



Salmonellosis

Adam was so excited when he brought his new box turtle home. But a few days later, he got a really bad stomachache and was running to the bathroom a lot. When he saw blood in the toilet after he pooped, his mom took him to the doctor. Once the doctor heard about Adam's new turtle, he did a few tests and diagnosed Adam with salmonellosis.

What Is Salmonellosis?

Salmonellosis (say: sal-muh-neh-LOW-sis) is an illness caused by *Salmonella* (say: sal-muh-NEH-luh) bacteria. If the bacteria find their way into a person's stomach and intestines, they can cause cramps, nausea, vomiting, and diarrhea. There are several different types, or strains, of *Salmonella* bacteria, and they all can make you sick.

What Causes *Salmonella* Infections?

Salmonella can be found in soil, water, raw food, and the bowel movements (poop) of some animals, including reptiles like turtles and snakes. Some kids get sick because of a pet or other animal. If poop gets on the animal's skin, the bacteria will get on the skin, too. Then a person who touches the animal can get the bacteria and might develop salmonellosis.

Someone also can be infected by eating food that has not been handled or prepared well. Sometimes *Salmonella* bacteria are found in raw foods — such as eggs, milk, chicken, turkey, beef, and pork — that have touched animal poop. If these foods are not processed or cooked well, the bacteria stay alive in the food and can infect someone who eats it.

People who have salmonellosis have the bacteria in their own poop, too. So if the sick person doesn't wash his or her hands carefully after using the bathroom and then touches food, the bacteria can get in the food and spread to other people.

What Are the Signs of a *Salmonella* Infection?

People who get salmonellosis may have these symptoms:

- nausea
- vomiting
- painful stomach cramps
- diarrhea, which could be bloody

Salmonellosis also may cause a headache and fever. Keep in mind that other illnesses also can cause all these symptoms, so it's important to tell your parent and see a doctor to figure out if you have salmonellosis.

What Will the Doctor Do?

To diagnose salmonellosis, a doctor will examine you and ask questions, like what you might have eaten recently. The doctor might ask you for a stool sample (some poop), which can be sent to a lab and tested for *Salmonella* bacteria.

If a healthy kid has salmonellosis and the symptoms aren't too bad, the doctor might say that no special medicine or treatment is necessary. The symptoms usually last a few days and most people feel pretty good again within a week.

But if someone's symptoms are severe, or if a tiny baby or anyone who has another illness like cancer or HIV gets salmonellosis, the doctor may do some more tests to figure out the best kind of medicine for them.

How Can I Prevent *Salmonella* Infections?

Because *Salmonella* bacteria are spread through poop, one of the best ways to prevent illness is to wash your hands often with warm water and soap.

Make a special effort to wash your hands in these situations:

- right after playing with a pet or animal (especially a reptile or chicken)
- right after you use the bathroom
- before preparing any food, like cutting up vegetables for dinner
- before eating any food

That's a lot of hand washing, but it's worth it! Even if you were to get *Salmonella* bacteria on your hands, you will get rid of them before they can make you sick.

You also might remind other members of your family to wash their hands often. People who cook meals should wash their hands before touching any food. It's also important to use water and soap to clean kitchen counters, cutting boards, and knives after they touch raw foods.

Another way to protect against *Salmonella* infection is to never eat raw or undercooked eggs, meat, chicken, or turkey. Meat, chicken, and turkey should be cooked until they are no longer pink in the center, and eggs should be cooked so they aren't wet and runny. Raw fruit and vegetables make healthy snacks, but wash them well before you start munching.

If you choose a reptile for a pet, remember that many reptiles carry *Salmonella*. Be sure everyone washes up after touching the animal or its cage.

Salmonellosis is no fun, but the good news is that most people get better pretty quickly.

Reviewed by: Rebecca L. Gill, MD
Date reviewed: November 2017

Note: All information on KidsHealth® is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult your doctor.

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E. Coli

What Is *E. Coli*?

E. coli is a common type of bacteria that can get into food, like beef and vegetables. *E. coli* is short for the bacteria's medical name *Escherichia coli*. The strange thing about these bacteria — and lots of other bacteria — is that they're not always harmful to you.

