

What is staphylococcal food intoxication?

Staphylococcal food intoxication is a gastrointestinal illness caused by eating foods contaminated with toxins produced by *Staphylococcus aureus* (staph). *Staphylococcus aureus* is a common bacterium found on the skin and in the noses of up to 25 percent of healthy people and animals. Usually it causes no illness in these healthy people unless it is transmitted to food products. It has the ability to make several types of toxins which can cause food poisoning.

Who is at risk for staphylococcal food intoxication?

Any person can develop gastrointestinal symptoms after ingesting staphylococcal toxins.

What are the symptoms of staphylococcal food intoxication?

People exposed to staphylococcal toxins may experience severe nausea, vomiting, stomach cramps and diarrhea. Illness typically lasts one day, but may last up to three days.

How soon do symptoms appear?

Staphylococcal toxins are fast acting. Symptoms usually develop within one to eight hours, but they can occur as quickly as 30 minutes.

How is staph food intoxication spread?

Food workers who carry staph and then handle food without washing their hands contaminate foods by direct contact. If these contaminated foods are not subsequently cooked, are heated or refrigerated inadequately or remain at room temperature for several hours, the bacterium begins to multiply and produce toxin in the food. Staphylococcal toxins are heat resistant and cannot be destroyed by heat. Staph can also be found in unpasteurized milk and cheese products. *Staphylococcus* is salt tolerant and can grow in salty foods like ham. Other foods at high risk of producing toxins from staph are those that are made by hand and require no cooking. Food items that have been associated with staph food intoxication include sliced meat, puddings, pastries and sandwiches. The foods may not smell bad or look spoiled even when the toxins are present.

When and for how long is a person able to spread the disease?

Staphylococcal toxins are not spread from person to person.

How is a person diagnosed?

Laboratory tests can identify *Staphylococcus aureus* in the stool or vomit of infected individuals. Testing is usually not done for individual patients but is reserved for outbreaks involving several persons.

What is the treatment?

Most people with staphylococcal food intoxication will recover on their own or only require fluids to prevent dehydration. Antibiotics are not effective in treating this illness.

Does past infection make a person immune?

No.

Should children or others be excluded from child care, school, work or other activities if they have staph food intoxication?

A child should be excluded from child care if he/she has:

- Vomited two or more times within the previous 24 hours, unless the vomiting is determined to be caused by a noninfectious condition and the child is not in danger of dehydration
- Diarrhea, if stool is not contained in the diaper or if diarrhea frequency exceeds two or more stools above normal for that child
- Or is unable to participate and the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group

A child or an adult should be excluded from school or work until diarrhea resolves. An adult who prepares or handles food should be excluded from work until 24 hours after diarrhea resolves.

Individuals with boils, abscesses and other infected lesions of hands or wrists or exposed portions of the arms should be excluded from food handling unless the area can be covered with an impermeable cover. Single-use gloves should always be worn over the impermeable cover when the wound is on the hands or wrist. Infected wounds on other parts of the body should be kept covered with a bandage. Strict hand hygiene before food handling should be enforced.

What can be done to prevent the spread of staph food intoxication?

- Wash hands and under fingernails vigorously with soap and water before handling and preparing food.
- Do not prepare food if you have a nose or eye infection.
- Do not prepare or serve food for others if you have wounds or skin infections on your hands or wrists.
- Keep kitchens and food-serving areas clean and sanitized.
- If food is to be stored longer than two hours, keep hot foods hot (over 140° F) and cold foods cold (40° F or under).
- Store cooked food in a wide, shallow container and refrigerate as soon as possible.

Additional Information:

Additional information is available by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resources:

1. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. [Children in Out-Of-Home Care]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2015: 132-151.
2. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. [Staphylococcal Food Poisoning]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2015: 714-715.
3. Centers for Disease Control and Prevention. (2015). www.cdc.gov/foodsafety/diseases/staphylococcal.html.