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## Coxsackievirus Infections

### What Are Coxsackievirus Infections?

Coxsackieviruses are part of the enterovirus family of viruses (which also includes polioviruses and hepatitis A virus) that live in the human digestive tract.

The viruses can spread from person to person, usually on unwashed hands and surfaces contaminated by feces (poop), where they can live for several days.

In most cases, coxsackievirus infections cause mild flu-like symptoms and go away without treatment. But in some cases, they can lead to more serious infections.

### What Are the Signs & Symptoms Coxsackievirus Infections?

Coxsackievirus can produce a wide variety of symptoms. About half of all kids with an infection have no symptoms. Others suddenly get a high fever, headache, and muscle aches, and some also develop a sore throat, abdominal discomfort, or nausea. A child with a coxsackievirus infection may simply feel hot but have no other symptoms. In most kids, the fever lasts about 3 days, then disappears.

### What Problems Can Happen?

Coxsackieviruses can cause symptoms that affect different body parts, including:

- **Hand, foot, and mouth disease**, a type of coxsackievirus syndrome, causes painful red blisters in the throat and on the tongue, gums, hard palate, inside of the cheeks, and the palms of hands and soles of the feet.



- **Herpangina**, an infection of the throat, causes red-ringed blisters and ulcers on the tonsils and soft palate, the fleshy back portion of the roof of the mouth.
- **Hemorrhagic conjunctivitis**, an infection that affects the whites of the eyes, usually begins as eye pain, followed quickly by red, watery eyes with swelling, light sensitivity, and blurred vision.

Occasionally, coxsackieviruses can cause more serious infections that may need to be treated in a hospital, including:

- viral meningitis, an infection of the meninges (membranes that surround the brain and spinal cord)
- encephalitis, a brain infection
- myocarditis, an infection of the heart muscle

Mothers can pass an infection to their newborns during or just after birth. Babies are more at risk for a serious infection, including myocarditis, hepatitis, and meningoencephalitis (an inflammation of the brain and meninges). In newborns, symptoms can develop within 2 weeks after birth.

## Are Coxsackievirus Infections Contagious?

Coxsackieviruses are very contagious. They can be passed from person to person on unwashed hands and surfaces contaminated by feces. They also can be spread through droplets of fluid sprayed into the air when someone sneezes or coughs.

When an outbreak affects a community, risk for coxsackievirus infection is highest among infants and kids younger than 5. The virus spreads easily in group settings like schools, childcare centers, and summer camps. People are most contagious the first week they're sick.

In cooler climates, outbreaks most often happen in the summer and fall, but tropical parts of the world have them year-round in.

## How Are Coxsackievirus Infections Treated?

Depending on the type of infection and symptoms, the doctor may prescribe medicines to make your child feel more comfortable. Because antibiotics only work against bacteria, they can't be used to fight a coxsackievirus infection.

You can give acetaminophen or ibuprofen to relieve minor aches and pains. If the fever lasts for more than 24 hours or if your child has any symptoms of a more serious coxsackievirus infection, call your doctor.

Most kids with a simple coxsackievirus infection recover completely after a few days without needing any medical treatment. A child who has a fever without any other symptoms should rest in bed or play quietly indoors. Offer plenty of fluids to prevent dehydration.

## How Long Do Coxsackievirus Infections Last?

How long the infection lasts can vary. Kids who only have a fever may see their temperature return to normal within 24 hours, although the average fever lasts 3 days. Hand, foot, and mouth disease usually lasts for 2 or 3 days; viral meningitis can take 3 to 7 days to clear up.

## When Should I Call the Doctor?

Call the doctor immediately if your child has any of these symptoms:

- fever higher than 100.4°F (38°C) for infants younger than 6 months and higher than 102°F (38.8°C) for older kids
- poor appetite
- trouble feeding
- vomiting
- diarrhea
- difficulty breathing
- convulsions
- unusual sleepiness
- pain in the chest or abdomen
- sores on the skin or inside the mouth
- severe sore throat
- severe headache, especially with vomiting, confusion, or unusual sleepiness
- neck stiffness
- red, swollen, and watery eyes
- pain in one or both testicles

## Can Coxsackievirus Infections Be Prevented?

There is no vaccine to prevent coxsackievirus infection. Hand washing is the best protection. Remind everyone in your family to wash their hands well and often, especially after using the toilet, after changing a diaper, before meals, and before preparing food. Shared toys in childcare centers should be cleaned often with a disinfectant because the virus can live on these objects for days.

Kids who are sick with a coxsackievirus infection should be kept out of school or childcare for a few days to avoid spreading the infection.

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

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