

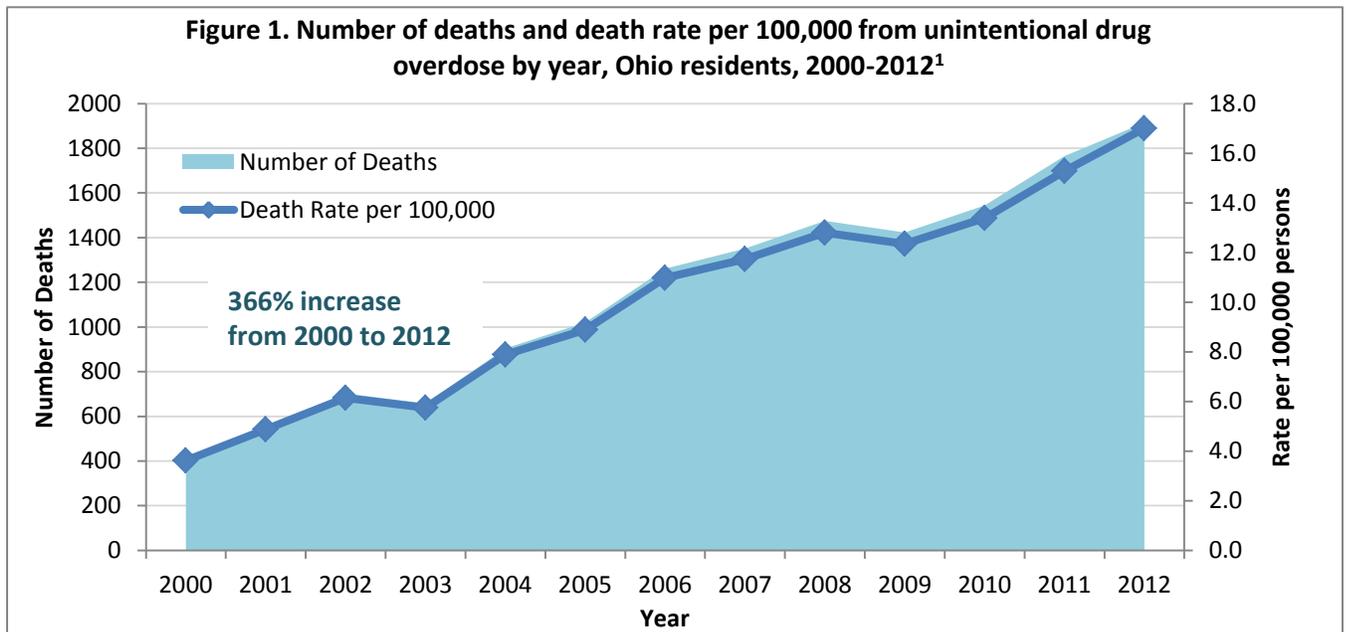


# 2012 OHIO DRUG OVERDOSE DEATHS

March 2014

**Drug overdose deaths continue to be a public health crisis in Ohio with a 366 percent increase in the number of deaths from 2000 to 2012. (See Figure 1.)**

- Unintentional drug overdoses caused **1,914** deaths to Ohio residents based on data in 2012. **This is the highest number of deaths on record for drug overdose** and surpasses the previous highest number (1,765) in 2011 by 8.4 percent.
- In 2012, **five Ohioans died every day from unintentional drug overdose**, or one every 5 hours.
- Unintentional drug overdose continues to be the leading cause of injury-related death in Ohio, ahead of motor vehicle traffic crashes, suicide and falls. This trend began in 2007 and continues through 2012.
- **Opioids (prescription or heroin) remain the driving factor behind the unintentional drug overdose epidemic in Ohio.** Approximately two-thirds (1,272; 66.5 percent) of the drug overdoses involved any opioid in 2012, similar to 2011 (1,154; 65 percent). (See Table 1.)
- **Prescription opioids are involved in most of the unintentional drug overdoses** and have largely driven the rise in deaths over the past decade. Unlike previous years, prescription opioid-related deaths decreased slightly in 2012, but there was a sharp increase in heroin-related deaths. (See Figures 2-3.)
- **Multiple drug use remains one of the largest contributors to the epidemic.** (See Table 1.) In 2012, more than half (53.1 percent) of overdose deaths (where the number of drugs was specified) involved more than one drug.



