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  - Division of Substance Abuse and Mental Health
  - Division of Medicaid and Medical Assistance
- Department of Health and Social Services, Division of Public Health
  - Delaware Health Statistics Center
  - Emergency Medical Services and Preparedness Section
  - Bureau of Communicable Diseases
  - Epidemiology Research Unit
AGE-ADJUSTED DRUG OVERDOSE MORTALITY RATES BY DRUG TYPE, DELAWARE RESIDENTS, 2000-2017

Data Source: Delaware Department of Health and Social Services, Division of Public Health, Health Statistics Center. *Rates are age-adjusted to the 2000 U.S. Standard Population. Notes: Deaths are classified using the International Classification of Diseases, Ninth and Tenth Revisions (ICD-9 and ICD-10). Drug overdoses are identified using underlying cause-of-death codes X40–X44 (unintentional), X60–X64 (suicide), X85 (homicide), and Y10–Y14 (undetermined).
KEY FINDINGS

- 343 Delaware residents died of a drug overdose in 2017*
- 84% of deaths involved opioids (n=288)
- 81% of decedents interacted with a Delaware health system 1 year prior to death (n=276)

*Data Source: Delaware Department of Health and Social Services, Division of Public Health. Includes decedents without a state of residence; excludes homicides and natural deaths.
PERCENTAGE OF DRUG OVERDOSE DEATHS BY OCCUPATION AND SEX, DELAWARE, 2017

Data source: Delaware Department of Health and Social Services, Division of Public Health, Health Statistics Center. ‘Not employed’ includes persons who were unemployed, students, disabled, homemakers, or retired. ‘Healthcare’ includes practitioners and support staff.
PERCENTAGE OF DRUG OVERDOSE DEATHS BY DRUG TYPE, DELAWARE, 2017

Data source: Delaware Department of Health and Social Services, Division of Public Health, Health Statistics Center. Percentages were suppressed for counts of less than 10 in the numerator.
INFECTIOUS DISEASES

- Hepatitis C
  - A total of 97 decedents (28.3%) had documentation of a hepatitis C infection in the past or at the time of death.
  - Of decedents with a hepatitis C history, 87.6% interacted with Delaware health systems in the year prior to death.
  - 51% of drug overdose decedents with a Hep C infection had heroin listed on the death certificate.
  - History of homelessness was 30% for decedents with a Hep C infection compared to 16% without Hep C.

- HIV – too few cases to report

- HBV – no documented cases
DRUG OVERDOSE DECEDEMTS’ INTERACTIONS WITH DELAWARE HEALTH SYSTEMS ONE YEAR PRIOR TO THEIR DEATHS, DELAWARE, 2017

4 out of every 5 drug overdose decedents interacted with a Delaware health system 1 year prior to death.

No systems: 19.5% (n=67)
1 system: 25.7% (n=88)
2 systems: 20.7% (n=71)
3 systems: 21.0% (n=72)
4 or 5 systems: 13.1% (n=49)

Data source: Delaware Department of Health and Social Services, Division of Public Health, Health Statistics Center and data from state agencies included in health system definition. Health system was defined as a visit to a Delaware emergency department (ED), an Emergency Medical Services (EMS) encounter, a prescription in the Prescription Monitoring Program (PMP), treatment or services administered by a Division of Substance Abuse and Mental Health (DSAMH) contracted site, or discharge from a Delaware hospital. EMS encounters and ED visits at the time of death were not included.
DRUG OVERDOSE DECEDEMTS' INTERACTIONS WITH DELAWARE HEALTH SYSTEMS ONE YEAR PRIOR TO THEIR DEATHS, DELAWARE, 2017

ED Visit 54.2%

PMP 47.8%

EMS 43.1%

DOA 35.3%

Hospitalization 11.7%

DSAMH Treatment Services 26.8%

Data source: Delaware Department of Health and Social Services, Division of Public Health, Health Statistics Center and data from state agencies included in health system definition. Notes: Health system was defined as a visit to a Delaware emergency department (ED), an Emergency Medical Services (EMS) encounter, a prescription in the Prescription Monitoring Program (PMP), treatment or services administered by a Division of Substance Abuse and Mental Health (DSAMH) contracted site, or discharge from a Delaware hospital. Includes Department of Correction (DOC) interactions as part of the expanded analysis.
Of the drug overdose decedents:
- 70% had an ED visit within two years of their death
- 54% had an ED visit within one year of their death
- 10% had had a previous drug overdose ED visit in the year prior to their death.
- 23% were seen in the ED with a mental health diagnosis
- 7% were seen in the ED with a pain diagnosis
- Nearly 10% of drug overdose decedents were hospitalized with a diagnosis of a mental, behavioral, or neurodevelopmental disorder.

