

What We Know

Outbreak

- County, state, and federal officials are continuing to work together to investigate the current shigellosis outbreak in Genesee and Saginaw counties, Michigan.

- As of October 7, ~~1302~~ cases of shigellosis have been reported in Genesee and Saginaw counties since ~~March 1, 2016~~ November 2015.

- No source has been identified for the outbreak at this time, but the characteristics of the outbreak are similar to other shigellosis outbreaks caused by person-to-person transmission within a community. This is the most common route of transmission for shigellosis outbreaks in the United States.

- *Shigella* germs are present in the stools of infected persons while they have diarrhea and for up to a week or two after the diarrhea has gone away.
- Transmission of *Shigella* germs occurs when people put something in their mouths or swallow something that has come into contact with stool of a person infected with *Shigella*.

- Shigellosis is very contagious. The best thing people can do to keep from getting sick from *Shigella* bacteria and other infectious diseases is to wash their hands with soap and water, particularly after using the bathroom, after changing diapers, and before handling food.
 - The public water in Genesee and Saginaw counties is safe to use for regular handwashing, according to the results of EPA's ongoing water quality testing.
 - If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60% alcohol. This type of hand sanitizer will kill *Shigella* bacteria but does not kill all types of germs and will not work well if hands are visibly greasy or dirty.
 - CDC recommends washing hands with soap and water as soon as possible after using hand sanitizer.
 - Other hand-hygiene products, such as baby wipes, do not completely remove germs and are not recommended for cleaning hands.

- Symptoms of *Shigella* infection can include diarrhea that is sometimes bloody, stomach cramps, and fever.
- Symptoms generally resolve within 5 to 7 days without treatment.
- CDC recommends that people who believe they have shigellosis see their health care provider.

October 7, 2016

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Commented [YKM(1)]: We are in the process of confirming the case counts in Saginaw county since November 2015.

Commented [OJ(2R1)]: Update to show 130 cases March 1

Filter Study

- Wayne State University and the University of Michigan are collaborating on a study of the lead point-of-use tap filters in Flint to develop better guidance on how often they should be replaced.
- As part of this study, researchers have been testing the water and filters in people's homes in Flint for traces of bacterial DNA. As expected, the researchers have found traces of bacterial DNA as they would in other communities.
- At this time, researchers have not found any evidence of *Shigella* bacteria in the water or on the filters.
- Testing results have shown pieces of DNA from other bacterial families on the filters. The researchers are continuing testing but have not found evidence of bacteria that would cause illness. This testing does not indicate if the bacteria are alive.
- The water filter study is ongoing, and results will be released to the public once the study is complete.

What We Don't Know/What We'd Like to Know

- While the source of this outbreak has not been identified, some surveys of residents in the area suggest that people have changed their hygiene habits, possibly due to concerns about the water.
- County, state, and federal officials are planning to conduct a study that will compare people who have gotten sick with shigellosis to people who are not sick. This study will help identify factors that could be contributing to the outbreak.
 - As part of the study, researchers may be collecting information from Genesee and Saginaw county residents about foods they have eaten, places they have traveled, hygiene behaviors, water use, diaper changing in the home or interaction with childcare facilities, and other behaviors and factors known to cause transmission of shigellosis within a community.
 - Results of the study will be shared with the public once complete.
- Currently, there is no evidence that suggests that the shigellosis outbreak is being caused by contamination of the public water system in Flint but we will continue to investigate all possible routes for spreading the bacteria.
 - The EPA continues to monitor the quality of the water system in Flint.
 - The levels of chlorine found in the distribution system are known to kill *Shigella* bacteria.
 - People who may be concerned about the presence of *Shigella* or any other bacteria in their water, such as families with infants or those who are immunocompromised, may choose to use bottled water for cooking and drinking.

Commented [YKM(3)]: CDC does not recommend conducting environmental testing unless results of the epidemiologic investigation indicate a need for such tests; therefore, we have not mentioned environmental testing these TPs

October 7, 2016

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