CDC in Action

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Charlotte Duggan] 2014 was an unprecedented year for the Centers for Disease Control and Prevention. Employees worked 24/7 to protect Americans from several health threats, including Ebola, Entero Virus-D68, and other health threats, such as smoking-related deaths. The Ebola outbreak in West Africa triggered the largest outbreak response in CDC's history. More than one thousand employees are working in Atlanta to develop guidance and teach people about the virus, and hundreds were deployed to the region. Kavitha Muthuswamy is a health communication specialist who spent a month in Sierra Leone.

[Kavitha Muthuswamy] Part of my role was to go to hot spots and find out what was happening in communities and then to work with communities on education and prevention. We heard of rumors of 30 unreported deaths in the Moboki village of central Sierra Leone. We talked to the village headsmen and the community members to find out why the deaths weren't reported; what the current knowledge, attitudes, practices were about Ebola and transmission. We learned that there was a lot of fear, and the fear centered around seeing the ambulances and the entire response team and the different parts of the process as, you know, just a sign of death, and that the people coming out in protective clothing, out of the ambulances to take a sick person were really like angels of death. They had never seen a survivor, and so there was no reason to think that someone could have any other outcome except for death. To increase trust and confidence in the community, we engaged a few key community members to do the education door-to-door within the village and within surrounding villages because they were trusted more. We really tried to engage local chiefs to talk to the village headsman, to ask them to be open about reporting cases of Ebola. One thing that we did do was work with the local health department to call families back with updates about their family members from the holding centers and the treatment units. That built a lot of trust within the community and they were more open to reporting cases and also to receiving ambulances or to getting care.

[Charlotte Duggan] While Kavitha was battling an infectious virus abroad, Dr. Steve Oberste was fighting a viral outbreak in the U.S.: Entero Virus-D68. He's the Chief of CDC's Polio and Picornovirus Lab, and says the 1,100 confirmed cases in the U.S. were the result of the rapid spread of this virus.

[Dr. Oberste] We had seen very, very little activity since the virus was discovered over 50 years ago, only a handful of detections in the U.S. until about five years ago, in which there were some small clusters. We first started seeing the volume really rising and we found that we had to basically retool our entire lab and change our workflows around completely. Normally, our lab receives about five packages of samples per week. Those are for both polio and non-polio entero viruses. During the outbreak, we received as many as 29 in a single day. Because of the number of samples that we had, at one point we had a queue more than 1,000 samples, we had to break it out so different people were responsible for each of the different steps. One person would log them in, another person would do the next pre-processing step, the next person would run the test, and so on. In response to the big outbreak, and because the test we had been using was fairly complicated and required a lot of steps and could not be expanded to large numbers and high

throughput, we developed a specific EV-D68 test that let us run a lot more at one time. So we could run well over 100 samples in a day, if necessary. As a branch chief, I'm very proud of the way my lab has responded and people really stepped up and did things that were outside the norm for them.

[Charlotte Duggan] In 2014, there were other health threats that were harming people such as smoking. As Dr. Ursula Bauer explains, the *Tips from Former Smokers* campaign has been extremely effective.

[Dr. Bauer] Now in its third year, CDC's *Tips from Former Smokers* campaign continues to prove its value to the nation. In terms of lives saved, suffering averted, and health care costs avoided, it's one of the great public health achievements of the decade. In the first year alone, TIPS motivated 1.6 million smokers to make a quit attempt and was responsible for at least 100,000 American smokers quitting smoking permanently. Now, we know the TIPS campaign accomplished this while providing an exceptional return on investment. The campaign cost a mere 480 dollars per smoker who quit, and 393 dollars per year of life saved. The TIPS campaign is truly a best-buy for the American people. I certainly look forward to being part of CDC's amazing TIPS team in 2015. </p>

[Charlotte Duggan] CDC's hard work in 2014 will carry over into the new year as we continue to work on threats like Ebola, EV-D68, and tobacco use, and any unknown public health threats that lie ahead in 2015.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO.