BPC took a deeper dive into selected states to better understand how federal dollars are being used in states to address the opioid epidemic. Each case study that follows includes information on state mortality data and other information relevant to the opioid epidemic in that state. A breakdown of funding by federal department is provided, as well as county-level funding for each state. Each case study also includes an overview of a state’s goals and, where applicable, first-year outputs under the SAMHSA STR grants for FY2017 and FY2018. In addition, the plans for the FY2018 SOR grants are presented. The role of Medicaid is highlighted in each state. The latest available data on the trends in opioid use and overdose is presented. Finally, the case studies include information on drug-use data and outcomes.

State Opioid Overview

From 2014 through 2017, Ohio has had the highest number of opioid-involved overdose deaths per year for any U.S. state. Only West Virginia had a higher age-adjusted rate per 100,000 in 2017. As deaths involving fentanyl and other synthetic opioids increased significantly from 2015 to 2017 (see Figure 1), Ohio’s opioid-related death rates have increased by 29 percent, 33 percent, and 19 percent per year—a faster rate of increase than most Midwest states. Since 2011, Ohio has had the highest drug overdose rate in the Midwest (see Table 1). Ohio makes up 4 percent of the U.S. population and accounted for 9 percent of the opioid deaths from 2015 to 2017.

In response, federal appropriations to address the opioid epidemic nearly doubled from $119,030,865 in 2017 to $224,921,519 in 2018. Per capita, appropriations increased from $10 per person to $19 per person.

<table>
<thead>
<tr>
<th>Year</th>
<th>Deaths</th>
<th>Ohio Rate*</th>
<th>Midwest Region Rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2,698</td>
<td>24.7</td>
<td>12.2</td>
</tr>
<tr>
<td>2016</td>
<td>3,613</td>
<td>32.9</td>
<td>16.5</td>
</tr>
<tr>
<td>2017</td>
<td>4,293</td>
<td>39.2</td>
<td>19.1</td>
</tr>
<tr>
<td>Total</td>
<td>10,604</td>
<td>32.9</td>
<td>16.0</td>
</tr>
</tbody>
</table>

*Age-Adjusted Rate per 100,000.

References to increases or decreases in substance use rates indicate statistically significant changes at the 0.05 level. References to rates being similar indicate a lack of statistical significance even though rates may differ.
The Ohio Department of Mental Health and Addiction Services (OhioMHAS) administers the majority of federal opioid funds. OhioMHAS distributes the State Targeted Response (STR) grant and the Substance Abuse Prevention and Treatment Block Grant (SABG) to local county alcohol, drug addiction, and mental health (ADAMH) boards. Ohio has 50 ADAMH boards that encompass all 88 Ohio counties. As further detailed in the Key Federal Grants section below, ADAMH boards each have distinct opioid projects. The treatment, prevention, and recovery services provided by ADAMH boards are also funded by local property taxes.

Former Governor John Kasich established the Governor’s Cabinet Opiate Action Team (GCOAT) in 2011 to “fight opiate abuse and to decrease the rate of overdose deaths.” During the Kasich administration, GCOAT members included 23 senior state officials from the full spectrum of state agencies: OhioMHAS, Medicaid, Public Safety, Education, Aging, Veterans Services, and more. GCOAT members met in-person monthly and held weekly calls to discuss the state response to the opioid crisis epidemic, including the allocation of federal funds to fill gaps in state resources. GCOAT organized many efforts over the last eight years in Ohio including Project DAWN (Deaths Avoided with Naloxone) and led the partnership to create prescriber guidelines for management of chronic, non-terminal pain in 2013. GCOAT leverages federal grants with state funding, as the state agencies on GCOAT provided $1.1 billion in total state funding in 2017. This, and related cross-agency coordination continuing under the current administration of Governor Mike DeWine, is now known as RecoveryOhio.

Federal appropriations to address the opioid epidemic are broken down in Tables 2 and 3 below. As shown, SAMHSA programs make up the majority of federal spending—85 percent in 2017 and 73 percent in 2018. Ohio received grants from 34 different opioid-related federal programs.
Figures 2 and 4 depict the funding per capita for opioid-related grants for FY2017 and FY2018, respectively. The blue counties received the highest funding, with 52 percent to Cuyahoga, Franklin, Hamilton, and Montgomery counties in FY2017. These counties made up 38 percent of deaths, shown in Figures 3 and 5. Several rural counties in southern Ohio had high death rates and low relative funding. Gallia, Highland, and Lawrence counties had death rates of 46.5, 54.6, and 51.1, respectively, and all had under $3 per capita funding in FY2017, putting each in the lowest 25 percent of funding in the state.

