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CHART



Stimulant Prescribing and Stimulant-Related Deaths in Philadelphia

While much national attention continues to focus on the opioid epidemic and over-prescribing of opioids, physicians continue to prescribe stimulant drugs, primarily for the treatment of Attention Deficit Hyperactivity Disorder (ADHD). These drugs include methylphenidate, dexamethylphenidate, amphetamine, dextroamphetamine, and lisdexamfetamine. The increase in prescribing coincides with high levels of use of illicit stimulants, including cocaine and methamphetamine¹. While stimulant drugs increase attention, mood, and energy in the short-term, they are addictive and have been associated with severe cardiac, neurologic, and psychiatric side effects, including sudden death, stroke, seizures, and psychosis. These drugs are also often used in combination with other addictive substances, and stimulants are increasingly found in drug overdose deaths, usually in combination with opioids. This issue of CHART illustrates the scale of stimulant prescribing and stimulant-related deaths and highlights those demographic groups most impacted in Philadelphia.

KEY TAKEAWAYS

Sale of prescription stimulants has been increasing

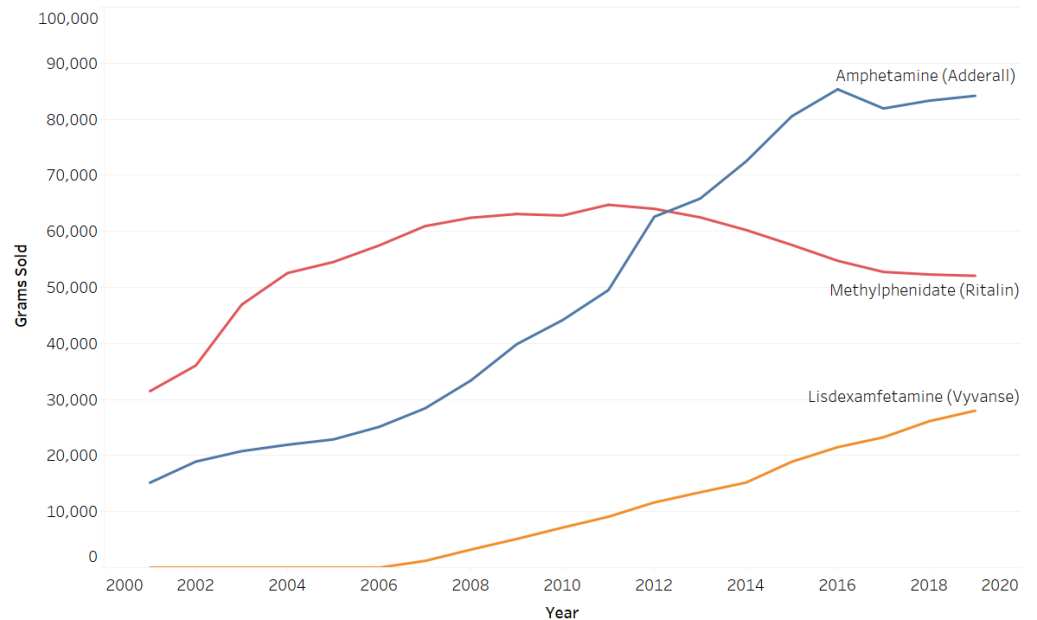
Dispensing of prescription stimulants has remained consistent over time.

Cocaine and methamphetamine-involved deaths are increasing in Philadelphia.

¹ While most methamphetamine use is illicit, this drug is occasionally prescribed legally.

