Opioid Overdose Prevention: Using Data to Drive Action

Drug overdoses have dramatically increased over the last two decades, and deaths from overdose have increased sharply since 2013. In 2016, more than 63,000 Americans died from drug overdoses. Of those overdose deaths, around 2 in 3 have involved a prescription or illicit opioid. Timely, high-quality data are critical to help public health officials effectively respond to the opioid overdose epidemic. Data help officials understand the extent of the problem, focus resources where they are needed most, and evaluate the success of prevention and response efforts.

Enhanced State Opioid Overdose Surveillance

The Centers for Disease Control and Prevention (CDC) is funding 32 states and the District of Columbia to improve data collection efforts on opioid-involved overdoses through the Enhanced State Opioid Overdose Surveillance (ESOOS) program. This program helps states to:

- **Establish an early warning system** by using data from emergency departments (ED) and/or emergency medical services (EMS) to detect increases or decreases in nonfatal opioid overdoses
- **Integrate data from death certificates and unique medical examiner and coroner investigations**, including toxicology reports, on opioid overdose deaths to track multi-state trends or focus on overdoses in a single county to inform local prevention efforts. These data are compiled through the State Unintentional Drug Overdose Report System (SUDORS)
- **Share findings with state and national stakeholders** to inform their opioid overdose prevention and response efforts

**OBJECTIVE**

Improve the timeliness of fatal and nonfatal opioid overdose data for action and response.

**SUPPORTING STATES**

$11.8 million, with awards ranging from $233,000 to $626,000

12 states from 9/1/2016 to 8/31/2019

20 states and DC from 9/1/2017 to 8/31/2019

Current funding for 33 locations:

AK, CA, CT, DE, DC, FL, GA, KY, IL, IN, LA, MA, MD, ME, MI, MN, MO, NV, NH, NJ, NC, NM, OH, OK, PA, RI, TN, UT, VT, VA, WA, WV, WI

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control
NEW DATA: REPORTING ON NONFATAL AND FATAL OVERDOSE

Every four months, ESOOS-funded states report overdose data about ED visits and EMS transports to CDC, including:

- Syndromic or hospital billing data to identify all drug, opioid, and/or heroin overdoses that presented in EDs
- Data on EMS transports, such as whether naloxone was administered and, if so, the number of doses
- Demographic characteristics of those who overdosed, such as sex, age, race/ethnicity, and county of residence

Every six months, ESOOS-funded states report critical death-scene investigation information on overdose deaths through SUDORS, including:

- Type of opioid (e.g., prescription, heroin, or illicitly manufactured fentanyl) from toxicology reports
- Evidence of injection drug use (e.g., needles on scene, track marks on decedent, tourniquet) or other illicit drug use (e.g., drug paraphernalia, powders, crystal substances)
- Whether someone administered naloxone during the emergency medical response and, if so, who
- Evidence that the opioid overdose progressed rapidly
- Recent release from an institution, such as prison
- History of mental health disorders
- History of substance use disorders
- County where fatal overdose occurred

EARLY PROGRAM SUCCESS

Applying CDC’s data and surveillance expertise in partnership with funded states is helping to improve the quality and timeliness of opioid overdose data and to inform response.

Identifying dangers of illicitly manufactured fentanyl with SUDORS overdose death data

- Quantified the emerging problem of fentanyl analogs by documenting 700 deaths involving fentanyl analogs across 10 of the ESOOS states from July to December 2016, with nearly 400 deaths involving carfentanil, a powerful opioid used to treat large animals. CDC increased funding in 2017 to ESOOS states to improve toxicologic testing for fentanyl analogs.
- Found that more than 50 percent of overdose deaths in 10 states now involve fentanyl, predominantly illicitly made fentanyl.

Developing an early warning system for drug overdoses with ED and EMS data

- Defined how to effectively track heroin and opioid overdoses and collaborated with states to refine definitions for their own use.
- Reported findings on opioid overdoses treated in EDs in 16 of the ESOOS states from July 2016 through September 2017, which showed that ED visits for opioid overdoses rose 30 percent in all parts of the United States.