In FY2018, many Ohio counties received increased absolute and relative funding, as shown in Figure 4. Gallia and Highland counties received 9.7 and 8.9 per capita, respectively, above the state median (8.8). Lawrence County remained in the lowest 25 percent in the state at 5.9 per capita. Again, the highest funding went to Cuyahoga, Franklin, Hamilton, and Montgomery counties with 56 percent combined in FY2018.

Footnote: Figures reflect the location of the recipient of the federal funding, which does not necessarily correspond with the service area of the funding. For the STR, SDR, and SABG funding, the sub-award locations are reflected in these figures.
Figure 2: Ohio Federal Opioid Funding
2017 by County

Figure 3: Ohio Drug Overdose Death Rate
2015–2017 by County

*“Suppressed” is displayed for counties with 9 or fewer overdose deaths per CDC’s policy to protect personal privacy, and to prevent revealing information that may identify specific individuals.
Figure 4: Ohio Federal Opioid Funding
2018 by County

Figure 5: Ohio Drug Overdose Death Rate
2015–2017 by County

*“Suppressed” is displayed for counties with 9 or fewer overdose deaths per CDC’s policy to protect personal privacy, and to prevent revealing information that may identify specific individuals.
Key Federal Grants from 2017 and 2018 Federal Appropriations

The largest FY2017 opioid-specific federal grant awarded to Ohio is the STR grant administered by SAMHSA. In 2017, this program was funded at $26 million, 22 percent of federal opioid funding in Ohio. In 2018, Ohio received $56 million in funding under the State Opioid Response (SOR) program, which made up over half (53 percent) of the new federal opioid funding awarded to Ohio. The state received STR funding for Year 1 in May 2017 and for Year 2 in May 2018; Ohio received Year 1 SOR funding in September 2018 and is expected to receive Year 2 funding before September 30, 2019. In addition to the resources to build on existing substance use prevention and treatment activities for the state to respond to the epidemic, the STR and SOR programs allowed Ohio to implement a wide range of strategic goals. Below is a brief overview of the goals and outcomes from the first year of the STR funds and Ohio's plan for the 2018 SOR grant.

Ohio STR Goals

Ohio's STR goals include primary prevention, early intervention/harm reduction, workforce development, treatment, criminal justice/reentry, trauma-informed care, child welfare, and recovery supports. OhioMHAS classified as “Tier 1” and “Tier 2” counties with the highest overdose death rates from 2010 to 2015, which included 61 percent of the state population. OhioMHAS then prioritized funding for ADAMH boards in Tier 1 and Tier 2 counties, with Tier 3 counties that had access to statewide prevention and workforce training activities. Nine boards covering 17 Tier 3 counties were subsequently awarded MAT-Prescription Drug and Opioid Addiction funds to expand the use of MAT, undertaking projects similar to those of boards in the Tier 1 and Tier 2 counties. Ohio's federal funding per capita aligned with the 2015-2017 overdose death rates as shown in Figures 3 and 5. ADAMH projects varied, but many of them funded MAT and Quick Response Teams. Quick Response Teams employ a combination of first responders, law enforcement, certified peer supporters, and clinicians who connect individuals surviving an opioid overdose to treatment. Ohio's STR goals and strategies were divided into the following areas:

- MAT;
- workforce development;
- immediate access;
- primary prevention;
- screening, brief intervention, and referral to treatment;
- recovery supports, including peer services; and
- addressing secondary trauma among first responders.