Sale of prescription stimulants is increasing in Philadelphia

Sale of select prescription stimulants by year, Philadelphia, 2001-2019

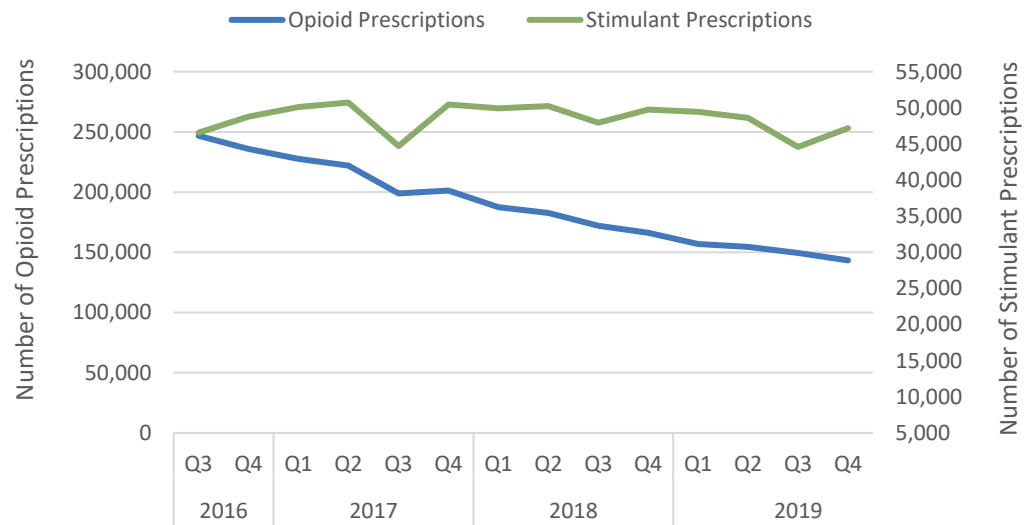


Source: Drug Enforcement Administration Automated Reports and Consolidated Ordering System

- The number of prescription stimulants sold in Philadelphia has been increasing since 2001.
- Sales of the prescription stimulants methylphenidate (e.g. Ritalin) and amphetamine (e.g. Adderall) increased 62% and 477%, respectively, from 2001 to 2019.
- Lisdexamfetamine (e.g. Vyvanse) sales have increased continuously since the drug was first marketed for treatment of ADHD in 2012.

Prescription stimulants dispensed to Philadelphia residents has remained consistent over time.

Number of Prescriptions Dispensed at Philadelphia Pharmacies to Philadelphia Residents, 2016Q3-2019Q4



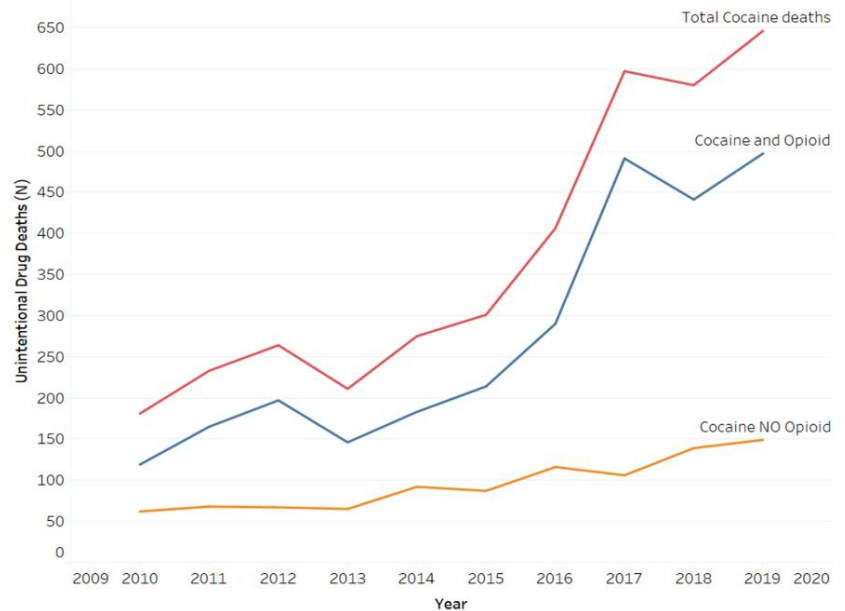
Source: Pennsylvania Prescription Drug Monitoring Program

- While opioid prescriptions dispensed to Philadelphia residents have decreased, stimulants prescriptions have remained consistent from 2016 to 2019.
- In the third quarter of 2016, 46,580 stimulant prescriptions were dispensed to Philadelphia residents. By the fourth quarter of 2019, that increased 1.3% to 47,177 prescriptions.
- The proportion of stimulant prescriptions dispensed to patients 18 years and older has increased from 59% in the third quarter of 2016 to 63% in the fourth quarter of 2019 (data not shown).
- During that same time period the proportion of stimulant prescriptions dispensed to patients under the age of 18, decreased from 41% to 37% (data not shown).