Data Source: Delaware Department of Health and Social Services, Division of Public Health. "Delaware health system interaction was defined as a visit to a Delaware emergency department (ED), an Emergency Medical Services (EMS) encounter, a prescription in the Prescription Monitoring Program (PMP), treatment or services administered by a Division of Substance Abuse and Mental Health (DSAMH) contracted site, or discharge from a Delaware hospital. Includes Department of Correction (DOC) interactions as part of the expanded analysis. EMS encounters and ED visits at the time of death were not included."
Of the drug overdose decedents:

- 7% had a non-fatal overdose EMS encounter in the year prior to their death
- In the three months prior to death, 31% of female and 24% of male overdose decedents had an EMS encounter
EMERGENCY DEPARTMENT VISITS OF DRUG OVERDOSE DECEDEMENTS FROM TIME PRIOR TO DEATH BY SEX, DELAWARE, 2017

Data source: Delaware Department Health and Social Services, Division of Public Health Statistics Center and Delaware Electronic Surveillance System for the Early Notification of Community-based Epidemics
Percentage of drug overdose decedents with prescriptions in PMP by drug class in the year prior to death, Delaware, 2017

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioid</td>
<td>23.6%</td>
</tr>
<tr>
<td>Partial Opioid</td>
<td>6.1%</td>
</tr>
<tr>
<td>Benzodiazepine</td>
<td>22.2%</td>
</tr>
<tr>
<td>Stimulant</td>
<td>4.7%</td>
</tr>
</tbody>
</table>
Percentage of drug overdose decedents with a prescription for benzodiazepine and an opioid in the year prior to death, Delaware, 2017

Prescriptions for benzodiazepine and an opioid in the year prior to death

- No Rx among 18-24 year olds
- 18.5% of 55-74 year olds
- 21.4% of females
- 8.2% of males
Of the 343 drug overdose decedents:
- 14.3% were seen for OUD at DSAMH in the year prior to their deaths.
- 7.3% were seen for substance use disorder at DSAMH in the year prior to their deaths.
- 5.2% were seen for a mental health condition at DSAMH in the year prior to their deaths.

Drug overdose decedents with more than a high school education interacted with DSAMH services at a noticeably smaller percentage than those decedents with a high school education or less from the time of death to five years prior to death.

Noticeable decrease in utilization of DSAMH services from five years prior to death to one year prior to death (42% decrease among those with a high school education or GED between five years and one year prior to death).

**PERCENTAGE OF DRUG OVERDOSE DECEDEMENTS BY DIVISION OF SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES USED IN THE YEAR PRIOR TO DEATH, DELAWARE, 2017**

- **9.3%** Withdrawal Management
- **8.2%** Case Management
- **5.8%** Substance Abuse Outpatient
- **5.2%** Residential Treatment

**Data source:** Delaware Department of Health and Social Services, Division of Public Health and Division of Substance Abuse and Mental Health.
ADDRESSING THE HEALTH CRISIS: MAXIMIZING EMERGENCY TOUCHPOINTS

- We are developing the Overdose System of Care which includes:
  - Screening and treatment protocols for EMS and EDs.
  - Certified Recovery Peers to engage individuals into treatment.
  - Buprenorphine induction in the ED.
  - Better use of data to assess and improve performance
The State tightened its prescribing rules in 2017: Division of Professional Regulation issued safe prescribing regulations and new requirements for prescribing for acute episodes and chronic, long term pain management.

- Many PMP improvements.
- Provider-specific screening and treatment materials have been created and shared.
- On-site technical assistance is being provided to Delaware prescribers.
ENGAGING PROVIDERS ON PAIN MANAGEMENT

- Use opioids minimally, if at all.
- Non-opioid pain management alternatives:
  - physical therapy
  - exercise and strength training
  - chiropractic care
  - Acupuncture
  - massage
  - relaxation techniques
  - mind-body and mindfulness practices.
- DPH is developing a provider toolkit.
Delaware has significantly expanded and broadened its treatment system.

Goal: an engaging, comprehensive, coordinated, integrated, high-quality, and person-centered treatment system.

START system takes a holistic approach to recognize touch points to engage new or lost-to-care clients, provide comprehensive services and supports.
ENGAGING CORRECTIONS

- We encouraged Medically Assisted Treatment for inmates.
- We provided naloxone training for Probation and Parole staff.
▪ DPH ensures that first responders have naloxone kits available to them.
▪ DPH is working on a plan for first responders to leave naloxone kits behind on suspected overdose runs.
▪ Laws have passed allowing distribution of naloxone to citizens in pharmacies.
▪ DPH has held distribution events and partnered with stakeholders who can train others to make naloxone available.
OTHER INITIATIVES

- Law enforcement
  - Drug diversion, high-trafficking area investigations
  - HERO HELP and Angel programs
  - Drug Take-Back Days

- Pharmacies
  - Safe medication disposal boxes
  - Providing community with naloxone

- Health Education
  - Evidence-based SUD prevention curriculum

- Future opportunities with employers
  - DPH identifying construction, food service, HVAC employers
THANK YOU.