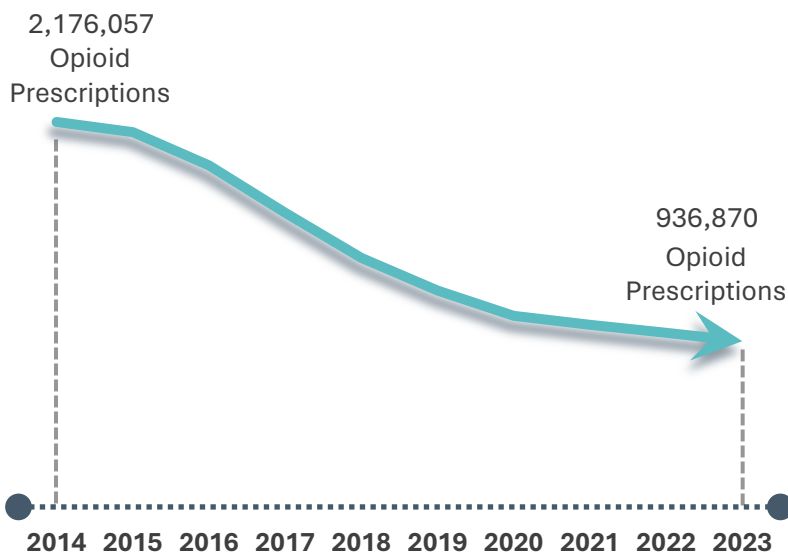


West Virginia Board of Pharmacy Prescription Opioid Indicators Report



Brooke County 2023

Within the West Virginia Department of Health (DOH) Bureau for Public Health, the West Virginia Violence and Injury Prevention Program (WV VIPP), in collaboration with the West Virginia Board of Pharmacy, under the direction of the Centers for Disease Control and Prevention (CDC), continues to work to address prescription drug misuse, diversion, and overdose within the state of West Virginia. Prescription drug overdose continues to be a major issue in West Virginia. Preliminary data from DOH's Health Statistics Center shows that in 2022, more than 1,400 people died in association with drug misuse (including prescription and illicit drugs) with a rate of 86.1 per 100,000 population. This is over two and a half times the national average. To help combat this epidemic, CDC provided specific opioid prescribing indicators to identify high-risk areas within the state to allow for intervention and community education.



Source: West Virginia Controlled Substance Monitoring Program

Since 2014, there has been a **57% decrease** in the number of opioids dispensed in West Virginia.

Nearly **5 million** fewer doses were dispensed in 2023 than in 2022.

Indicator 1: Number and rate of opioid analgesics per 1,000 state residents

This indicator includes all opioid prescriptions that are classified as Schedule II, III, IV, or V. The figures below show the total number of opioid prescriptions for Brooke County and the rate per 1,000 population compared to the state. Population estimates were obtained from US Census data.

Figure 1

Number of Opioid Analgesics Dispensed, Brooke County, 2014-2023

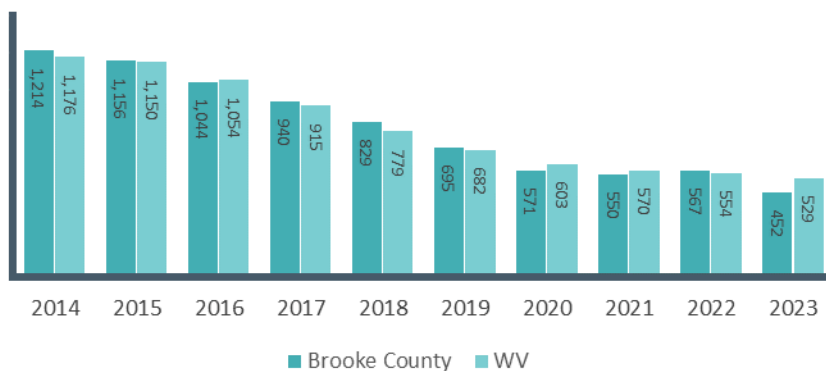
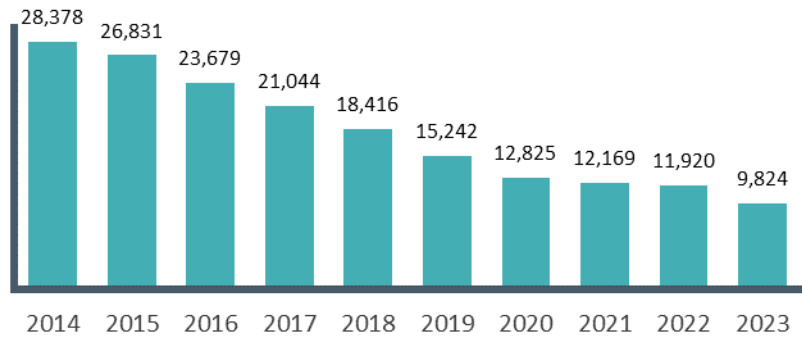


Figure 2

Rate of Opioid Analgesics per 1,000 Population in Brooke County and West Virginia, 2014-2023

What does this mean?