Ohio implemented a three-pronged approach: (1) department-directed strategies and activities focusing on counties with highest opioid overdose deaths and treatment needs; (2) department-directed strategies and activities to be deployed statewide; and (3) ADAMH-identified projects consistent with the goals and objectives of Ohio's STR project.
Ohio STR Outcomes

The STR outcomes data are preliminary, but OhioMHAS has produced reports on efforts to increase workforce and capacity expansion. Through the STR program, OhioMHAS is projected to increase the number of Drug Addiction Treatment Act (DATA)-waivered physicians by 6,085. This was estimated to increase total patient capacity by at least 45,630.18 In the first six months of STR funding, 2,120 people received opioid use disorder treatment and 533 were provided recovery support services.19

Ohio used an integrative care model for its approach to treatment, targeting emergency department patients and pregnant mothers with opioid use disorder.20 In the first year of funding, 246 clients were served by the three participating hospital emergency departments.21 The Maternal Opiate Medical Support (MOMS) program provided services to 219 women in the first year, with 71 percent of participants remaining in the program.22 MOMS participants’ use of illicit drugs decreased from 85 percent to 12 percent from May 2017 through April 2018.23

Ohio’s STR funds supported 15 trainings to expand evidence-based treatment and recovery for opioid use disorder.24 In the first year of funding, the STR funds were used to train more than 6,800 professionals. Trainings were in the following areas:

- American Society of Addiction Medicine Criteria—guidelines for patients with addiction and co-occurring conditions;
- Botvin Life Skills—prevention staff instructed in an evidence-based substance use and violence-prevention program;
- Extension for Community Healthcare Outcomes (ECHO)—provides prescribers support, mentorship, and education related to MAT and opioid use disorders;
- Emergency Department Case Manager Grant—funding to hire case managers to coordinate clinical care for patients with substance use disorders, including opioid use disorders; and
- PAX Good Behavior Game Training—schoolteacher training in self-regulation and behavior as a skill set.25

Ohio SOR Goals/Plan

In 2018, Ohio received SOR funds which were used to build on its STR projects. The Ohio SOR project is estimated to provide treatment and recovery support services to 9,000 individuals with opioid use disorder in each year of the project, totaling 18,000 individuals.26 Ohio’s SOR funds have already funded 11 trainings.27 Table 4 shows Ohio’s SOR goals and objectives.
Table 4: Ohio SOR Goals and Objectives

<table>
<thead>
<tr>
<th>Prevention Goals</th>
<th>Prevention Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase the availability of naloxone to prevent overdose death.</td>
<td>Increase by 30 percent over 2018 the number of Project Dawn naloxone kits distributed.</td>
</tr>
<tr>
<td>Increase professional understanding of opioid use disorder.</td>
<td>70 percent of professionals who attend stigma-reduction training will report changes in practice in their respective systems.</td>
</tr>
<tr>
<td>Increase community awareness of the danger of opioids.</td>
<td>Social-media campaign total and unique page views will increase 25 percent above established baseline figures.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment and Workforce Goals</th>
<th>Treatment and Workforce Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand access to MAT.</td>
<td>Increase by 1,000 the number of prescribers who obtain the DATA waiver.</td>
</tr>
<tr>
<td>Increase the number of clinicians who provide evidence-based psychosocial treatment services to clients with an opioid use disorder.</td>
<td>A minimum of 750 of licensed clinicians will obtain a certificate of completion of continuing education in substance use treatment. 500 of those clinicians will demonstrate expanded client care to include OUD based on a review of service claims data.</td>
</tr>
<tr>
<td>Increase service delivery that supports family stability/unification.</td>
<td>Each regional community project will identify at least four agencies that add family services that make it easier for family members to seek and stay in treatment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recovery Services Goals</th>
<th>Recovery Service Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand the number of certified peer supporters providing support to individuals with opioid use disorder.</td>
<td>Increase the number of peer supporters employed in various settings (e.g., EDs, child welfare, courts by 30 percent over 2018.</td>
</tr>
<tr>
<td>Increase the availability of recovery housing, including family recovery housing, that accepts MAT.</td>
<td>At least 30 recovery house owners will move to MAT acceptance in housing in 2019.</td>
</tr>
<tr>
<td>Increase number of patients who become employed.</td>
<td>25 percent of the unemployed client workforce will be enrolled in job-training programs in 2019.</td>
</tr>
</tbody>
</table>

