

Introduction to Communicable Disease Surveillance and Investigation in North Carolina



Shigellosis Outbreak Guidance

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Learning Objectives

- Recognize the start of a Shigellosis outbreak
- Locate resources to manage a Shigellosis outbreaks
- Identify three control measures to prevent secondary cases of Shigellosis in a child care facility



Overview

- Background
 - Clinical picture
 - Case definition
- Outbreaks
 - Recognition
 - Response
- Resources



What is Shigellosis

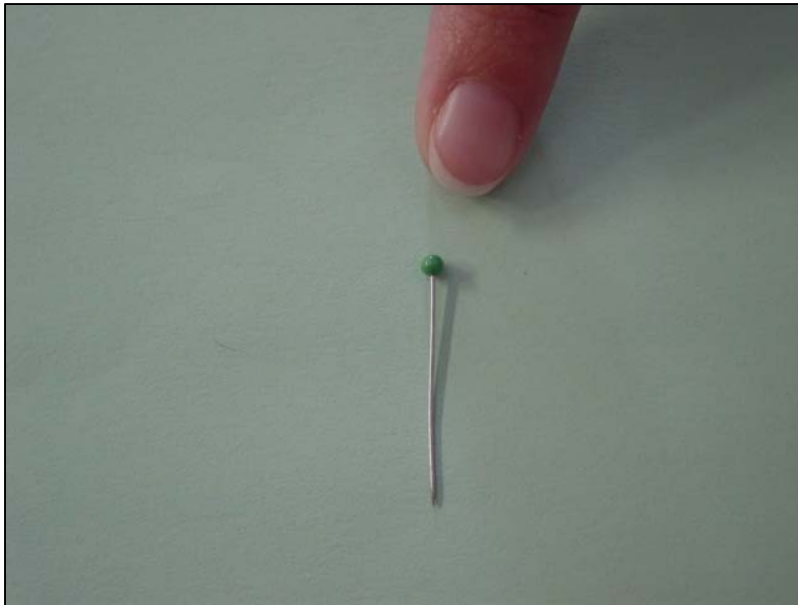


Clinical Picture

- Variable severity of diarrhea, fever, nausea, cramps, and tenesmus. Asymptomatic infections may occur.
- Typically 1-4 day incubation
- Most infections with *S. sonnei* are self-limiting (48-72 hours)



Highly Contagious



400 organisms can fit
on the head of this pin

As little as 10 can
produce symptoms

Case Classification

- Confirmed
Isolation of Shigella (culture)
- Probable
Clinically compatible + epi-link
- Suspect
Identification of Shigella from non-culture method



One Confirmed Case

Exclude from

- Child care
- Health care
- Food handling

until asymptomatic AND negative stool culture



Return to Childcare/ High Risk Occupations

Return when asymptomatic AND...

- 1 negative stool culture or PCR (child care attendee)
- 2 negative stool cultures (child care worker, health care worker, food employee)



Recognizing and Responding to an Outbreak



One (1) Conf Case in Child Care

Recognition

One case is not an outbreak,
but could be an early warning

Response

Swift and thorough before
things get out of hand.

Exclusion of Ill
Increased hand washing
Environmental cleaning
No new admissions



Two (2) Conf Case in Child Care

Recognition

This is an outbreak!

Response

Swift, thorough, and hold people accountable.

Exclusion of Ill

Increased hand washing

Environmental cleaning

No new admissions

Letter home to parents

Testing of case's direct contacts



Community Outbreak

Recognition

Cases in multiple facilities in
the county
(i.e. child care, schools)

Response

Swift, thorough, and hold
people accountable.

**Same as previous, even for a
single case of diarrhea with
no alternative diagnosis**



Resources

2013 Shigella Toolkit

- Location: Online NC CD Manual
- Content: Investigation steps; Control measures; Guidance for child care and schools; Template letters; Parent/child/staff questionnaires;



Take Home Message

Hand washing, hand washing, hand washing!!

- Fecal-oral
- Human reservoir
- Low infectious dose



Let's review...



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- Recognize the start of a Shigellosis outbreak
- Locate resources to manage a Shigellosis outbreak in a child care facility
- Identify three control measures to prevent secondary cases of Shigellosis in a child care facility



Thank you and good luck!

