MEMORANDUM

November 25, 2015

TO: Public Safety Committee
FROM: Susan J. Farag, Legislative Analyst
SUBJECT: Briefing: Heroin (County Trends and the Use of Narcan)

Today, the Public Safety (PS) Committee will be briefed on heroin use in the County, and the deployment of Narcan among Emergency Medical Services (EMS) staff and Police. Those expected to attend include:

Chief Scott Goldstein, Montgomery County Fire and Rescue Service (MCFRS)
Chief Tom Manger, Montgomery County Police Department (MCPD)
Battalion Chief Alan Butsch, MCFRS
Assistant Chief Russ Hamill, Investigative Services Bureau, MCPD
Captain Paul Liquorie, Special Investigations Division, MCPD
Lieutenant Ron Smith, Special Investigations Division, MCPD

Background

Heroin use continues to grow nationally, and Montgomery County has seen its own uptick in narcotics use. The increase can be attributed, in part, to addiction to prescription painkillers. Heroin is a much cheaper and often more readily-accessible alternative. According to a recent Centers for Disease Control and Prevention (CDC) report, the death rate involving heroin has almost tripled from 2010 to 2013 (attached at © 7-14). According to the State Department of Health and Mental Hygiene (DHMH), Montgomery County experienced 33 heroin-related deaths in 2014 (see chart at © 15). As of July 2015, there had been 20 heroin-related deaths in the County.
One approach that many local governments have taken is the use of naloxone (brand name Narcan). In Fire and Rescue, all 28 paramedic engines, all 18 medic units, and all 32 Basic Life Support (BLS) ambulances are equipped with naloxone. Naloxone is not carried on trucks, rescue squads, or other vehicles that do not primarily respond on EMS calls.

Local law enforcement agencies are permitted to partner with local health departments to obtain the prescription for and carry naloxone. The Police Department's naloxone program is a little over one year old. MCPD has 57 Police Officers trained to carry and administer naloxone, and is working with the Department of Health and Human Services (DHHS) to train an additional 90 police officers.

**Naloxone Use**

MCFRS advises that it is difficult to collect true data on MCFRS' response to heroin overdoses in the County. Not everyone who calls 911 admits to heroin use or that the illness is likely caused by a potential overdose. Naloxone is administered on site whenever an unconscious or altered patient is suspected of taking narcotics. MCFRS providers administer naloxone to patients about 35 times per month. The use of naloxone has been effective in one-to two-thirds of all patients who received it, indicating that the underlying cause of illness was indeed narcotic use.

The Police Department reports that it has responded to 66 total heroin overdose events so far this year (see attached report at ©2-3). Eighteen of those were fatal. To date, the Police have administered one dose of naloxone, which was successful.

Heroin overdose events spiked up from 2013 to 2014, from 56 to 76. Calendar 2015 data seems to be approximately the same as last year.

Heroin related arrests in 2015 seem to be relative level to last year’s arrests. The County had 116 total in 2014, and so far in 2015, it has had 105. In both years, about 60% of the arrests were for simple possession (see © 3).

**Costs**

MCFRS advises that the current cost for naloxone is just under $30 per dose, and it costs MCFRS about $10,000 per year to stock and use Narcan. The Police Department is paying about $44 per dose. There are several reports that the cost of naloxone has been increasing significantly.
Discussion Issues

1) It would be helpful for the Committee to understand what Police naloxone training entails.

2) It is Council staff’s understanding that there are both nasal spray and injectable versions of naloxone, and that Police carry only the nasal spray. What is the difference in delivery methods and the reason for each?

3) Why is there a cost disparity in unit price between what MCFRS ($30) and the Police ($44) pay? How do MCFRS and MCPD obtain naloxone? How often does unused medication have to be replaced?

4) In prior Committee discussions about Automatic External Defibrillators (AEDs), the Police Department has indicated that Police and MCFRS often provide a coordinated response to a particular call where there is an indication of someone who is intoxicated or on drugs, and who may be at risk of a cardiac event. Is this response model also used for suspected heroin overdoses? How does this factor, if at all, into future plans for naloxone deployment among Police Officers?

