CDC QFRs
Energy and Commerce Committee
Hearing
Federal Efforts to Combat the Opioid Crisis: A Status Update
on CARA and Other Initiatives
October 25, 2017

Questions for the Record
Dr. Anne Schuchat, Principal Deputy Director, CDC

The Honorable Michael C. Burgess

1. **The CDC has spoken about the "hidden causalities" of the opioid epidemic in regards to the rise of infectious diseases due to injection drug use. What further can be done to reduce the harms and health care costs associated with the crisis?**

Answer:

A comprehensive, multi-sectoral approach is needed to prevent infectious diseases attributed to opioid use disorder which includes:

- Collaboration at the community level between public health, law enforcement, healthcare, education, substance use treatment providers, housing services, and faith-based stakeholders.
- Coordination across multiple levels of the U.S. health care system.
- Implementation of tailored community-based prevention services which include, but are not limited to, testing and treatment for infectious diseases including HIV, hepatitis B, and hepatitis C; provision and disposal of sterile injection equipment (where legal and consonant with community support); provision of naloxone and overdose prevention training; and provision of or referral to addiction treatment and mental health services, including medication-assisted treatment.

Does the agency have appropriate authorities to respond to the rise of these infectious diseases?

Answer:

Authorities granted to CDC under the Public Health Service Act (PHSA) allow for wide-ranging prevention and response activities. Additionally, the Department of Health and Human Services is undergoing a department-wide process to identify what authorities or changes in statute would be helpful to combat the opioid crisis.

2. **The Washington Post has reported on the "rampant spread of Hepatitis C" due to the opioid abuse epidemic. Are we doing a sufficient job identifying those with HCV or HBV and linking them to care?**

   Answer:
   Rates of viral hepatitis have risen steadily, tripling between 2010–2015, mirroring the opioid crisis with young, white Americans in rural communities hit the hardest—but, few communities in the nation have been spared. Currently, only about half of people living with HCV and HBV know they are infected. Because of this and other obstacles, hundreds of thousands of Americans with viral hepatitis who would benefit from treatment have not yet received it.

   CDC's infectious disease programs provide an established, nationwide network asset that can be strengthened to prevent transmission of infectious diseases and link drug users to care. CDC's viral hepatitis disease monitoring activities is limited to 14 U.S. states.

3. **The CDC estimated that the total "economic burden" of opioid abuse is $78.5 billion per year—given the increases in Hepatitis and HIV associated with addiction does this number include concomitant infectious diseases of abusers and then others infected, as well as long term treatment?**

   Answer:

   The 18-month study from which this cost estimate arose calculates overall healthcare costs for those with substance use disorder but does not does not fully capture the economic burden of infectious disease stemming from the opioid crisis. To estimate the lifetime burden from infectious diseases, additional analyses of healthcare costs of heroin use, HIV, and viral hepatitis treatment, and productivity and quality of lives lost to opioid use disorders would be required.

4. **We know that having a better understanding of the epidemic, including where it's hitting Americans the hardest, and why, is essential to building upon and improving the current federal government response. How can we improve the timeliness of data on opioid use and abuse while also maintaining quality of data?**

   Answer:

   The timeliness of mortality data reporting in general has improved significantly over the past few years with over 50 percent of deaths now being reported to CDC within 10 days of the death. However, deaths involving drugs continue to be among the slowest deaths to be reported. A recent CDC analysis of the timeliness by cause of death showed that, on average,

over 80 percent of all deaths had been sent to CDC within 13 weeks (about three months) of the death, but less than 40 percent of drug overdose deaths had been sent. This is due largely to the need for toxicology testing. For drug overdose deaths, an important component of data quality is accurate reporting of the specific drugs involved on the death certificate and this is dependent on toxicology and medical examiner and coroner capacity. The single most important thing that could be done to improve the timeliness of data on opioid involved death reporting would be to improve the timeliness of conducting toxicology testing. To do this, it is necessary to strengthen the capacity within offices of medical examiners and coroners, and forensic toxicology labs. The major limiting factors in reducing the drug death data reporting lag are the timeliness and variability of death investigation in offices of medical examiners and coroners, and toxicology practices across the country. Medical examiners and corners rely on ancillary tests, specifically toxicology, to determine the cause of death. Many of the state labs that provide postmortem forensic services to the medical examiner and coroner community are under-resourced and have long delays. In addition, many rural counties must transport decedents long distances to the nearest regional site and incur additional costs for coroner and law enforcement personnel who attend the autopsies. Support for these labs and other capability enhancements could help, along with increased support for medical examiners and coroners to address the timeliness, quality, and reporting process for postmortem toxicology results.

Greater Standardization of Procedures is also necessary. Performance of state vital records vary significantly across the country. It is important to establish and implement minimum performance standards in improving the timeliness and quality of mortality vital statistics and a process for ensuring that states sustain themselves at that minimum level. CDC is partnering with the Public Health Accreditation Board to currently beta test draft performance standards for improving the timeliness and quality of mortality statistics. In addition, collaboration with the ME/C community is needed to develop death scene investigation protocols for drug overdose deaths as well as standard practices for ME/C and has a real impact on their practice.

Finally, it is important to enhance the Workforce.

Beyond providing resources to strengthen death investigation and toxicology, Medical Examiners and Coroner offices need more resources, including trained personnel, especially trained medicolegal death investigators and forensic pathologists, to meet the increasing demands from the increased number of drug overdose deaths.

To create a more comprehensive picture of opioid overdose deaths to inform prevention and response efforts, CDC is also working to build state capacity and to provide scientific expertise to assist states in improving the timeliness of data for both fatal and non-fatal overdoses through CDC's Enhanced State Opioid Overdose Surveillance (ESOOS) program. In its first programmatic year, CDC funded 12 states to: 1) Improve the timeliness of reporting of nonfatal opioid overdoses using Emergency Department (ED) and Emergency Medical Services (EMS) data; 2) Improve the timeliness of reporting of fatal opioid overdoses and associated risk

factors so that these data can be used to inform public health response tactics within and across states; and 3) Disseminate findings to stakeholders to support prevention efforts. With the increase in funds appropriated to CDC in Fiscal Year 2017, CDC was able to expand the ESOOS program to fund an additional 20 states and Washington, D.C. (for a total of 32 states and Washington, D.C.). CDC also was able to provide supplemental funds to all ESOOS-funded states, with the expectation that a minimum of 60 percent of the supplemental funds were to go to medical examiners/coroners to primarily support comprehensive toxicology testing of opioid-involved deaths. One particularly novel and innovative component of this program is the use of emergency department (ED) and emergency medical services (EMS) data to track and analyze nonfatal overdose data. These data aid states in identifying "hot spots" or areas with emerging drug overdose clusters so prevention efforts can be targeted quickly.

ESOOS-funded states leverage CDC's National Violent Death Reporting System (NVDRS) platform to collect data on all unintentional or undetermined intent opioid overdose deaths under a module entitled the State Unintentional Drug Overdose Reporting System (SUDORS), which uniquely captures detailed information on toxicology, death scene investigations, and other risk factors that may be associated with a fatal overdose. For instance, SUDORS data have identified and tracked large increases in fentanyl analog deaths driven by carfentanil within one state's borders. Early findings from these data, again, reinforce the need and urgency for more timely and comprehensive toxicology testing.

