Multistate Outbreak of E. coli Infections Linked to Romaine Lettuce

Posted: November 27, 2019
Updated: December 04, 2019, December 19, 2019
Outbreak Status: Ongoing

The New Jersey Department of Health (NJDOH) is working with the CDC (Centers for Disease Control and Prevention) and public health and regulatory officials in several states on a multistate outbreak of Shiga toxin-producing *Escherichia coli* O157:H7 infections linked to romaine lettuce.

- *Escherichia coli* (*E. coli*) are a large and diverse group of bacteria found in the environment, foods, and intestines of people and animals.
- Symptoms of *E. coli* vary but most people infected develop diarrhea that is often bloody, vomiting, fever and abdominal cramps anywhere between 1-10 days after eating or drinking something that contains the bacteria and illness typically lasts 5 to 7 days.
- Some kinds of *E. coli* make a toxin called Shiga toxin and these bacteria are called ‘Shiga toxin-producing *E. coli* or STEC for short. The most commonly identified STEC in North America is *E. coli* O157:H7; others in the STEC group are called non-0157 STEC.
- Individuals usually recover without treatment however in some people, the diarrhea may be severe enough to require hospitalization.
- Some types of STEC frequently cause severe disease, including bloody diarrhea and hemolytic uremic syndrome (HUS) which is a severe complication characterized by renal failure.
- We encourage people to contact their health care provider if they have diarrhea that lasts for more than 3 days or if diarrhea is accompanied by high fever, blood in the stool, or so much vomiting that they cannot keep liquids down and they pass very little urine.
- Children younger than 5 years, adults older than 65 years, and people with weakened immune systems are more likely to have severe illness.

**Outbreak Summary:**

<table>
<thead>
<tr>
<th></th>
<th>Case Count</th>
<th>States/Counties</th>
<th>Illness Onset Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>138</td>
<td>25</td>
<td>09/20/19 - 12/01/19</td>
</tr>
<tr>
<td>NJ</td>
<td>9</td>
<td>6</td>
<td>10/28/19 – 11/11/19</td>
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</tbody>
</table>

**Key Points:**

- As of December 19, 2019; 138 people infected with the outbreak strain of *E. coli* O157:H7 have been reported from 25 states. Illnesses started on dates from September 20, 2019, to December 1, 2019. Ill people range in age from 1 to 89 years, with a median age of 26 years and 62% are female. Of 136 people with information available, 72 people have been hospitalized, including 13 people who developed Hemolytic Uremic Syndrome, a type of kidney failure. No deaths have been reported.
- NJ has 9 cases associated with this outbreak from 5 counties; Atlantic (1), Burlington (3), Camden (1), Cumberland (1), Monmouth (1) and Ocean (2). Illness onsets range from October 28, 2019, to November 11, 2019, ill people range in age from 13 to 52 years, 78% are male, 7 ill people were hospitalized and discharged and none developed HUS. No deaths have been reported.
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- NJDOH is currently investigating recent *E. coli* cases that have been reported to see if they could be associated with this outbreak.
- Epidemiologic and traceback evidence indicates that romaine lettuce harvested from the Salinas, California growing region is a likely source of the outbreak. No common grower, supplier, distributor, or brand of romaine lettuce has been identified.

Advice to Consumers/Retailers:

- Most romaine lettuce products are labeled with a harvest location and all types of romaine lettuce grown in Salinas, California should be thrown away.
- Consumers should discard all types or uses of romaine lettuce, such as whole heads of romaine, hearts of romaine, and bags and boxes of precut lettuce and salad mixes that contain romaine, including baby romaine, spring mix, and Caesar salad if the harvest area is unknown.
- Restaurants and retailers should not serve or sell any romaine lettuce, including salads or salad mixes containing romaine from Salinas, California.
- Drawers and shelves in refrigerators where lettuce was stored should be washed and sanitized. Additional guidance on cleaning can be found below; [https://www.cdc.gov/foodsafety/communication/clean-refrigerator-steps.html](https://www.cdc.gov/foodsafety/communication/clean-refrigerator-steps.html).

Advice to Clinicians:

- Some studies have shown that administering antibiotics to patients with *E. coli* O157 infections might increase their risk of developing hemolytic uremic syndrome (a type of kidney failure), and the benefit of antibiotic treatment has not been clearly demonstrated. Antibiotics are not routinely recommended for patients with *E. coli* O157 infections or for patients in whom *E. coli* O157 infection is suspected.

Additional Resources:

- [https://academic.oup.com/cid/article/65/12/e45/4557073 2017](https://academic.oup.com/cid/article/65/12/e45/4557073 2017) (IDSA Practice Guidelines)
- [https://www.cdc.gov/ecoli/index.html](https://www.cdc.gov/ecoli/index.html) (CDC *E. coli* Homepage)
- [https://www.nj.gov/health/cd/topics/foodborne.shtml](https://www.nj.gov/health/cd/topics/foodborne.shtml) (NJDOH Foodborne Illness Homepage)