



Graphics from

Ohio addiction policy inventory and scorecard

Overdose reversal and other forms of harm reduction



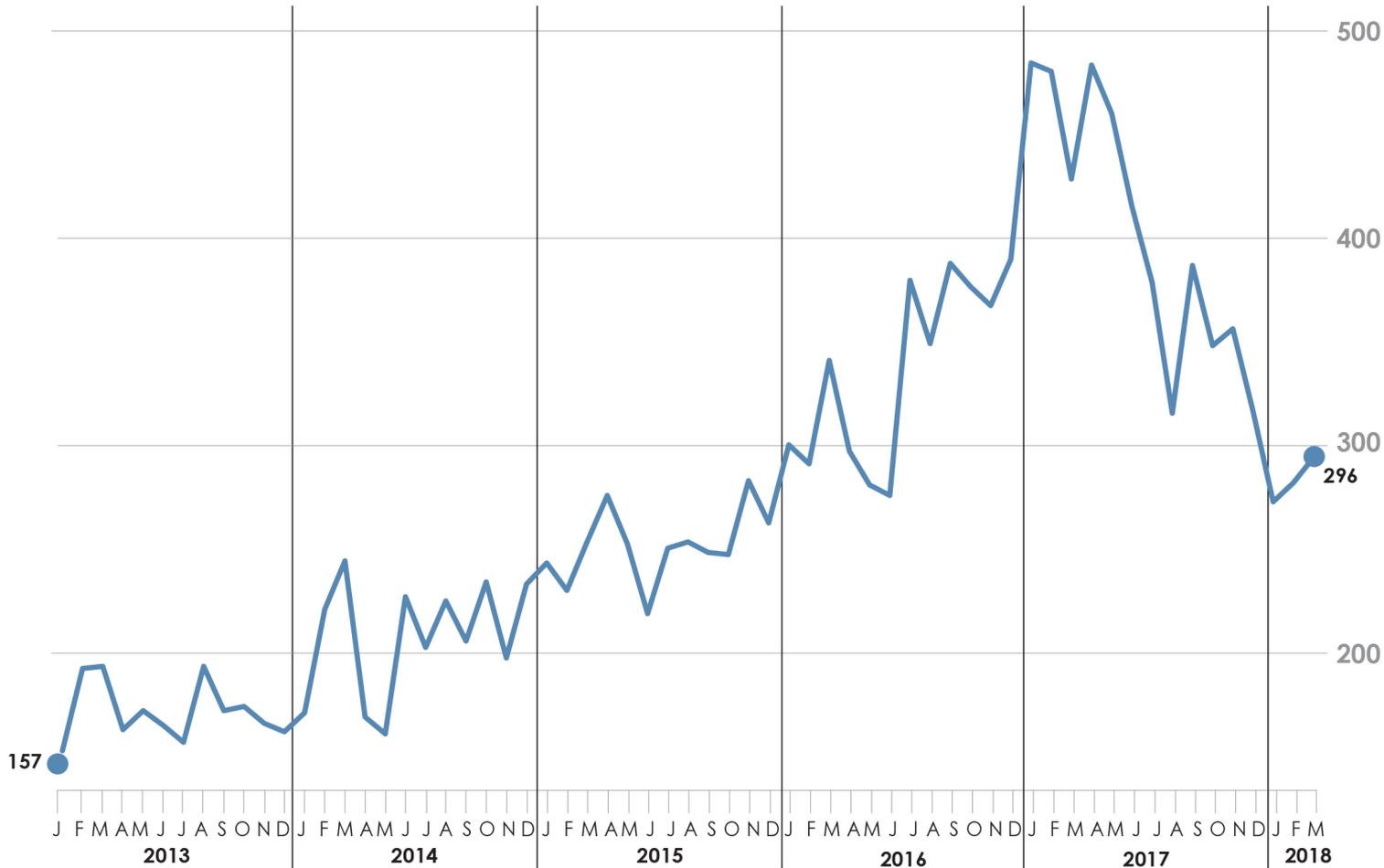
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key findings for policymakers

- **Cautious optimism and continued action on overdose deaths.** For the first time since the opioid crisis began, Ohio's monthly overdose deaths started to decline markedly in the second half of 2017. Ohio's strong policy focus on overdose reversal has likely contributed to this good news, but hundreds of thousands of Ohioans still struggle with addiction, and more can be done to save lives.
- **Hepatitis C presents major challenges for policymakers.** Largely due to injection drug use, rates of hepatitis C have increased in recent years. Given the high price of drugs that treat hepatitis C, state policymakers will need to find sustainable ways to cover treatment for thousands of Medicaid enrollees with this disease, and should invest in harm reduction to prevent future infections.
- **Evidence-based harm reduction is an underutilized tool.** Ohio can do more to incorporate harm reduction strategies as part of a comprehensive, person-centered response to the addiction crisis.

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018.

Number of unintentional drug overdose deaths, Ohio, Jan. 2013 - March. 2018



Note: 2018 data is provisional
Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure ES 1.
Data source: Ohio Public Health Data Warehouse, data accessed Nov. 5, 2018



Summary scorecard rating

Extent to which Ohio policies and programs align with research evidence and reach Ohioans in need

Subtopic	Rating
Naloxone distribution, access and awareness	Moderate
Immunity for naloxone prescribing and dispensing and Good Samaritan law	Moderate
Syringe services programs	Weak
Hepatitis C and HIV screening and treatment	Moderate
Other harm reduction strategies (drunk driving prevention and Housing First)	Strong

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure ES 2.

Data source: Ohio Public Health Data Warehouse, data accessed Nov. 5, 2018



Key elements of a comprehensive policy response to addiction



Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 1.

HPIO Addiction Evidence Project: Overdose Reversal and Other Forms of Harm Reduction

Evidence resource page
Online hub for credible evidence on what works to reverse overdose and reduce other harms related to addiction

- Web page with links to:**
- Clinical standards and guidelines
 - Expert consensus statements and recommendations
 - Model policies
 - Evidence registries



Online content

Policy inventory
Description of policy changes enacted in Ohio from January 2013 to May 2018

- Policy inventory summary**
- Volume of policy changes by topic and type of substance
 - State agency spending

Policy scorecard
Analysis of strengths and gaps in Ohio's policy response to addiction

- Policy scorecard summary**
Composite rating of policies and programs based on the extent to which they:
- Align with research evidence on what works to reduce addiction
 - Reach Ohioans in need (implementation reach, including number of counties served)

Report: Ohio Addiction Policy Inventory and Scorecard

- Detailed inventory**
List of 53 specific Ohio policy changes, including:
- Legislation
 - Rules and regulations
 - New or expanded state agency initiatives, programs, systems changes or guidelines



Online content

- Detailed scorecard**
List of 27 evidence-based policies and programs with the following information for each:
- Brief description of Ohio implementation
 - Rating for evidence alignment
 - Rating for implementation reach
 - Opportunities for improvement



Online content

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 2.