This packet includes the following:

- MCFRS Naloxone Information
- MCPD Naloxone Information
- Opiate Overdose Response Program (MCPD)
- “Montgomery County Officers Trained to Administer Narcan,” WTOP (January 20, 2015) 16-18
Testimony for PSC in regards to MCFRS Narcan usage

In the last few years, public and media attention has focused on the problems of heroin and narcotics abuse in America and in Maryland. As a result MCFRS has fielded numerous internal and external requests for data about its response to heroin overdoses and its use of Narcan.

Unfortunately, the data is hard to collect. Patients and/or friends or family members who call 911 to seek help for these incidents are often understandably reluctant to give details. As a result, these calls can be dispatched as “overdoses”, or as an “unconscious” person, or even the ubiquitous “sick” person. All of these call descriptors encompass a broad range of etiologies so it is impossible to categorize how many calls a year MCFRS is dispatched on that are truly for a narcotics overdose.

On the treatment side of the house, things get a little better but not much. EMS providers have no way to definitively identify a narcotic overdose. Therefore, the medication Narcan is administered to any unconscious or altered patient who may be suspected to have taken narcotics. MCFRS providers are encouraged to have a broad index of suspicion in this regard. Currently MCFRS providers administer Narcan to patients about 35 times a month. One can infer that narcotics are present when the use of Narcan is effective in waking the patient up. When MCFRS has drilled down its use of Narcan, it has been found that the use of Narcan was efficacious in a third to 2/3rds of the time.

Narcotics are a class of drugs and pharmaceuticals that include heroin and other natural and synthetic derivatives. The primary danger of narcotics is their effect upon the central nervous system to slow or stop breathing. Narcan works by preferentially binding to receptor sites in the nervous system and therefore “blocking” the effects of opiates. Although Narcan has been touted in some media outlets as a new wonder drug, Narcan is not a brand new medication. In Maryland, paramedics have been authorized to use this drug since the late 1980’s. Authorization for the use of Narcan was expanded to Maryland BLS providers in 2013. Currently, MCFRS paramedics can give Narcan through an IV, or by an intra-muscular injection, or by aerosolizing it into the nose. MCFRS EMTs can only aerosolize it into the nose. Although this is a simpler way to give Narcan, it is not as safe for the provider, nor as quick acting.

Narcan is available on all 28 MCFRS Paramedic Engines and all 18 MCFRS Medic units. It is also carried on all BLS ambulances (23 in service and 9 ready reserves). Narcan is not carried on Trucks, Rescue Squads and other vehicles that do not primarily respond on EMS calls. However, these vehicles do carry supportive respiratory equipment and the crews assigned to these units could support breathing in the event that they encounter a patient that is in respiratory arrest.

The current cost for Narcan is just under $30 per dose. It costs MCFRS about $10,000 per year to stock and use Narcan.

Thank you for the opportunity to discuss this issue and I welcome any questions.
Heroin Trends in Montgomery County, Maryland

- Non-Fatal and Fatal Heroin Overdose Events 2013-2015:

Heroin Overdose Events

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<th>2013</th>
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<th>2015</th>
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<td>52</td>
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<td>Fatal</td>
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<tr>
<td>Total</td>
<td>56</td>
<td>76</td>
<td>66</td>
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- Non-Fatal incidents increased 30% from 2013 to 2014
  - Three individuals were identified as experiencing non-fatal heroin overdoses twice on separate dates
- Fatal incidents increased 50% from 2013 to 2014

*Data prior to this epidemic, which began in March 2013, has not been collected with the same level of detail and is unavailable for comparison.*
• Heroin Related Arrests 2014-2015:

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<td>Heroin-Sell</td>
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<td>Heroin-Use</td>
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<tr>
<td><strong>Total</strong></td>
<td>116</td>
<td>105</td>
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*Records Management System (RMS) was changed mid-2013 and arrests prior to 2014 are unavailable for comparison.

