

Colds and Coughs in Children and Adolescents: Managing Viral Infections

Coughs, runny and stuffy noses, and other cold symptoms can make your child miserable — but they usually aren't serious. **Most are caused by viruses, and get better with time and rest.** Antibiotics are rarely needed, and may do more harm than good.

This handout answers common questions, provides tips to help ease symptoms, and gives advice on when to call the doctor.

What can I do?

- **Learn more** about your child's symptoms, what you can do to help him feel better, and when to see the doctor. This fact sheet can help.
- **If you have a doctor's appointment, ask questions:**
 - **If your doctor says antibiotics are not needed, don't insist on them.** Ask your doctor to explain why antibiotics won't help, and what you can try instead. Also see the tips on page 3.

 - **If your doctor does prescribe antibiotics, ask why.** What type of bacterial infection will they treat?

Why won't my doctor give my child antibiotics?

- **Antibiotics kill bacteria, not viruses.** Colds and most coughs and sore throats are caused by viruses. Antibiotics will **NOT** cure viruses, and they will **NOT** help someone with a viral infection feel better faster.
- **Using antibiotics when they're not needed can do more harm than good.**
 - Bacteria start to build resistance to antibiotics. This is called **antibiotic resistance**, and is a serious worldwide problem. The more antibiotics are used, the more resistant bacteria become. Common antibiotics may not kill these resistant germs, so more toxic and costly antibiotics are needed. Sometimes, these resistant bacterial infections need to be treated in a hospital — and can even lead to death.
 - As with many medications, your child could have unexpected allergies or side effects.

Understanding your child's symptoms

When viruses infect your child's respiratory system (nose, throat, and chest), they can cause any or all of these symptoms:

- runny or stuffy nose
- coughing
- sore throat
- sneezing
- watery eyes
- headache
- body aches
- fever
- chills
- tiredness

It's normal for the symptoms of viral infection to last up to 14 days, sometimes even longer. For most children, the worst is over in about 10 days, although the cough may last for 3 weeks. Remember, antibiotics won't make a viral illness get better faster. Usually, they just need to run their course. It's best to just wait and watch. Follow the tips on the next page to ease symptoms, and see the list on page 4 for tips on when to call a doctor.

When to worry about sore throats

Sore throats can be worrisome. That's because there's a fairly common bacterial infection of the throat, called "strep throat." If strep throat isn't treated with antibiotics, it can lead to more serious problems. When to suspect strep? Here are a few clues:

- **MAY BE strep:** a sore throat without cold symptoms, or a sore throat with fever, headache, sunburn-like rash, stomachache, or vomiting. If your child has a sore throat like this, see a doctor. The only way to know for sure is to have a lab test done.
- **Probably NOT strep:** a mild sore throat that comes with a cough or a runny or stuffy nose.

Doesn't thick, green mucus mean I need an antibiotic?

When germs infect the nose, the nose makes mucus to help wash the germs away. At first, the mucus is clear. But as the body's immune cells fight back, the mucus begins to change color. First it becomes white or yellow. Later it may become green. This is normal and does not mean your child needs an antibiotic. Still, if things don't improve after about 10 days — or if your child's symptoms are severe — see a doctor. It's possible your child has developed a sinus infection and needs antibiotics.

When to worry about coughs

Coughs are annoying, but most of the time they're not serious. Even **bronchitis** (a "chest cold" that causes inflammation of the large airways in the lungs) is usually caused by a virus and will heal on its own within 3 weeks or so. However, you should watch coughing in babies and young children carefully. It could be an RSV-like virus. **RSV** (respiratory syncytial virus) is a common virus that brings only mild symptoms in adults and older children — but in babies it can occasionally cause serious infections that get worse quickly. See the last page about when to consider calling the doctor.

Why not take an antibiotic now, to prevent a bacterial infection?

Most viral infections do **NOT** lead to bacterial infections. Using antibiotics to prevent a bacterial infection only contributes to antibiotic resistance. That same antibiotic may not work the next time it's needed — and if you get an infection, it can be much more difficult to treat. It's best to wait and use antibiotics only if a bacterial infection is confirmed.