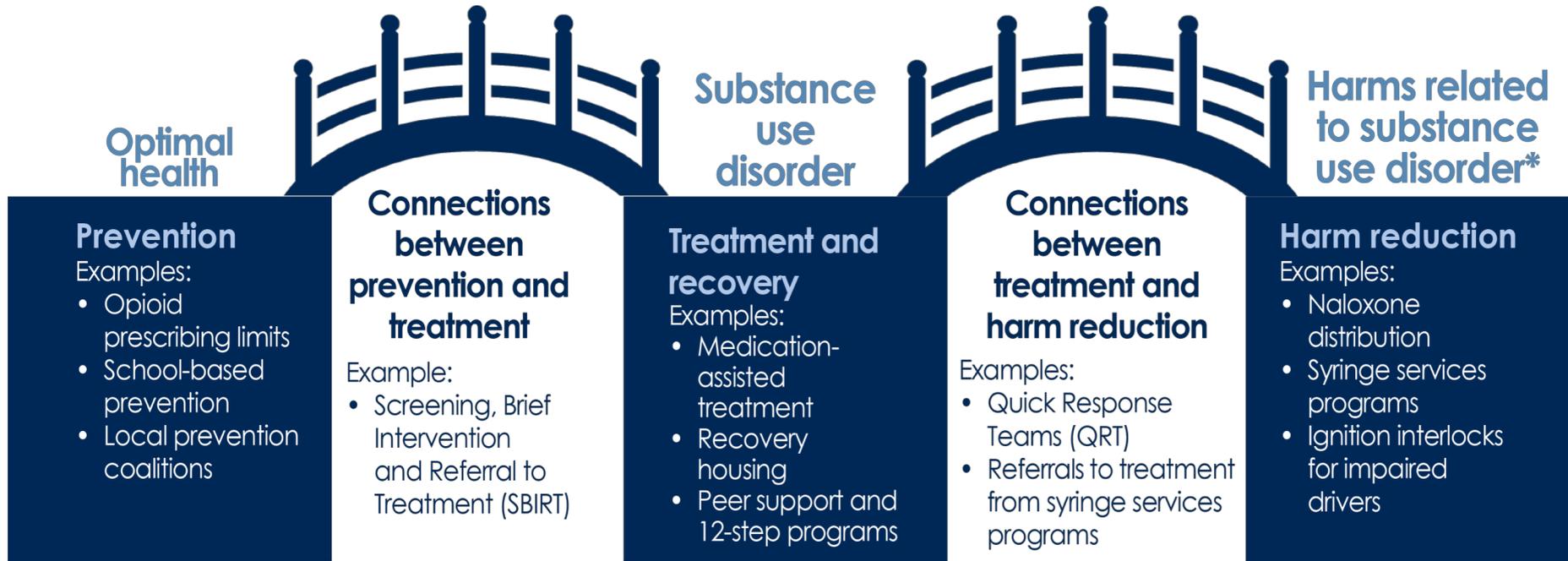
Examples of addiction-related harms

Opioids ³	Methamphetamine, cocaine and other psychostimulants ⁴	Alcohol ⁵	Tobacco ⁶
<ul style="list-style-type: none"> Fatal and nonfatal overdose Neonatal Abstinence Syndrome 	<ul style="list-style-type: none"> Fatal and nonfatal overdose Tooth decay and gum disease Convulsions and seizures Paranoia, delusions and anxiety 	<ul style="list-style-type: none"> Alcohol poisoning Fetal Alcohol Syndrome Violence Liver disease (fibrosis, cirrhosis, liver cancer) Dementia Motor vehicle crash injuries and death 	<ul style="list-style-type: none"> Cancer (lung and many other types) Heart disease Stroke Chronic obstructive pulmonary disorder Diabetes Male erectile dysfunction Low birth weight Sudden Infant Death Syndrome
<p>Injection drug use (opiates and/or psychostimulants)⁷</p> <ul style="list-style-type: none"> Hepatitis C HIV/AIDS Endocarditis (heart infection) 			
<p>Other downstream harms</p> <ul style="list-style-type: none"> Homelessness Job loss and reduced worker productivity Child maltreatment and loss of custody Prostitution, sexual exploitation and sexually transmitted infections Crime and incarceration Secondary trauma for first responders and behavioral health workforce 			

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 3.

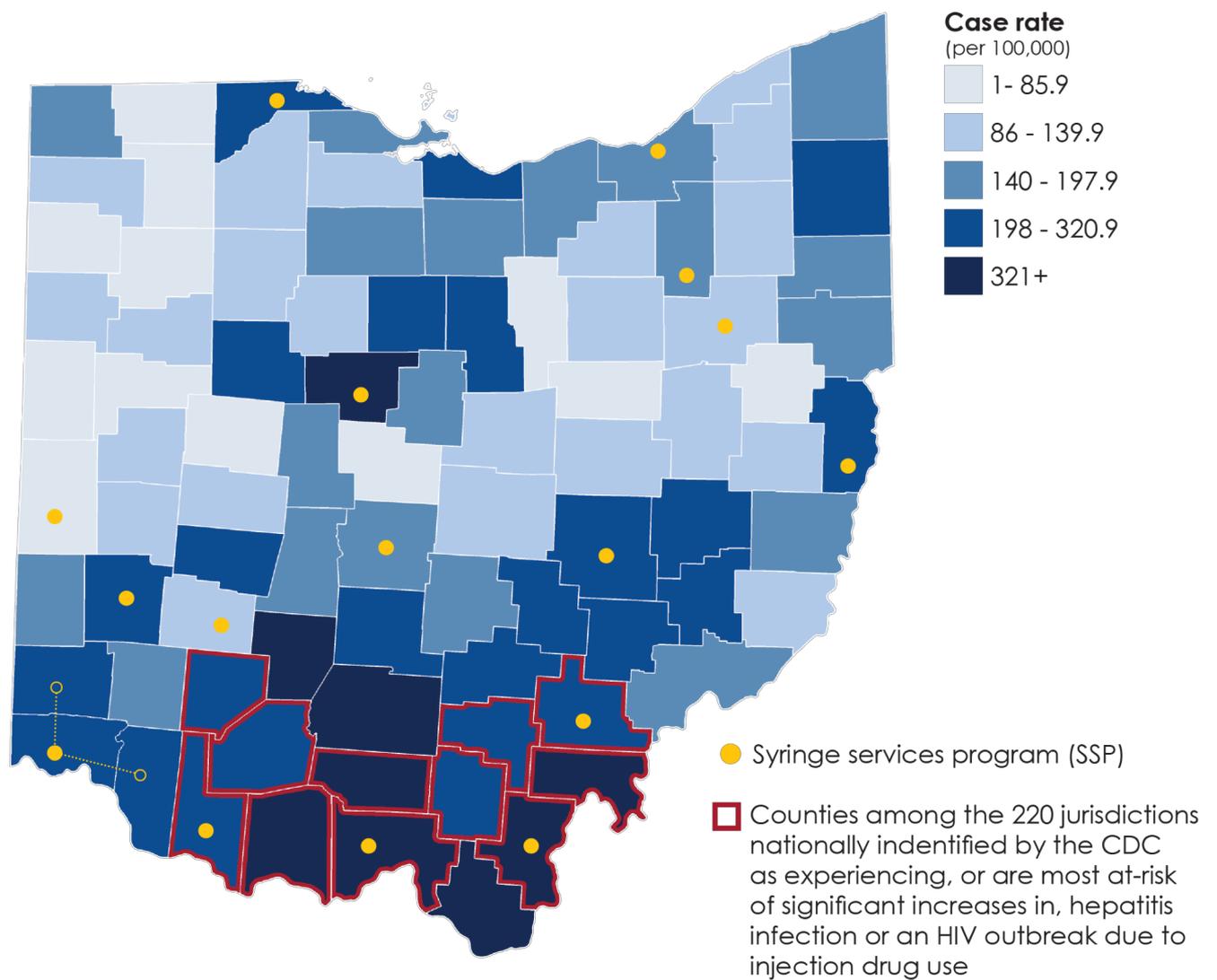


Role of harm reduction in a comprehensive approach to addiction



Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 4.