<sup>1</sup>Source: Ohio Department of Health; Office of Vital Statistics, Analysis Conducted by Injury Prevention Program

Additional data, resources and background information are available at:  
<http://www.healthyohioprogram.org/vipp/drug/dpoison.aspx>

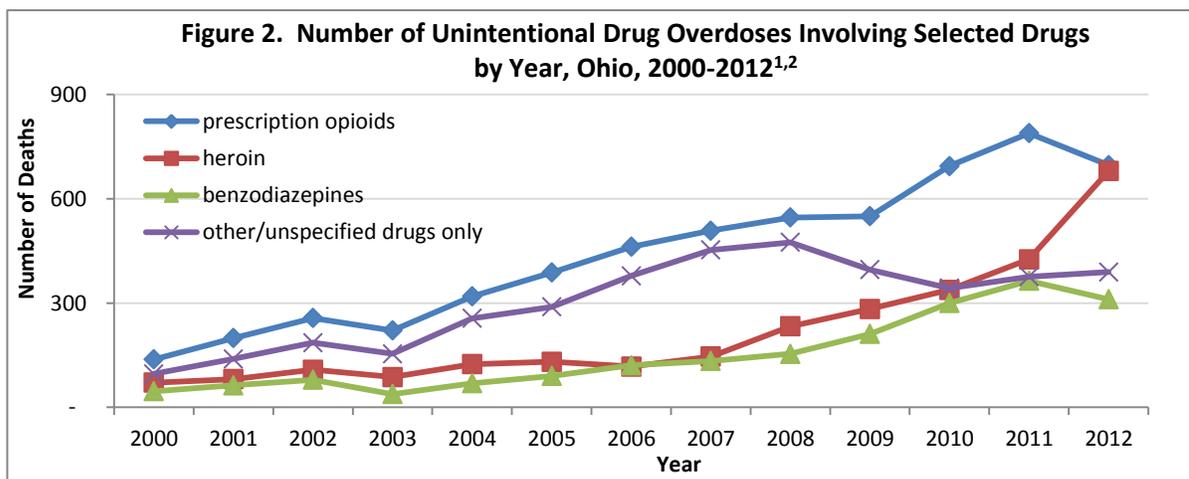


# 2012 OHIO DRUG OVERDOSE DEATH DATA: DRUGS INVOLVED:

**Analysis of the substances involved in the deaths reveals increasing heroin-related overdose, now nearing prescription opioid-related deaths.** Heroin-involved deaths have increased from 16 percent (233) in 2008 to a high of 35.5 percent\* (680) of all drug overdoses in 2012. **Heroin was associated with more than twice as many fatal overdoses as cocaine.**

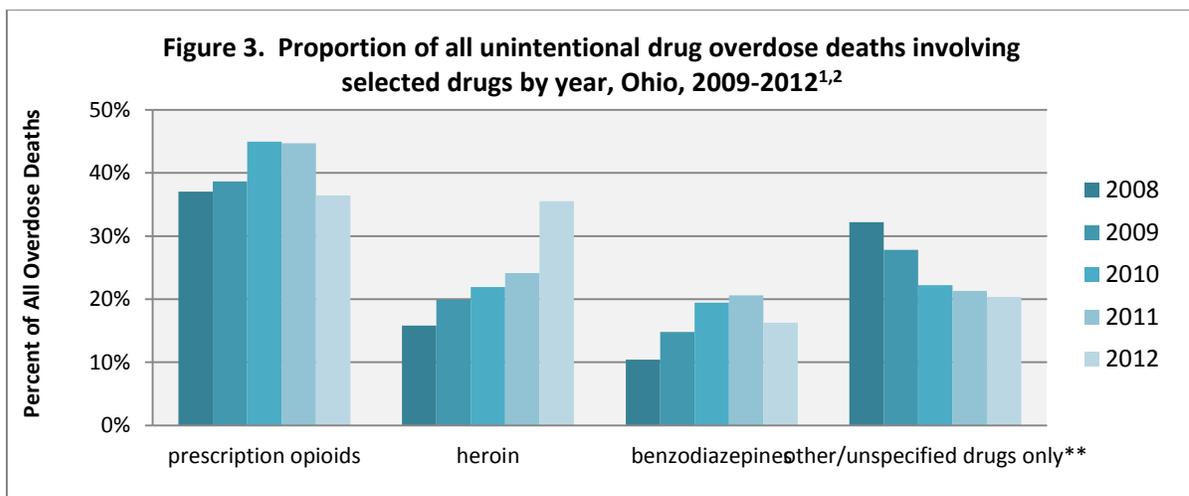
**Although demonstrating a small decrease in fatal overdose involvement in 2012, prescription opioids continue to be the lead contributor to the overdose problem.** More than a third (36.4 percent\*) of fatal unintentional overdoses in 2012 involved prescription opioids, still more than any other substance. On the positive side, this was a lower percentage than in 2011 and 2010 (see Figures 2-3) hopefully signaling better news ahead.

