



## **An Investigation of State Health Department and National Food Safety Surveillance Concordance**

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Keeneland Conference  
April 2014

# + Systems for Food Safety Surveillance Require Evaluation

The Washington Post

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## Salmonella outbreaks expose weaknesses in USDA oversight

By [Kimberly Kindy](#) and [Brady Dennis](#), Published: February 6

The Agriculture Department inspector showed up at Rick Schiller's home in November to collect potential evidence from his freezer: three pounds of chicken thighs, wrapped in plastic and stamped with a Foster Farms label.

Schiller, a 51-year-old California advertising executive, had recently returned from a five-day stay in the hospital prompted by severe vomiting, diarrhea and an infection that left his joints throbbing and his right leg purple and twice its normal size.

"I've been around the block. I've had some painful things," he said. "But nothing like this."

State lab tests run on Schiller had already confirmed the diagnosis: a [salmonella infection](#) linked to Foster Farms chicken, part of a widespread outbreak that has food-safety advocates and some public health officials warning about the potential for food-borne illnesses to become more and more severe in the age of antibiotic-resistant "superbugs."

Federal regulators and poultry companies are scrambling to find new ways to reduce salmonella contamination, which sickens a million Americans annually. And the Agriculture Department is planning to expand rules to limit salmonella on chicken parts, not just whole birds.

But food-safety groups say this doesn't go far enough and that the USDA should ban the most perilous salmonella strains from poultry altogether, just as it did with other dangerous bacterial strains in many beef products.

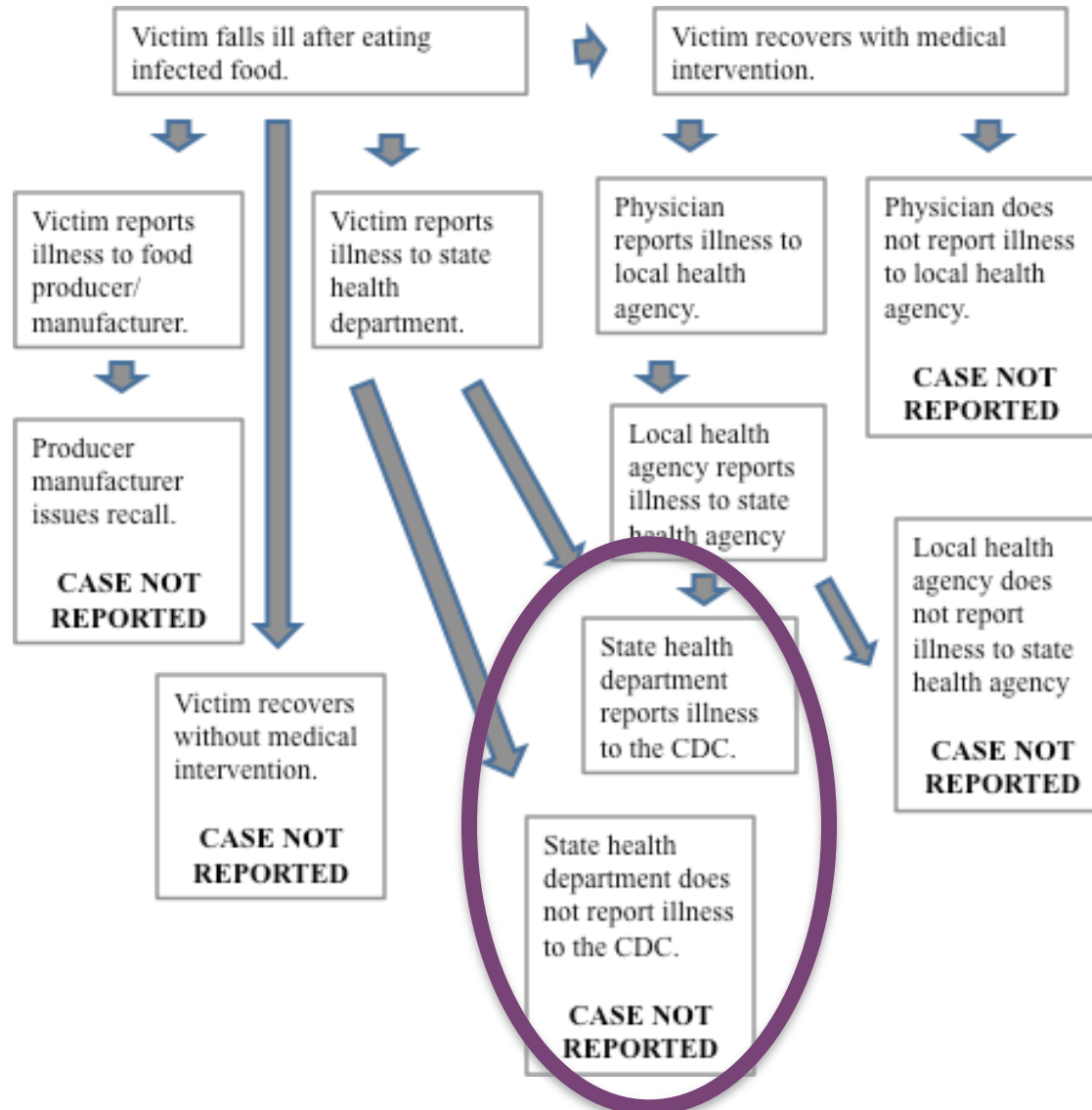
Poultry processors have resisted such an approach, arguing that it would be expensive and ultimately futile because salmonella is so pervasive.

