



## **Christopher R. Braden, MD**

Deputy Director of the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)  
Centers for Disease Control and Prevention (CDC)

**Christopher Braden, MD**, is the Deputy Director of the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID). A medical epidemiologist at CDC, Dr. Braden assumed this position in March 2016, and is part of the leadership team overseeing the center charged with the prevention and control of a broad spectrum of infectious diseases, including Ebola, Zika and anthrax, and more common conditions like foodborne diseases and healthcare-associated and antibiotic-resistant infections. In his new role, Dr. Braden often coordinates NCEZID response to large or cross cutting outbreaks.

Dr. Braden has previously served as the director of the Division of Foodborne, Waterborne, and Environmental Diseases, associate director for science in the Division of Parasitic Diseases, and chief of outbreak response and surveillance within the Enteric Diseases Epidemiology Branch, Division of Foodborne, Bacterial and Mycotic Diseases at the National Center for Zoonotic, Vector-Borne, and Enteric Diseases. Dr. Braden also served as a medical epidemiologist in CDC's Division of Tuberculosis Elimination. Dr. Braden rose to the rank of captain in the U.S. Public Health Service but retired from the Commissioned Corps in July 2016.

### **Detecting and stopping outbreaks**

- After the 2010 Haitian earthquake, too many people were dying of cholera, a waterborne disease. Dr. Braden led CDC's action to analyze the situation quickly and set up clinics and cholera treatment centers to provide needed treatment to keep people from dying. Then he put in place a program to provide education to prevent the disease from spreading.
- When an alert Tennessee doctor spotted a rare disease, Dr. Braden headed CDC's investigation to identify contaminated steroid injections as the source of a new type of fungal meningitis and find the best way to treat it. CDC helped notify doctors and patients across the country. The outbreak affected more than 600 people in 20 states and resulted in new guidance to help doctors treat the previously unknown disease and new oversight for compounding pharmacies.
- A series of multistate outbreaks of antibiotic resistant Salmonella with abnormally severe infections spurred CDC investigations. Dr. Braden's team identified raw chicken as the source. Findings resulted in immediate changes by the processing company to improve practices.
- As a deadly E. coli outbreak threatened the lives of children in several states, Dr. Braden pulled together local, state, and federal resources to trace the source. His team found the outbreak was caused by spinach from fields contaminated with virulent E. coli. The investigation spurred rapid action to pull affected products from grocery store shelves. It also resulted in major changes in the produce industry to make produce safer and prevent future outbreaks.
- Dr. Braden represented CDC in a government-wide initiative to identify the foods that cause the most illnesses. He led CDC's analysis of a 2010 FDA regulation related to egg safety by investigating what percentage of Salmonella Enteritidis cases result from eggs compared to other sources. This type of analysis will show whether the rule is decreasing the number of illnesses caused by eggs. Similar analyses can help government understand whether food safety regulations are effective.

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## **Technology for faster, better response**

A proponent of the use of technology in disease detection, Dr. Braden led the establishment of CDC's next generation sequencing program aimed at revolutionizing outbreak surveillance and response. The new technology will allow CDC and other laboratories to identify pathogens faster, with greater sensitivity, and with fewer tests. This will position public health agencies to find disease clusters that current technology cannot detect.

## **Breaking through bureaucracy**

Dr. Braden has made it a personal priority to develop new and stronger relationships with other federal agencies, such as FDA and USDA, and to engage industry and consumer groups alike in finding pragmatic solutions to foodborne illnesses. "None of us has all the information we need to get the answer," he says. "The more information we can assemble, the better and faster we can find solutions to long-term problems." He has established several steering committees to ensure that information is exchanged on a range of food and waterborne health issues.

Dr. Braden was also the associate director for science in the Division of Parasitic Diseases, and chief of outbreak response and surveillance in the Enteric Diseases Epidemiology Branch, Division of Foodborne, Bacterial and Mycotic Diseases. He also served as a medical epidemiologist in the Division of Tuberculosis Elimination in CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

Dr. Braden earned the BS at Cornell University and the MD at the University of New Mexico School of Medicine. He completed an internship and residency in internal medicine and a fellowship in infectious diseases at Tufts New England Medical Center in Boston, MA. In 1993, he became an Epidemic Intelligence Service Officer at CDC. He is a member of the American Society for Microbiology, and an associate editor for the Emerging Infectious Diseases Journal.

Dr. Braden has authored more than 70 peer reviewed publications and textbook chapters.