CDC published a *MMWR* Early Release and a Vital Signs report in March using ESOOS data which will be the timeliest data CDC has published to date on drug overdoses- approximately within 2 months of publication.

CDC, in partnership with March of Dimes, is working to protect mothers and babies though a pilot project in Illinois, New Mexico, and Vermont to explore approaches for improving the speed and accuracy of surveillance of Neonatal Abstinence Syndrome (NAS). Data report there is about one baby born every 25 minutes affected by opioid withdrawal. Surveillance of NAS is important to inform a public health response that can quickly identify areas of need and target interventions to improve outcomes for these babies by connecting mothers to services and care. These pilot projects are also evaluating the health services needed through their first birthday, which will help prepare the health system to care for these babies.

The Honorable Joe Barton

1. **The techniques for managing acute pain are different from the techniques for managing chronic pain. In fact, some specialties, like dentistry, rarely (if ever) have to treat patients for chronic pain. Even the types of opioids that would be prescribed—long acting versus short acting—are different. The CDC guideline and the current FDA REMS strategy have both focused on managing chronic pain, but what are you doing to help promote more judicious prescribing among those who are not in the business of managing chronic pain?**

Answer:

Although the CDC Guideline focuses on the use of opioids to treat chronic pain, it does provide some guidance in the treatment of acute pain. Recommendation 6 in the Guideline states that long-term opioid use often begins with acute pain treatment, and when treating acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed. More than a few days of exposure to opioids can significantly increase hazards and increase the likelihood of dependence.

In addition, the CDC has released several resources for patients for the treatment of acute pain. These include:

- *What You Need to Know* outlines the differences between acute and chronic pain and also the facts that a patient needs to know when prescribed opioids for acute pain management.
- *Get the Facts* is an infographic that highlights important information about acute pain management for common conditions and injuries.
- *Opioid Overdose Tip card* is about preventing an overdose generally. It is also featured on our acute pain materials tab on the CDC website.
- Clinician Commitment Poster to Patient Prescription Safety [PDF – 2 MB] also addresses acute pain.
- Continuing Medical Education credits are being offered to healthcare providers for the training on the opioid guidelines.

The National Safety Council is also sponsoring a systematic review of the evidence related to the management of acute musculoskeletal pain. The evidence review is currently underway by McMaster University and is expected to be completed by December 2018. A full guideline will follow, developed jointly by the American College of Physicians and American Academy of Family Physicians. A CDC representative serves on the technical review advisory panel for this effort.

2. What are you doing to promote the delivery of preventive services that help to control acute pain and stop such pain from becoming chronic?

Answer:

CDC's Guideline provides guidance for the treatment of acute pain (see Recommendation 6 described in the above response to question #1). In addition, CDC will serve on the technical review advisory committee for an acute pain guideline (see NSC work described above in the response to question #1). We also have released several communications materials

(referenced in the above question) that are supporting the delivery of preventive services. Finally, CDC's work through our funded states encourages the uptake and implementation of the CDC Guideline, which includes recommendations regarding acute pain management with opioids.

The Honorable Gus Bilirakis

I recently learned about a new initiative from the health insurance industry called the STOP Initiative that will help plans measure how individual providers in their networks are adhering to CDC guidelines for prescribing opioids for chronic pain using claims data to quantitatively track from results. It is my understanding that this is the first industry-wide initiative that will help to measure these guidelines.

1. **Can you please describe these measures and what they seek to do?**

   Answer:

   America's Health Insurance Plans (AHIP) launched its Safe, Transparent Opioid Prescribing (STOP) Initiative, which is designed to support widespread adoption of clinical guidelines for pain care and opioid prescribing. The STOP Measure will be shared widely with health plans and initial results will be gathered throughout the coming months. As experience is gained, the initial version of the measure will be updated, revised, and validated. As part of the overall STOP Initiative, AHIP and an opioid work group will continue to introduce best practices as the health care industry works together to combat the opioid epidemic.

   The CDC was not engaged in the development of these measures included in STOP. However, CDC was made aware of these efforts by individuals representing AHIP. Based on information shared by AHIP with CDC, the four measures include: 1) Percentage of immediate-release opioids versus percentage of long-acting/extended-release opioids; 2) Percentage of opioids prescribed concurrently with benzodiazepines; 3) When and how often urine drug tests are performed for patients on opioid therapy; and 4) Dosage and days supply of opioid prescriptions. CDC perceives these four measures to correspond broadly to a few of the 12 recommendations enumerated in the CDC Guideline. An initial assessment is that use of these measures may hold potential to track concordance with elements of the CDC Guideline at minimum. This voluntary initiative was launched on October 19, 2017, so it is too early to see the results.

2. **From your perspective, do you think this type of initiative is something that will help move the needle on the opioid epidemic?**

   Answer:

While CDC cannot speak to the efficacy of this effort in particular given our cursory knowledge of this initiative, CDC is supportive of the development and use of measures to assess and encourage adherence to clinical recommendations, as well as to promote quality improvement efforts. Certain insurers are developing similar measures. CDC has been considering how to assist in coordination of this effort so that consistent measures can be developed. AHIP, as the association of some individual insurers/plans across the nation, is heading in this direction, which is noteworthy.

3. Do you think more efforts like this are needed to generate tangible results when it comes to adoption of these guidelines?

Answer:

CDC is supportive of a comprehensive approach to operationalize and evaluate the recommendations contained in the Guideline to change the culture of clinical practice. One means for doing so is with efforts like the STOP Initiative. Under the STOP Initiative, AHIP has launched the STOP Measure, an evidence-based methodology health plans can use to measure how provider practices compare to the Centers for Disease Control and Prevention (CDC) Guidelines for Prescribing Opioids for Chronic Pain. This measurement aims to help health plans and providers collaborate to improve adherence with the CDC guidelines, thereby improving patient safety and reducing the risk of opioid misuse. CDC is supportive of the development and use of measures to assess and encourage adherence to clinical recommendations, as well as to promote quality improvement efforts.

To encourage uptake and use of the Guideline, CDC developed a comprehensive implementation plan to move science into action. Since health care systems have the potential to improve pain management including safer use of opioids through guideline concordant care on a broad scale, CDC engaged external stakeholders to develop Quality Improvement (QI) measures based on the Guideline. These are voluntary QI measures intended to support practice improvement for primary care practices by tracking opioid prescribing and providing feedback to clinicians through a data dashboard. CDC is recruiting large health care systems in which to pilot implementation of the QI measures, track their progress, and to be part of a 12-month Opioid QI Collaborative.

CDC's QI-related work is one component of its overarching Guideline implementation strategy. Broadly stated, CDC's Guideline implementation effort is comprised of the following: 1) Communication and Dissemination; 2) Clinical education and training; 3) Insurer and Pharmacy Benefit Manager Strategies; and 4) Health System Strategies.

Another way to improve uptake is to integrate the guideline into electronic health records (EHRs) or clinical decision support tools. CDC is collaborating with the Office of the National Coordinator to integrate Guideline recommendations, such as alerts for Morphine Milligram Equivalent (MME) thresholds, defaults on prescribing amounts for the initiation of opioids and

prompts to check the PDMP, into EHRs. This work was piloted in three hospital systems (Yale New Haven Hospital, Carolinas Medical Group, and Houston Medical) and is currently being evaluated. The Carolinas HealthCare System successfully built an EHR alert to address opioid prescribing by providing critical information at the point of care. The following five objective criteria available in the EHR were programmed to "trigger" the alert: three or more prescriptions for an opioid in past 30 days; two or more onsite administration of opioids in past 30 days; current prescription with 50 percent or more remaining ("early refills"); previous presentation for opioid overdose; and positive blood alcohol content or toxicology screen for cocaine or marijuana.

The Honorable Chris Collins

1. **As PDMPs have evolved in recent years, incorporating PDMP data into a prescriber or pharmacist's clinical workflow seems to be the key to ensuring that the data is used effectively while also increasing efficiency and saving time for providers. What are the barriers currently preventing more states from incorporating PDMP data into clinical workflow?**

   Answer:

   Two main barriers are the costs and the lack of capacity (skilled staff) to implement the software.

   A PDMP must also be easy to access, and the data must be accurate and timely.
   The most helpful, and arguably the most important, feature of a PDMP-EHR integration platform is ensuring that patient data is displayed in a simple and organized manner. Clinicians do not want the PDMP data to be a simple laundry list of prescriptions that are not necessarily itemized by date. A well-built PDMP-EHR integrated platform provides the clinician/end user with PDMP data within clinical workflow in an easily accessible and readable format. Another helpful feature are the flags/alerts. Integrated PDMP-EHR platforms that provide clinicians/end users with easily accessible and organized data presented in clear manner with guideline concordant alerts/flags would facilitate increased PDMP use and informed clinical decision making.

2. **We know that the "moment of clarity" when a patient realizes they need to go into treatment can be short-lived, and having resources in place to immediately connect patients to treatment is critical to the chances of recovery. When a PDMP does indicate a patient has been "doctor shopping" and potentially has a substance use disorder, what policies are in place to direct them to treatment if they wish to go? If none exist, how could we help encourage them to access treatment at that time?**

Answer:

CDC's Prevention for States (PfS) program requires states to implement community-based or insurer interventions. In addition, states have the option to undertake evaluations of state policies or a rapid response project to address the rapidly changing epidemic.

The best practices CDC has seen thus far are strategies to encourage referrals at the site of overdose reversal treatment and directing them to services.

States have taken these opportunities to implement a variety of initiatives that support individuals suffering from substance use disorder and encourage them to access treatment. One example is the work of Maryland's PfS team. Maryland has a community-based intervention, the Overdose Survivors Outreach Program (OSOP), that enhances the hospital Screening, Brief Intervention, Referral to Treatment (SBIRT) model in six Baltimore city hospitals by adding community peer outreach post-discharge. These peer recovery specialists will conduct outreach to overdose survivors from 4 hospitals that have implemented SBIRT. In addition, some PDMP platforms are developing tools that integrate the CDC guidelines into their platforms. These platforms create easy-to read reports for clinicians to use to assess patients risk factors and needs. In addition, these platforms are integrating alerts for patients in need of MAT treatment to local MAT treatment facilities.

3. **Some states such as Massachusetts have started using data as a weapon in the fight against opioids. They are combining data from prescription records, death records, medical examiners… even prisons. For example, they found that a person who is released from jail in Massachusetts has a 56 times greater chance of dying from an overdose than the average person. They are using that information to make better policy decisions, as well as to identify specific individuals who are in need of services. States are supposed to be the laboratories of democracy. What has the CDC learned from states in their use of data analytics? Is there a plan to use data to fight the opioid crisis?**

Answer:

Strengthening our understanding of the crisis through better public health data and reporting is an HHS priority and included in the Department's 5-point strategy to combat the opioid epidemic. Surveillance and data are key components in informing a public health response to the opioid epidemic and can come from multiple sources, such as a PDMP, vital records, or emergency departments. Linking and analyzing data from these sources can help provide the best understanding of how the opioid crisis is affecting states.

One means to shore up state capacity and to provide the needed level of scientific expertise to assist states in these efforts has been the creation of CDC's Enhanced State Opioid Overdose Surveillance (ESOOS) program. In its first programmatic year (2016), CDC funded 12 states to: 1) Improve the timeliness of reporting of nonfatal opioid overdoses using Emergency Department

(ED) and Emergency Medical Services (EMS) data; 2) Improve the timeliness of reporting of fatal opioid overdoses and associated risk factors so that these data can be used to inform public health response tactics within and across states; and 3) Disseminate findings to stakeholders to support prevention efforts.

The program collects data on fatal opioid overdoses through the State Unintentional Drug Overdose Reporting System (SUDORS), which uniquely captures detailed information on toxicology, death scene investigations, and other risk factors that may be associated with a fatal overdose. For instance, SUDORS data have identified and tracked large increases in fentanyl analog deaths driven by carfentanil within one state's borders. Early findings from these data reinforce the need and urgency for more timely and comprehensive toxicology testing.

ESOOS also improves innovative strategies around morbidity data, using EMS and ED data to provide a comprehensive picture around non-fatal opioid overdoses. The use of this data can act as an early warning system to detect sharp increases or decreases in overdoses. In addition, this data can help inform where more resources, such as naloxone or treatment capacity, are needed.

The initial cohort of 12 states began program implementation on September 1, 2016, and CDC will rapidly disseminate findings as states provide data. The first report of ESOOS mortality data, "Deaths Involving Fentanyl, Fentanyl Analogs, and U-47700—10 States, July—December 2016," was published as a *Morbidity and Mortality Weekly Report (MMWR)* Early Release on October 27, 2017. States completed data reports by August 31, 2017, and CDC published it less than two months later.

With the increase in funds appropriated to CDC in Fiscal Year 2017, CDC expanded the ESOOS program to fund an additional 20 states and Washington, D.C., for a total of 32 states plus D.C. CDC also was able to provide supplemental funds to all ESOOS-funded states, with the expectation that a minimum of 60 percent of the supplemental funds were to go to medical examiners/coroners to primarily support comprehensive toxicology testing of opioid-involved deaths.

States are also leveraging PDMP data to inform public health prevention responses around safer prescribing. Linking PDMP data to an electronic health record can help facilitate safer prescribing at the point of care. In addition, PDMP data can also help identify high prescribing counties or localities in need of provider education, specifically academic detailing.

In addition to more timely data, the ability to leverage data sources across agencies is beneficial in creating a full picture of the opioid overdose crisis. CDC is working with DEA to find ways to use law enforcement data to improve public health interventions. For example, DEA data available through the National Forensic Laboratory Information System (NFLIS), were used during a 2015 Epidemiological Assistance, or Epi Aid, in which CDC scientists responded to a request from the state of Ohio to assist in examining the ongoing increase in unintentional

fentanyl-related overdose deaths in their state, elucidate the population most at risk, and inform their public health response. In part, the Epi Aid explored whether changes in law enforcement fentanyl drug reports (from NFLIS) could be used to estimate trends in fentanyl-related mortality. In analyzing data on fentanyl drug reports and fentanyl-related deaths, it was found that changes in reported fentanyl drug reports were predictive of changes in fentanyl-related deaths in Ohio, especially in 2014 as the epidemic began.