County-level hepatitis C case rate per 100,000 population, 2016 and location of Syringe Services Programs



Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 5.

Data source for SSP: 18 and counting: Another Ohio county starts syringe exchange, Harm Reduction Ohio; Syringe Exchanges in Ohio, Harm Reduction Ohio

Data source for hepatitis C: Vulnerable Counties and Jurisdictions Experiencing or At-Risk of Outbreaks, Centers for Disease Control and Prevention; Ohio Department of Health, Hepatitis Surveillance Program, data reported as of June 17, 2017.



Ohio's harm reduction "deserts"

Counties with insufficient access to overdose reversal or other harm reduction strategies

Counties with higher overdose death rates and no Project DAWN site (see figure 21 on page 33)	Counties with higher overdose death rates and lower naloxone administration reported by EMS (see figure 20 on page 32)	Counties identified by CDC as at-risk for hepatitis C or HIV outbreaks and with no syringe services program (SSP) (see figure 5 on page 15)
<ul style="list-style-type: none"> • Darke • Fayette • Huron • Pike • Preble 	<ul style="list-style-type: none"> • Clinton • Columbiana • Crawford • Darke • Hancock • Jefferson • Marion • Pike • Richland 	<ul style="list-style-type: none"> • Adams • Clinton • Highland • Jackson • Meigs • Pike • Vinton

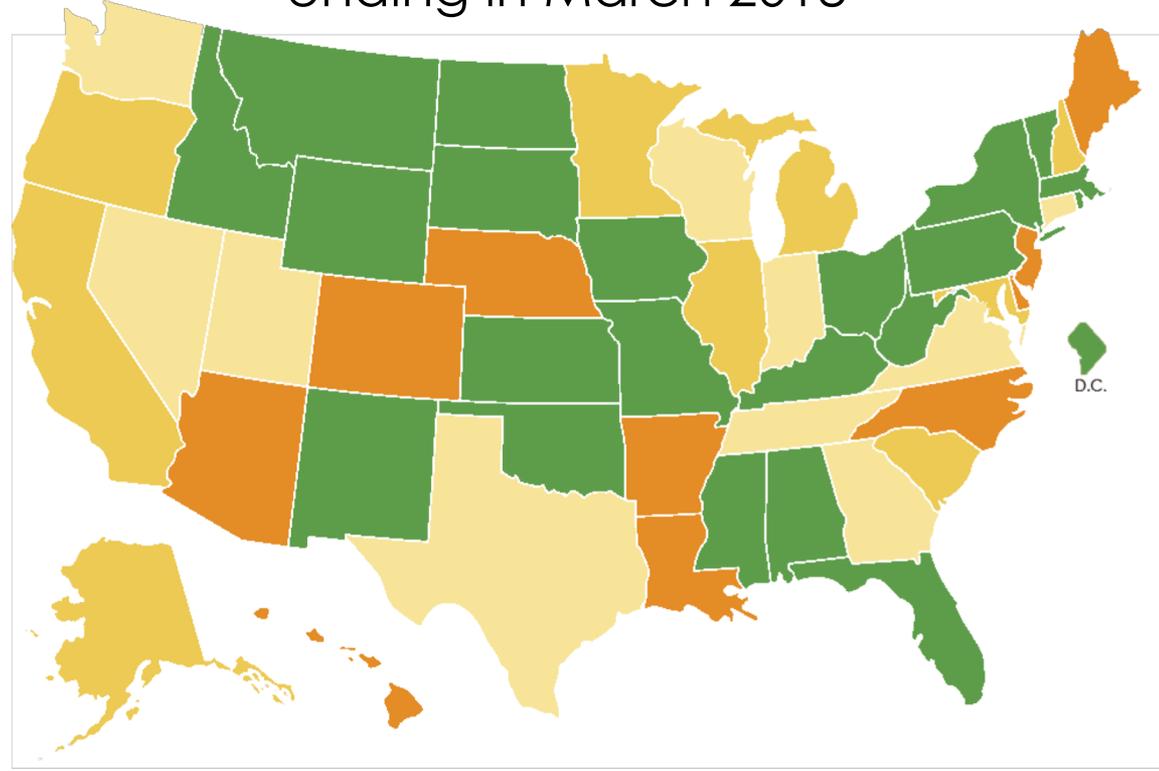


Note: Bolded counties appear in more than one category

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 6.

Percent change in number of drug overdose deaths

by state, 12-month period ending in March 2017 to 12-month period ending in March 2018



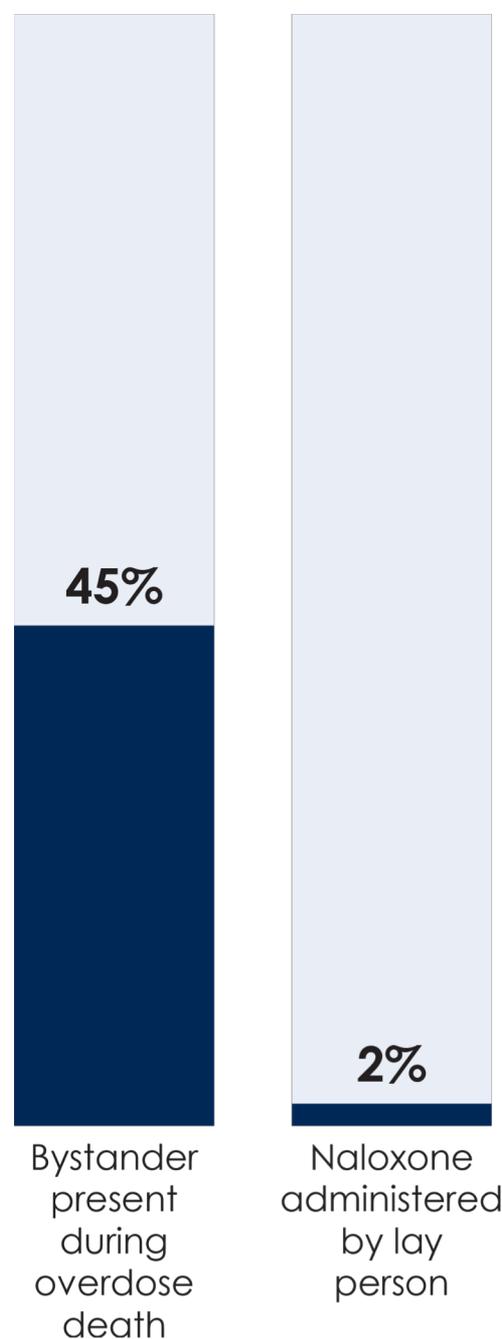
Note: Based on provisional counts, which may not include all deaths that occurred during a given time period. Numbers are subject to change.

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018, Figure 8.