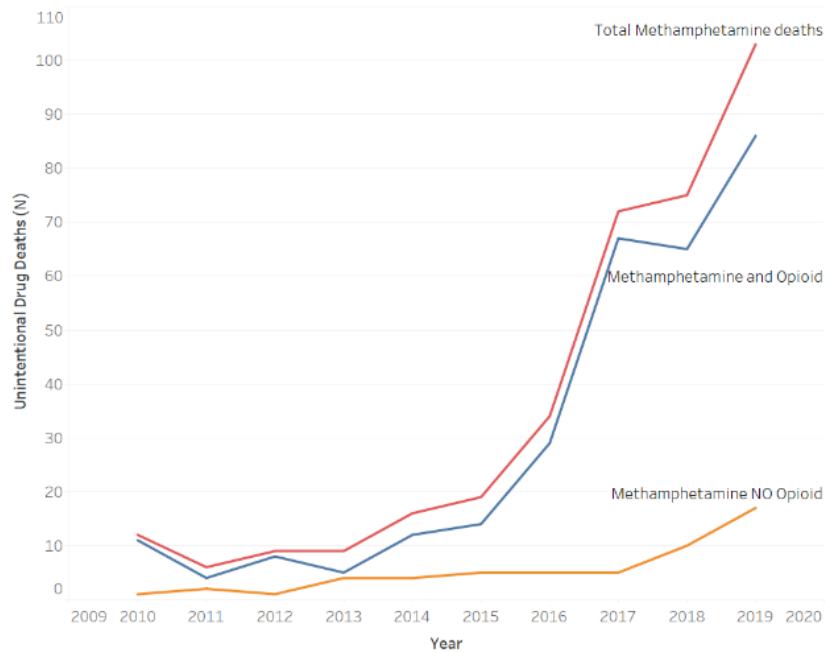
Cocaine and methamphetamine-involved deaths are increasing in Philadelphia

(a)

Number of Fatal Overdoses with (a) Cocaine or (b) Methamphetamine Present 2010 – 2019, Philadelphia



(b)



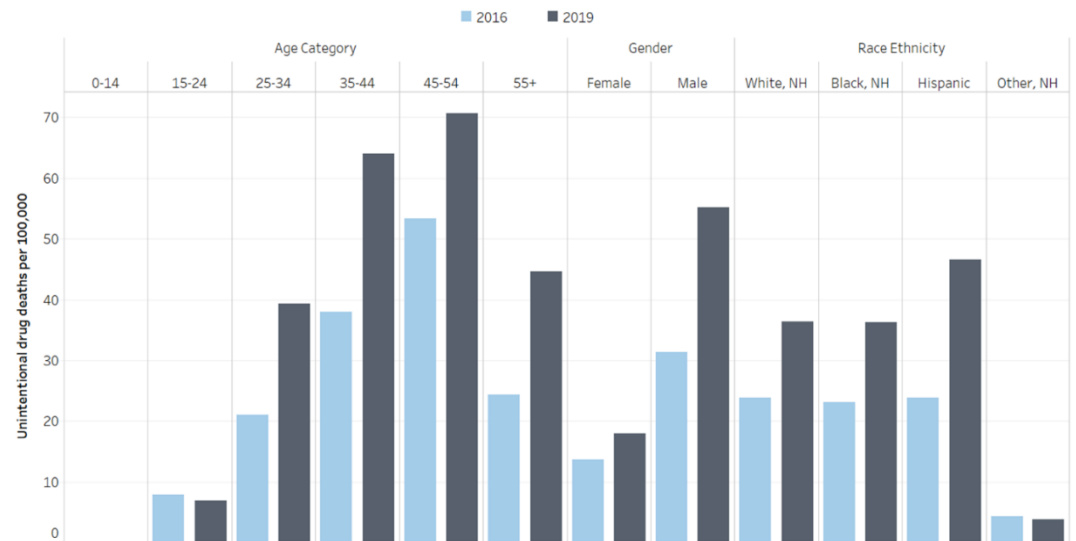
Source: Philadelphia Medical Examiner's Office

- Cocaine is a commonly used illicit stimulant that has similar effects on the body as prescription stimulants.
- Methamphetamine is a potent and addictive synthetic stimulant similar to amphetamine but much less often legally prescribed. Methamphetamine is considerably more likely to be used illicitly than amphetamine.

- In Philadelphia, cocaine and methamphetamine were increasingly present in overdose deaths in which opioids were found. Since 2010 there were smaller increases in overdose deaths involving these drugs without opioids.
 - 646 (56%) of the 1,150 drug overdose deaths in Philadelphia in 2019 involved cocaine, an 11% increase from 2018.
 - 497 (77%) of the cocaine-involved deaths also involved an opioid, 93% of which included fentanyl.
 - 103 (9%) of the drug overdose deaths in 2019 involved methamphetamine, a 37% increase from 2018.
 - 86 (84%) of the methamphetamine-involved deaths also involved an opioid, of which 92% included fentanyl.

