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Select Abstract:

Multistate Outbreak of Multidrug-Resistant Salmonella Heidelberg Infections Linked to Foster Farms Brand Chicken— United States, 2013

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Background: *Salmonella* causes ~1.2 million infections and 400 deaths annually in the United States. On 6/13/2013, PulseNet, a national subtyping network, identified a cluster of human infections of *Salmonella* Heidelberg (SHg) with indistinguishable genetic fingerprints. States and CDC initiated an investigation to identify the source and prevent additional illnesses.

Methods: We defined a case as illness with an outbreak strain with onset 3/1/2013–present. Our investigation included collection of patient exposures and comparison to a population survey, isolate testing for antimicrobial resistance, and traceback and culture of retail chicken. USDA-FSIS conducted intensified *Salmonella* testing at four production facilities.

Results: We identified 403 case-patients in 23 states and PR; 40% (128/318) were hospitalized. A higher percentage (82% [51/61]) consumed chicken prepared at home than reported in the FoodNet Population Survey, (65%, *p*-value <0.002); 80% (16/20) reported eating Foster Farms (FF) brand. One sub-cluster was linked to FF-sourced rotisserie chicken from a single store location which subsequently recalled >23,000 units of rotisserie chicken products. Chicken products collected from FF facilities, FF retail chicken samples, and leftover case-patient food yielded the outbreak strains. Case-patient and poultry isolates were resistant to combinations of seven different antimicrobials, with 50 exhibiting multidrug resistance. On 10/7/13, USDA-FSIS issued an alert about chicken from three FF facilities, reminding consumers to properly handle raw poultry. On 10/11/13, FF began implementing process enhancements.

Conclusions: This outbreak, in which epidemiologic, traceback, and laboratory evidence identified FF chicken as the source, highlights the need for more rigorous *Salmonella* control in raw chicken products. In response, FF implemented measures to decrease *Salmonella* burden in chicken parts, which may stimulate nationwide adoption of more stringent standards by other producers.

Keywords: *Salmonella*, disease outbreaks, food poisoning