Data source: National Center for Health Statistics, Vital Statistics Rapid Release, Provisional Drug Overdose Counts, as of Nov. 6, 2018



Bystander present and naloxone administered by a lay person during overdose death, Ohio, 2016

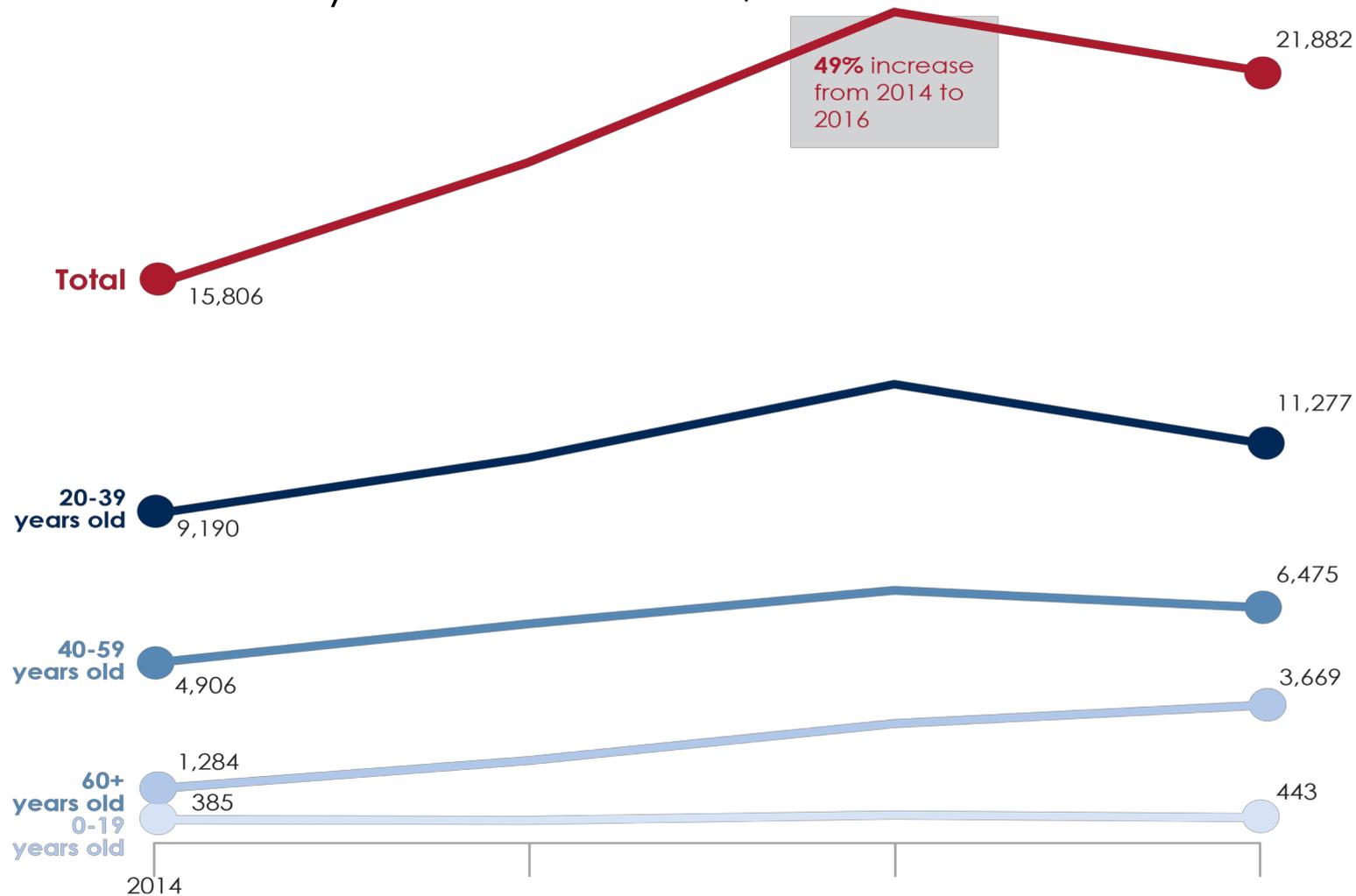


Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 9.

Data source: Enhanced State Opioid Overdose Surveillance (ESOOS) data, provided by the Ohio Department of Health, Oct. 11, 2018

New hepatitis C cases* in Ohio

by number of cases, 2014-2017



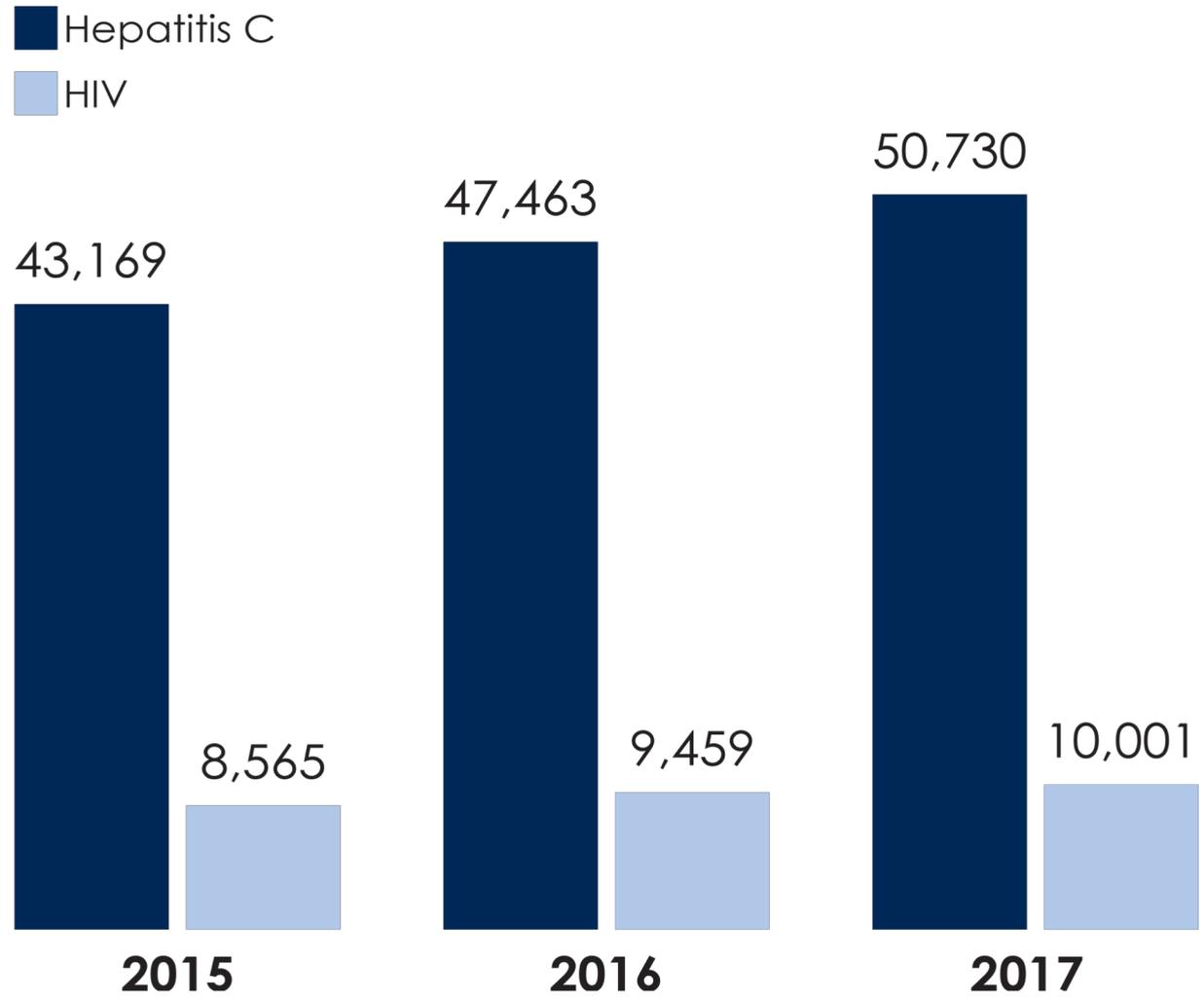
*Includes all hepatitis C cases, both "acute" and "past or present" for 2013-2015 and both "acute" and "chronic" for 2016 and 2017.

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 10.

Data source: Ohio Department of Health, Hepatitis Surveillance Program Data. 2014-2017 data reported through June 25, 2018.