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. Positively, there was an overall decrease in both the rate and number of opioids being prescribed in Brooke County and in West Virginia from 2014-2023.

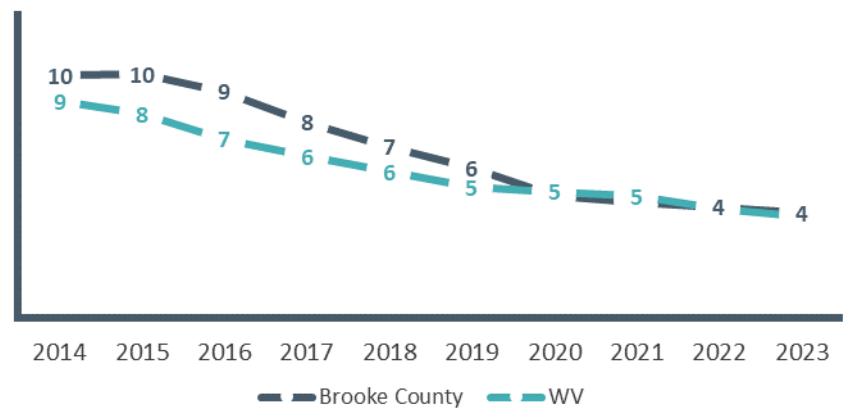
Indicator 2: Percent of patients receiving more than an average daily dose of 90 morphine milligram equivalents (MME)

This indicator shows the total average daily dose of MMEs that a patient is taking. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V. MMEs are used as a measure to describe the potency of an opioid. Calculating MMEs is important to determine which patients may be at risk for an overdose. The figure below shows the percentage of patients with greater than an average daily dose of 90 MMEs in Brooke County compared to the state during 2014-2023.

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

Figure 3

Percent of Patients Receiving More than an Average Daily Dose of 90 MME, Brooke County and WV, 2014-2023



What does this mean?

This indicator is important because it provides information for prescribers about how much morphine equivalent drug the patient is receiving. MMEs help determine the amount of morphine an opioid dose is equal to when prescribed, often used as a gauge of the misuse and overdose potential of the amount of opioid that is being given at a particular time. It is also a useful tool to identify high-burden areas in the state, which is important for public health surveillance at the county level. From 2014-2023, Brooke County's percentage of patients receiving more than an average daily dose of 90 MMEs is slightly higher but nearly equivalent to the state average and has decreased over this time.

Indicator 3: Rate of multiple provider episodes for prescription opioids (5 or more prescribers and 5 or more pharmacies in a 6-month period) per 100,000 residents

This indicator shows the rate of patients who went to five or more prescribers and five or more pharmacies within a six-month period, or multiple provider episode (MPE). The rate is calculated per 100,000 population. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V.

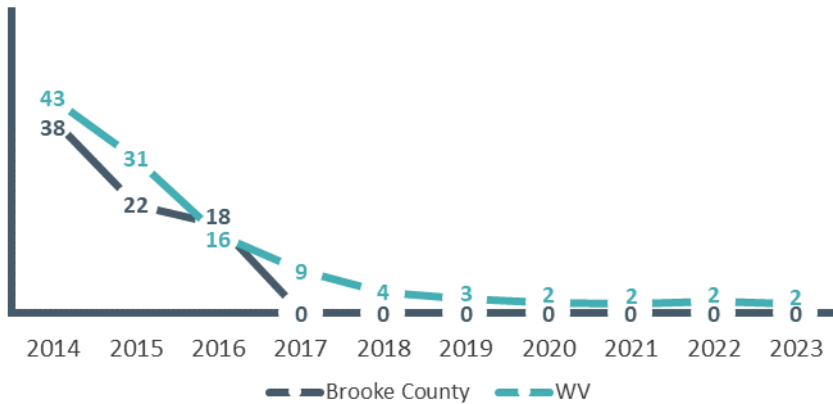


Figure 4

Rate of Multiple Provider Episodes (MPE) for Prescription Opioids per 100,000 Population, Brooke County and WV, 2014-2023

What does this mean?

This indicator is important because it provides valuable information on prescription filling behaviors. Patients who receive prescriptions from more than five doctors and who fill at more than five pharmacies are at greater risk of drug overdose. This indicator helps determine patients who may have drug-seeking habits (i.e., “doctor shopping”). From 2014-2023, West Virginia and Brooke County have had a considerable decrease in the rate of patients who qualified as having an MPE. Brooke County has had no cases of MPEs during the past seven years.

