

# Common Childhood Infections

Most infections are caused by germs called *viruses* and *bacteria*. While you may be able to keep germs from spreading, you can't always keep your child from getting sick. It is important for parents to know how to keep their children healthy and what to do when they get sick. Read on to learn more from the American Academy of Pediatrics (AAP) about common childhood infections—signs and symptoms, treatments, and when to call your child's doctor.

# How to tell if your baby has an infection

Bacterial infections can be very dangerous, especially in babies younger than 3 months. Call the doctor right away if your baby has any of the following symptoms:

- Fever
- Weak cry
- Not breathing easily
- Poor color
- More fussy than usual
- Sleeping more than usual
- Vomiting or diarrhea
- Not eating well

# How to prevent germs from spreading

The following are tips from the Centers for Disease Control and Prevention on how to keep germs from spreading.

### Wash your hands

- Before, during, and after preparing food
- Before eating food
- Before and after caring for someone who is sick
- Before and after treating a cut or wound
- After using the toilet
- · After changing diapers or cleaning up a child who has used the toilet
- After blowing your nose, coughing, or sneezing
- After touching an animal or animal waste
- After handling pet food or pet treats
- After touching garbage

#### How to wash your hands

• Wet your hands with clean, running water (warm or cold) and apply soap. (Note: If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60% alcohol. Put enough on your hands to make them all wet, then rub them together until dry. Sanitizer does not work well on dirt that you can see.)

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- Rub your hands together to make a lather and scrub them well; be sure to scrub the backs of your hands, between your fingers, and under your nails.
- Continue rubbing your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
- Rinse your hands well under running water.
- Dry your hands using a clean towel or air-dry them.

#### Other ways to prevent germs from spreading

• Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue away in the garbage. If you don't have a tissue, cough or sneeze into your upper sleeve or elbow, not your hands.

- · Avoid touching your eyes, nose, and mouth.
- Avoid sharing eating utensils, drinking cups, toothbrushes, washclothes, or towels
- · Avoid close contact with people who are sick.
- Stay home when you are sick, if possible.

# How to help your child feel better

Your child's doctor may recommend the following ways to soothe a sick child:

#### To relieve a stuffy nose

- Use saline (saltwater) nose drops to thin nasal discharge. Ask your child's doctor about which ones to use. Place a few drops of the saline into each nostril followed by gentle bulb suction. This works best for babies younger than 3 months.
- During the illness, use a cool-mist humidifier or vaporizer in your child's room. This helps moisten the air and may help clear your child's nasal passages. Be sure to clean the humidifier or vaporizer often, as recommended by the manufacturer.

#### To relieve chest congestion

- Chest physical therapy can loosen mucus and may help infants and young children cough it out. Lay your child across your knees, face down; cup your hand; and gently tap your child's back. Or sit your child on your lap, lean her body forward about 30 degrees, cup your hand, and gently tap her back.
- During the illness, use a cool-mist humidifier or vaporizer in your child's room. This helps moisten the air and may help clear your child's congestion. Be sure to clean the humidifier or vaporizer often, as recommended by the manufacturer.

#### To relieve a cough

- Try half a teaspoon of honey for children aged 2 to 5 years, 1 teaspoon for children aged 6 to 11 years, and 2 teaspoons for children 12 years and older. If honey is given at bedtime, make sure you brush your child's teeth afterward. Remember, it's not safe to give honey to babies younger than 1 year.
- For a child aged 4 years and older, cough drops or lozenges may help soothe the throat. Remember not to give cough drops or lozenges to a child younger than 4 years because he could choke on them. Also do not give your child more cough drops than directed on the package.

#### To relieve a fever

• Give acetaminophen to a baby 6 months or younger. Check with your doctor if your baby is younger than 3 months. Give either acetaminophen or ibuprofen to a child older than 6 months. Ask your child's doctor for the right dosage for your child's age and size. Do not give aspirin to your child because it has been associated with Reye syndrome, a rare but very serious illness that affects the liver and the brain.

# **Common childhood infections**

The following are some of the more common childhood infections, including signs and symptoms, treatments, and when to call the doctor.

#### Bronchiolitis

Bronchiolitis is caused by several viruses that bring about blockage of the small breathing tubes of the lungs, making it hard to breathe. It occurs most often in infants because their airways are smaller and more easily blocked.

