

**Centers for Disease Control and Prevention**

**2017 Hurricane Response**

**House Energy and Commerce Oversight and Investigations Subcommittee Hearing**

**October 24, 2017**

**Testimony**

**Witness:** RADM Stephen C. Redd, MD

**Testimony** – House Energy and Commerce Committee, Oversight and Investigations Subcommittee

Good morning Chairman, Ranking Member, and other distinguished members of the subcommittee. I am Rear Admiral Stephen C. Redd, Director of the Centers for Disease Control and Prevention's (CDC) Office of Public Health Preparedness and Response. I appreciate the opportunity to be here today to discuss CDC's efforts and activities in response to the 2017 hurricanes.

From late August to early October of this year, the President approved several emergency and major disaster declarations in accordance with the Stafford Act for the hurricane-affected states and territories. This authorized the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to coordinate all disaster relief efforts. Under the National Response Framework (NRF), FEMA is the lead agency and CDC, along with our HHS counterparts here today, is serving in a supporting role to FEMA. As a part of the NRF, HHS leads the Emergency Support Function-8, Public Health and Medical Services, under which CDC operates. CDC's responsibilities include providing public health support to supplement state, tribal, territorial and local resources in response to public health and medical disasters and/or during potential health and medical emergencies.

CDC prepares for emergency events by helping our state, local, tribal and territorial partners strengthen their public health preparedness systems for emergency events. CDC's Public Health Emergency Preparedness Program (PHEP) is our single largest cooperative agreement program that

provides critical funding, guidance, and technical assistance to help partners prepare for public health emergencies. Since August 2002, the PHEP cooperative agreements have assisted public health departments across the nation, targeting the development of emergency-ready public health departments that are flexible and adaptable. Each state and territory impacted by Hurricanes Harvey, Irma, Maria, and Nate are PHEP recipients.

Since 2002, States and Territories funded under PHEP have continued to focus on strengthening critical public health preparedness capabilities. For example, in FY 2017, Texas planned to dedicate approximately 90 percent of their PHEP funding in the critical public health preparedness capabilities of Community Preparedness, Medical Material Management & Distribution and Public Health Laboratory Testing. The State's past experience with flooding disasters has helped Texas ensure the safe evacuation of residents, especially residents in need of special assistance during an evacuation who otherwise would have been left behind. Florida planned to focus approximately 80 percent of their FY 2017 funding to Community Preparedness, Public Health Surveillance & Epi Investigation and Public Health Lab Testing. The US Virgin Islands proposed to use approximately 60 percent of their FY 2017 PHEP funds on Emergency Operations Coordination, Public Health Surveillance & Epidemiology Investigations and Community Preparedness. Puerto Rico planned to dedicate over 60 percent of their PHEP funds to Public Health Laboratory Testing, Information Sharing, and Medical Countermeasure Dispensing.

Immediately following a hurricane, the Federal, state, and territorial response includes coordinating and managing resources to provide immediate relief, in particular restoring physical infrastructure, which includes infrastructure needed to provide healthcare. Once public health and other officials have identified and addressed the immediate public health and healthcare needs, the impacted areas enter the recovery phase when critical capabilities are identified and key activities are

implemented to assist communities with recovering effectively over time. The recovery phase can last from months to years.

CDC continues to work in affected areas from Hurricanes Harvey, Irma, and Maria. Texas was primarily impacted by the flooding caused by Hurricane Harvey and is now in the recovery phase. This is also the case in Florida which was heavily impacted by Hurricane Irma. However, the U.S. Virgin Islands, which sustained severe damage from both Hurricanes Irma and Maria, is just now entering the recovery phase, and Puerto Rico is still in the response phase from the devastation caused by Hurricane Maria.

On August 30, 2017, CDC officially activated its Emergency Operations Center to address the public health impact of Hurricane Harvey and then expanded the activation to include the subsequent Hurricanes, Irma and Maria, as they approached the states and territories. Since August 31<sup>st</sup>, CDC has approximately 500 staff members who have provided scientific and technical assistance and additional logistics, staffing, communications, analytics, management, and other support functions. Additionally, we have deployed approximately 73 staff to the impacted areas to provide on the ground support. To fully address the impact of the 2017 hurricanes, we are providing a full spectrum of public health technical support to Federal, state, local, territorial, and tribal entities, including on-site support. The focus areas for the effort are epidemiology and health surveillance, environmental and occupational health, and public health communications.

To address immediate health concerns, CDC deploys at the direction of the Department and via the Strategic National Stockpile (SNS), Federal Medical Stations (FMS) to serve as temporary non-acute medical care facilities. Each FMS can accommodate up to 250 people and contains a cache of medical supplies and equipment. HHS deploys medical teams to staff the FMS. As of October 16<sup>th</sup>, for Hurricane

Maria, CDC/SNS has deployed six 250-bed Federal Medical Stations in Puerto Rico. For Hurricane Harvey, CDC/SNS deployed four to Texas and two to Florida for Hurricane Irma.

