The Overdose Crisis: Allegheny County 2017

ACOPC Summer Conference
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Chief Medical Examiner
Allegheny County
New data compiled from hundreds of health agencies reveals the extent of the drug overdose epidemic last year.

AKRON, Ohio — Drug overdose deaths in 2016 most likely exceeded 59,000, the largest annual jump ever recorded in the United States, according to preliminary data compiled by The New York Times.

The death count is the latest consequence of an escalating public health crisis: opioid addiction, now made more deadly by an influx of illicitly manufactured fentanyl and similar drugs. Drug overdoses are now the leading cause of death among Americans under 50.

Although the data is preliminary, the Times’s best estimate is that deaths rose 19 percent over the 52,404 recorded in 2015. And all evidence suggests the problem has continued to worsen in 2017.
Allegheny County

Overview

Allegheny County data is updated on a monthly basis. This database reflects records from 2008-current.

If you have questions about Allegheny County's data, please contact:

Dr. Karl Williams MD, MPH, Medical Examiner, 1520 Penn Avenue
Pittsburgh, PA 15222, Phone: (412) 350-4800, Fax: (412) 350-4899

3,139 reported overdose deaths in All Years Available (2008 - 2017)

Accidental Accident
Allegheny County
Overview – Incident Zip Codes

Fatal Overdoses By Incident Zip Code

Zip Codes (with 3+ deaths)

15210: 167
15212: 143
15216: 98
15219: 83
15136: 92
15132: 84
15235: 73
15227: 72
15206: 72
15211: 63
Allegheny County
Overview – Resident Zip Codes

Fatal Overdoses By Resident Zip Code

<table>
<thead>
<tr>
<th>Zip Codes (with 3+ deaths)</th>
<th></th>
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<tbody>
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<td>15212 : 135</td>
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<tr>
<td>Undefined : 93</td>
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<td>15108 : 63</td>
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</tr>
<tr>
<td>15202 : 62</td>
<td></td>
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</tbody>
</table>

Map data ©2017 Google | Terms of Use | Report a map error
Allegheny County
Zip Code with Highest Number of Overdoses

15210 = 167 Overdose Deaths

Mt. Oliver
Allegheny and Westmoreland

Zip Code with Highest Number of Overdoses

15210 = 167 Overdose Deaths

Greensburg, PA
Allegheny County
Demographic Dashboard

Allegheny County Demographics of Overdose Decedents (All Years Available (2008 - 2017))

Gender
- Male: 31.4%
- Female: 68.6%

Race
- White: 85.3%
- Black: 14.1%
- Hispanic: 8.0%
- Asian: 27.0%
- Other: 22.3%

Age Groups
- 5-17: 0%
- 18-24: 6%
- 25-34: 22%
- 35-44: 25.8%
- 45-54: 22.3%
- 55-64: 22.3%
- 65+: 8.0%

Ages

Pitt Pharmacy
PERU

OVERDOSE FREE PA

Allegheny County
Allegheny County

Age Breakdown

2008-2017
- 27.0%
- 25.8%
- 14.1%
- 22.3%
- 8.0%

2016
- 28.6%
- 23.2%
- 23.5%
- 15.4%
- 5.8%

Legend:
- 0-17
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+
Allegheny County

Top Ten Drugs

2008-2017

2016
Beaver County

Top Ten Drugs

Graph showing the top ten drugs by overdose deaths from 2012 to 2017.
Allegheny County

Data Charts

Fatal Overdoses Over Time

2016
- Allegheny County Fatal Overdoses: 650 (100.0%)
Allegheny County
Heroin vs. Fentanyl

2008-2017

2017

Number of fatal overdoses

- drugs="Heroin": 330 (50.8%)
- drugs="Fentanyl": 412 (63.4%)

- drugs="Heroin": 80 (32.7%)
- drugs="Fentanyl": 209 (85.3%)
Opioid Prescriptions have started to Decrease but Opioids Fatalities are still Increasing

Opioid morphine milligram equivalents (MME) dispensed fell by over 15% from 2010-2015

Source: IMS Health, U.S. Outpatient Retail Setting

2015 Overdose Deaths:
- 52,404 Any Drug
- 33,091 Any Opioid

Opioid OD Deaths US, 2000-2015

Commonly Prescribed Opioids (Natural & Semi-Synthetic Opioids and Methadon)
- Heroin
- Other Synthetic Opioids (e.g., fentanyl, tramadol)

Allegheny County

Prescription Opioids vs. Fentanyl

2016

- Category=Prescription Opioids: 137 (21.1%)
- Category=Fentanyl/Fentanyl Related Substances/Non-Prescription Synthetic Opioids: 425 (65.4%)
Where are we going from here?

Worst Cast Scenario

Scenario 1: The opioid deaths forecast for 2027 is 93,613. The forecasted change is 183% since 2015 when it was 33,091. This curve assumes total drug overdoses climb at the same rate they have for decades. It’s also based on the assumption opioid deaths keep making up roughly the same percentage of all drug deaths.