#### Signs and symptoms

- Wheezing (a whistling sound) or difficult, fast breathing
- Runny nose
- · Congested cough that gets worse at night
- Fever

#### Treatment

See "How to help your child feel better."

**Call your child's doctor** if your child stops taking fluids or has a hard time breathing. She may need to go to the hospital for oxygen, fluids, or medicine to help her breathe.

#### Colds

Colds are caused by viruses. Most children have 8 to 10 colds in their first 2 years of life. Most colds come and go and rarely lead to anything worse. They usually last about a week. Antibiotics do not help colds.

#### Signs and symptoms

- Stuffy or runny nose and sneezing
- Watery eyes
- Mild cough
- Mild fever
- Headache
- Not eating well

#### Treatment

See "How to help your child feel better."

#### Call your child's doctor if your child

- Has blue lips or nails
- Has a fever that lasts for more than 2 to 3 days
- Has symptoms that get worse after a week
- Has a hard time drinking or breathing
- Has ear pain
- Is more sleepy or cranky than usual

#### Croup

Croup is caused by several viruses that affect the voice box and the airways, making it hard for a child to breathe. It's most common in toddlers but can affect children between 6 months and 5 years of age.

#### Signs and symptoms

- Runny nose
- A cough that gets worse and starts to sound like a seal's bark
- Hoarse cry
- Noisy or difficult breathing
- Fever
- Sore throat
- Not eating well

# **About other medicines**

- **Cough and cold medicines.** The AAP does not recommend OTC cough and cold medicines for children younger than 4 years. Children 4 to 6 years of age should only use OTC cough and cold medicines if a doctor says it is OK. After age 6 years the directions on the package can be followed (but be very careful with dosing).
- **Antibiotics.** Your child's doctor may prescribe an antibiotic to treat a bacterial infection. For viral infections the body needs to fight the virus on its own because antibiotics won't work. However, in some cases, your doctor may prescribe an antiviral medicine for influenza.

#### Treatment

Steam treatment can be helpful. Simply fill your bathroom with steam from the tub or shower. Bring your child into the bathroom and let him breathe in the steam for a few minutes. Keep a close eye on your child so that he doesn't get too warm or burn himself with the hot water. Another thing that might help is dressing your child warmly and going outside to inhale the cool night air.

#### Call your child's doctor right away if your child

- Has a bluish color of the lips, mouth, or fingernails
- Makes a harsh rasping or hoarse sound when breathing (this is called stridor) that gets louder with each breath
- Seems to struggle to get a breath or cannot speak because of lack of breath
- · Drools or has trouble swallowing
- Has a fever that will not go away even after he has been given medicine
- · Has symptoms that return and are worse

#### **Ear infection**

Occasionally fluid can build up in the middle ear due to a cold, allergies, or an infection of the nose or throat. If bacteria or a virus infects this fluid, it can cause swelling and pressure on the eardrum and an earache. This type of ear infection, called *acute otitis media*, often clears up on its own. However, if the infection does not clear up, your child's doctor may recommend treatment with an antibiotic. If fluid stays in the ear even after other symptoms have cleared, it can develop into another ear condition called *otitis media with effusion*. This condition usually needs no treatment unless the fluid is still there after 3 months.

#### Signs and symptoms

- $\cdot$  Ear drainage that is yellow or white, possibly tinged with blood
- Ear pain
- Not eating well
- Vomiting or diarrhea
- Not sleeping well
- Fever
- Trouble hearing

#### Treatment

Give your child acetaminophen or ibuprofen to treat the pain. There are also ear drops that may help ease the pain for a short time but check with your child's doctor first. There's no need to use over-the-counter cold medicines (decongestants and antihistamines). Your child's doctor may wish to examine your child to see if an antibiotic is necessary. If so, be sure your child finishes all of the medicine to improve the chances of it being cured.

Call your child's doctor if you suspect an ear infection and your child

- Has drainage from the ear
- Has a fever
- Seems to be in a lot of pain
- $\boldsymbol{\cdot}$  Is unable to sleep
- Isn't eating

#### Flu (influenza)

The flu is caused by a virus and usually occurs in the winter months. Your child usually will feel the worst during the first 2 or 3 days.