States are at the forefront of using data to understand Neonatal Abstinence Syndrome (NAS). CDC, in partnership with March of Dimes, is working to protect mothers and babies through a pilot project in Illinois, New Mexico, and Vermont to explore ways to estimate the prevalence of NAS and support infants affected by NAS in the first year of life. Surveillance of NAS is important to inform a public health response that can quickly identify areas of need and target interventions to improve outcomes for these babies by connecting mothers to services and care. These pilot projects are also evaluating the health services needed through their first birthday, which will help prepare the health system to care for these babies. CDC, in partnership with March of Dimes, is supporting the Tennessee Department of Health in first look at the impact NAS may have on educational needs and services for children in the United States. It links Tennessee Medicaid (TennCare) and birth certificate data to Tennessee Department of Education data tracking special education outcomes during early childhood (3–8 years of age). Preliminary findings indicate children with a history of NAS were significantly more likely to: 1) be referred for evaluation of an educational disability, 2) meet criteria for a disability, and 3) receive therapies or services.

The Honorable Buddy Carter

1. **What type of education is available, or should be available, to providers on evidence based prescribing and clinical strategies for abuse-deterrent opioids and understanding when to prescribe immediate release (IR), extended release (ER), and long-acting (LA) opioids?**

Answer:

The 2016 CDC Guideline for Prescribing Opioids for Chronic Pain addressed the use of abuse deterrent opioids, noting that "As indicated in FDA guidance for industry on evaluation and labeling of abuse-deterrent opioids (190), although abuse-deterrent technologies are expected to make manipulation of opioids more difficult or less rewarding, they do not prevent opioid abuse through oral intake, the most common route of opioid abuse, and can still be abused by nonoral routes. The "abuse-deterrent" label does not indicate that there is no risk for abuse. No studies were found in the clinical evidence review assessing the effectiveness of abuse-deterrent technologies as a risk mitigation strategy for deterring or preventing abuse. In addition, abuse-deterrent technologies do not prevent unintentional overdose through oral intake. Experts agreed that recommendations could not be offered at this time related to use of abuse-deterrent formulations." At this time, there is limited evidence to support use of specific

abuse deterrent opioids. Better evidence of benefits of abuse deterrent opioids is needed to inform education and training for providers.

For extended-release/long acting (ER/LA) opioids, multiple trainings have been made available as part of FDA's Risk Evaluation and Mitigation Strategy (REMS) for ER/LA Opioid Analgesics, approved in 2012. These trainings were provided using unrestricted funds from opioid manufacturers. One example of a high-quality training produced for this REMS was Boston University's SCOPE of Pain.

CDC offers free continuing education training on opioid prescribing for providers, including a webinar series and interactive online modules. A lecture on "Dosing and Titrating Opioids" in the webinar series addresses appropriate use of IR and ER/LA opioids. Other content in the webinar series and online modules addresses related topics including how to assess when benefits of opioids are likely to outweigh risks, nonopioid treatments for pain, and how to communicate with patients about opioid use.

The Honorable Pete Olson

1. **Of the grant funding provided for in CARA, how much funding has been allocated to state prescription drug monitoring programs (PDMPs)? Do you think states need additional federal grant funding to improve their PDMP or to fund clinical workflow integrations?**

Answer:

CDC did not receive any funding through CARA. While CDC does fund states for improvements to PDMPs via the Overdose Prevention in States program, this was not through CARA.

Funding to states is critical to enhance PDMPs, which includes making them real-time, actively managed, and easy to use and access.

2. **How does CDC work with federal partners, specifically law enforcement and public safety partners such as the DEA and ONDCP?**

Answer:

CDC works closely with our Federal partners including the DEA and ONDCP to combat the opioid epidemic. CDC embedded a public health analyst within DEA for one year to better inform collaborative efforts and to assist in learning the cultures of each field, which can help increase communication across agencies. Within this personnel exchange, it was particularly useful to learn of and share information about the data sources that each agency uses. As a result of this personnel exchange, DEA and CDC established a data-sharing request process for

National Forensic Laboratory Information System (NFLIS). Although DEA publishes annual and semi-annual NLFIS reports to its website for public viewing, prior to this agreement, the sharing of raw data with CDC had been inconsistent DEA and CDC are currently in the process of establishing a formal data and information-sharing agreement. CDC and DEA are working together to find ways to use law enforcement data to improve public health interventions. DEA data systems, such as NFLIS, can act as an early warning system for potential outbreaks or sharp increases in overdoses.

As an example, NFLIS data were used during a 2015 Epidemiological Assistance, or Epi Aid, where CDC scientists responded to a request from the state of Ohio to assist in examining the ongoing increase in unintentional fentanyl-related overdose deaths in their state. In part, the Epi Aid explored whether changes in reported fentanyl drug-seizure rates (from NFLIS) could be used to estimate trends in fentanyl-related mortality. In analyzing data on fentanyl-related seizures and fentanyl-related deaths, it was found that changes in reported fentanyl-seizures were predictive of changes in fentanyl-related deaths in Ohio, especially in 2014 as the epidemic began.

CDC also works with ONDCP to address the regional nature of the opioid epidemic by collaborating on the Heroin Response Strategy (HRS) under the High Intensity Drug Trafficking Areas (HIDTAs) program, which is funded by ONDCP. The HIDTA HRS leverages strategic partnerships to target the organizations and individuals trafficking deadly drugs like heroin and illicit fentanyl so that overdoses are reduced and lives are saved. The HRS currently coordinates the efforts of 10 regional HIDTAs across 22 states. The HIDTA HRS is a collaborative public health/public safety model focused on coordinated data-driven approaches to reduce opioid overdose deaths.

CDC scientists, working with HIDTA law enforcement experts, manage project planning and development for the HRS, which includes:

- Program and communications systems
- Program evaluation
- Initiative-wide project implementation
- Regional coordination of Public Health Analysts

In addition, CDC partners with the HIDTAs to manage the Public Health and Public Safety Network, which includes a public health analyst (PHA) and a drug intelligence officer (DIO) in each of the 22 states the HIDTA HRS covers. PHAs work collaboratively across sectors and agencies within each state to gather, analyze, and distribute drug-related public health data; develop and support data-driven policy and programming initiatives; facilitate interagency collaboration; and advance efforts in surveillance, treatment and prevention initiatives within their state. They bring a public health perspective to law enforcement efforts, and enhance public health efforts with law enforcement intelligence and relevant data.

One of the projects conducted under the HIDTA HRS is the Good Samaritan Project, which assesses law enforcement knowledge of and perspective about Good Samaritan laws (laws that offer legal protection to people who give reasonable assistance to those who are, or who they believe to be, injured, ill, in peril, or otherwise incapacitated) within their state, which is one of the strategies implemented as means to prevent drug overdose fatalities.

Also, in support of this work, CDC has partnered with ONDCP to invest $2 million to support the piloting of community-level initiatives to further efforts to address the opioid epidemic in partnership with regional HIDTA programs. Under this initiative, 13 grants have been awarded in 10 different states to support implementation of innovative strategies within a targeted geographic area with the aim of building the evidence base for response activities that other communities can employ.

Projects address topics such as post-overdose strategies to link people to care using patient navigators and recovery coaches; justice-involved populations and access to MAT; pre-arrest diversion; buprenorphine induction in the ED; neo-natal abstinence syndrome; and adverse child experiences.

