Child Health and Mortality Prevention Surveillance Network (CHAMPS) Program

Every year, six million children die before their 5th birthday. CDC and partners are working to answer the critical question of why. CDC's Division of High-Consequence Pathogens and Pathology (DHCPP) out of the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) has teamed up with domestic and international partners to map the causes of child mortality in developing countries.

The Child Health and Mortality Prevention Surveillance Network (CHAMPS) program is a network of disease surveillance sites in Sub-Saharan Africa and South Asia gathering data about why children under 5 die. Areas covered by the sites experience high child mortality rates, as defined by a population of at least 100,000 people and an under-5 mortality rate greater than 50 per 1,000 live births. Through CHAMPS, minimally invasive tissue sampling (postmortem needle biopsies) on deceased children are gathered to determine causes of death. The ultimate goal of the program is to use the data to inform policies to reduce childhood mortality in these regions.

Currently, six sites have contracts in place, including the following locations:

- Bamako, Mali
- Kisumu, Kenya
- Manica, Mozambique
- Soweto, South Africa
- Balikandi, Bangladesh
- Harar, Ethiopia

CHAMPS began in 2015 with a \$75 million commitment from the Bill & Melinda Gates Foundation to start mapping causes of death in children. The initial focus includes tracking the most preventable causes of mortality among children younger than 5 years of age. The Emory Global Health Institute is the lead partner, with assistance from CDC, the



International Association of National Public Health Institutes, the Public Health Informatics Institute at Emory, and Deloitte Consulting LLP.

DHCPP's Infectious Disease Pathology Branch is the central pathology laboratory for CHAMPS, evaluating specimens by histology for evidence of infectious or other diseases, and performing tissue-based diagnostic testing (immunohistochemistry and PCR) for infectious agents as indicated by the histology. DHCPP has evaluated nearly 700 cases from 4 countries thus far, as parts of both a pilot project and the formal CHAMPS study. As the database of causes of death expands, international health partners will be able to utilize the data to develop policy and health interventions that target causes of death for children under age five, making it possible for future generations to live longer and healthier lives.

