The Opioid Overdose Epidemic
CDC RESPONSE

Congressional Briefing

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Rapid Increase in Drug Overdose Death - Rates by County

Model-based Death Rate

SOURCE: NCHS Data Visualization Gallery
Three Waves of the Opioid Overdose Epidemic in the United States

Wave 1: Prescription opioid deaths climb in the late 1990s

Wave 2: Heroin deaths rise in 2010

Wave 3: Synthetic opioid deaths – illicit fentanyl and analogs - skyrocket in 2013

Almost 400,000 people have died from an opioid overdose since 1999

SOURCE: National Vital Statistics System Mortality File
Drug Overdose Deaths Involving Cocaine and Psychostimulants with Abuse Potential in the US

Kariisa, Scholl, Wilson, Seth, Hoots  May 2019

Death Rates
Percent Increase from 2010 - 2017
- Cocaine Overall 231
- Cocaine without ANY Opioids 83
- Psychostimulant Overall 433
- Psychostimulant without ANY Opioids 300

Deaths
Percent of Deaths 2017
- Cocaine with ANY Opioid 72.7
- Psychostimulant with ANY Opioid 50.4

Opioid Deaths Nested in a Broadening Drug Overdose Epidemic...
### Number of opioid overdose deaths by opioid type in 25 states from January to June 2018

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total opioid overdose deaths</th>
<th>Opioid deaths with information on involved opioids, Jan–Jun 2018, no. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total opioid overdose deaths</td>
<td>13,415 (100)</td>
<td></td>
</tr>
<tr>
<td>Opioid drug class or drug involved in opioid deaths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any prescription opioid</td>
<td>3,853 (28.7)</td>
<td></td>
</tr>
<tr>
<td>Any illicit opioid</td>
<td>11,124 (82.9)</td>
<td></td>
</tr>
<tr>
<td>Any suspected IMF</td>
<td>9,105 (67.9)</td>
<td></td>
</tr>
<tr>
<td>Any suspected heroin</td>
<td>5,281 (39.4)</td>
<td></td>
</tr>
<tr>
<td>Any fentanyl analog</td>
<td>2,676 (20.0)</td>
<td></td>
</tr>
<tr>
<td>Any U-series</td>
<td>63 (0.5)</td>
<td></td>
</tr>
</tbody>
</table>

**Common mutually exclusive combinations of opioids involved in opioid deaths**

**Opioid combinations co-involving IMF**

- IMF with no other illicit opioids: 4,320 (32.2)
- IMF with heroin: 2,566 (19.1)
- IMF with fentanyl analogs: 1,722 (6.7)
- IMF with heroin and fentanyl analogs: 1,008 (7.5)

**Illicit opioid combinations not co-involving IMF**

- Heroin with no other illicit opioid: 1,534 (11.4)
- Fentanyl analogs with no other illicit opioid: 312 (2.3)
- Prescribed opioid with no illicit opioid: 2,291 (17.1)
- All other combinations of opioids: 212 (1.6)

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*Note: IMF is illicitly manufactured fentanyl. Refer to source for other footnotes.*
An Everybody Problem

The opioid overdose epidemic is impacting most populations in America now

From 2016 to 2017

- Opioid overdose deaths increased among males and females and among persons aged ≥25 years, non-Hispanic whites, non-Hispanic blacks and Hispanics.
- The largest relative change occurred among blacks (25%), and the largest absolute rate increase was among males aged 25–44 years (4.6 per 100,000).
- The largest relative change among age groups was for persons aged ≥65 years (17%).
- Counties in medium metro areas experienced the largest absolute rate increase (1.9 per 100,000).

Source: Scholl, Seth, Kariisa, Wilson, Baldwin (2019)
Drug overdose deaths increasing across America from 2013 to 2017

- The number of opioid deaths in the United States almost doubled from 25,052 to 47,600
- A total of 35 states had a statistically significant increase in their drug overdose death rate.
- WV had the highest absolute rate at both time points.
- DC, WV, OH, PA, NH, MD and ME had the largest absolute rate increase – each over 20 deaths per 100,000 people.
- The death rate over doubled in 10 areas – ND, DC, ME, MD, NH, PA, OH, NJ, FL, MA.
- For context, there were 8,050 opioid deaths in 1999.

Source: Scholl, Seth, Kariisa, Wilson, Baldwin (2019); NCHS Data Brief 329 (2019)
How We Got Here?

1. Pain Being Designated The Fifth Vital Sign
2. Under Appreciation of Addictive Potential of Prescription Opioids
3. Aggressive Marketing of Prescription Opioids to Clinicians
4. Clinicians Who Ran Pill Mills that Profited from Over Prescribing
5. Sophisticated Actions of Drug Traffickers to Open New Heroin Markets
6. Potency and Ease of Making, Trafficking, and Profiting from Illicit Fentanyl and Fentanyl Analogs
CDC North Star

Reduce opioid overdose deaths and related harms right now AND address the drivers that put individuals at risk for substance misuse, abuse and overdose
CDC’s Approach to Opioid Overdose Prevention

- Conduct surveillance and research
- Empower consumers to make safe choices
- Build state, local, and tribal capacity
- Support providers, health systems, and payers
- Partner with public safety
Overdose Data to Action
OD2A

- Integrates previous funding into one announcement
- $300M per year for 3 years
- Seamless integration of data and prevention programs
- 66 jurisdictions funded including 47 states and 16 hard hit cities and counties
Getting more timely, comprehensive, localized, and actionable data

- **Morbidity**: ED data with greater coverage (>75% of visits)
  - Suspected all drug, opioid, heroin, stimulant overdoses required.
  - Leverage both syndromic and hospital billing data.