Number of Ohio Medicaid enrollees diagnosed with and receiving treatment for hepatitis C and HIV, 2015-2017*



* Calendar year

Note: Data includes fee-for-service and managed care enrollees of all ages

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 11.

Data source: Ohio Department of Medicaid, 2018



Cost of hepatitis C prevention and treatment for people who use injection drugs

Injection drug users at risk for hepatitis C infection

- People who inject drugs are at increased risk of hepatitis C infection
- Approximately half of people who inject drugs are estimated to be infected with hepatitis C⁴⁶
- Hepatitis C is transmitted through used needles, blood and contaminated surfaces

\$154
Per-participant
Annual cost
to operate a
syringe services
program (SSP)⁴⁵

Acute hepatitis C infection

- Initial onset of hepatitis C is referred to as “acute”
- Acute hepatitis has mild or no symptoms, so many people do not realize they are infected

\$66
Per-patient
Hepatitis C
screening⁴⁷

Chronic hepatitis C infection

- Hepatitis C infection is considered chronic if it persists for 6 months or longer
- Hepatitis C becomes chronic in approximately 75% to 85% of cases⁴⁹
- Chronic hepatitis C eventually develops into liver disease by progressing slowly without any signs or symptoms for several decades

**\$24,600-
\$74,760**
List price of
one course
of hepatitis C
treatment⁴⁸

Liver disease

- Scarring of the liver (fibrosis) leads to cirrhosis, which is permanent liver scarring that impairs function
- Cirrhosis is a precursor to advanced liver disease and/or liver cancer
- If liver disease is life-threatening, liver transplant is needed
- If untreated, patients can die from liver disease, a leading cause of premature death in Ohio⁵¹

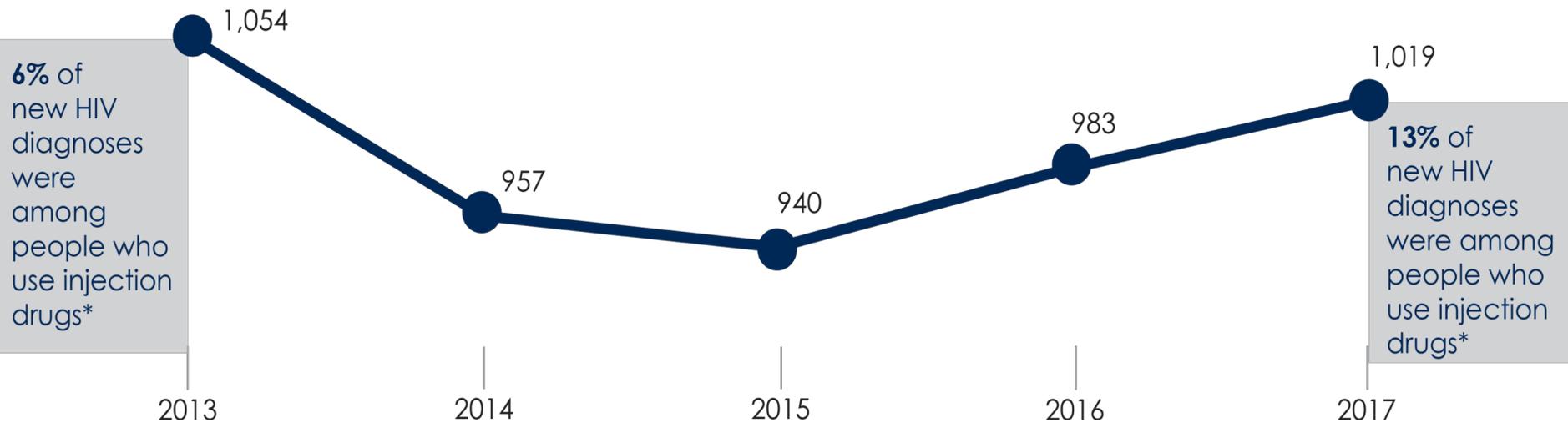
\$812,500
Cost of a liver
transplant⁵⁰

Upstream

Downstream

Source: Health Policy Institute of Ohio, “Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction,” November 2018. Figure 11. (see publication for data sources)

New diagnoses of HIV infection in Ohio, 2013-2017

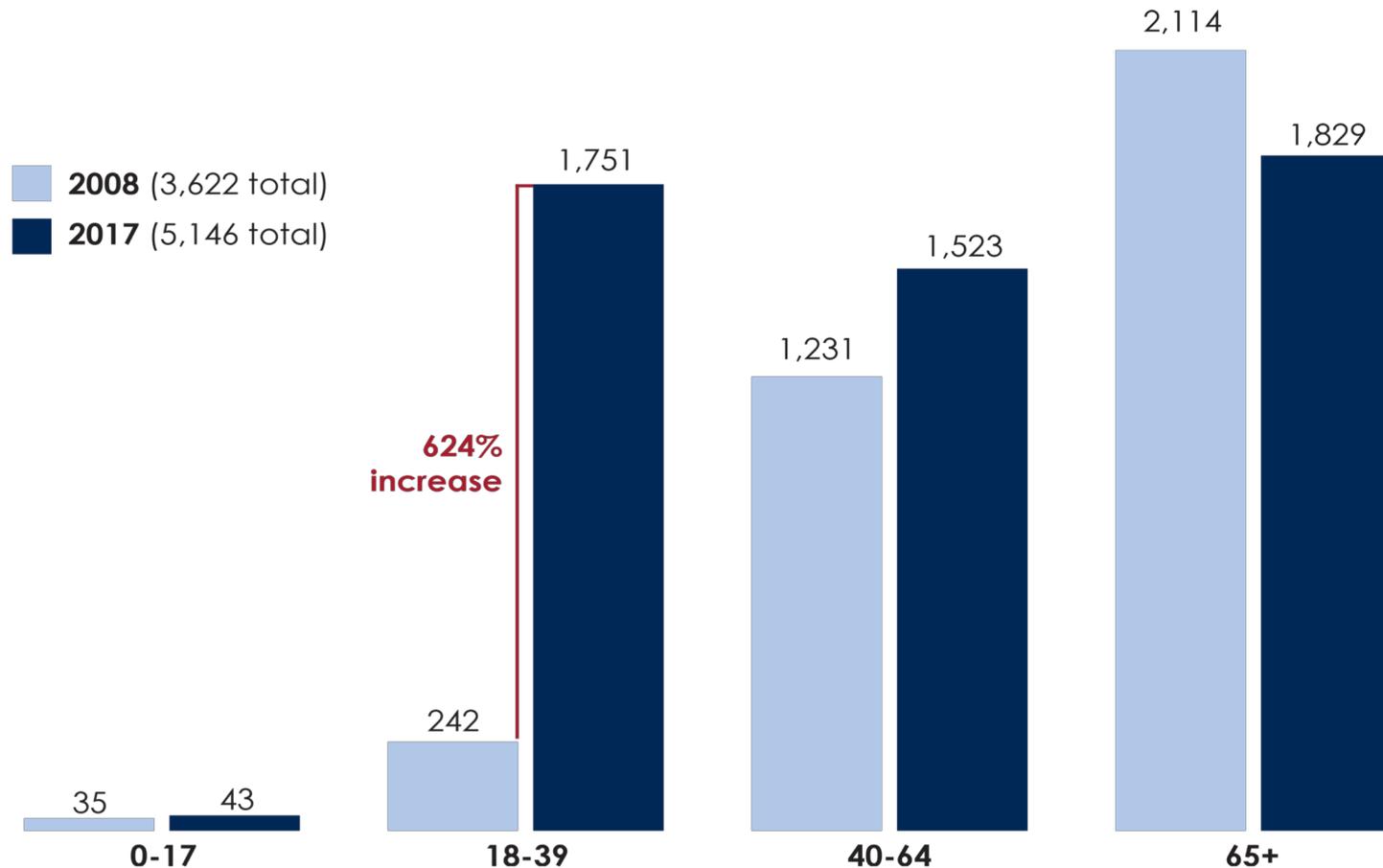


* Exposure categories for people who use Injection drugs include injection drug use only; male-to-male sex and injection drug use; injection drug use and heterosexual contact; and male-to-male sex, injection drug use and heterosexual contact.

