Multistate Salmonella Poona Outbreak Linked to Cucumbers — Alaska 2015

Background
On August 18, 2015, the Centers for Disease Control and Prevention (CDC) launched an investigation regarding a cluster of 32 cases of Salmonella Poona (S. Poona) infection affecting multiple states, including one case in Alaska. Clinical isolates from the 32 cases matched by pulsed field gel electrophoresis (PFGE). Subsequently, numerous additional cases were identified nationally and in Alaska. The outbreak was linked to consumption of raw cucumbers imported from Baja, Mexico. This Bulletin features a S. Poona outbreak at a daycare center, summarizes the Alaska cases, and recaps response efforts undertaken to control the daycare center outbreak and prevent additional cases in the wider community.

Alaska Daycare Center Outbreak
On August 24, the Section of Epidemiology (SOE) received a report from a local daycare center (DCC) of two children diagnosed with salmonellosis. On August 26, four additional cases were reported (two of whom were family members of the DCC cases). SOE initiated an investigation in collaboration with Municipality of Anchorage (MOA) staff to determine the cause of the outbreak. On August 28, the Alaska State Public Health Laboratory (ASPHL) reported that six patients tested positive for S. Poona with matching PFGE patterns. Additional case finding efforts identified a total of seven laboratory-confirmed cases and three probable cases.

MOA Public Health Nurses joined DCC staff to interview ill persons for risk factors associated with salmonellosis. Meals served at the DCC; no food safety violations or ill kitchen staff were reported. As the national outbreak evolved and cucumbers were suspected, investigators discovered that cucumbers had been served at the DCC. Therefore, on August 28, DCC staff were advised to immediately throw away all cucumbers.

Summary of All Identified Alaska Cases
In total, 17 laboratory-confirmed and five probable S. Poona cases were identified in Alaska with onset dates ranging from July 28 to October 6 (Figure); 77% (17/22) of the patients were female. Patient ages ranged from 3 months to 75 years; 77% (17/22) were aged <18 years. Cucumber consumption was explicitly reported by 13 of the 17 lab-confirmed patients, including the ill children at the DCC. Cucumber consumption was not explicitly reported by any of the five probable cases, nor any of the cases with illness onset after September 1, suggesting that person-to-person (P2P) spread was likely to have occurred. Five ill persons were hospitalized; none died.

Traceback
The Alaska Department of Environmental Conservation (DEC) initiated a traceback investigation on August 31, and determined that cucumbers consumed by Alaska patients in all the different venues were sourced from the same local produce distributor, who obtained them from a California distributor -- Ayres, DEC Food Safety and Sanitation Program, and Willy Mamtchueng, BSN, RN, MOA.

Figure. Case of Salmonella Poona (N=32) Linked to Imported Cucumbers, Southcentral Alaska July – October, 2015

Recall Dates

1. For a current list of food recalls that affect Alaska, refer to: http://dec.alaska.gov/ch/fs/recallsalerts.html
2. Salmonellosis risk can be reduced by properly cooking foods, washing fresh foods, and paying strict attention to hygiene when ill or when caring for others who are ill.
3. Salmonellosis is a condition reportable by both health care providers and laboratories. See reporting details at: http://dhss.alaska.gov/dph/Epi/Pages/pubs/conditions
4. Providers should obtain stool culture for bacterial and viral testing in patients with acute diarrheal illness.

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References

(Contributed by Ginger Provo, BSN, SOE, Jereniv Ayres, DEC Food Safety and Sanitation Program, and Willy Mamtchueng, BSN, RN, MOA.)