#### Signs and symptoms

- Stuffy, runny nose
- Cough
- Sore throat
- Sudden fever
- Chills
- · Lack of energy
- Headache
- Body aches and pain
- Dry cough
- Sore throat
- Vomiting and belly pain

#### Treatment

Most children with the flu need nothing more than bed rest, a lot of fluids, and fever medicine. Just as most colds go away on their own, so do most cases of the flu. In children who already have major health problems, doctors sometimes recommend antiviral drugs, but generally the medicine works best when taken within the first 48 hours after symptoms begin. Antibiotics will not help against the flu.

#### Prevention

Annual influenza vaccination is recommended for everyone 6 months of age and older. Plan to get your child vaccinated before the influenza season starts each fall. Remember that children 6 months through 8 years old need 2 doses of vaccine to be fully immunized the first time they are vaccinated to prevent influenza.

**Call your child's doctor** if your child is younger than 3 months and has a fever. For a child older than 3 months who has been exposed to the flu or shows signs of the flu, call your child's doctor within 48 hours. Also, call your child's doctor or seek medical care if your child experiences any of the following:

- · A hard time breathing
- Blue lips or nails
- A cough that worsens or will not go away after 1 week
- Pain in the ear
- Fever that does not go away or comes back after 3 to 4 days

#### Impetigo

Impetigo is a skin infection that can spread quickly. This infection is caused by bacteria. It's most common in warm weather and often appears on the face, but may be found anywhere on the body. Germs can enter through an opening in the skin, such as a cut, insect bite, or burn.

#### Signs and symptoms

- Small sores that become oozing, yellow, and crusty
- Raw areas or breakdown of the skin

#### Treatment

Most cases of impetigo can be treated with an antibiotic. The antibiotic is taken by mouth or put on the skin in ointment form. Be sure to use the medicine for as long as recommended by your child's doctor to keep the infection from coming back.

#### Call your child's doctor if

- The skin around the sores turns red or has red streaks.
- The sores spread to other parts of the body.
- · Your child develops a fever or boil.
- Your child's urine looks red or brown.

#### Pinkeye (conjunctivitis)

Pinkeye is a reddening of the white part of one or both eyes. There are different kinds, including bacterial, viral, allergic, or chemical (usually caused by chlorine in a swimming pool). Viral and bacterial pinkeye are contagious and can spread easily in schoo or child care.

#### Signs and symptoms (in one or both eyes)

- Watery, itchy, or burning eyes
- Redness of the eye
- White, yellow, or green discharge coming from the eye
- Crusting in the eye that lasts all day

#### Treatment

If it's bacterial pinkeye, your child's doctor will prescribe antibiotic drops or ointment. Be sure to use the medicine for as long as recommended by your child's doctor to cure the infection. If it's viral pinkeye, antibiotics are not helpful. A warm, wet washcloth may help get rid of crusts around the eyes and may also help the eyes feel better. Wash hands often, especially after touching the eyes, and do not share washcloths.

#### Call your child's doctor if your child

- Has swelling and redness in the eyelids and around the eye that gets worse
- Has a fever
- · Seems more sleepy than usual

#### Pneumonia

Pneumonia is an infection of the lungs. It often occurs a few days after the start of a cold. Most cases of pneumonia are mild. Pneumonia is caused most often by viruses or bacteria.

#### Signs and symptoms

#### Mild case

- Cough with shortness of breath
- Fever
- Not eating well
- Less energy than usual

More severe case

- Shaking chills
- Fever
- Chest pain
- Difficult or fast breathing

Your child's doctor may need to perform an x-ray to see if pneumonia is the cause of the symptoms.

#### Treatment

Pneumonia caused by bacteria is treated with antibiotics. Be sure to use all of the medicine to keep the infection from coming back. Antibiotics are not helpful if it's pneumonia caused by a virus.

**Call your child's doctor** if your child's symptoms are severe or if your child is younger than 3 months. She may need to go to the hospital if she is not better after several days of antibiotics at home.

#### Sinusitis

Sinusitis is an inflammation of the lining of the nose and sinuses. Inflammation inside the nose usually accompanies a cold. Allergic sinusitis may accompany allergies such as hay fever. Bacterial sinusitis is a secondary infection caused by bacteria trapped in the sinuses.

#### Signs and symptoms

- Cold symptoms (nasal discharge, daytime cough, or both) for more than 10 days without improving
- Thick, yellow nasal discharge and a fever for at least 3 or 4 days in a row
- Pain or tenderness around the eyes, cheekbones, or upper teeth (This happens sometimes in older children or teens.)
- Persistent bad breath along with the cold symptoms (However, this also could be from a sore throat or if your child is not brushing his teeth.)
- Severe headache

#### Treatment

A runny nose caused by a virus usually goes away by itself (see "How to help your child feel better"). When caused by bacteria, antibiotics may be needed. Be sure to use all of the medicine to keep the infection from coming back.