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 13.

Data source: Ohio Department of Health, HIV/AIDS Surveillance Program. Data reported through June 30, 2018.

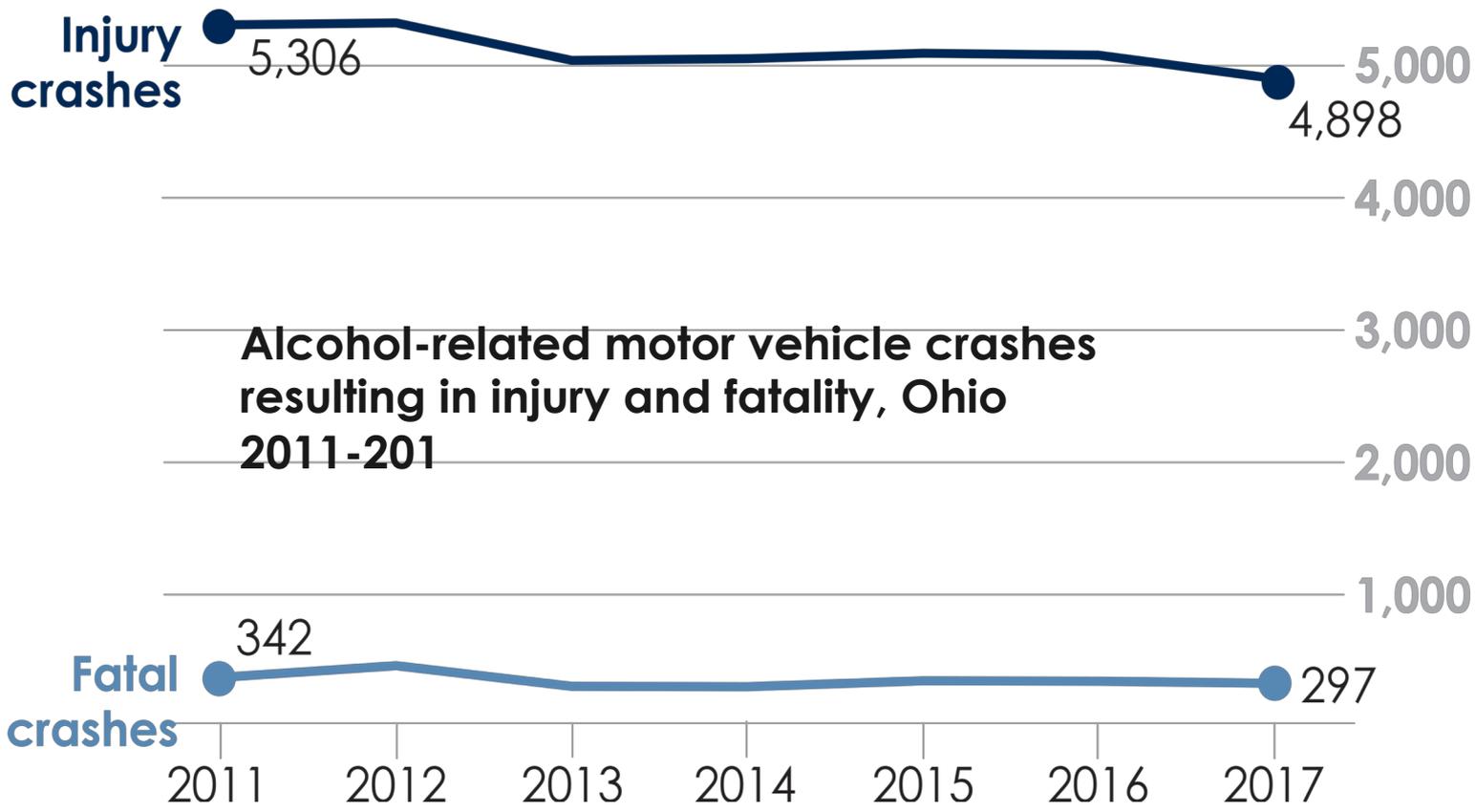
Ohio hospital encounters for patients with endocarditis, by age group, 2008 and 2017



Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 14.

Data source: Ohio Hospital Association

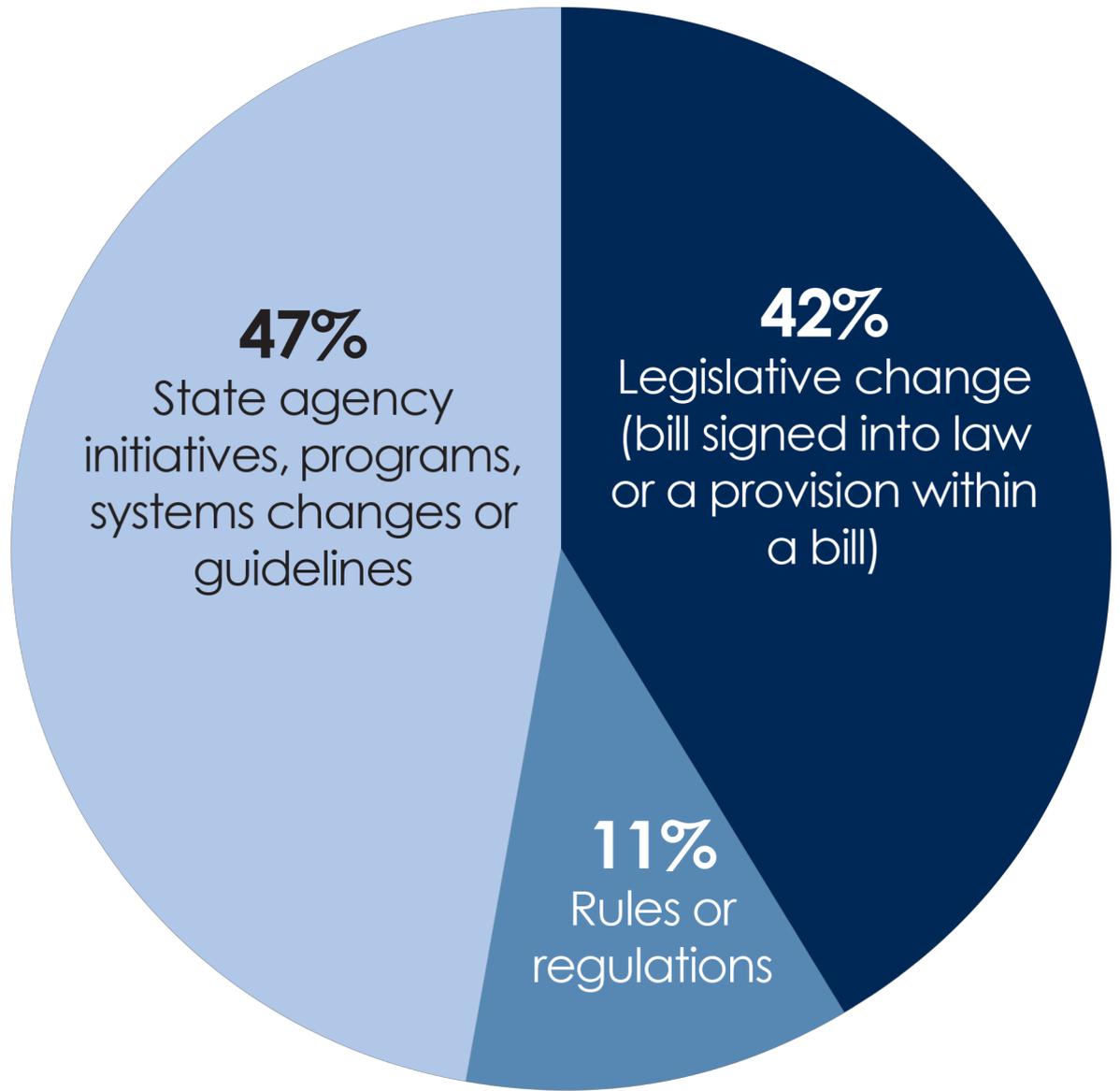
Alcohol-related motor vehicle crashes resulting in injury and fatality, Ohio 2011-2017



Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 15.
Data source: Ohio Department of Public Safety



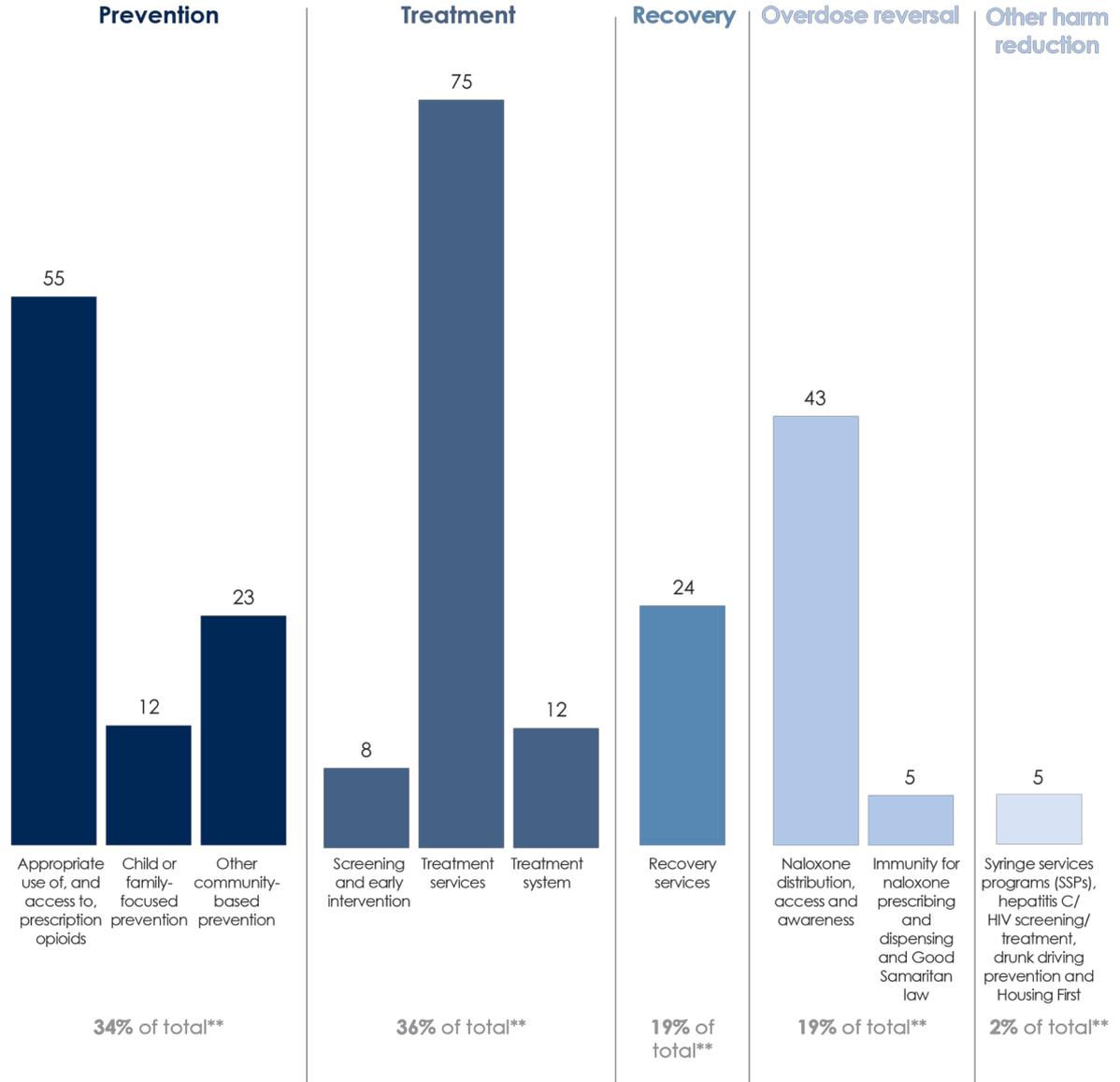
Number of policy changes related to overdose reversal and other forms of harm reduction in Ohio, by type of policy change, Jan. 2013 – May 2018



Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 16.

Data source: HPIO review of Ohio legislation, regulations, Governor's Cabinet Opiate Action Team timeline and other policy summaries

Number of addiction-related policy changes in Ohio, by topic, January 2013 to May 2018*



* Overdose reversal and other harm reduction policies were identified through May 2018, while prevention, treatment and recovery policies were identified through December 2017.

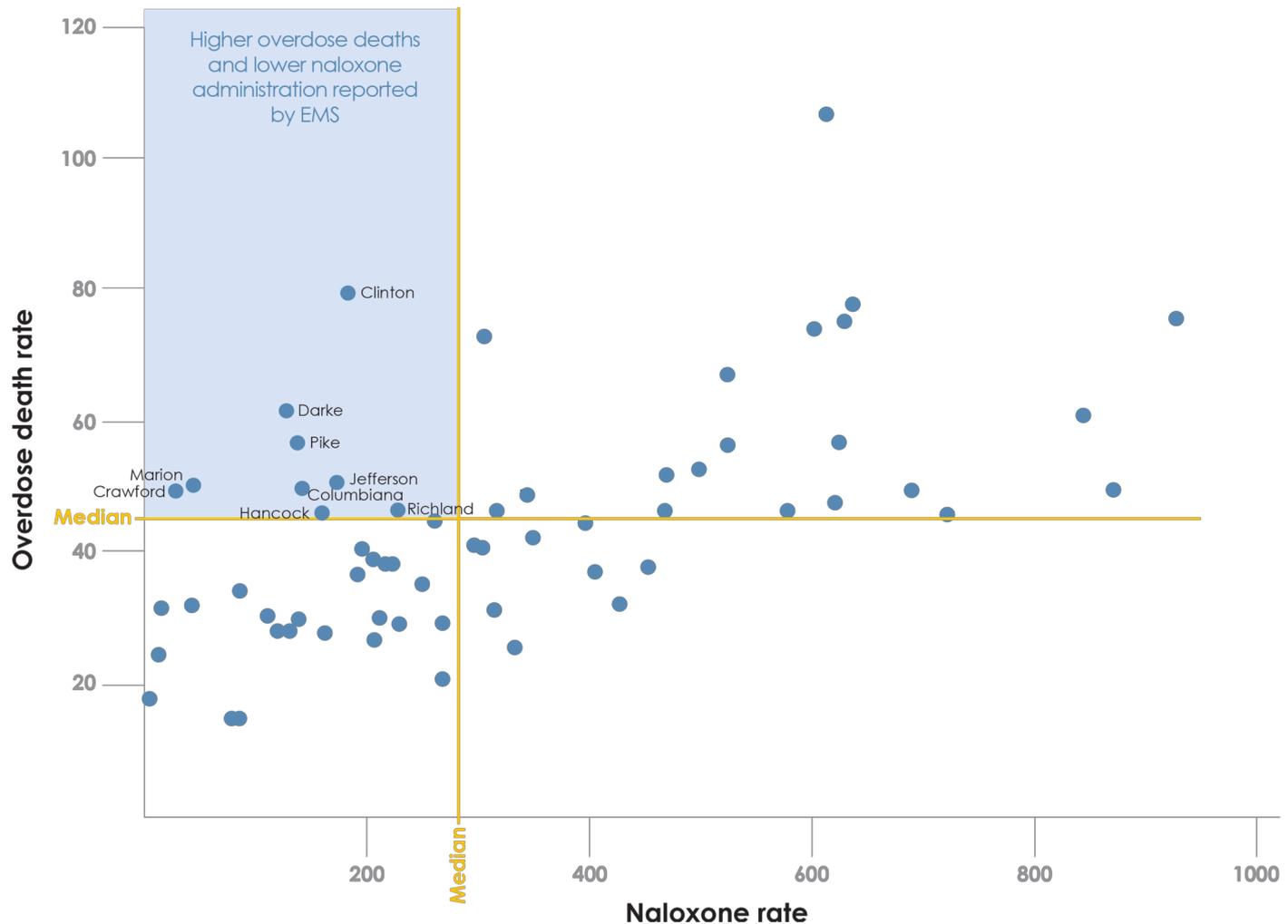
** Percents exceed 100 percent because some policies were counted in more than one category.