*Arrests reports may have included more than one arrestee and each arrestee was counted individually.

*Arrests involving Heroin Paraphernalia only are not included in the table above.
Opiate Overdose Response Program

FC No.: 923  
Date: 11-24-14

If a provision of a regulation, departmental directive, rule, or procedure conflicts with a provision of the contract, the contract prevails except where the contract provision conflicts with State law or the Police Collective Bargaining Law. (FOP Contract, Article 61)

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I. Purpose  
II. Definitions  
III. Policy  
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V. Department of Health and Human Services  
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VII. Equipment  
VIII. Proponent Unit  
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I. Purpose
Drug overdoses are a serious public health challenge in Maryland and in Montgomery County. During the past decade, increases in the number of fatal drug overdoses have been driven primarily by an epidemic of pharmaceutical opioid abuse. Common opiate drugs often abused by users include morphine, heroin, fentanyl, oxycodone, and hydrocodone. The administration of the nasal Naloxone spray (trade name Narcan®), by First Responders is a response to this growing opiate overdose epidemic. Changes in Maryland state law (Md. Health-General Code Ann. §§ 13-3101 through § 13-3109) have recently been made to allow trained and certified police officers to carry and administer the nasal Naloxone spray, which can quickly and safely reverse the effects of an opiate overdose. This opiate overdose response program will allow officers to carry and administer Naloxone in order to reduce the number of fatal overdoses and save lives.

II. Definitions
A. Opiate- An opiate is a medication or drug that is derived from the opium poppy or that mimics the effect of an opiate (a synthetic opiate). Opiate drugs are narcotic sedatives that depress activity of the central nervous system, reduce pain, and induce sleep. Police officers often encounter opiates in the form of morphine, methadone, codeine, heroin, fentanyl, and oxycodone (OxyContin®, Percocet® and Percodan®).

B. Naloxone- Naloxone hydrochloride is an opioid antagonist that can be used to counter the effects of an opiate overdose. Specifically it can displace opioids from the receptors in the brain that control the central nervous system and respiratory system. It is a scheduled drug but it has no euphoric properties and minimal side effects. It is marketed under various trademarks including, but not limited to Narcan®.

C. Psychiatrist and Registered Nurse - A Maryland licensed Psychiatrist and Registered Nurse from the Montgomery County Department of Health and Human Services (HHS) who will provide program oversight. Required training and certifications will be provided and controlled by the Health and Human Services Psychiatrist and Registered Nurse.

D. Overdose Response Unit Coordinator: The MCPD Crisis Intervention Team Coordinator will serve as the Coordinator for the Overdose Response Unit.
III. Policy
A. Naloxone hydrochloride kits will be issued to sworn first responder officers as selected by the department, who are currently certified as Crisis Intervention Team members. Those officers will be part of the Overdose Response Unit (O.R.U.).

B. Those officers assigned to the program must attend a training class in order to obtain certification to carry the scheduled drug Narcan® or Naloxone hydrochloride. The instruction will consist of training on recognizing the symptoms of an opiate overdose, the proper administration of nasal Naloxone, the importance of contacting emergency medical services, and care of the individual after the administration of Naloxone.

C. O.R.U. officers will monitor calls for service in their assigned districts and, when not assigned as a primary officer, may self dispatch to calls for service involving a suspected opiate drug overdose. The response will be routine.

IV. Procedure
A. Steps to follow when handling an overdose call:

1. The O. R. U. officer will consider/ensure officer safety and use universal precautions upon responding to the scene of an overdose. In accordance with the training described below, the officer will provide immediate assistance via the use of Naloxone, provide treatment to the patient, and assist EMS/MCFRS personnel on the scene. This does not prohibit the officer from handling any criminal investigations that may arise from the incident.

2. The O. R. U. officer will conduct an initial assessment of the patient and scene, to include statements from witnesses and/or family members regarding drug use. The officer will make a determination regarding the administration of Naloxone.