- Nearly one-fourth (537; 28.1 percent\*) of the overdoses involved commonly-prescribed opioids such as oxycodone, hydrocodone and morphine (data not shown).
- Six percent\* of the overdoses involved methadone (prescription opioid) (see Table 1), demonstrating a slight reduction from 2011 (10 percent).



**Deaths involving benzodiazepines** have also increased from 154 (10.4 percent\*) in 2008 to 311 (16.2 percent\*) in 2012, but do show a slight decline from 2011 levels.

**Multiple drug use** remains a major contributing factor (53 percent of deaths) to the overdose epidemic. (See Table 1.)



<sup>1</sup> Source: Ohio Department of Health; Office of Vital Statistics, Analysis Conducted by Injury Prevention Program

<sup>2</sup> Multiple drugs are usually involved in overdose deaths.

\*\*No specific drug was identified

\*In approximately one-fifth (20 percent) of the cases, no specific drug is identified in the death certificate data. As such, reported drugs are likely under-estimates of their true contribution to the burden of fatal drug overdose in Ohio.



## 2012 OHIO DRUG OVERDOSE DEATH DATA: SPECIFIC DRUG INVOLVEMENT:

**Table 1. Unintentional drug overdose deaths of Ohio residents involving specific drug(s), as mentioned on the death certificate, by year, 2001-2012<sup>1-3</sup>**

Drug Category <sup>4</sup>	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total 2001-12	% of 2012 deaths	
<b>all opioids*</b>	266	344	296	429	489	551	631	735	783	979	1,154	<b>1,272</b>	<b>7,929</b>	<b>66.5%</b>	
<b>prescription opioids</b>	199	257	221	319	388	462	508	546	550	694	789	<b>697</b>	<b>5,630</b>	<b>36.4%</b>	
<b>heroin</b>	81	108	87	124	131	117	146	233	283	338	426	<b>680</b>	<b>2,754</b>	<b>35.5%</b>	
<b>benzodiazepines</b>	63	79	38	69	90	121	133	154	211	300	364	<b>311</b>	<b>1,933</b>	<b>16.2%</b>	
<b>cocaine</b>	112	154	140	221	223	317	287	252	220	213	302	<b>326</b>	<b>2,767</b>	<b>17.0%</b>	
<b>alcohol</b>	50	43	40	38	58	89	135	181	173	195	221	<b>282</b>	<b>1,505</b>	<b>14.7%</b>	
<b>methadone</b>	30	47	55	116	144	161	176	170	169	155	157	<b>123</b>	<b>1,503</b>	<b>6.4%</b>	
<b>hallucinogens</b>	1	7	7	8	8	10	13	14	9	26	30	<b>31</b>	<b>164</b>	<b>1.6%</b>	
<b>barbiturates</b>	7	6	5	3	5	3	7	3	5	13	11	<b>6</b>	<b>74</b>	<b>0.3%</b>	
<b>other/unspecified drugs only**</b>	139	186	154	256	289	378	453	475	396	343	376	<b>389</b>	<b>3,834</b>	<b>20.3%</b>	
<b>Multiple Drug Involvement</b>											<b>888<sup>5</sup></b>	<b>980<sup>6</sup></b>	<b>1,016<sup>7</sup></b>	<b>27,936</b>	<b>53.1%</b>
<b>Total unintentional poisoning deaths</b>	<b>555</b>	<b>702</b>	<b>658</b>	<b>904</b>	<b>1,020</b>	<b>1,261</b>	<b>1,351</b>	<b>1,475</b>	<b>1,423</b>	<b>1,544</b>	<b>1,765</b>	<b>1,914</b>	<b>14,572</b>		
<b>Crude annual death rate per 100,000</b>	<b>4.9</b>	<b>6.1</b>	<b>5.7</b>	<b>7.9</b>	<b>8.9</b>	<b>11.0</b>	<b>11.7</b>	<b>12.8</b>	<b>12.3</b>	<b>13.4</b>	<b>15.3</b>	<b>16.6</b>	<b>10.6</b>		

1. Source: ODH, Office of Vital Statistics, Analysis by Injury Prevention Program

2. Total includes out of state deaths of Ohio residents for all years

3. Individual drugs do not add up to totals as more than one drug may be listed on the death certificate for one death.

4. Data completeness varies from year to year for residents who died out of state; approximately 2% of the fatal overdoses on average each year.