The Honorable Susan Brooks

1. **I have heard you say that preventing drug use before it begins is the most cost effective way to reduce drug use and its consequences. In your opinion, what are the characteristics of successful prevention intervention programs? Besides lack of resources, what are the barriers to implementing intervention programs?**

Answer:

To respond to and curtail the opioid crisis, CDC applies scientific expertise and centers activities on surveillance and implementation of public health strategies, which includes addressing inappropriate prescribing of opioids as a key driver of the current epidemic. Given the levers that exist at the state-level, through its Overdose Prevention in States effort across three programs, CDC is partnering with 45 states and Washington, D.C., to provide resources and scientific expertise to maximize those levers with a specific focus on using data to drive action and preventing people from getting addicted in the first place through safer prescribing. Some of the key prevention aspects of our program are:

1. maximizing the use of state Prescription Drug Monitoring Programs as both a public health surveillance and clinical decision support tool;

2. implementing community and insurer interventions to have the biggest impact on populations;

3. evaluating state-level policies in place to continue to build the evidence base for strategies that hold promise. Underlying success in these endeavors is strong collaboration across different entities within the state to support a multi-sector response to this complex issue.

Through these efforts, CDC has established strong partnerships with public health entities in the vast majority of states. In CDC's estimation, however, the next critical step to address existing barriers is to establish and strengthen efforts at the local level as well. CDC has learned from our funded states that the manifestation of the epidemic differs within different regions of the same state. While in some regions overdoses from prescription opioids are the primary concern, in others it is overdoses from illicit opioids. Given this, a suite of resources and response interventions applicable at a local level are needed. CDC currently is in the initial stages of developing a suite of interventions that localities can choose from to quickly implement a response based on the needs presented. CDC is partnering with the National Association of County and City Health Officials (NACCHO) to assess resources available, develop tools that address gaps, and to evaluate implementation of these strategies at the local level. In addition, CDC is working closely with HIDTA partners in 22 states to implement and evaluate pilot projects across a variety of communities to grow the evidence base about what works in real-world settings. Ongoing gaps that exist include tailoring local interventions that yield efficacy within the context of rural and tribal communities in particular. Both communities possess underlying challenges that are distinct from other regions; therefore, the need exists to assess and promote tailored public health response strategies to benefit these populations. In addition, an important component of prevention should be primary prevention among youth to stop the trajectory toward use in adulthood. CDC data suggest that the middle- school years present a strong opportunity for intervention. While it can be difficult to bridge education and public health agencies, CDC has experience in successfully supporting these connections to address health risks And works to implement health education, youth development, and screening and referral activities in schools to address high-risk behaviors such as substance use.

Finally, CDC is collaborating with other components of HHS and with other Federal agencies to prevent drug use before it begins by addressing pain management. CDC is working on the HHS National Pain Strategy (NPS) Implementation Steering Committee, which is working to improve pain management in the U.S. using the strategies laid out in the NPS.

The Honorable Markwayne

1. **According to the CDC, Native Americans have the highest rates of both opioid overdose deaths as well as HCV-related deaths. Does your department engage with these populations around risk factors associated with opioid abuse, including the spread of infectious diseases such as HIV and HCV? Do you currently have the ability to help tribal and public health systems develop programs to alert providers of care for opioid abuse to also test for concomitant infectious diseases and provide a pathway to treatment? Are you engaging in these activities currently, if so, can you please elaborate on these efforts and provide any**

findings on the results? How could we strengthen the our public health system infrastructure to better respond to the opioid epidemic and its long term health consequences?

Answer:

CDC collaborates with states, counties, local, and tribal communities, as well as with the Indian Health Service (IHS), to prevent opioid overdoses and related harms. CDC has the ability to support tribal health programs via CDC's work with U.S. states. CDC does not currently directly fund tribal governments; however, funding awards for CDC's HIV prevention efforts stipulate that states must address and collaborate with tribal communities in their jurisdictions.

CDC is working with IHS on an analysis of existing data sources that may inform IHS about regions and counties at potential risk for spread of HIV and HCV infection associated with injection drug use, in order to identify priority localities for HIV and HCV prevention and harm-reduction interventions. CDC is also providing technical assistance to the Cherokee Nation to optimize care and move toward eliminating HCV among American Indians in the Cherokee Nation Health System. This includes supporting the planning, implementation, monitoring, and evaluation of efforts to bring together a coalition of public health, clinical care, and academic medicine partners. Successful completion will not only improve the health of the Cherokee Nation, but also inform similar programs to move toward eliminating HCV infection in other American Indian and non-American Indian populations. In 2015, a five-fold increase in testing occurred, from 3,337 persons initially tested to 16,772 in the Cherokee nation. Additionally, screening for Hepatitis C virus in the Indian Health Service, reports an increase in testing from 8% to 33 percent nationwide among American Indian/Alaskan Native populations between 2012 and 2015.

The Honorable Gregg Harper

1. **CDC recently launched a communications campaign. Can you tell us about the campaign and how it is being rolled out?**

Answer:

CDC publically released the Rx Awareness communications campaign in September. The campaign features real-life accounts of individuals living in recovery from opioid use disorder, and those who have lost someone to a prescription drug overdose. The campaign will increase awareness and knowledge among Americans about the risks of prescription opioids and deter inappropriate use. CDC is running digital, radio, and out-of-home campaign ads for 14 weeks in select states (OH, KY, MA, and NM) with broader release anticipated in 22 additional states funded through CDC's Opioid Prevention in States effort.

The Honorable Leonard Lance

1. **Can you tell us about CDC's opioid surveillance programs, especially in regards to fentanyl? How has CDC improved the timeliness of reporting? What gaps remain in data collection capabilities and how is CDC working to bridge those gaps?**

Answer:

CDC now funds the Enhanced State Opioid Overdose Surveillance (ESOOS) program in 32 states and Washington D.C. In its first programmatic year, CDC funded 12 states to: 1) Improve the timeliness of reporting of nonfatal opioid overdoses using Emergency Department (ED) and Emergency Medical Services (EMS) data; 2) Improve the timeliness of reporting of fatal opioid overdoses and associated risk factors so that these data can be used to inform public health response tactics within and across states; and 3) Disseminate findings to stakeholders to support prevention efforts.

The program collects data on fatal opioid overdoses through the State Unintentional Drug Overdose Reporting System (SUDORS), which uniquely captures detailed information on toxicology, death scene investigations, and other risk factors that may be associated with a fatal overdose. For instance, SUDORS data have identified and tracked large increases in fentanyl analog deaths driven by carfentanil within one state's borders. Early findings from these data reinforce the need and urgency for more timely and comprehensive toxicology testing.

ESOOS also improves innovative strategies around morbidity data, using EMS and ED data to provide a comprehensive picture around non-fatal opioid overdoses. The use of this data can act as an early warning system to detect sharp increases or decreases in overdoses. In addition, this data can help inform where more resources, such as naloxone or treatment capacity, are needed. CDC released a *Vital Signs* in March, which will publish CDC's most timely data on drug overdoses given the near real-time reporting of this system.

The initial cohort of 12 states began program implementation on September 1, 2016, and CDC will rapidly disseminate findings as states provide data. The first report of ESOOS mortality data, "Deaths Involving Fentanyl, Fentanyl Analogs, and U-47700—10 States, July—December 2016," was published as a *Morbidity and Mortality Weekly Report (MMWR)* Early Release on October 27, 2017. States completed data reports by August 31, 2017, and CDC published it less than two months later. CDC published a *Vital Signs* report and *MMWR* Early Release in March 2018, which will include the timely data on drug overdoses given the near real-time reporting of this system.