3. If administration of Naloxone is indicated, the O. R. U. officer will use the pre-filled Naloxone nasal mist adaptor and administer the Naloxone to the patient. Officers should use caution and be aware that a rapid reversal of an opiate overdose may cause projectile vomiting by the patient and/or violent behavior.

4. The O. R. U. officer will advise ECC that the Naloxone kit has been utilized and the condition of the patient for relay to incoming EMS and/or MCFRS personnel. O. R. U. officers will not relinquish care of the patient until someone of a higher medical authority relieves them, i.e. MCFRS personnel.

5. The Naloxone reversal effects will last between 30 – 90 minutes, while the effects of the opiates may last much longer. It is possible that after the Naloxone wears off the overdose could recur. O.R.U. officers will encourage the patient to be transported to the hospital. If the patient will not go to the hospital voluntarily:

   a. If there is evidence that the patient attempted suicide by their ingestion of opiates or expresses suicidal thoughts or ideations, or there are other criteria for evaluation under the emergency petition process - the emergency evaluation process will be initiated.

   b. If the patient continues to refuse transport in all other cases, and he or she reasonably appears to have the capacity to make medical decisions, as determined by MCFRS and/or the O.R.U. officer, the patient may legally refuse further medical assistance.

6. When a Naloxone kit is utilized, the O. R. U officer will complete a MCP 923 (Use of Naloxone Report) prior to the end of his/her tour of duty and forward the form to the Overdose Response Unit.
Coordinator for tracking the statistical data on the nasal naloxone deployment. An incident report must also be completed when a Naloxone kit is utilized. The report should describe the nature of the incident, the care the patient received, and the fact that the Naloxone kit was deployed. The MCP 923 form must be completed in order to receive a replacement Naloxone kit from the Department of Health and Human Services.

7. The District/Duty Commander will be notified when the Naloxone kit is utilized.

V. Department of Health and Human Services

The HHS Psychiatrist and Registered Nurse will maintain a written inventory documenting the quantities and expirations of the naloxone replacement supplies, and a log documenting the issuance of replacement units. The Psychiatrist and Registered Nurse will also maintain certificate numbers and a log of officers who are trained and certified to carry and administer Naloxone. The Naloxone certificate log will be available and forwarded to the Overdose Response Unit Coordinator.

VI. Training

A. The HHS Psychiatrist and Registered Nurse will provide O.R.U Officers with the initial training, valid for two years, in order to obtain certification to carry and administer Naloxone. Training will include, but not be limited to: patient and scene assessment, recognizing the signs and symptoms of an overdose, recognizing different forms of opiates and other “street” drugs, instruction in the proper administration of nasal Naloxone, co-occurring disorders, alcohol and drug abuse, CPR refresher, troubleshooting Naloxone, and the importance of contacting MCFRS.

B. To maintain their certification, O.R.U. Officers must attend refresher training when notified by HHS.

VII. Equipment

It is the responsibility of the O.R.U. officer to inspect and maintain his/her own naloxone kit. Naloxone kits are sensitive to temperature extremes and expire every two years. Expired kits should be replaced prior to their expiration date. It is not recommended that officers administer Naloxone if the medication is expired. The kits should not be left in a vehicle for extended periods of time or stored in extreme high or low temperatures, i.e. storing the kits in a PPV or SOV when an officer is off-duty is not recommended. Each Naloxone kit will contain:

- 1 set of disposable synthetic gloves
- Nasal atomizer
- 2 milligram dose of Naloxone hydrochloride
- Overdose Response Program laminated instruction card
- One yellow PELICAN© case provided to and by MCPD personnel

VIII. Proponent Unit: Crisis Intervention Team Coordinator

IX. Cancellation- No cancellations

J. Thomas Manger
Chief of Police

Holly Hedegaard, M.D., M.S.P.H.; Li-Hui Chen, M.S., Ph.D.; and Margaret Warner, Ph.D.