#### Call your child's doctor if your child

- · Does not feel better after 3 to 4 days of treatment
- Has severe head or face pain
- Has a sudden high fever

#### Strep throat

Strep throat is an infection of the throat caused by strep bacteria and is very common in children and teens.

#### Signs and symptoms

- Pain in the throat, especially when swallowing
- $\cdot\, {\rm Red}$  or white patches in the throat
- $\cdot$  Swollen, tender glands in the neck
- Fever
- Headache
- Belly pain

Most sore throats in children are not strep. But because many viruses have the same symptoms as strep, your child's doctor may do a test to see if strep is present.

#### Treatment

Sore throats caused by viruses usually go away on their own in 5 to 7 days and antibiotics are not helpful. Because strep throat is caused by bacteria, it is treated with antibiotics. After 24 hours of antibiotic treatment, your child is no longer contagious and should start to feel better. Be sure to use all of the medicine to keep the infection from coming back.

#### Call your child's doctor if your child

- Has a fever that keeps coming back
- Has swelling of the glands in the neck that gets worse
- Has a hard time breathing

#### Sty

A sty is a painful, red bump on the eyelid caused by an infected oil or sweat gland. Sties are not very contagious. However, once your child gets a sty, she is more likely to get one again.

#### Signs and symptoms

- Red, tender bump on the eyelid
- Tenderness around the eye
- Swelling around the eye
- $\boldsymbol{\cdot}$  Redness on the eyelid

#### Treatment

To ease the pain and discomfort of a sty, place a warm cloth on the eyelid 3 to 4 times a day until signs of the infection are gone. Antibiotics are generally not helpful with a sty.

**Call your child's doctor** if the warm cloth treatments don't work. In some cases, you may be referred to an eye doctor who can drain the sty surgically.

#### Urinary tract infection

Urinary tract infections (UTIs) occur when bacteria infect the urinary tract. The urinary tract includes the kidneys, the tubes that join the kidneys and bladder (ureters), and the bladder. A UTI can be found in children from infancy through the teen years and into adulthood. Your child's doctor will ask for a urine sample to test for a UTI before recommending antibiotic treatment.

#### Signs and symptoms

- Painful, burning, and frequent urination
- Fever
- Vomiting
- Belly pain
- Back pain
- Bad-smelling urine

### Treatment

Urinary tract infections are treated with antibiotics. Be sure to use all of the medicine to keep the infection from coming back.

#### Call your child's doctor if your child

- Has urine that is pink, red, or brown
- Has a temperature above 101°F (38.3°C)
- Has severe back pain
- · Is not better after 2 days of antibiotic therapy

#### Vomiting and diarrhea

Vomiting and diarrhea are usually caused by viruses that infect the intestines but are sometimes caused by bacteria. They usually last about a day or two but can last up to a week.

#### Signs and symptoms

- Frequent and uncontrollable loose, watery stools
- Vomiting
- $\boldsymbol{\cdot} \text{ Belly pain, cramps}$
- Fever

#### Treatment

If your child is throwing up, your child's doctor may tell you to not give food until it stops. However, to keep your child from getting dehydrated, you may be told to give your child electrolyte drinks. Electrolyte drinks are special drinks that you can buy from a store. For school-aged children, your child's doctor may also suggest caffeine-free sport drinks that are low in sugar. Children younger than 2 years should not be given medicine for diarrhea unless your child's doctor tells you it's OK. If your child has a bacterial infection that is causing the vomiting or diarrhea, antibiotics sometimes may be needed.

**Call your child's doctor** if your child has any of the following signs of dehydration:

- Blood or mucus in the stool
- No tears
- Dry diaper or no urination for 6 hours
- Dry mouth, skin, or lips
- Sunken eyes
- Not as alert as usual
- Sunken soft spot on head (for infants)
- High fever

Most cases of mild dehydration can be treated by giving your child fluids. However, if dehydration is severe, your child may need to be given fluids through an IV (a tube inserted into a vein). To lower the chance of dehydration, call your child's doctor early if your child has vomiting or diarrhea that won't go away.

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