- **Mortality**: SUDORs will collect data on all drug overdoses
  - More funding to medical examiners/coroners
  - Preliminary counts of opioid-involved deaths based on clinical and scene evidence (OPTIONAL)

- **Innovative Projects**
  - Tracking linkage to care
  - Local health surveillance
  - Data linkage

**OD2A Surveillance**
CDC’s Overarching Goal for PDMPs
Maximize and Enhance the Use

- Increase the timeliness and comprehensiveness of data
- Incentivize health care providers to use the PDMP
- Actively manage PDMP data to monitor practice
- Integrate PDMP data into clinical workflow
- Provide clinical decision support for clinicians
- Leverage PDMPs for public health surveillance

Example Prevention Strategy
20 Percent of Funds Must Go To Local Level To Spur Innovation and Ensure Support Reaches Hardest Hit Communities
CDC is supporting tribes to address the opioid overdose epidemic
Overdose Response Strategy (ORS)

Original HIDTAs
Expansion 1
Expansion 2
Expansion 3
Expansion 4

11 HIDTAs in 24 State and Expanding...
Combatting Opioid Overdose through Community Level Intervention (COOCLI)

Example COOCLIs
- Expanding access to medication assisted treatment in Cuyahoga County jail, OH.
- Emergency department-initiated referrals to MAT in Philadelphia, PA
- Post-arrest diversion to treatment for opioid use disorder in Kingsman, AZ
- On-call recovery coaches and referral to treatment for opioid use disorder in Fire Departments in Providence, RI
- Corrections-based MAT in Boston, MA

Collaborators
$5.5M in FY18-19 from CDC

CDC
UNIVERSITY OF BALTIMORE
Adverse Experiences and Health

- Diseases of Disconnection and Despair
  - OBESITY
  - HOMICIDES
  - CAR CRASHES
  - PTSD
  - ANXIETY
  - DEPRESSION
  - DEMENTIA
  - STDs
  - SUICIDE
  - HIV
  - HEPATITIS C
  - CIRRHOsis
  - UNWANTED PREGNANCY
  - ADDICTION (e.g., GAMBLING, SEX, FOOD)
  - SUBSTANCE USE DISORDER

- Adverse Childhood Experiences
  - ABUSE (PHYSICAL, SEXUAL, VERBAL, EMOTIONAL)
  - ALCOHOL USE
  - DRUG USE
  - MENTAL ILLNESS
  - DOMESTIC VIOLENCE
  - NEGLECT
  - DIVORCE/SEPARATION
  - INCARCERATED HOUSEHOLD MEMBER

- Adverse Societal Conditions
  - INEFFECTIVE SCHOOLS
  - INCOME INEQUALITY
  - CRIME
  - POVERTY
  - SOCIAL EXCLUSION
  - RACISM
  - SEXISM
  - UNEMPLOYMENT
  - HOMOPHOBIA
  - FOOD INSECURITY
  - HOPELESSNESS
  - LIMITED HEALTH CARE ACCESS
  - HOUSING INSECURITY
  - ENVIRONMENTAL HAZARDS

THE ROOTS AND GROWTH OF POOR HEALTH OUTCOMES
A lasting impact...

ACEs

Adverse Childhood Experiences

SOURCE: Dube et al. 2003 - Pediatrics
An innovative and holistic police-school-community partnership

- Focuses on ACES to create a trauma informed community working to build resilience in children.
- Partnership between Berkeley County Schools, Martinsburg Police Department, Shepherd University and community organizations including The Boys & Girls Club of the Eastern Panhandle.
- Program advocates for children with high ACE scores and connect individuals with the services they need to succeed.
- Program is tiered and provides universal supports that benefit everyone, targeted prevention programs, and wrap-around services for children and families in need.
CDC Guideline Implementation

Focus on four priority areas to maximize the uptake and use of the opioid prescribing guideline for chronic pain outside of active cancer, palliative, & end-of-life care

1. Translation and Communication
   Develop tools and resources about the guidelines for a variety of audiences – including providers, health systems, and the general public.

2. Clinical Training
   Educate providers through medical schools and ongoing continuing medical education (CME) activities.

3. Health System Implementation
   Educate providers, integrate into EHRs and other clinical decision support tools, adopt and use quality metrics, and leverage within broader coordinated care activities.

4. Insurer/Pharmacy Benefit Manager Implementation
   Proactive use of claims information and improvement in coverage and service delivery payment models – including reimbursement for clinician counseling; coverage for non-pharmacological treatments; and drug utilization review or prior authorization.

Quality Improvement and Care Coordination:
Implementing CDC’s Opioid Prescribing Guideline

Applying CDC’s Guideline for Prescribing Opioids:
An Online Training Series for Providers
No Shortcuts to Safer Opioid Prescribing

- Commentary highlights misapplication of the Guideline. For example:
  - Recommendations to populations outside the Guideline’s scope
  - Dosage recommendations that results in hard limits or “cutting off” opioids
  - Dosage recommendation to patients receiving or starting medication-assisted treatment for opioid use disorder

CDC Injury Center

@CDCgov #OpioidGuideline does not support abrupt tapering or sudden discontinuation of #opioids. Learn more in our recent @NEJM commentary: bit.ly/CDCNEJMopiods

The NEW ENGLAND JOURNAL of MEDICINE
April 24, 2019
Dowell, Haegerich, Chou
Prescription opioids can be addictive and dangerous.

It only takes a little to lose a lot.

cdc.gov/RxAwareness
Helping to turn the tide...