5. 343 deaths in 2010 involved an unknown number of drugs

6. 376 deaths in 2011 involved an unknown number of drugs; multiple drug involvement percent is based on 1,389 deaths with known number of drugs on death certificate.

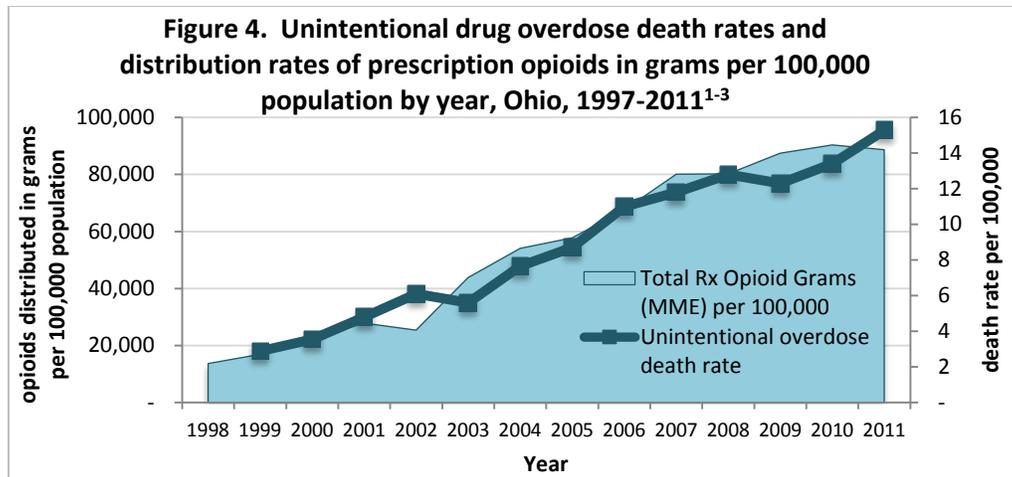
7. 389 deaths in 2012 involved an unknown number of drugs; multiple drug involvement percent is based on 1,525 deaths with known number of drugs on death certificate.

\* Includes prescription opioids and heroin

\*\*Includes only those instances where no other drug than T50.9 (other/unspecified) is included as contributing to death

## CONTRIBUTING FACTORS TO THE OPIOID OVERDOSE EPIDEMIC

- Key factors leading to this epidemic include 1) **changes in clinical pain management guidelines** in the late 1990's (i.e., Federation of State Medical Boards releases *Model Guidelines for the Use of Controlled Substances for the Treatment of Pain*; Ohio Revised Code 4731.21 Drug Treatment of Intractable Pain) and 2) **aggressive marketing by pharmaceutical companies** of new, extended-release prescription opioids to physicians (*Source: FDA Warning Letters*). These factors initially led to rapidly increasing use of prescription opioids.
- From 1997 to 2011, there was a 643 percent increase in the amount of prescription opioid grams per 100,000 population distributed to retail pharmacies in Ohio (*Source: DEA ARCOS*).



**Sources:** 1. Ohio Vital Statistics; 2. DEA, ARCOS Reports, Retail Drug Summary Reports by State, Cumulative Distribution Reports (Report 4) Ohio, 1997-2007 [http://www.deadiversion.usdoj.gov/arcos/retail\\_drug\\_summary/index.html](http://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html); 3. Calculation of oral morphine equivalents used the following assumptions: (a) All drugs other than fentanyl are taken orally; fentanyl is applied transdermally. (b) These doses are approximately equianalgesic: morphine: 30 mg; codeine 200 mg; oxycodone and hydrocodone: 30 mg; hydromorphone; 7.5 mg; methadone: 4 mg; fentanyl: 0.4 mg; meperidine: 300 mg.

- In 2012, there was an average of 67 doses of opioids dispensed for every Ohio resident. (*Source: Ohio Board of Pharmacy, Ohio Automated Rx Reporting System*).
- Additional societal and medical trends that contributed to this complex problem over the past decade include marketing of medications directly to consumers, over-prescribing, substance abuse, widespread diversion of medications, doctor shopping and prescription fraud, illegal online “pharmacies,” unscrupulous providers (e.g., “pill mills”), overmedication and mixing medications, and improper storage and disposal of excess medications.
- Contributing factors to the recent rise in heroin-related overdose in Ohio include a growing opioid-addicted population, shutdown of southern Ohio pill mills, additional recent scrutiny around prescribed opioids, tamper-resistant prescription opioid formulations, increasing quantity and purity of heroin and decreasing cost of heroin compared to prescription opioids.