The salmonella strain that sent Schiller to the hospital — a type known as Heidelberg — has been linked to numerous outbreaks in recent years, including the one at Foster Farms, which [officially has sickened](#) 430 people in 23 states but [probably has harmed many more](#). The pathogen has sent double the usual rate of victims to hospital emergency rooms, one reason the Centers for Disease Control and Prevention [called dozens of experts and investigators back to work](#) during the government shutdown this past fall to more closely track the outbreak. Some strains of Heidelberg also have proven resistant to several types of commonly prescribed antibiotics.

"This isn't your grandmother's salmonella," said Sarah Klein, an attorney for the Center for Science in the Public Interest (CSPI), a nonprofit health watchdog group.



# System for Reporting Incidence of Foodborne Illness



Adapted from Centers for Disease Control Description of Process for FBDO Reporting

# + Study Objective

To characterize the informational and organizational structural capacity of state health department foodborne illness reporting systems through comparison of a single channel for food safety surveillance and data collection:  
**state and national notifiable disease lists.**



# + Methodology

- Copies of the most recent version of each state's notifiable disease list were obtained using the State Reportable Conditions Website maintained within the Council of State and Territorial Epidemiologists' (CSTE) online database.
- The 2011 CDC List of Notifiable Conditions was used as a checklist by which state-level lists were compared for collection of data on pathogens responsible for foodborne illness.
- State lists were also analyzed for the presence of food-related pathogens associated with the greatest amount of hospitalization and resulting in the highest costs by the CDC; these include Salmonella, Norovirus, Campylobacter spp., Toxoplasma gondii, and E.coli (STEC) O157.

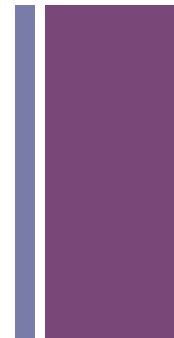
Food Outbreak  
Botulism (Foodborne)  
Botulism (Infant)  
Botulism (Other)  
Brucella  
Campylobacter  
EColi157  
EColi157H7  
Ecoli (AnySerotype)  
Giardia  
Hepatitis A  
Hepatitis E  
Listeria  
Salmonella  
Shigella  
Strep A  
Strep B  
Strep\_AB  
Strep\_ToxicShock  
Strep\_Pneumona  
Trichinella  
Vibrio\_paraahaemolyticus  
Vibrio\_Other  
Vibrio\_Vulnificus  
Vibrio\_0nCholera  
Yersinia

