

***Salmonella* Braenderup Infections Associated with Poultry Contact**

October

Olmsted County/Multiple states

On October 1, 2012, the Minnesota Department of Health (MDH) Public Health Laboratory identified a *Salmonella* Braenderup case isolate that matched a nationwide cluster consisting of cases from 10 states with matching pulsed-field gel electrophoresis (PFGE) patterns (Minnesota subtype designation BR88). The Minnesota case was interviewed on October 12, 2012 and reported contact with live chicks. An investigation was initiated.

A case was defined as a Minnesota resident who had a culture-confirmed infection with *S. Braenderup* BR88 and illness onset from July 25, 2012 through December 13, 2012 (the time frame used for the national investigation). All *Salmonella* cases reported to MDH are interviewed about food consumption, animal contact, and other potential exposures as part of routine enteric disease surveillance. The case was also asked questions regarding the source of their live chicks.

Only one case was identified in Minnesota, a 6-year-old male with illness onset on August 30. Symptoms included diarrhea, nausea, vomiting, cramps, and a fever of 102° F. Illness duration was 8 days. The case was not hospitalized.

The case's parents could not remember the purchase date of the chicks, but they knew the chicks were delivered to their home on August 24. The chicks were purchased directly from a hatchery in Webster City, Iowa. After the initial interview, MDH was not able to reach the case household to ask for permission to send fecal sample collection kits to the household. Therefore, no chick fecal samples were collected for testing.

Forty-five *S. Braenderup* outbreak cases were identified in 23 other states. Illness onset dates ranged from July 25, 2012 through December 13, 2013. Sixty-four percent of cases were female, and ages ranged from <1 to 88 years (median age, 23 years). There were six hospitalizations and no deaths. Twenty-six (74%) of 35 cases with available exposure information reported contact with live poultry prior to illness onset. Twelve potential source hatcheries in nine different states were identified. These included a hatchery in Webster City, Iowa; a hatchery in Lebanon, Missouri; a hatchery in Cameron, Texas; a hatchery in Portales, New Mexico; a hatchery in Caldwell, Indiana; a hatchery in Portland, Oregon; a hatchery in Polk, Ohio; a hatchery in Cincinnati, Ohio; a hatchery in Estacada, Oregon; a hatchery in Lancaster, California; a hatchery in Gonzales, California; and a hatchery in Fresno, California. All 12 hatcheries were contacted and asked to participate in a conference call regarding this outbreak. The Centers for Disease Control and Prevention (CDC) hosted the call and asked if hatcheries would be willing to work with CDC on these issues and if they would complete a survey.

This was an outbreak of *S. Braenderup* infections associated with live chicks. Six cases, including the Minnesota case, reported the hatchery in Webster City, Iowa as their source of live poultry, while the remaining cases reported one or more of 11 other hatcheries. CDC planned to work with all 12 hatcheries on voluntary *Salmonella* controls going forward. Contact with live poultry, particularly with young poultry, is a well-known risk factor for *Salmonella* infections in humans.