With the increase in funds appropriated to CDC in Fiscal Year 2017, CDC was able to expand the ESOOS program to fund an additional 20 states and Washington, D.C. CDC also was able to provide supplemental funds to all ESOOS-funded states, with the expectation that a minimum of 60% of the supplemental funds were to go to medical examiners/coroners to primarily

support comprehensive toxicology testing of opioid-involved deaths. With the increase in funds appropriated to CDC in Fiscal Year 2018, CDC anticipates scaling up funding and technical support to enhance surveillance within all 50 states to improve the timeliness and comprehensiveness of fatal and nonfatal opioid overdose reporting.

In terms of gaps, it is necessary to strengthen the Mortality Data Infrastructure (IT Systems). When a drug overdose death occurs, multiple data requestors ask toxicology and ME/C offices to provide data using tools that are not integrated with the laboratory information systems and case management systems that they use every day. This puts significant burden on these offices and contributes to the lag in the data. CDC will work closely with the Association of State Crime Lab Directors, Society of Forensic Toxicologists, and National Association of Medical Examiners to help enhance their capabilities so that they can help provide the data. Support is needed to enhance the Interoperability of medical examiner/coroner case management systems and state electronic death reporting systems to improve timeliness and data quality.

The Honorable Morgan Griffith

1. **Prescription drug monitoring programs (PDMPs) are an invaluable tool for preventing "doctor shopping" and diversion of opioid medications. We know that PDMPs are regulated differently from state to state in terms of when/if a provider is required to check them, what information is included in a PDMP, and who has access to this information. Some states also have agreements in place to allow access between their respective PDMPs across state lines. What are ways in which PDMPs can be better utilized to identify instances of addiction to opioids and prevent overdoses? What can be done to improve PDMP sharing across state lines?**

   Answer:

   The opioid crisis manifests differently in communities and states. To the extent that states have access to more data, including data that are more timely as well as data from other states, the better they are able to inform and tailor their response.

   PDMPs are a promising tool to address the epidemic and prevent opioid misuse, abuse, and overdose. Their utility as a public health resource and tool can be maximized through various means. For one, they can provide essential information to a clinician at the point of care as they are making that critical treatment decisions for their patient. This is what we mean when we say that PDMPs are a clinical decision-making tool. Just like any other part of a patient's medical history, the PDMP provides essential information to inform decisions about care.

Another public health application is the use of PDMP data to inform strategic prevention programming and resource allocation. This is what we mean when we talk about the PDMP as a public health surveillance tool. PDMPs can tell us where prescribing is problematic, where we need to focus prescriber education efforts, and where overdoses may be more likely to occur so that we can ensure availability of naloxone and use health systems to connect people to treatment and care.

PDMPs can also act as part of an early warning system to detect increases in prescribing in certain communities. Analyzing de-identified PDMP data by geographic area, whether that be county, zip code, etc. can show trends in medical and non-medical use of prescription drugs.

Ensuring that these public health applications of the PDMP are maximized is a key and required component under our Prevention for States program and the enhanced component of our Data-Driven Prevention Initiative program.

Every state PDMP operates differently, so the challenges and barriers for each state will differ. Some states may be precluded from sharing data from a legislative or regulatory perspective. Other may have difficulties from a resource perspective, particularly if there are costs associated with data sharing and prove prohibitive to a state. Others may have technical challenges, such as integrating PDMPs with EHRs. Finally, some states may have a different agency housing a PDMP, requiring MOUs to share data with public health entities.

Some of these challenges can continue to be addressed by the provision of technical assistance and resources from the federal level. Illinois will soon be implementing guideline concordant enhancements to their integrated PDMP-EHR integrations that provides flags based on the active cumulative Morphine Milligram Equivalent (MME). There will be flags based on ≥ 50 MME and ≥ 90 MME. The PDMP will also provide resources such as links to the CDC's prescribing guideline provider tools and resources based on the MME flags. These changes/enhancements were a result of TA provided by the Illinois CDC PfS state support team.

In addition, the Illinois CDC PfS state support team has been working to provide technical assistance around the PfS second required strategy of implementing initiatives in the community and/or health systems. Through the CDC PfS team's monthly calls and site visit, the CDC and Illinois have developed and disseminated Illinois Prescription Monitoring Program County Profiles.

CDC is also working with funded states for PDMP and EHR (electronic health record) integration. This step is critical for ensuring the information from PDMPs are a part of clinical workflow and easy for providers to check while seeing patients.

2. **We often hear that not enough states are sharing PDMP data with other states. However, my understanding is that 45 states are now actively sharing PDMP data. For states that are not, the barriers are primarily at the state legislative level and not technological. What are your views on the current state of interstate data sharing? Do you think that states have been**

doing a better job in recent years of sharing data with their neighboring states (at a minimum) to prevent doctor shopping?

Answer:

States have made important strides to share data to prevent doctor shopping, inform strategic prevention programming and resource allocation, and understand regional trends in opioid prescribing to better inform physicians about their own prescribing patterns. Ensuring that these public health applications of the PDMP are maximized is a key and required component under our Prevention for States program and the enhanced component of our Data-Driven Prevention Initiative program. CDC also provides important technical assistance through its grantee communities of practice, which allows peer-to-peer learning so that states can share best practices, lessons learned, and key successes in addressing challenges that may be similar among states.

States have been working to share PDMP data via data hubs such as the RxCheck and PMPi. As of now, 48 states and Washington, D.C. are exchanging data via either the PMPi or the RxCheck.

The Honorable Ben Ray Lujan

1. **In 2015, 33,000 Americans died from opioids. According to the CDC, almost half of those deaths were from prescription opioids. The New York Times reports that in 2016, overdoses from all drugs was the leading cause of death of people under the age of 50. Drug overdoses now kill more Americans each year than at the height of the HIV epidemic and the worst year for auto accident deaths. The Times and drug use experts attribute the sharp rise in all drug overdose deaths to the rise of opioids. What we need to fight this epidemic is continued and reliable long-term investments in prevention, treatment, recovery, and monitoring. The President's budget proposal for fiscal year 2018, coupled with other administration initiatives, takes several steps back in the fight against opioid addiction, including a cut in funds for SAMHSA. Overall, the President's proposed budget cuts HHS by 16.2 percent, the CDC by 17 percent and NIH by 19 percent. It cuts funding for addiction research, treatment and prevention. Even the White House Office on National Drug Control Policy would take a 95 percent hit.**

a. **Deputy Director Schuchat, do you have all of the tools you need to stop the opioid epidemic?**

Answer:

CDC received an increase in appropriation in both fiscal years 2016 and 2017 for opioid overdose prevention activities. With that funding, CDC is now able to fund 45 states and Washington, D.C. to implement prevention activities and to collect data on fatal and non-fatal overdoses. CDC is committed to continuing prevention activities with the resources we are appropriated.

b. Given the 17 percent cuts to CDC in the President's budget proposal, what programs relating to the opioid epidemic will be cut? Which programs would have been expanded that will now not be?