# + Analysis

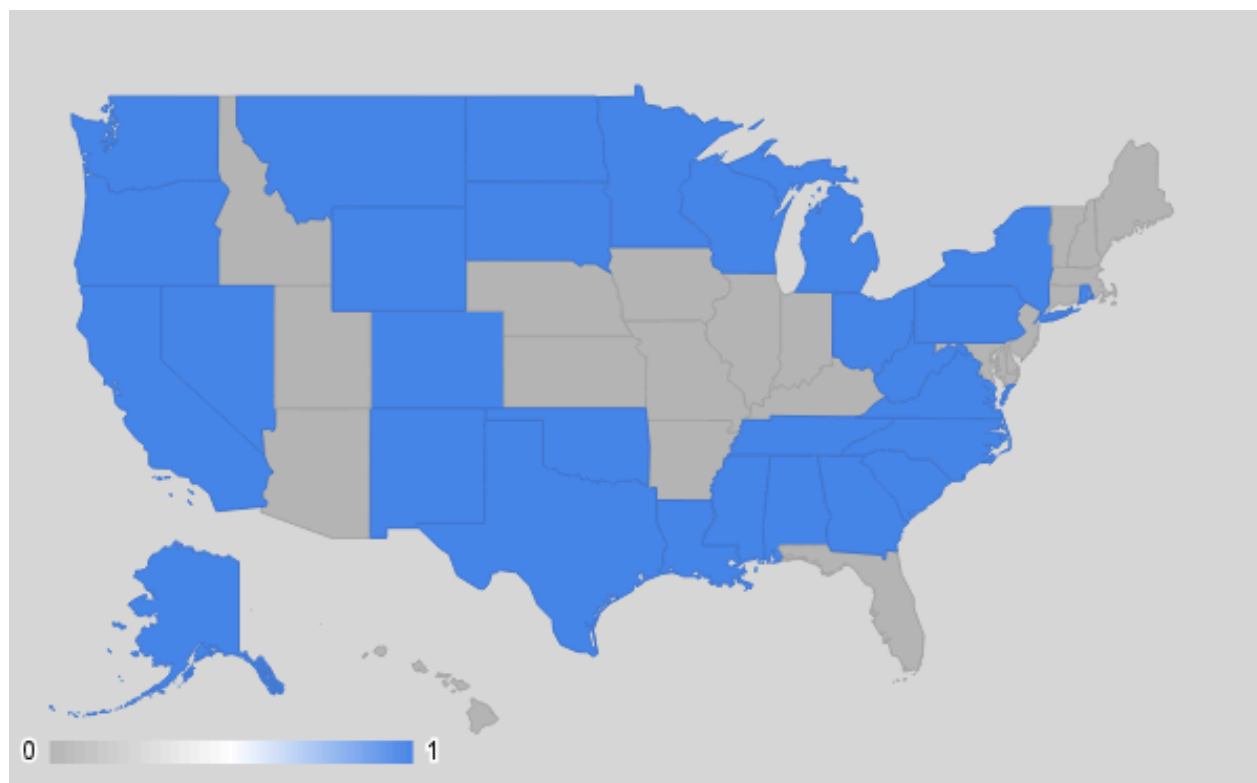


1. Existence of list, list type
2. Frequency of foodborne illness-related pathogen on the lists
3. Year in which each state list was most recently updated.
4. Presence of “food outbreak” as a general category
5. Tracking of geographical patterns
6. Concordance with national list
7. Link to pathogens linked to increased healthcare resource utilization (i.e., hospitalizations)

# + Results



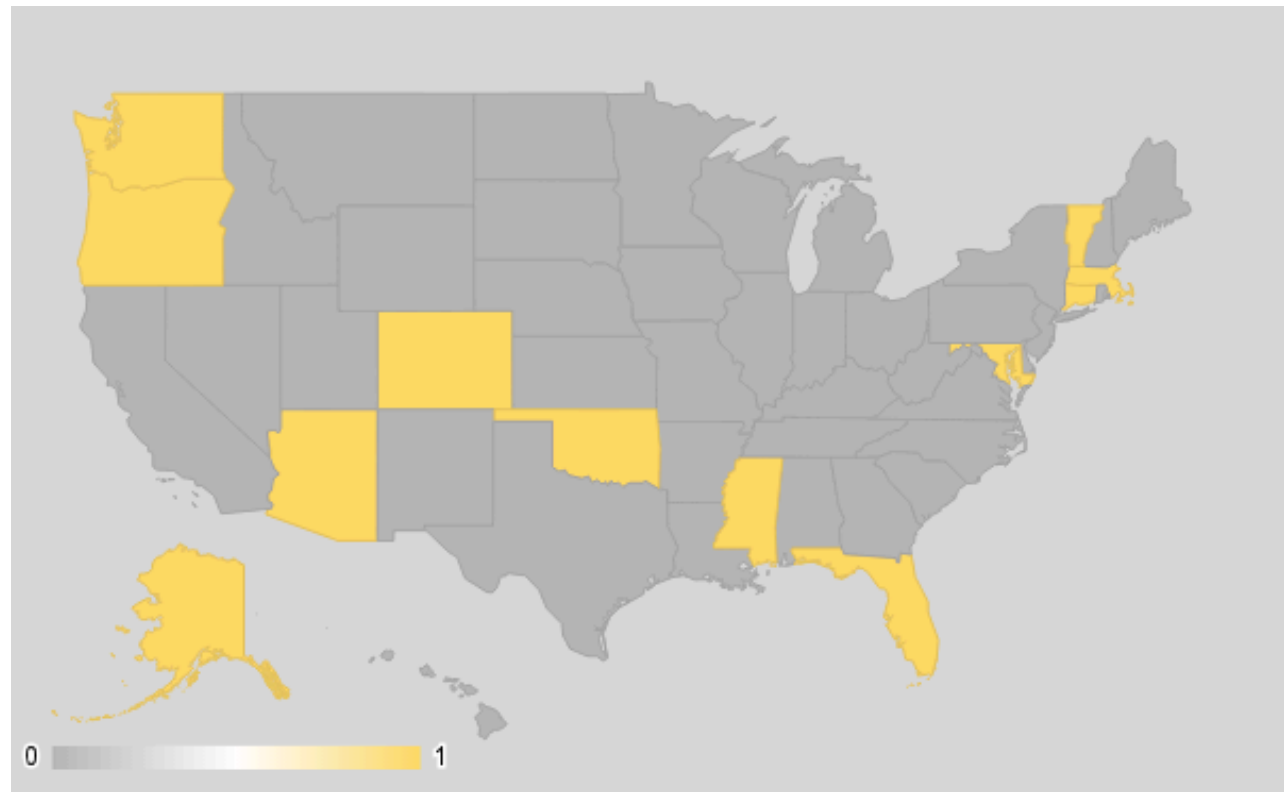
- All 50 states and the District of Columbia maintain a notifiable disease list
- Only 26 (52%) states were updated between 2011 and 2013.
- Twelve states maintain a separate list for healthcare providers and laboratories: Alaska, Arizona, Colorado, Connecticut, Florida, Maryland, Massachusetts, Mississippi, Oklahoma, Oregon, Vermont and Washington.
- Fifty-one percent (n=26) of states collect data on incidence of a food outbreak in general.
- At least 70% concordance between the state and the CDC in only seven states: California (85%), Florida (78%), Ohio (75%), Rhode Island (75%), Connecticut (71%), Delaware (71%) and New Hampshire (71%).