Key findings

Data from the National Vital Statistics System (Mortality)

• From 2000 through 2013, the age-adjusted rate for drug-poisoning deaths involving heroin nearly quadrupled from 0.7 deaths per 100,000 in 2000 to 2.7 deaths per 100,000 in 2013. Most of the increase occurred after 2010.

• The number of drug-poisoning deaths involving heroin was nearly four times higher for men (6,525 deaths) than women (1,732 deaths) in 2013.

• In 2000, non-Hispanic black persons aged 45–64 had the highest rate for drug-poisoning deaths involving heroin (2.0 per 100,000). In 2013, non-Hispanic white persons aged 18–44 had the highest rate (7.0 per 100,000).

• From 2000 through 2013, the age-adjusted rate for drug-poisoning deaths involving heroin increased for all regions of the country, with the greatest increase seen in the Midwest.

Drug poisoning (overdose) is the number one cause of injury-related death in the United States, with 43,982 deaths occurring in 2013 (1). While much attention has been given to deaths involving opioid analgesics (2), in recent years there has been a steady increase in the number of drug-poisoning deaths involving heroin. A recent study using data from 28 states reported that the death rate for heroin overdose doubled from 2010 through 2012 (3). Using data from the National Vital Statistics System, this data brief provides a description of trends and demographics for heroin-related drug-poisoning deaths in the United States from 2000 through 2013.

Keywords: overdose • mortality • National Vital Statistics System

While the age-adjusted rate for drug-poisoning deaths involving opioid analgesics has leveled in recent years, the rate for deaths involving heroin has almost tripled since 2010.

Figure 1. Age-adjusted rates for drug-poisoning deaths, by type of drug: United States, 2000–2013

NOTES: The number of drug-poisoning deaths in 2013 was 43,982, the number of drug-poisoning deaths involving opioid analgesics was 16,235, and the number of drug-poisoning deaths involving heroin was 8,257. A small subset of 1,342 deaths involved both opioid analgesics and heroin. Deaths involving both opioid analgesics and heroin are included in both the rate of deaths involving opioid analgesics and the rate of deaths involving heroin. Access data table for Figure 1 at: http://www.cdc.gov/nchs/data/databriefs/db190_table.xlsx.

From 2000 through 2013, the age-adjusted rate for drug-poisoning deaths involving opioid analgesics was higher than the rate for drug-poisoning deaths involving heroin (Figure 1). The age-adjusted rate for opioid-analgesic poisoning deaths increased at a faster pace from 2000 through 2006 (19% per year) than from 2006 through 2013 (2% per year). From 2010 through 2013, the age-adjusted rate for opioid-analgesic poisoning deaths declined slightly from 5.4 to 5.1 per 100,000. In contrast, the age-adjusted rate for drug-poisoning deaths involving heroin showed a different pattern with a slower pace of increase between 2000 and 2010 (6% per year) and a faster pace of increase from 2010 forward (37% per year). From 2010 through 2013, the age-adjusted rate for heroin-related drug-poisoning deaths nearly tripled from 1.0 per 100,000 in 2010 to 2.7 per 100,000 in 2013.

In 2013, the number of drug-poisoning deaths involving heroin was nearly four times higher for men than women.

More men than women died from drug poisoning involving heroin (Figure 2). In 2013, the number of heroin-related drug-poisoning deaths for men (6,525 deaths) was nearly four times that for women (1,732 deaths). From 2010 through 2013, the age-adjusted rate increased from 1.6 to 4.2 per 100,000 for men and from 0.4 to 1.2 per 100,000 for women.

Figure 2. Number of drug-poisoning deaths involving heroin, by sex: United States, 2000-2013

NOTE: Access data table for Figure 2 at: http://www.cdc.gov/nchs/data/databriefs/db190_table.pdf#2.
The rate for heroin-related drug-poisoning deaths was highest among adults aged 25–44 from 2000 through 2013.

