E. Coli O157:H7 Outbreak in a childcare center: Local view of a national outbreak

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TOPIC/TARGET AUDIENCE: Communicable disease investigators, environmental health specialists, food-borne illness professionals

ABSTRACT: Background: Multnomah County Health Department Communicable Disease Services (MCHD/CDS) investigated an outbreak of E. coli O157:H7 in a childcare center that was linked to the national I.M. Healthy Soynut Butter outbreak.

Methods: Cases were identified through electronic lab reports, telephone interviews, and online surveys. A confirmed case was lab-confirmed O157 STEC or PFGE match in students, staff, or classroom volunteers at the daycare with onset on or after February 1, 2017.

Results: There were 7 confirmed cases with onsets between 3/2/17 and 3/13/17. There was 1 hospitalization, 1 diagnosis of HUS, and no deaths. We received 96/192 responses (50%) to the parent survey and 11/50 responses (22%) to the staff survey.

Conclusions: Qualitative interviews and testing ultimately identified the same strain of E. coli O157:H7 in soynut butter samples and case specimens as the one implicated in the national outbreak. The illness was contained to one classroom, and there was no evidence of widespread E. coli illness in the school. Control measures were put into place for the duration of the outbreak, and MCHD Environmental Health performed daily site visits to the childcare center. The outbreak was declared over on April 3, 2017.

OBJECTIVE(S):

- Discuss methods used in a foodborne-illness outbreak investigation in a childcare center
- Explain control measures used to contain disease spread in an outbreak setting
- Describe the risks of E. coli infection in a childcare setting

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