



Frequently Asked Questions: *Cronobacter*

What is *Cronobacter*?

Cronobacter sakazakii, formerly known as *Enterobacter sakazakii*, is a germ found naturally in the environment. The germs can live in dry foods, such as powdered infant formula, powdered milk, herbal teas, and starches. *Cronobacter* can cause diarrhea and urinary tract infections in people of all ages, but infection can be very serious in infants.

Who is most at risk and what signs and symptoms should I look out for?

Cronobacter infections are rare, but they can be deadly in newborns. Infections in infants usually occur in the first days or weeks of life. About two to four cases are reported to CDC every year, but this figure may not reflect the true number of illnesses because most hospitals and laboratories are not required to report *Cronobacter* infections to health departments.

Cronobacter germs can cause a dangerous blood infection (sepsis) or make the linings surrounding the brain and spinal cord swell (meningitis). Infants 2 months of age and younger are most likely to develop meningitis if they get sick from *Cronobacter*. Other infants more likely to get sick are those born prematurely and those less able to fight germs and sickness because of illness or medical treatment, such as infants receiving chemotherapy for cancer.

The first symptom of *Cronobacter* infection in infants is usually a fever, accompanied by poor feeding, crying, or very low energy. You should take an infant with these symptoms to the doctor.

How does powdered infant formula become contaminated with *Cronobacter*?

Powdered infant formula is not germ-free. Formula manufacturers report that it is not possible to remove all germs from powdered infant formula. At the factory, *Cronobacter* could get into formula powder from ingredients used to make the formula or if the formula powder touches a *Cronobacter*-covered surface in the factory.

At home, *Cronobacter* could get into the formula if formula lids or scoops are placed on *Cronobacter*-covered surfaces and later touch the formula or if the formula is mixed with water or in a bottle that has *Cronobacter* in it.

Can *Cronobacter* be spread from one person to another?

We do not know if *Cronobacter* infection can be spread from one person to another, but other types of bacteria spread this way, especially in hospitals if people do not wash their hands well.

How is *Cronobacter* diagnosed and treated?

Babies whose blood might have *Cronobacter* need to go to a doctor or hospital right away so they can get germ-fighting medicine called antibiotics. Babies who have meningitis from *Cronobacter* usually need special tests to look at the brain and spinal fluid.

Cronobacter infection is diagnosed by a laboratory culture. If a *Cronobacter* infection is diagnosed by a laboratory culture in an infant, CDC encourages clinicians and laboratories to inform their local or state health department.

Frequently Asked Questions: *Salmonella*

What is *Salmonella*?

Salmonella is a germ that is estimated to cause about 1.35 million infections, 26,500 hospitalizations, and 420 deaths in the United States every year. Food is the source for most of these illnesses.

Who is most at risk and what signs and symptoms should I look out for?

People taking certain medicines (for example, stomach acid reducers) are at an increased risk of *Salmonella* infection. However, children under 5 years old and infants (children younger than 12 months) who are not breast fed are the most likely to get an infection. Infants, adults aged 65 and older, and people with a weakened immune system are the most likely to have severe infections.

Most people with *Salmonella* infection have diarrhea (that can be bloody), fever, and stomach cramps. Some people may also have nausea, vomiting, or a headache.

Symptoms usually begin six hours to six days after infection and last four to seven days. However, some people do not develop symptoms for several weeks after infection and others experience symptoms for several weeks.

You should take an infant to the doctor if they have diarrhea and a fever higher than 102°F, diarrhea lasting more than three days that is not improving, bloody stools, prolonged vomiting that prevents the infant from keeping liquids down, or fewer than normal wet diapers.

How do people get infected?

Salmonella live in the intestines of people and animals. People can get *Salmonella* infection from a variety of sources, including:

- Eating contaminated food or drinking contaminated water
- Touching infected animals, their feces, or their environment

How is *Salmonella* diagnosed and treated?

Most people recover from *Salmonella* infection within four to seven days without antibiotics. People who are sick with a *Salmonella* infection should drink extra fluids as long as diarrhea lasts.

Antibiotic treatment is recommended for:

- People with severe illness
- People with a weakened immune system, such as from HIV infection or chemotherapy treatment

- Adults older than 50 who have medical problems, such as heart disease
- Infants (children younger than 12 months).
- Adults age 65 or older

Salmonella infection is diagnosed when a laboratory test detects *Salmonella* bacteria in a person's stool (poop), body tissue, or fluids. When these positive specimens are forwarded to the state public health laboratory, additional testing can be performed to determine the type of *Salmonella* causing the infection and can then be compared it to others across the nation to see if they may have a common source.