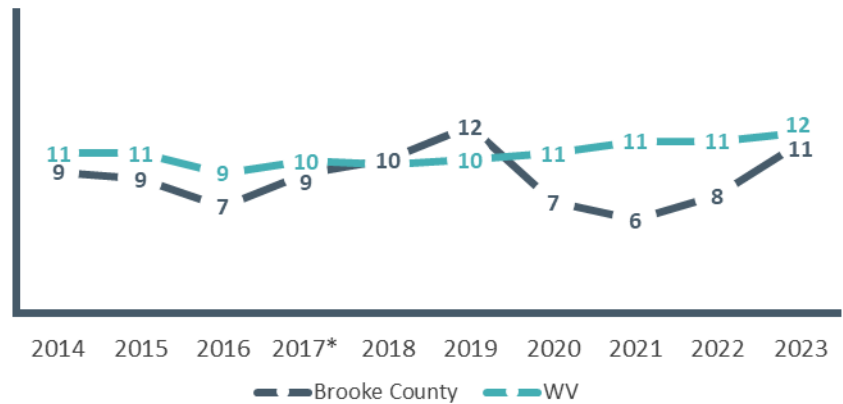
Indicator 4: Percent of patients prescribed long-acting/extended-release opioids who were opioid-naïve

This indicator represents the percentage of patients with no prescribed opioid prescriptions in the previous 45 days* who were prescribed at least one long acting/extended release (LA/ER) opioid, among all patients with LA/ER opioid prescriptions. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V.

*Note that CDC changed the definition of “opioid-naïve” from 60 days to 45 days in 2017.

Figure 5

Percent of Opioid-Naïve Patients among Patients Prescribed LA/ER Opioids, Brooke County, 2014-2023



What does this mean?

This indicator is important to understand because it provides information about individuals who are not accustomed to opioid medications, which may potentially increase the risk of opioid dependence, misuse, or overdose. CDC opioid prescribing guidelines recommend using immediate release (IR) opioids before taking long acting or extended-release opioids. From 2014-2023, Brooke County had an overall increase in patients who were opioid-naïve and prescribed LA/ER opioids but was slower than the state average, apart from 2019.

Indicator 5: Percent of patient prescription days with overlapping opioid prescriptions

This indicator shows the percentage of days in which more than one prescribed opioid prescription during the same period was dispensed, among all prescription days. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V.

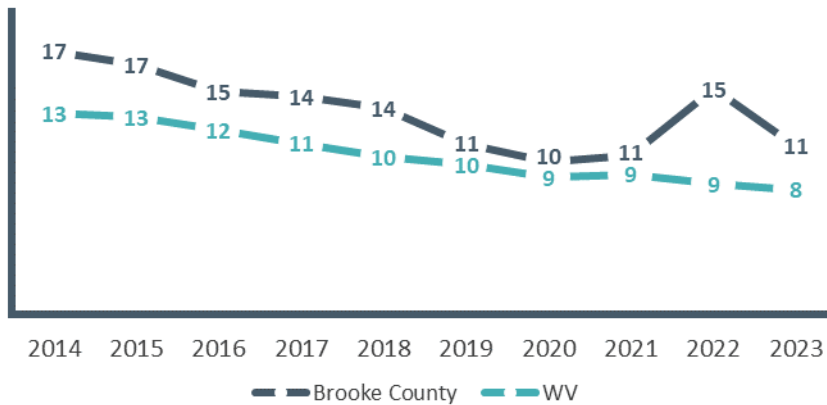


Figure 6

Percent of Patient Prescribed Days Overlap Between Opioid Analgesics, Brooke County and WV, 2014-2023

What does this mean?

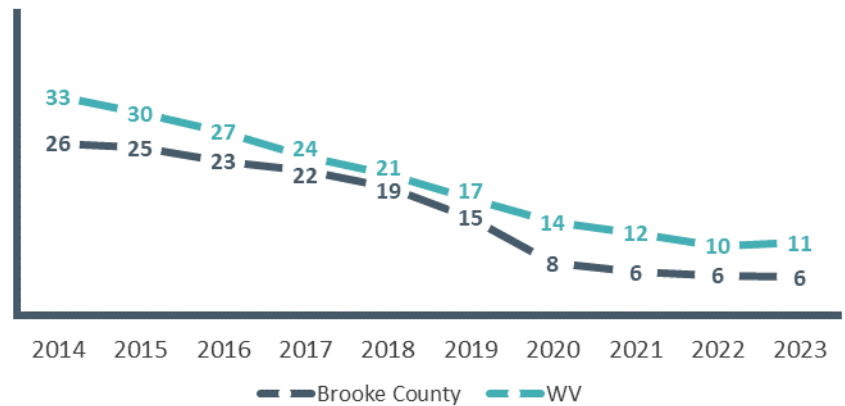
This indicator represents patients who may potentially be using their opioid prescriptions not as prescribed or may show areas where drug diversion is occurring. Using multiple opioid prescriptions during the same period increases the risk for drug dependency and overdose. It is important to understand this because a considerable number of drug overdose deaths include more than one opioid. From 2014-2023, Brooke County had a higher percentage of prescription overlap compared to the state average. Additionally, there has been a steady decrease at both the county and state level since 2014, aside from an increase in 2022.

