In 2014, the world saw the most expansive and deadly outbreak of Ebola in history, in which more than 28,000 people were infected and 11,000 people died globally. Although the epidemic was mostly contained to West Africa, the magnitude of the emergency in an increasingly globalized world sparked fear that the virus could easily spread through travel. In the United States, Georgia was particularly vulnerable to travel-related Ebola cases, both because it is home to Centers for Disease Control and Prevention (CDC) headquarters, which was continuously sending staff to assist with the outbreak in West Africa, and because the Atlanta Hartsfield-Jackson International Airport was one of five airports that received travelers from West Africa. With help from PHEP-funded staff, the Georgia Department of Public Health reconfigured an existing system to quickly establish an epidemiologic surveillance system capable of rapid detection and identification of public health threats – in this instance, potential Ebola cases.

The incubation period for Ebola virus can be up to 21 days, but Ebola is only contagious after the patient becomes symptomatic. CDC recommended that travelers returning from Ebola-affected countries be monitored for 21 days for symptoms. This placed an extreme burden on the Georgia Department of Public Health, which has a small epidemiology department that needed to monitor nearly 3,000 travelers who would eventually return to Georgia from West Africa.
The 2014 Ebola outbreak required monitoring of all travelers returning from West Africa. The Georgia Department of Public Health modified an existing surveillance system to efficiently monitor more than 100 travelers per day. Within six days, the health department implemented a fully automated patient tracking system that allowed two epidemiologists to monitor more than 100 patients per day and quickly follow up with those who were beginning to show symptoms.

The key to responding so quickly to this monumental need, said Edison, was having a flexible surveillance system already in place and an extremely capable IT team. SendSS was established in 2006 using PHEP funds and has been integral in many outbreaks and emergency responses since then, from foodborne outbreaks to the H1N1 influenza pandemic and the Hurricane Katrina response. In these responses, as with Ebola, fast detection of cases was integral to monitoring for morbidity and controlling and containing the spread of disease.

CDC’s Public Health Emergency Preparedness (PHEP) cooperative agreement program is a critical source of funding, guidance, and technical assistance for state, local, tribal, and territorial public health departments to strengthen their public health preparedness capabilities. Since 9/11, the PHEP program has saved lives by building and maintaining a nationwide public health emergency management system that enables communities to rapidly respond to public health threats.

To learn more about the PHEP program, visit www.cdc.gov/phpr/readiness.