Compared with adults aged 18–24 and 45–64, those aged 25–44 had the highest rate for drug-poisoning deaths involving heroin (Figure 3). From 2000 through 2010, the average annual increase in the rates was 10% for adults aged 18–24, 5% for those aged 25–44, and 4% for those aged 45–64. From 2010 through 2013, the death rate for adults aged 18–24 increased 2.3-fold from 1.7 to 3.9 per 100,000, for those aged 25–44 the rate increased 2.8-fold from 1.9 to 5.4, and for those aged 45–64 the rate increased 2.7-fold from 1.1 to 3.0.

Figure 3. Rates for drug-poisoning deaths involving heroin, by selected age groups: United States, 2000–2013
In 2000, non-Hispanic black persons aged 45–64 had the highest rate for drug-poisoning deaths involving heroin. In 2013, non-Hispanic white persons aged 18–44 had the highest rate.

In 2000, the highest rate for drug-poisoning deaths involving heroin was among non-Hispanic black persons aged 45–64 (2.0 per 100,000) (Figure 4). In contrast, in 2013, the rate was highest among non-Hispanic white persons aged 18–44 (7.0 per 100,000). From 2000 through 2013, rates increased for both age groups (18–44 and 45–64) and race and ethnicity groups (non-Hispanic white, non-Hispanic black, and Hispanic), with the largest increases seen among non-Hispanic white persons.

Figure 4. Rates for drug-poisoning deaths involving heroin, by selected age and race and ethnicity groups: United States, 2000 and 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Race</th>
<th>Rate (per 100,000)</th>
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<tbody>
<tr>
<td>18–44</td>
<td>Non-Hispanic white</td>
<td>2.0</td>
</tr>
<tr>
<td>18–44</td>
<td>Non-Hispanic black</td>
<td>7.0</td>
</tr>
<tr>
<td>18–44</td>
<td>Hispanic</td>
<td>7.0</td>
</tr>
<tr>
<td>45–64</td>
<td>Non-Hispanic white</td>
<td>7.0</td>
</tr>
<tr>
<td>45–64</td>
<td>Non-Hispanic black</td>
<td>7.0</td>
</tr>
<tr>
<td>45–64</td>
<td>Hispanic</td>
<td>7.0</td>
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95% confidence interval.

NOTES: Deaths for Hispanic persons are underreported by about 5%. See "Deaths: Final Data for 2010." Access data table for Figure 4 at: http://www.cdc.gov/nchs/data/databriefs/db190_table.pdf#4.

From 2000 through 2013, the age-adjusted rate for drug-poisoning deaths involving heroin increased for all regions of the country, with the greatest increase seen in the Midwest.

In 2000, age-adjusted rates for drug-poisoning deaths involving heroin were higher in the Northeast and West regions (0.9 per 100,000) (Figure 5). In contrast, in 2013, the Midwest and Northeast regions had higher rates (4.3 and 3.9 per 100,000, respectively). From 2000 through 2013, the age-adjusted rate for heroin-related drug-poisoning deaths increased nearly 11-fold in the Midwest region (from 0.4 to 4.3 per 100,000), more than 4-fold in the Northeast region (from 0.9 to 3.9), more than 3-fold in the South region (from 0.5 to 1.7), and doubled in the West region (from 0.9 to 1.8).

Figure 5. Age-adjusted rates for drug-poisoning deaths involving heroin, by census region: United States, 2000, 2007, and 2013

Summary

This report provides the latest national statistics on drug overdose deaths involving heroin, highlighting the substantial increase in death rates and the populations most at risk. From 2000 through 2013, the age-adjusted rate for drug-poisoning deaths involving heroin nearly quadrupled from 0.7 per 100,000 in 2000 to 2.7 per 100,000 in 2013. During this 14-year period, the age-adjusted rate showed an average increase of 6% per year from 2000 through 2010, followed by a larger average increase of 37% per year from 2010 through 2013.
Identifying populations at high risk of heroin-related drug-poisoning death can help target prevention strategies. The number of heroin-related drug-poisoning deaths among men was nearly four times higher than among women. Since 2000, the rates for drug-poisoning death involving heroin have increased for all age and race and ethnicity groups, with adults aged 25–44 having the highest rate. Heroin-related drug-poisoning deaths increased for all regions of the country from 2000 through 2013, with the greatest increase seen in the Midwest.

Data source and methods

Estimates are based on the National Vital Statistics System multiple cause-of-death mortality files (4). Deaths were classified using the *International Classification of Diseases, Tenth Revision* (ICD–10). Drug-poisoning deaths were defined as having an ICD–10 underlying cause-of-death code of X40–X44 (unintentional), X60–X64 (suicide), X85 (homicide), or Y10–Y14 (undetermined intent) (5). Of the drug-poisoning deaths in 2013, 81% were unintentional, 12% were suicides, 6% were of undetermined intent, and less than 1% were homicides. Among deaths with drug poisoning as the underlying cause, the types of drugs involved are indicated by the ICD–10 multiple cause-of-death codes of T40.1 for heroin and T40.2, T40.3, or T40.4 for opioid analgesics.

Age-adjusted death rates were calculated using the direct method and the 2000 standard population (6). Data for Hispanic origin should be interpreted with caution. Studies comparing Hispanic origin on death certificates and on census surveys have shown inconsistent reporting on Hispanic ethnicity (6). Geographic regions were based on census definitions (7). Trends in death rates and number of deaths were evaluated using the Joinpoint Regression Program (8). Comparisons of rates among different groups were tested for statistical significance using methods described elsewhere (6); a statement that a given death rate is higher or lower than another rate indicates that the difference in the rates is statistically significant.

Several factors related to death investigation and reporting may affect measurement of death rates involving specific drugs. For example, toxicological tests to determine the types of drugs present may vary by jurisdiction (9). Measurement errors related to these factors are more likely to affect substance-specific death rates than the overall drug-poisoning death rate. In 2013, 22% of drug-poisoning deaths did not include information on the specific types of drugs involved. Some of these deaths could potentially involve heroin or opioid analgesics.

Metabolic breakdown of heroin into morphine in the body can make it difficult to distinguish between deaths from heroin and deaths from morphine based on the information on the death certificate. Some deaths reported to involve morphine could actually be deaths from heroin. This may result in an undercount of heroin-related deaths.

Drug-poisoning deaths may involve multiple drugs. Analysis shows that approximately 16% of the drug-poisoning deaths involving heroin also involve opioid analgesics. This percentage is relatively consistent across time, age groups, and race and ethnicity groups.

About the authors

Holly Hedegaard and Li-Hui Chen are with CDC’s National Center for Health Statistics (NCHS), Office of Analysis and Epidemiology; Margaret Warner is with NCHS Division of Vital Statistics.
References


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1. Includes deaths confirmed or suspected to be related to recent heroin use.
2. Includes only deaths for which the manner of death was classified as accidental or undetermined.
3. Counts for 2015 are preliminary.
Mont. Co. officers trained to administer Narcan

By Dick Uliano (http://wtop.com/author/dick-uliano/)
January 20, 2015 4:09 pm
GAITHERSBURG, Md. — People are dying from heroin overdoses in leafy, suburban neighborhoods, in the countryside and in the city. Heroin-related deaths have increased sharply throughout the region and across the country. In just two years, from 2011 to 2013, heroin deaths jumped by 88 percent in Maryland.

Now, Montgomery County Police are being trained to administer Narcan, a rescue medication carried by most ambulance crews.

"This gives us an additional edge so that if the officers are out there on patrol and we get a call for an overdose that occurs relatively close by we can respond immediately," says Officer Scott Davis, coordinator of the Montgomery County Police Crisis Intervention Team.

Narcan, the trade name for the drug naloxone, is a spray administered in the nostrils. It can bring a person who has overdosed back from the brink of death.
Mont Co. officers trained to administer Narcan - WTOP

“It gets absorbed in the blood stream very rapidly and the effects are within a couple of seconds to a minute. It’s very quick,” Davis says.