CDC applies syndromic surveillance to monitor health-related data that precede diagnosis and signal a probable disease case or outbreak. Syndromic surveillance uses existing data systems as an early warning system of disease outbreaks, water or food contamination or other event, for example, spikes in school absenteeism or emergency department visits. Our National Syndromic Surveillance Program collaborates with the Assistant Secretary for Preparedness and Response's Disaster Medical Assistance Teams (DMAT) to collect all data on DMAT patient encounters. The total number of encounters received for Texas was approximately 5,400 and for Florida, approximately 1,700. Most encounters for Texas and Florida were related to bites, stings, injuries, musculoskeletal pain, various respiratory symptoms, treatment of existing chronic conditions, and medication refills. From Puerto Rico and the US Virgin Islands, CDC has received data from approximately 1,300 total encounters. The common chief complaints have been related to musculoskeletal pain, injuries due to cuts/lacerations, and normal health maintenance for existing chronic diseases. CDC also works closely with the American Red Cross to monitor data on shelter population, so that health officials can quickly detect if health-related issues arise.

CDC is also providing technical assistance to affected states and territories to address various other health issues such as food safety; water issues including sewage and wastewater; injury prevention from debris and drowning; disease or insect vector control; hazardous waste; shelter assessments; and indoor air quality issues such as carbon monoxide and mold. CDC's Geographic Information Systems (GIS) mapping team is working with the Florida Department of Health to identify the total number of private inundated (flooded) water wells. We are also working with FEMA and the Department of Defense to make recommendations to the Puerto Rico Department of Health (PRDH)

for vector control measures post Hurricane Maria. For example, CDC is supporting local vector control in Puerto Rico by providing technical assistance to the Puerto Rico Vector Control Unit (VCU). Through this effort, CDC is advising the VCU on messaging strategies to encourage community participation in the clean-up of trash that may serve as potential mosquito breeding sites. CDC has also recommended safe water storage with lids or screens to prevent egg-laying by mosquitoes and the continued use of repellent. The Puerto Rico VCU will incorporate this guidance into their messaging campaign and consider the dissemination of repellent to the public. We are also working with Puerto Rico and US Virgin Islands on disinfection of water cisterns.

Identifying and controlling diseases of public health importance in Puerto Rico and the U.S. Virgin Islands is a priority. Of concern, the PRDH sustained significant damage during Hurricane Maria, including to their laboratories. To date, the labs are not able to conduct any public health testing including the ability to confirm diagnoses of infectious and environmental diseases. CDC is working with PRDH and FEMA to get the Puerto Rico public health labs back in operation. In the meantime, CDC is assisting with arranging for packaging and shipping of clinical specimens for suspected priority infectious diseases to the continental U.S. for testing and reporting.

CDC has provided guidance and technical assistance regarding the safety of responders, including respiratory protection and immunization recommendations. For instance, in Puerto Rico, responders were informed of safety hazards associated with exposure to carbon monoxide from power generators, use of protective clothing and boots to prevent cuts and exposure to contaminated water, and the importance of personal hygiene and handwashing. We have also provided technical assistance to state and territorial partners and responder organizations who planned to deploy to Puerto Rico or U.S. Virgin Islands on a variety of topics including proper occupational health and safety precautions for handling human remains, mold remediation, and preventing heat stress.

Another critical component to a successful recovery is the ability to quickly disseminate potential lifesaving public health messages, tools and resources to a wide and diverse audience. CDC's Health Communications Task Force has the responsibility of developing and disseminating key messaging and resources to individuals in the impacted areas. In coordination with federal partners, CDC is disseminating social media messages and public service announcements over operating radio stations and flyers to all residents and mainstream media in English, Spanish, and other languages as requested. CDC and our HHS colleagues are amplifying each other's messages.

CDC developed a suite of safety messages covering several critical topics, including generator safety and carbon monoxide poisoning. CDC is in the process of providing safety fact sheets and flyers to Puerto Rico and the US Virgin Islands for a communications campaign. These messages were also distributed electronically through partners, friends, family, and social media. The Health Communications Task Force also focuses on reaching key clinician audiences with Health Alert Notices and clinician outreach newsletters, and has been successful in reaching approximately one million people in a short period of time. For example, given that many healthcare providers are not familiar with signs and symptoms of carbon monoxide poisoning, CDC provided clinical information about how to diagnose carbon monoxide poisonings.

CDC continues to respond to requests from federal, state, tribal, territorial, and local partners on critical public health recovery efforts. For example, the Texas Department of State Health Services requested CDC's assistance for an investigation to explore possible invasive mold infections following widespread flooding and indoor mold growth from Hurricane Harvey. CDC will assist the investigation by: (1) identifying cases of invasive mold infections at Houston area medical centers to help inform the response; (2) characterizing mold exposures of immunocompromised patients in flood damaged areas

to improve public health and clinical messaging; and (3) assessing the extent of mold in households of immunocompromised patients, to the extent possible. CDC is in communication with public health officials in each area to determine short and long-term gaps and requirements to support their recovery activities.

CDC recognizes that the full recovery from the recent hurricanes will take some time, particularly for Puerto Rico and the Virgin Islands where the damage is extensive, but we are here to continue providing support. We will continue to work with FEMA, and all of our federal partners, over the next several years during this long period of recovery. Thank you again for the opportunity to appear before you today to discuss CDC's hurricane response and recovery efforts. I would be glad to answer any questions you may have.