Indicator 6: Percent of patient prescription days with overlapping opioid and benzodiazepine prescriptions

This indicator represents the percentage of patients who had an opioid and a benzodiazepine (i.e., Alprazolam, Lorazepam, Diazepam) prescription on the same day among all opioid prescription days. It includes all opioid prescriptions that are classified as Schedule II, III, IV, or V and benzodiazepines.

Figure 7

Percent of Patient Prescribed Opioid Days that Overlap with Benzodiazepine Prescriptions, Brooke County and WV, 2014-2023



What does this mean?

This indicator is important because it shows areas in the state where patients are using both opioids and benzodiazepine drugs at the same time. Taking an opioid with a benzodiazepine increases the risk for drug overdose and death, as both classes of medication depress the central nervous system. From 2014-2023, Brooke County had a lower percentage of days where there was an overlapping opioid and benzodiazepine prescription than the state average. Additionally, there has been a steady decrease at both the county and state level since 2014.

County Rankings by Indicator

Patient County	Indicator 1	Indicator 2	Indicator 3	Indicator 4	Indicator 5	Indicator 6
BARBOUR	26	17	15	40	22	39
BERKELEY	44	5	4	41	2	43
BOONE	2	50	15	25	52	9
BRAXTON	34	15	15	34	10	33
BROOKE	42	27	15	1	6	33
CABELL	10	42	14	7	35	5
CALHOUN	17	46	15	5	46	27
CLAY	5	30	15	48	20	42
DODDRIDGE	53	11	15	17	8	52
FAYETTE	15	37	15	36	37	38
GILMER	52	28	15	44	21	51
GRANT	35	34	15	21	9	36
GREENBRIER	14	10	8	44	27	30
HAMPSHIRE	30	9	15	52	3	18
HANCOCK	37	29	15	3	5	53
HARDY	48	48	15	53	15	14
HARRISON	11	26	12	14	31	25
JACKSON	28	55	6	25	32	23
JEFFERSON	46	3	15	37	4	44
KANAWHA	16	52	13	12	39	25
LEWIS	24	33	15	49	18	47
LINCOLN	3	40	15	18	38	6
LOGAN	1	45	7	30	51	2
MARION	36	36	11	43	42	7
MARSHALL	18	24	15	22	34	21
MASON	21	51	3	22	47	7
MCDOWELL	22	4	15	44	24	39
MERCER	33	19	15	18	25	23
MINERAL	39	25	15	27	7	27
MINGO	9	47	15	12	54	1
MONONGALIA	55	13	15	14	15	12
MONROE	54	20	15	6	50	27
MORGAN	29	1	15	47	1	37
NICHOLAS	6	32	2	22	22	15
OHIO	41	8	15	27	12	11
PENDLETON	19	6	1	41	11	3
PLEASANTS	49	22	15	10	52	46
POCAHONTAS	38	2	15	51	26	30
PRESTON	45	7	9	27	17	48
PUTNAM	31	43	15	34	32	17
RALEIGH	32	39	10	30	42	20
RANDOLPH	25	12	5	14	49	50
RITCHIE	13	49	15	8	55	48
ROANE	20	53	15	9	28	44
SUMMERS	12	23	15	49	28	13
TAYLOR	27	41	15	55	28	18
TUCKER	40	18	15	18	18	55
TYLER	47	31	15	3	42	33
UPSHUR	51	21	15	54	14	54
WAYNE	50	38	15	30	36	3
WEBSTER	4	16	15	38	13	39
WETZEL	23	44	15	10	47	21
WIRT	7	54	15	2	40	32
WOOD	43	35	15	30	40	15
WYOMING	8	14	15	38	45	10

*Each county is ranked from 1 to 55, where a rank of 1 is assigned to the county with the highest (worst) rate or percentage and a 55 to the county with the lowest (best) rate or percentage. Counties with a "5" in the rank had an equivalent rank as another county and the average rank was returned.

Percentage of Brooke County residents with a controlled substance prescription

18.6%

Percentage of West Virginia residents with a controlled substance prescription

23.2%

Percentage of Brooke County residents with an opioid prescription

12.2%

Percentage of West Virginia residents with an opioid prescription

14.3%

Percentage of Brooke County residents with a benzodiazepine prescription

4.6%

Percentage of West Virginia residents with a benzodiazepine prescription

6.4%

To access the individual 2023 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](#).

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