Answer:

CDC appreciates Congress's support and investment of our opioid prevention work. CDC is committed to continuing opioid overdose prevention and will continue to work with states in their overdose prevention programs and surveillance.

The Honorable Paul Tonko

1. Does the CDC have any data that specifically details overdose death rates or incidence for individuals leaving jail or prison? If not, is there a way for CDC to obtain this data?

Answer:

CDC does not have systematic access to data on overdoses for all individuals leaving jail or prison, but the Enhanced State Opioid Overdose Surveillance program, which seeks to improve the timeliness of data collection on fatal and non-fatal opioid overdoses, does capture some information on justice-involved populations. The State Unintentional Drug Overdose Reporting System (SUDORS), which uniquely captures detailed information on toxicology, death scene investigations, and other risk factors that may be associated with a fatal overdose, does collect information on recent release from an institution for all opioid overdose deaths. "Jail, prison, or detention facility" is one of the options for institutions. To qualify as a recent release, the decedent had to have spent one or more nights in the institution, within a month prior to death. SUDORS also captures information about deaths that occurred while the decedent was in custody, which could have been under arrest, in jail/prison, in a psychiatric institution, etc. This information could be used to track what proportion of opioid overdose decedents had recently been incarcerated, and what proportion died while incarcerated.

While CDC does not collect data related to individuals leaving jail or prison, in 2015, the Massachusetts Department of Public Health (MDPH) requested CDC's assistance with an epidemiological investigation (Epi-Aid). Massachusetts had experienced a surge of opioid-related deaths, from 698 in 2012 to 1,747 in 2015, and over 74 percent of the drug overdose deaths involved fentanyl. The key goal of the investigation was to understand the extent to which the sharply increasing supply of illicitly-made fentanyl (IMF) in Massachusetts from 2013 through 2015 contributed to the surge in opioid-related overdose deaths. CDC worked closely with the MDPH, SAMHSA, and DEA to determine that illicitly-made fentanyl mixed with or sold as heroin was primarily responsible for the surge of deaths from 2014 to 2015. Eight out of ten fentanyl-related overdose deaths were suspected to involve illicitly-made fentanyl. Using the data obtained in the investigation, CDC provided recommendations for the MDPH related to

screening people for heroin and/or fentanyl use, expanding access to naloxone and providing training for overdose prevention, and implementing messaging and education around the dangers of fentanyl, especially in the cases of people who had recently been released from prison.

Given the specific needs of justice-involved individuals as particularly vulnerable demographic, CDC has partnered with the National Governors Association (NGA) to assess different strategies and programs underway within states to address opioid use disorder while individuals are incarcerated and following their release. More specifically, NGA convened a Learning Lab for interested states to attend and learn about programs and strategies within a peer state to provide Medication-Assisted Treatment (MAT) and other services for justice-involved populations. In addition, NGA hosted a webinar to educate leadership within states about the efficacy of MAT and to highlight other innovative strategies that states can employ to prevent opioid misuse, abuse, and overdoes specific to this target population.

The Honorable Frank Pallone, Jr.

1. **With 90 percent of addictions beginning in the teenage years, we know there is a critical need for effective drug prevention programming, especially during this current opioid crisis. In the past decade, our national prevention infrastructure has been decimated (including the elimination of funding for the National Youth Anti-Drug Media Campaign) and our ability to educate young people and prevent more teens from becoming addicted is hobbled. We need prevention messages to serve as a counterweight to the proliferation of pro-drug messaging in the media today. In order to convey the risk of opioid and other drug abuse and reverse the stark addiction and overdose trends that are creating heartbreak in families across the country, investment in prevention messaging is crucial. Regarding Section 102 in CARA- the National Awareness Campaigns provision, can you please tell us what the status of implementation and investment is? What do the various agencies plan to do to move forward with this provision and how can we help?**

Answer:

Although CDC did not receive any funding to implement provisions in CARA, CDC has developed the Rx Awareness communications campaign which was released publicly in September. The campaign features real-life accounts of individuals living in recovery from opioid use disorder, and those who have lost someone to a prescription drug overdose. The campaign will increase awareness and knowledge among Americans about the risks of prescription opioids and deter inappropriate use. CDC is running digital, radio, and out-of-home campaign ads for 14 weeks in select states (OH, KY, MA, and NM) with broader release anticipated in 22 additional states funded through the CDC Opioid Prevention in States effort.

2. I would like to thank all of the witnesses for joining us. I am particularly interested in learning more about CDC efforts to improve the timeliness and comprehensiveness of the data available about the epidemic.

a. Can you tell us about CDC's surveillance programs?

Answer:
CDC's surveillance programs strengthen our understanding of the crisis through better public health data and reporting which is a component of HHS's 5-point strategy to combat the opioid epidemic.

The National Vital Statistics System (NVSS) is one of oldest and most critical surveillance systems at CDC for monitoring the impact (measured in lives lost) of the opioid epidemic. Through the NVSS data on all births, deaths, and fetal deaths are sent to the National Center for Health Statistics (NCHS), which has contracts with all 57 vital records jurisdictions to provide these data. From these data, CDC compiles annual national statistical data files and publishes a variety of reports. Annual mortality data are currently available through 2015 and 2016 data will be release before the end of the year. To address a need for even more timely data NCHS now releases quarterly provisional estimates based on a current flow of vital statistics data from the states vital records offices. To address specific request for timely information of drug overdose death, CDC recently began releasing monthly provisional drug overdose counts that provide the most timely information available on the overall numbers of drug overdose deaths and death involving specific drugs and drug classes by state.

In addition, CDC has launched the Enhanced State Opioid Overdose Surveillance (ESOOS) program. In its first programmatic year, CDC funded 12 states to: 1) Improve the timeliness of reporting of nonfatal opioid overdoses using Emergency Department (ED) and Emergency Medical Services (EMS) data; 2) Improve the timeliness of reporting of fatal opioid overdoses and associated risk factors so that these data can be used to inform public health response tactics within and across states; and 3) Disseminate findings to stakeholders to support prevention efforts.

The program collects data on fatal opioid overdoses through the State Unintentional Drug Overdose Reporting System (SUDORS), which uniquely captures detailed information on toxicology, death scene investigations, and other risk factors that may be associated with a fatal overdose. For instance, SUDORS data have identified and tracked large increases in fentanyl analog deaths driven by carfentanil within one state's borders. Early findings from these data reinforce the need and urgency for more timely and comprehensive toxicology testing.

ESOOS also improves innovative strategies around morbidity data, using EMS and ED data to provide a comprehensive picture around non-fatal opioid overdoses. The use of this data can act as an early warning system to detect sharp increases or decreases in overdoses. In addition, this data can help inform where more resources, such as naloxone or treatment capacity, are needed.

The initial cohort of 12 states began program implementation on September 1, 2016, and CDC will rapidly disseminate findings as states provide data. The first report of ESOOS mortality data, "Deaths Involving Fentanyl, Fentanyl Analogs, and U-47700—10 States, July—December 2016," was published as a *Morbidity and Mortality Weekly Report (MMWR)* Early Release on October 27, 2017. States completed data reports by August 31, 2017, and CDC published it within two months.