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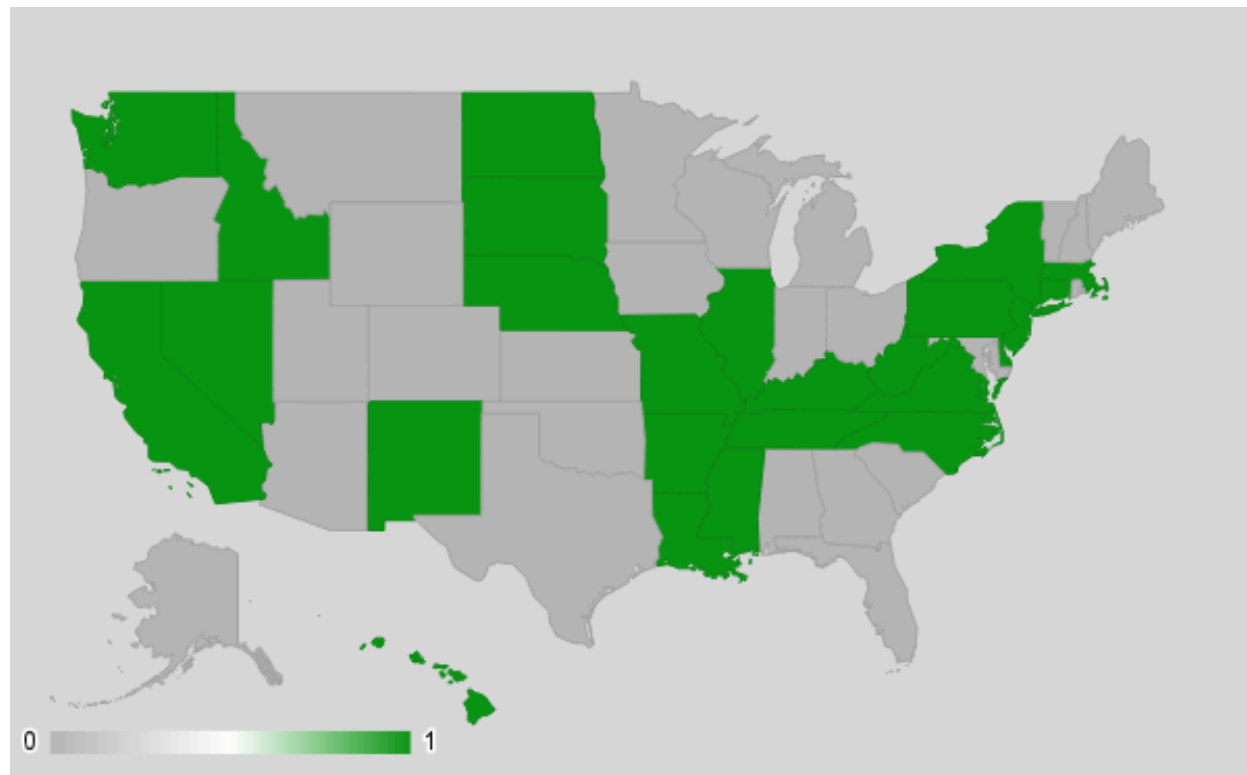
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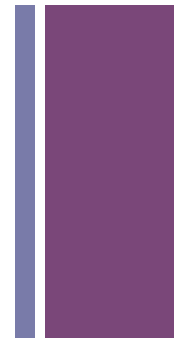