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 17.

Data source: HPIO review of Ohio legislation, regulations, Governor's Cabinet Opiate Action Team timeline and other policy summaries



Rate of naloxone administered by Ohio EMS Providers and unintentional overdose death rate, by county, 2017



Note: Twenty five counties are not included due to low overdose death rates (ODH suppresses the rate when there are fewer than 10 total deaths per year in a county). Clark and Fayette counties are outliers (very high naloxone administration rates) and have been removed from this analysis. Naloxone administration and overdose death rates are per 100,000 population.

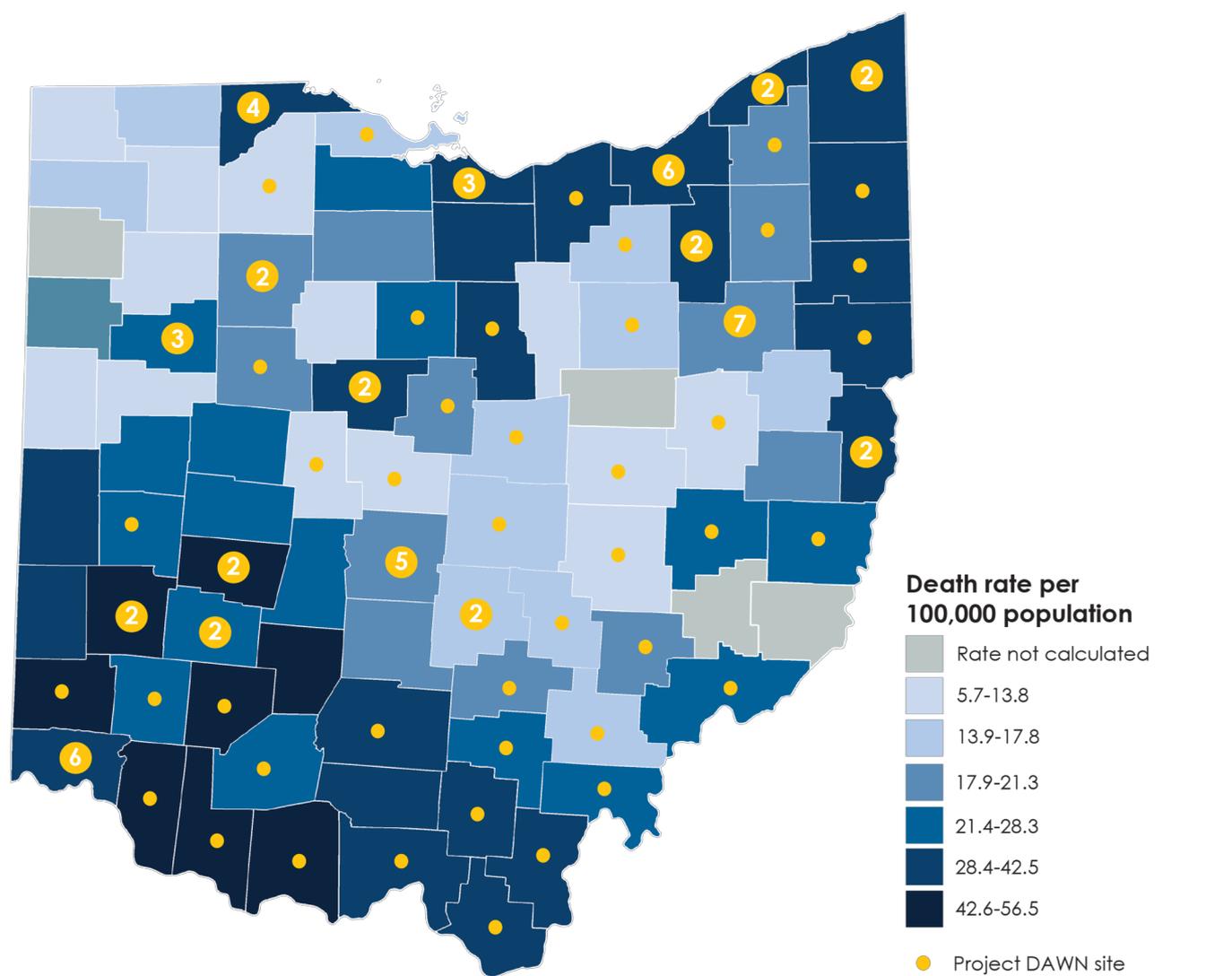
Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018. Figure 20.

Data source for overdoses: Ohio Public Health Data Warehouse, Ohio Department of Health, accessed Sept. 26, 2018

Data source for naloxone rate: Naloxone Administration by Ohio EMS Providers by County, Ohio, 2017, Ohio Department of Public Safety, EMS data received as of Nov. 5, 2018.



Overdose death rate, by county, 2012-2017 and Project DAWN sites



Note: Includes Ohio residents who died due to unintentional drug poisoning (underlying cause of death ICD-10 codes X40-X44). Rate suppressed if less than 10 total deaths for 2012-2017.

Source: Health Policy Institute of Ohio, "Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction," November 2018, Figure 21.

Data source for overdoses: Adapted from "2017 Ohio Drug Overdose Data: General Findings." Ohio Department of Health. Data source is Ohio Department of Health, Bureau of Vital Statistics; Analysis by ODH Injury Prevention Program; U.S. Census Bureau (Vintage 2016 population estimates)

Data source for Project DAWN sites: Project DAWN, Ohio Naloxone Distribution and Training Sites, Ohio Department of Health, as of Oct. 24, 2018.

Download the complete “Ohio Addiction Policy Inventory and Scorecard: Overdose Reversal and Other Forms of Harm Reduction” at

<http://bit.ly/2RWMHjo>