While grateful for the medication and its ability to save lives, Montgomery County State’s Attorney John McCarthy said, in an interview last week, that the rescue drug is doing something else.

"Narcan has emboldened some narcotics users to take riskier levels of narcotics to try for that better or higher high, thinking they can be saved at the back end," McCarthy says.

Twenty-seven Montgomery County police officers have been trained and issued Narcan kits.

By March, some 80 police officers are expected to be carrying Narcan.

“We’re trying to get the medication to the individuals that need it, when they need it,” Davis says.

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This year, police departments across the country, including in New York City, announced plans to stock up on a medication that reverses the effects of a heroin or opioid painkiller overdose.

The move signaled a shifting approach for officers more accustomed to fighting drug abuse with arrests than with a medical antidote.

But police and public health officials from New York to San Francisco are facing sticker shock: Prices for a popular form of the medication, naloxone, are spiking, in some cases by 50 percent or more.

“It’s not an incremental increase,” said Chuck Wexler, the executive director of the Police Executive Research Forum and a proponent of putting the lifesaving drug into officers’ hands. “There’s clearly something going on.”

In Georgia, police officials have seen the price of a kit containing the drug rise to $40 from $22. Departments in New Jersey, where heroin addiction has ravaged small communities, are facing similar increases.

In New York City, a spokeswoman for the Health Department said a more than 50 percent price increase for nasal naloxone has officials “concerned” over the future of its distribution programs.
That naloxone has rapidly gained acceptance, expanding from needle-exchange programs to police precinct station houses, underscores how widespread the twin scourges of heroin use and painkiller abuse have become in recent years.

While officials admit the drug represents only a temporary solution — without extensive treatment, many of those treated immediately return to using — rising prices represent a new challenge.

"It will decrease access," said Dr. Phillip O. Coffin, director of substance abuse research at the San Francisco Department of Public Health.

Long used in emergency rooms and by paramedics, naloxone is increasingly being distributed by state health departments and local community groups, who train users and their relatives to administer the drug, also known by the brand name Narcan. It can be administered using a needle injection or with an atomizer that creates a nasal spray.

Indeed, part of the appeal for law enforcement officials has been the ability to deliver the drug through a nostril of an overdosing person using an atomizer attachment. After a successful pilot program on Staten Island, the New York Police Department said this spring it would outfit its roughly 19,500 patrol officers with the drug.

The spray requires a higher concentration of the drug, one milligram per milliliter.

It is in that formulation that higher prices have been seen, officials said.

"I would hope that with additional demand, there could be deals worked out with these companies," said Christopher J. Gramiccioni, the prosecutor in Monmouth County, N.J., whose office this year paid to get the drug for local departments.

The form most often used by law enforcement and health departments, and held up prominently at news conferences, is the high-concentration formulation made by Amphastar. No nasal-specific naloxone product has been approved by the Food and Drug Administration. But it is used "off-label," in combination with an atomizer, to administer the drug through the nose. (A naloxone injector, designed to be used by
people without medical training and approved this year by the Food and Drug Administration, is many times as expensive.)

In an email, Jason B. Shandell, the president of Amphastar, declined to address the company’s pricing of its naloxone formulation “for competitive reasons,” but said that “manufacturing costs have increased on an annual basis.”

A spokeswoman for Hospira, another manufacturer, said its form of naloxone is “on average about the cost of a large pizza.”

For those who have worked with needle-exchange programs for years, price increases for naloxone appeared to coincide directly with the move by big-city police departments to outfit officers.

“We’ve had a pretty steady price for several years now,” said Matt Curtis, the policy director of VOCAL-New York, an advocacy group. “Then these big government programs come in and now all of a sudden we’re seeing a big price spike. The timing is pretty noticeable.”

A version of this article appears in print on December 1, 2014, on page A22 of the New York edition with the headline: Drug to Stop Heroin Deaths Is More Costly, the Police Say.