E. coli normally lives inside your intestines, where it helps your body break down and digest the food you eat. Unfortunately, certain types (or strains) of *E. coli* can get from the intestines into the blood. This can make a person pretty sick.

Someone who has *E. coli* infection may have these symptoms:

- bad stomach cramps and belly pain
- vomiting
- diarrhea, sometimes with blood in it

How Do *E. Coli* Infections Happen?

One very bad strain of *E. coli* was found in fresh spinach in 2006 and some fast-food hamburgers in 1993. Beef can contain *E. coli* because the bacteria often infect cattle. It can be in meat that comes from cattle and it's also in their poop, called manure. Cow poop in your food? How does that happen? Not on purpose, of course, but it can happen if the manure is used for fertilizer (a common practice to help crops grow) or if water contaminated with *E. coli* is used to irrigate the crops.

What Foods Can Cause *E. Coli* Infections?

E. coli can be passed from person to person, but serious *E. coli* infection is more often linked to food containing the bacteria. The person eats the contaminated food and gets sick.

Here are some foods that can cause *E. coli* poisoning:

- undercooked ground beef (used for hamburgers)
- vegetables grown in cow manure or washed in contaminated water
- fruit juice that isn't pasteurized (pasteurization is a process that uses heat to kill germs)

Heat can kill *E. coli*, so experts recommend that people cook beef (especially ground beef) until it is cooked through and no longer pink. Choosing pasteurized juice is another way to avoid possible infection.

Some experts recommend washing and scrubbing vegetables before eating them. But others say *E. coli* is hard to remove once it has contaminated produce, such as spinach, lettuce, or onions. The solution, they say, is to take more steps so that *E. coli* doesn't come in contact with crops.

What Will the Doctor Do?

If someone has symptoms of *E. coli* poisoning, the doctor will run some blood tests and take a sample of the person's stool (poop). The blood and stool can be checked to see if a harmful strain of *E. coli* is present. Even though diarrhea is one of the main symptoms, the person shouldn't take anti-diarrhea medicines because they can slow down recovery time.

Some people recover at home, while others need to be in the hospital. In some cases, *E. coli* poisoning can cause life-threatening kidney problems.

What Can Kids Do?

Adults are the main people in charge of preventing *E. coli* infection by serving well-cooked meat, cleaning countertops when preparing meats, and being aware of any recalls affecting contaminated vegetables or other products.

But kids can help too. Here are three ways:

1. When you're at a restaurant, order your burger well done. Eat it only if it's brown, not pink, on the inside.
2. Don't swallow lake, ocean, or pool water. If the water contains any human waste, it can carry the *E. coli* bacteria.
3. Always wash your hands after you use the bathroom and before you eat. There are plenty of bacteria in poop. Gross! You don't want to accidentally eat some of those bad bacteria!

Reviewed by: Steven Dowshen, MD

Date reviewed: April 2017

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Salmonellosis & E. Coli

Post Test – November 2019

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1. Salmonellosis is an illness caused by _____ bacteria.
2. Salmonella can be found in soil, water, _____ and the bowel movements of some animals including reptiles like turtles and snakes.
3. The symptoms of salmonellosis usually last a few weeks and most people feel good again within a month.
True or False?
4. Because Salmonella bacteria are spread through poop, one of the best ways to prevent _____ is to wash your _____ often with warm water and soap.
5. People who _____ meals should wash their hands before touching any _____.
6. E. Coli is short for the bacteria's medical name _____ coli.
7. E. Coli normally lives inside your intestines, where it helps your body break down and digest the food you eat.
True or False?
8. _____ can kill E. Coli, so experts recommend that people cook beef until it is cooked through and no longer pink.
9. In some cases, E. Coli poisoning can cause life-threatening _____ problems.
10. Adults are the main people in charge of preventing E. Coli infection by serving well-cooked meat, cleaning countertops when preparing meats and being aware of any _____ affecting contaminated _____ or other products.

October 2019 Quiz Answers. 1.Germs 2.Disease 3.False 4.Vaccines
5.Chicken Pox 6.Fungi 7.Protozoa 8.Toxins 9.False 10.Immune System



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