With the increase in funds appropriated to CDC in Fiscal Year 2017, CDC was able to expand the ESOOS program to fund an additional 20 states and Washington, D.C. (for a total of 32 states and Washington, D.C.) CDC also was able to provide supplemental funds to all ESOOS-funded states, with the expectation that a minimum of 60 percent of the supplemental funds were to go to medical examiners/coroners to primarily support comprehensive toxicology testing of opioid-involved deaths.

States are at the forefront of protecting mothers and babies by using data to understand Neonatal Abstinence Syndrome (NAS). With support from CDC and in partnership with March of Dimes, Illinois, New Mexico, and Vermont to explore approaches for improving the speed and accuracy of surveillance of Neonatal Abstinence Syndrome (NAS). Surveillance of NAS is important to inform a public health response that can quickly identify areas of need and target interventions to improve outcomes for these babies by connecting mothers to services and care. These pilot projects are also evaluating the health services needed through their first birthday, which will help prepare the health system to care for these babies.

CDC's Pregnancy Risk Assessment Monitoring System (PRAMS) in 51 jurisdictions (47 states, the District of Columbia, New York City, Puerto Rico, and the Great Plains Tribal Chairmen's Health Board) collects state-specific, population-based data from women during the postpartum period on maternal attitudes and experiences before, during, and shortly after pregnancy. CDC is supporting 6 states (AK, ME, NM, NY, PA, WV) to collect supplemental data on maternal substance use through the PRAMS.

b. How has CDC improved the timeliness of reporting?

Answer:

Timeliness of mortality reporting has improved significantly over the past several years. In 2010, only about 7% of deaths were reported to CDC within 10 days of the death. This percentage has increased steadily over the past few years and today over 50% of deaths nationally are reported to CDC within 10 days. The introduction of electronic death registration (EDR) systems in most states has been a significant catalyst for these improvements and CDC has been actively involved in encouraging states to implement these systems and has funded special projects in many states to enhance and maximize these systems with specific timeliness

goals. As current EDR systems age resources will be needed to maintain and upgrade aging systems if improvements in timeliness are to be sustained.

Capitalizing on the significant improvements in the timeliness of deaths being reported by the states, CDC launched the Vital Statistics Rapid Release (VSRR) program in 2015 with the first release of quarterly provisional mortality estimates, which included national estimates of overall drug overdose death rates. In August of 2017, the VSRR program was expanded to include monthly provisional counts of drug overdose deaths and death involving specific drugs and drug classes by state. The most recent monthly provisional report was released on November 13, 2017, and includes counts of drug overdose deaths through April 2017.

Reliable provisional estimates of death rates and counts for many causes of death can be released 3 months after the death occurred, but due to the additional time needed for toxicology drug overdose deaths are among the last reported to CDC, which means that reliable provisional rates and counts for these deaths can only be released 6 to 9 months after the death occurred. CDC is working closely with the state vital records offices and the ME/Coroner community on efforts to help minimize the time needed to report drug overdose deaths, including efforts to better integrate ME/Coroner case management systems with state EDRS.

c. What gaps remain in data collection capabilities, including the effect of some of the surveillance programs not being implemented in all 50 states and DC, and how is CDC working to bridge those gaps?

Answer:

CDC's surveillance programs strengthen our understanding of the crisis through better public health data and reporting which is a component of HHS's 5-point strategy to combat the opioid epidemic. Though timely, high-quality data are critical to support a multi-sector response to the opioid epidemic, states remain at differing capacity with regard to opioid overdose surveillance.

One means to shore up state capacity and to provide the needed level of scientific expertise to assist states in these efforts has been the creation of CDC's Enhanced State Opioid Overdose Surveillance (ESOOS) program. In its first programmatic year, CDC funded 12 states to: 1) Improve the timeliness of reporting of nonfatal opioid overdoses using Emergency Department (ED) and Emergency Medical Services (EMS) data; 2) Improve the timeliness of reporting of fatal opioid overdoses and associated risk factors so that these data can be used to inform public health response tactics within and across states; and 3) Disseminate findings to stakeholders to support prevention efforts.

The initial cohort of 12 states began program implementation on September 1, 2016, and CDC will rapidly disseminate findings as states provide data. The first report of ESOOS mortality data, "Deaths Involving Fentanyl, Fentanyl Analogs, and U-47700—10 States, July—December

2016," was published as a *Morbidity and Mortality Weekly Report (MMWR)* Early Release on October 27, 2017. States completed data reports by August 31, 2017, and CDC published it within two months.

With the increase in funds appropriated to CDC in Fiscal Year 2017, CDC was able to expand the ESOOS program to fund an additional 20 states and Washington, D.C. CDC also was able to provide supplemental funds to all ESOOS-funded states, with the expectation that a minimum of 60 percent of the supplemental funds received were to directly support comprehensive testing within each state.

CDC is now funding 32 states and Washington, D.C. under the ESOOS program.

3. **Adverse effects and accidental overdoses from opioids have had a huge impact on our nation, however, there are also downstream health consequences of opioid use, especially IV opioid or heroin use, such as HIV, Hepatitis B and Hepatitis C that also affects our nation's health. In 2015, there was an outbreak of HIV in a small town in Indiana, where nearly 200 individuals became infected with HIV due to injection of oxymorphone. I was particularly struck by statements from public health officials in a recent article in Politico. According to that article, health officials believe that the 2015 outbreak in Scott County is a harbinger of things to come as abuse of – painkillers, heroin, fentanyl, and other drugs – rages on. According to the Director of Public Health in Alaska, "[t]he nightmare that wakes me up at 3 a.m. is a Scott County – level HIV outbreak happening here in Alaska."**

a. **Dr. Schuchat, do you share these concerns about the risk of additional infectious disease outbreaks as a result of the opioid abuse epidemic?**

Answer:

The threefold increase in hepatitis C between 2010 and 2015and the 2015 HIV outbreak in Indiana are powerful evidence that persons who inject drugs are at high risk for both HIV and viral hepatitis, and that these infections can gain ground at any time unless the nation remains vigilant about prevention, testing, care.

b. **What are we currently doing to monitor and prevent these infections from IV drug use?**

Answer:

Last year, tens of thousands of viral hepatitis, HIV, and endocarditis (heart valve) infections occurred in the nation due to injection drug use. CDC is working to prevent these infections by:

- Using data to monitor emerging trends and direct prevention activities;

- Providing up-to-date scientific information and strengthening state, local, and tribal capacity to respond and prevent injection drug use-associated infectious diseases;
- Working with providers, health systems, and payers to implement effective prevention programs; and,
- Coordinating with public safety and community-based partners to rapidly link people to effective infectious disease (and substance use) treatment

c. What suggestions do you have for improving prevention strategies?

Answer:

CDC aims to strengthen our understanding of the crisis through better public health data and reporting which is a component of HHS's 5-point strategy to combat the opioid epidemic. A comprehensive, multi-sectoral approach is needed to prevent infectious diseases attributed to opioid use disorder which includes:

- Collaboration at the community level between public health, law enforcement, healthcare, education, substance abuse treatment providers, housing services, and faith-based stakeholders.
- Coordination across multiple levels of the U.S. health care system.
- Implementation of tailored community-based prevention services which include, but are not limited to, testing and treatment for HIV, viral hepatitis, and endocarditis, provision and disposal of sterile injection equipment (where legal and consonant with community support), provision of naloxone and overdose prevention training, and provision of or referral to addiction and mental health services, including medication-assisted treatment.