

Nearly Half of States Must Improve Outbreak Reporting

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The national cost of foodborne illness has been estimated at the astronomical sum of \$152 billion annually, but the information on who is getting sick and what is causing those illnesses is part of a state-by-state surveillance system that shows mixed results around the country, raising important new questions about how to improve state outbreak reporting.

In 2006, more than 200 people fell ill and 5 died after eating spinach contaminated with deadly E. coli bacteria. So in 2007, which also saw several nationwide outbreaks, state and local public health agencies should have been on full alert to investigate illnesses and report outbreaks to the Centers for Disease Control and Prevention (CDC). According to an analysis of 2007 outbreak reporting data by the nonprofit Center for Science in the Public Interest, outbreak reporting varied widely from state to state: nine states reported 10 to 15 outbreaks per million people, but many others reported only one. If states' reporting performance during 2007 (the most recent year when such information is available) is any indication, at least 23 states need to make dramatic improvements in their surveillance and reporting systems, according to CSPI.

"State and local health departments are our first line of defense when it comes to identifying the food that causes an outbreak," said CSPI food safety director Caroline Smith DeWaal. "But some states may not have enough investigators or the money to train and equip their staff, which can lead to lower-quality investigations and lower rates of reporting."

Oregon and Minnesota are well-recognized as having strong programs for foodborne outbreak surveillance, investigation, and reporting. Those states, which have excellent laboratory facilities and which quickly interview people who test positive for dangerous pathogens, each reported 10 outbreaks per million people in 2007. CSPI considered that a baseline for its analysis, and found that 7 states had even better reporting records, including Maine, Kansas, Wyoming, Vermont, Alaska, Hawaii and North Dakota. Those states generated more reports and provided CDC with better information to prevent future outbreaks.

On the other end of the spectrum, 12 states reported just one outbreak of foodborne illness per million people, and 11 states had reporting rates almost as low. Because there is no reason to think that those states would have such low incidences of outbreaks, CSPI

is concerned that this variability in reporting reflects a failure to identify, fully investigate, and report outbreaks. The 23 states with the lowest reporting rates in 2007 were Delaware, Georgia, Pennsylvania, New York, and Massachusetts, each with three outbreaks per million; Missouri, New Jersey, Virginia, Alabama, West Virginia, and Kentucky, each with two outbreaks per million; and Texas, North Carolina, Indiana, Louisiana, Nebraska, Utah, Arkansas, Montana, New Mexico, Nevada, Mississippi, and Oklahoma, each reporting just one outbreak per million.

In September of 2007, 19-month-old Isabelle Reinert of Sauk Rapids, Minn., became violently ill with unrelenting diarrhea and a 104-degree fever. Her diarrhea persisted for nearly six weeks, and her mother Amy Reinert told the Associated Press that it "was the worst thing I've ever experienced as a parent." Epidemiologists working for the state of Minnesota were eventually able to identify the source of the Salmonella that sickened Isabelle and others that year: Banquet Turkey Pot Pies. That link between the outbreak and ConAgra's pot pies led to a recall of over 3 million pot pies and new package cooking instructions, including advice that the pies should be cooked to 165 degrees F.

Legislation that passed the House of Representatives would help improve state reporting, according to CSPI. The FDA Food Safety Modernization Act, now pending in the Senate, would require FDA to improve coordination between federal, state and local surveillance systems; develop a national network of laboratories; and improve epidemiological tools available to the states. The bill would also integrate foodborne illness surveillance with other bio-surveillance capabilities.

"State outbreak reporting is a vital piece of our national food safety system, and the information gathered in the course of outbreak investigations can reduce the impact of outbreaks and prevent future ones. Action on Senate bill would help strengthen both federal and state food safety programs," DeWaal said.

According to recent research done by S.T.O.P.—Safe Tables Our Priority, a number of factors may also explain the variation in state investigations.

"States' systematic differences in response to foodborne illness case reporting may also explain variations in rates," said S.T.O.P.'s public health specialist, Susan Vaughn Grooters. "Time differences in surveying cases of foodborne illness and lack of integrated data collection may also affect how well states accurately capture data."