Cocaine and methamphetamine-involved overdose death rates have increased in all demographic groups

Cocaine involved overdose death rates by demographics, Philadelphia residents only, 2016-2019



Source: Philadelphia Medical Examiner's Office

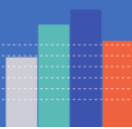
- Cocaine-involved overdose mortality rates increased 76% among males from 2016 to 2019, and 31% among females.
- Hispanic individuals had the largest increase in cocaine-involved overdose deaths from 2016 to 2019 (96%), followed by Non-Hispanic Black individuals (57%).
- Cocaine-involved overdose death rates continue to be highest among the 45-54 age group. However, the 25-34 year old age group had the biggest increase in cocaine-related overdose deaths from 2016 to 2019 (87%), followed by the 55+ year old age group (84%).

Methamphetamine involved overdose death rates by demographics, Philadelphia residents only, 2016-2019



Source: Philadelphia Medical Examiner's Office

- Methamphetamine-involved deaths continues to be more common in males and among whites.
- Methamphetamine-involved overdose rates increased 224% among males from 2016 to 2019, and 136% among females.
- Hispanics had the largest increase in methamphetamine-involved overdose from 2016 to 2019 (781%) follow by Non-Hispanic Black individuals (664%)
- The 35-54 year old age group had the biggest increase in methamphetamine-involved overdose deaths from 2016 to 2019 (345%) followed by the 55+ year age group (227%).



WHAT CAN BE DONE

The Health Department is:

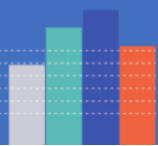
- Educating patients about the potential abuse and dependence of prescribed stimulants.
- Encouraging people who use stimulants to check their drugs for the presence of fentanyl, a dangerous synthetic opioid that has been found in other illicit drugs.
- Consolidating and distributing local data relating to the rise in stimulant use that is updated quarterly.
- Supporting the local syringe exchange program to reduce the risk of HIV and hepatitis C among people who inject stimulants.
- Creating educational materials and developing a media campaign about risks associated with stimulants.
- Developing an overdose awareness campaign that considers the diversity of people who use drugs and Philadelphia's rapidly changing drug market.

Health care providers should:

- Recommend behavioral therapy as first line treatment for pre-school aged children (ages 4-5 years) with ADHD, rather than medications.
- Before prescribing stimulant medications, confirm the diagnosis of ADHD using DSM-V criteria and determine, in discussions with patients or parents, that the benefits outweigh the risks of these drugs.
- Incorporate Screening, Brief Intervention and Referral to Treatment (SBIRT) into practices to routinely assess for recreational stimulant use and the use of other legal and illicit psychoactive drugs.
- Register for and use the Prescription Drug Monitoring Program database when prescribing stimulants.
- Help patients who are dependent on cocaine or methamphetamine get treatment. This can be through referral to drug detox or treatment programs.
- Warn patients who use non-opioid street drugs that their drugs may be contaminated with fentanyl.
- Educate people who use drugs to test their drugs for the presence of fentanyl using fentanyl test strips.
- Screen all individuals with a history or current use of injection drug use for HIV and hepatitis C. If negative, rescreen users every 6 months.
- Encourage people currently using injection drugs to use clean syringes and equipment with every use.
- Alert the Department of Public Health about surges in overdose or new patterns of overdose morbidity or mortality.

People can:

- Be informed and share about the risks of stimulant use.
- Avoid taking stimulants not prescribed for them and ask medical providers who prescribe stimulants for treatment of ADHD about alternative, safer forms of treatment.
- If using illicit stimulants like cocaine or methamphetamine, seek treatment for their drug use.
- Check their drugs for the presence of fentanyl using fentanyl test strips. Any illicit drug that is purchased on the street, including cocaine and pills, may contain fentanyl.
- Recommend that acquaintances who are using cocaine or methamphetamine seek treatment and help them find treatment providers.
- Obtain and get trained on how to use naloxone to prevent opioid-involved overdose fatalities. Naloxone is available at pharmacies in Pennsylvania without a prescription under a 'standing order' signed by the Pennsylvania's Secretary of Health.



RESOURCES

- **Harm reduction** resources and education, including syringe exchange, smoking kit distribution, and infectious disease screening:
 - Prevention Point of Philadelphia – 215-634-5272; <https://ppponline.org/>
- **Drug Treatment** referrals and education:
 - Community Behavioral Health (Medicaid-enrolled) – 1-888-545-2600
 - Behavioral Health Services Initiative (uninsured) – 215-546-1200
 - <http://dbhids.org/addiction-services/>
- **Drug Take Back** collection sites, year-round drug disposal, and education materials relating to Drug Take Back Days:
 - www.takebackday.dea.gov

For more information about actions the City is taking, visit <https://www.phila.gov/programs/combating-the-opioid-epidemic/the-citys-response/>

For Citywide data relating to the opioid epidemic, visit <https://www.substanceusephilly.com/>

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