Best Cast Scenario

Scenario 10: The opioid deaths forecast for 2027 is 21,300. The forecasted change is -36% since 2015 when it was 33,091. This curve assumes doctors prescribe fewer opioids, states embrace prescription drug monitoring programs, and insurers enact reforms to increase treatment access.
The Future?
Ten Year Projection of Opioid Overdose Deaths
Scenarios for the Future

• The best-case projection has fatal overdoses falling below 22,000 a year by 2027. But experts say reaching that level would require a major public investment in evidence-based treatment options and a concerted push among medical providers to control pain with non-narcotic therapies before trying prescription opioids.
  • By contrast, federal officials estimate that opioid abuse drains nearly $80 billion a year from the American economy because of expenses tied to health care, criminal justice, and lost productivity.

• The worst case scenario for opioid deaths forecast for 2027 is 40,652. The forecasted change is 23% since 2015 when it was 33,091. This curve assumes opioid deaths increase until a combination of increased naloxone access, decreased prescription opioids, and increased treatment lowers fatal overdoses.

SCIENTIFIC STRATEGIES FOR COMBATING THE OPIOID EPIDEMIC

**SHORT-TERM STRATEGIES**

**OVERDOSE PREVENTION & REVERSAL**
- Stronger opioid antagonist formulations
- Novel medications (e.g., 5-HT1A agonists, ampakines)
- Phrenic-nerve stimulation devices
- Technologies to detect overdose & alert help or autoinject naloxone

**TREATMENT OF OPIOID-USE DISORDERS**
- New formulations of existing medications
- Repurposing approved therapies (e.g., lorcaserin)
- Novel medications targeting neurobiology (e.g., lofexidine)
- *Vaccines and monoclonal antibodies
- Brain-stimulation technologies

**LONG-TERM STRATEGIES**

**TREATMENT OF CHRONIC PAIN**
- Opioid formulations with abuse-deterrent properties
- MOR-biased agonists
- Cannabinoids
- Novel or repurposed medications targeting pathophysiology (e.g., sodium-channel blockers)
- Monoclonal antibodies
- Brain-stimulation technologies
- *Gene therapies
- *Progenitor cell therapies
- Precision medicine
- Biomarkers

Adapted from Volkow & Collins, NEJM, 2017.
Where to go from here

Know the Facts
- Basic Facts
- View Overdose Death Data
- Get Relevant Reports

Find Local Resources
- Find Naloxone
- Locate Treatment
- Find Drug Take Back Boxes
- Attend An Event
- Connect Locally

Make an Impact
- Friends & Family
- Health Professionals
- Public Safety Professionals
- Persons Using Opioids
- People in Recovery

The TAC provides support for county coalition and task forces that aim to eliminate overdoses in their communities. We promote a multi-faceted approach, data-driven strategies, and an implementation framework developed by director Dr. Janice Hingle. The TAC partners with counties across the commonwealth of Pennsylvania (31 counties and growing).
How to Query the Datasets

Step 1: Choose “View Overdose Death Data”
How to Query the Datasets

Step 2: Select County(s) and load data set.
*Counties will have variable years of data

View Overdose Death Data

<table>
<thead>
<tr>
<th>Select Counties</th>
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<tbody>
<tr>
<td>Adams</td>
</tr>
<tr>
<td>Allegheny</td>
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<tr>
<td>Armstrong</td>
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<tr>
<td>Beaver</td>
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<tr>
<td>Union</td>
</tr>
<tr>
<td>Westmoreland</td>
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<tr>
<td>York</td>
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Load Data
How to Query the Datasets

Step 3: Choose Desired Years

Allegheny County

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3,139 reported overdose deaths in Allegheny County

[Dropdown menu: All Years Available (2008 - 2017)]
OverdoseFreePA
Demographic Dashboard

Allegheny County Demographics of Overdose Decedents (All Years Available (2008 - 2017))

Gender

Race

Age Groups

Ages

[Bar chart showing overdose deaths by ages]
OverdoseFreePA
Overdoses by Resident and Incident Zip Code

Allegheny County Count by Zip Code (All Years Available (2008 - 2017))

Fatal Overdoses By Incident Zip Code

<table>
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OverdoseFreePA
Overdoses by Zip Code

Allegheny

Allegheny and Westmoreland
OverdoseFreePA

Last “Static Page” – Editable Data Charts

Allegheny County Trends Over Time

Fatal Overdoses Over Time

Choose “Edit Chart”

![Graph showing the trend of fatal overdoses over time.](image)
# OverdoseFreePA

Last “Static Page” – Editable Data Charts

## Fatal Overdoses Over Time

### Gender
- All Genders
- Male
- Female

### Race
- All Races
- White
- Black
- Hispanic
- Asian
- Other

### Age Groups
- All Age Groups
- 0-17
- 18-24
- 25-34
- 35-44
- 45-64
- 65+

### Drugs in System
- All Drugs
- Add to Chart
- Clear Chart

### Chart Details

- Allegheny County Fatal Overdoses

![Graph showing fatal overdoses over time](chart.png)
Allegheny County
Heroin vs. Fentanyl

2008-2017

2017
OverdoseFreePA

Fentanyl Query
OverdoseFreePA

Example - Acetyl Fentanyl and Despropionyl Fentanyl Query
OverdoseFreePA
Example - Acetyl Fentanyl, Despropionyl Fentanyl Query, and Furanyl Fentanyl
Thank you!

Questions are Welcome