## NATIONAL DATA:

- 38,329 people died from a drug overdose in the United States in 2010, up from 37,004 deaths in 2009.<sup>1</sup>
- Overdose deaths involving opioid pain medications have shown a similar increase. Starting with 4,030 deaths in 1999, the number of deaths increased to 15,597 in 2009 and 16,651 in 2010.<sup>1</sup>
- The quantity of prescription painkillers sold to pharmacies, hospitals, and doctors’ offices was four times larger in 2010 than in 1999.<sup>2</sup> Enough prescription opioids were prescribed in 2010 to medicate every American adult around-the-clock for a month.<sup>2</sup>

1 Jones C, Mack K, Paulozzi L. Pharmaceutical Overdose Deaths, United States, 2010. *JAMA*. 2013;309(7):657-659.

2 Centers for Disease Control and Prevention. Vital Signs: Prescription Painkiller Overdoses in the US. November 2011. <http://www.cdc.gov/Vitalsigns/pdf/2011-11-vitalsigns.pdf>

## WHAT IS BEING DONE TO ADDRESS THE PROBLEM AT ODH?

- **Surveillance of drug overdose trends and patterns** and providing data on the [Ohio Drug Overdose website](#).
- **Coordinating the Prescription Drug Abuse Action Group (PDAAG)**. The PDAAG is an ongoing state-level work group comprised of over 100 member organizations dedicated to reducing prescription drug abuse and overdose in Ohio. The PDAAG serves as a conduit for information sharing, networking and the development of state-level recommendations to address the issue.
- **Funding three local prescription drug overdose prevention projects from 2014 to 2018** with funding from the CDC's Preventive Health and Health Services Block Grant. These projects engage in activities such as coalition development, education of healthcare prescribers and service providers, implementation of prescribing guidelines and health care system changes to ensure safer prescribing, formation of a poison death review committee and policy development.
- **Opioid Prescribing Guidelines**: Providing support for the Governor's Cabinet Opiate Action Team (GCOAT), Prescriber Education Work Group including development of [opioid prescribing guidelines](#) including:
  - [Opioid prescribing guidelines for emergency and acute care facilities](#) (issued April 2012).
  - [Ohio's Opioid Prescribing Guidelines for Treatment of Chronic, Non-Terminal Pain](#) (issued October 2013).



- **Increasing Access to Naloxone**: Building on its commitment to stem the dramatic increase in drug overdose deaths in Ohio, the ODH VIPP allocated support and technical assistance to initiate [Project DAWN \(Deaths Avoided with Naloxone\)](#), Ohio's first naloxone distribution program in the Portsmouth City Health Department in Scioto County. The VIPP is currently providing technical assistance, resources and financial support to expand Project DAWN sites in other counties in Ohio including Ross, Stark and Hamilton counties.
- **Encouraging excess drug disposal solutions and methods**. In order to foster a more permanent and sustainable method of drug disposal, ODH worked with local law enforcement to purchase prescription drug drop boxes from the National Association of Drug Diversion Investigators (NADDI). In collaboration with the Ohio Attorney General and Drug Free Action Alliance, this initiative provided 66 drug drop boxes to 23 Southern Ohio counties. A list of all drug drop boxes in Ohio can be found on NADDI's website: <http://rxdrugdropbox.org/>



- **Public Education: [Start Talking!](#)** is a new effort championed by Gov. Kasich and First Lady Karen W. Kasich aimed at preventing drug abuse among Ohio's children. The majority of substance-free adolescents credit parents for the decision not to use illegal substances. Likewise, teachers and other authority figures can have a similar influence on youth and their decision-making. The Start Talking! initiative was developed to:
  - Help parents understand risks to their children and empower them with simple, effective strategies;
  - Provide programming for schools to reinforce the positive messages children should be hearing at home;
  - Encourage peer-to-peer conversations among high school youth to promote healthy lifestyles; and
  - Focus on building resiliency in our youth so that they have the necessary tools to resist substance use.
 Visit the [Start Talking! website](#) for more information.



For complete information on what ODH is doing to address the issue, please visit:  
<http://www.healthyohioprogram.org/vipp/drug/dpoison.aspx>