**Medicaid**

Medicaid expansion is a critical component of Ohio’s response to the opioid epidemic by providing treatment coverage for opioid use disorder. In total, Medicaid expansion is estimated to have given 711,000 Ohioans health insurance coverage. The number of opioid-related hospitalizations in Ohio rapidly increased from 27,550 in 2013 to 47,750 in 2017, and the rate of uninsured visits decreased from 21 percent to 3 percent. Medicaid was the expected payer for 57 percent of opioid-related inpatient hospital stays in Ohio in 2016, compared with 37 percent nationally. In addition to Medicaid coverage of inpatient treatment, Medicaid also provides coverage for outpatient MAT, reimbursing over $100 million per year for treatment medications from 2016 to 2018 as specified in Table 5.
Table 5: Ohio Medicaid Spending on Opioid Treatment Drugs and Naloxone, 2016-2018

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buprenorphine</td>
<td>$85,503,743</td>
<td>$79,639,013</td>
<td>$82,094,804</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>$41,615,608</td>
<td>$47,439,823</td>
<td>$40,095,505</td>
</tr>
<tr>
<td>Naloxone</td>
<td>$1,166,532</td>
<td>$1,409,504</td>
<td>$2,289,689</td>
</tr>
<tr>
<td>Methadone</td>
<td>†</td>
<td>†</td>
<td>†</td>
</tr>
<tr>
<td>Total</td>
<td>$128,285,883</td>
<td>$128,444,341</td>
<td>$124,479,998</td>
</tr>
</tbody>
</table>

†Due to the marginal cost, Ohio Medicaid includes the methadone medication cost in the administration payment therefore the cost of the methadone medication alone cannot be separately calculated at this time.

Ohio has reduced its rate of opioid prescriptions per 100 people from a peak of 102.4 in 2010 to 63.5 in 2017, a 38 percent decrease. Using the STR and SOR funds, Ohio has emphasized increasing workforce capacity and access to opioid use disorder treatment.

The latest available data from the National Survey on Drug Use and Health (NSDUH) indicates that 442,000 people in Ohio reported past-year misuse of pain relievers, and 40,000 reported past-year heroin use. The NSDUH prevalence data reports similar rates of pain-reliever misuse from the 2015-2016 and 2016-2017 surveys, 4.54 percent and 4.67, respectively. The heroin use reported rates were also similar, 0.41 to 0.45. In 2017, Ohio saw a 54 percent growth in fentanyl-related deaths in 2017, making up 69 percent of all drug overdose deaths, as shown in Table 6. Meanwhile, heroin deaths declined by a third from 2016 to 2017, making up 34 percent and 20 percent of all drug overdose deaths, respectively.

Table 6: Ohio Opioid Overdose Deaths by Class, 2015–2017

<table>
<thead>
<tr>
<th>Year</th>
<th>All Drugs</th>
<th>Any Opioid</th>
<th>Rx Opioids</th>
<th>Fentanyl</th>
<th>Heroin</th>
<th>Methadone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>29.9</td>
<td>24.7</td>
<td>6.1</td>
<td>11.4</td>
<td>13.3</td>
<td>1.0</td>
</tr>
<tr>
<td>2016</td>
<td>39.1</td>
<td>32.9</td>
<td>6.9</td>
<td>21.1</td>
<td>13.5</td>
<td>0.8</td>
</tr>
<tr>
<td>2017</td>
<td>46.3</td>
<td>39.2</td>
<td>7.6</td>
<td>32.4</td>
<td>9.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>38.5</td>
<td>32.9</td>
<td>6.9</td>
<td>21.7</td>
<td>12.0</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*Age-Adjusted Rate per 100,000.
Endnotes


2 Ibid.

3 Ibid.

4 Ibid.

5 Ibid.

6 Ibid.


8 Ibid.

9 Ibid.

10 Ibid.


14 Ibid.


18 Ibid.


21 Ohio Mental Health and Addiction Services. “CURES Year One Accomplishments.” 2018. Available at: https://mha.ohio.gov/Portals/0/assets/Funding/CURES/Cures_Year_1_Accomplishments_Fact_Sheet_2.pdf.


23 Ibid.


31 Ibid.


33 Ohio Department of Medicaid. 2019.

34 Centers for Disease Control and Prevention. “U.S. State Prescribing Rate Maps.” Available at: https://www.cdc.gov/drugoverdose/maps/nxstate2010.html.


Ibid.


Ibid.