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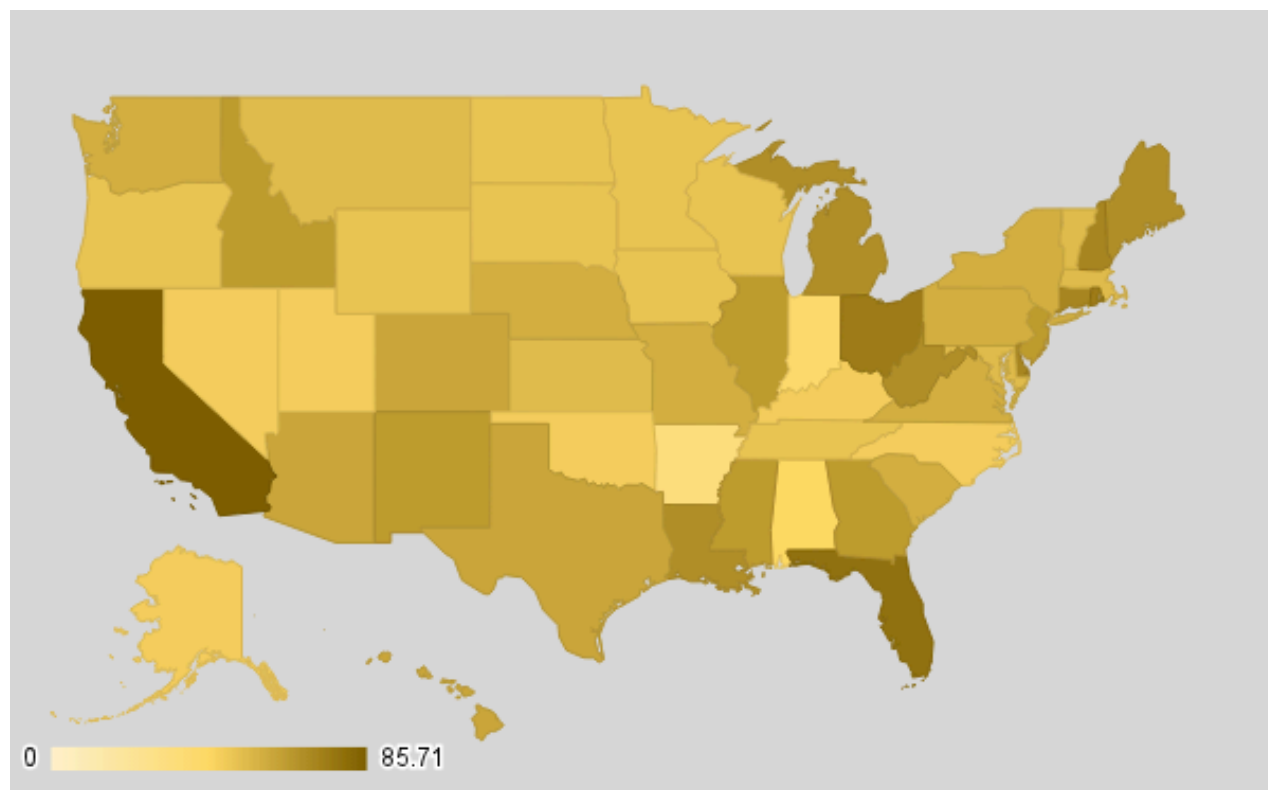
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# + Implications



“We should not wait until hundreds of deaths occur in a food crisis before we address the serious fragmentations in federal oversight of our increasingly global food supply chain.”

- Darrell Issa (R-CA)

# + Acknowledgements



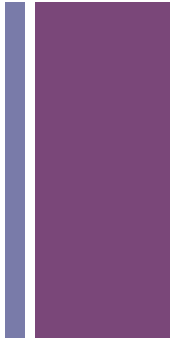
Funding:

National Coordinating Center for Public Health Services and  
Systems Research

Mentor:

Dr. Jennifer Ibrahim

+ Thank you



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