What can I do to help my child feel better?

A viral infection usually lasts only a week or two. But when your child is feeling rotten, this can seem like a long time! Here are some tips to help ease symptoms and help your child get better faster:

- **Rest.** Resting is one of the best things your child can do to get better. Keep your child home from school or day care.
- **Drink lots of water and other fluids.** Water thins mucus and helps ease coughs, stuffy noses, and sore throats. Other fluids — even milk — are usually okay too.
- **Rinse your child's sinuses with salt water.** See the steps at the bottom of the page.

- **Use a humidifier.** Use a cool mist humidifier around children. Don't let the room get too moist — there shouldn't be moisture on the windows. Also, follow the package directions to keep the humidifier clean.
- **Stay away from smoke.** Smoke worsens symptoms and slows recovery. Don't let anyone smoke in the house. *And if you smoke, try to take a break for a few days, or smoke only outside. See the back page for resources to help you quit.*

What about over-the-counter medication?

The American Academy of Pediatrics recommends that you never give over-the-counter cold and cough medicines to children under age 4 (and only if recommended by a doctor for ages 4 to 6). These medicines won't help your child get better faster. For children over 4, some people find they do help relieve symptoms and let your child rest easier. Following are some general guidelines:

- **For pain or fever:** Use acetaminophen (like Tylenol) or ibuprofen (like Advil or Motrin). For people with asthma or a family history of asthma, many specialists suggest avoiding both ibuprofen and naproxen sodium (like Aleve), as they can aggravate or promote asthma. Do **NOT** give aspirin to a child or teen.
- **For a sore throat:** Lozenges or cough drops may soothe a sore or dry throat. (But don't give a throat lozenge to children under 5 years old — they can choke.) You can also try having your child gargle with salt water. Use the same salt solution described in the panel below.

- **For a stuffy or runny nose:** Decongestants and antihistamines have not been studied well in children. Some people find them helpful, but others find that the side effects outweigh the benefits. If you decide to use a cold medicine for your child over age 4, follow the label instructions.
- **For a cough:** A cough can be a sign of asthma or other serious problems. See a doctor if your child has coughing symptoms like those described on page 4. For relief at home, you can try cough medicine, though studies show that most don't help. Rubbing Vicks VapoRub on the chest may help children age 2 and older.

When should I see the doctor?

Most symptoms of viral infection will get better on their own with time and rest. But for some symptoms, it's wise to see a doctor. A doctor can make sure nothing is seriously wrong, prescribe medicine if needed, and explain what to do to feel better. Here are some tips for when to call.

Fever:

- For babies younger than 90 days (3 months): 100.4°F or higher
- For babies 90 to 180 days old (3 to 6 months): 101.0°F or higher
- For children 6 months and older: a high fever (103.0°F or higher), and the child seems sicker than you'd expect
- Fever that lasts 2 days or more and is not improving

Salt Water to the Rescue!

To help ease a stuffy nose, try rinsing your child's sinuses with salt water once or twice a day. This is a bit messy, but it's one of the best things to do to help clear a sinus problem. Here's how:

- 1 Make a salt-water rinse by mixing 1 cup of distilled, boiled, or filtered water with ½ teaspoon of salt. (Or, you can buy a saline rinse at the store.)
- 2 Put the salt-water rinse into a bulb syringe or squirt bottle. For a baby, put the salt water in an eyedropper.
- 3 Hold your child's head sideways over the sink.
- 4 Using the bulb syringe, squirt bottle, or eyedropper, squirt a stream of salt water into the top nostril.
- 5 Let the salt water run from the top nostril to the lower nostril. Some of the water will come out the lower nostril. Some may drain down the back of the throat. That's fine — the goal is to rinse as well as possible.
- 6 Repeat steps 3 to 5 with the other nostril.

Coughing:

- For babies, coughing that makes it difficult to eat or sleep, especially if the baby is younger than 6 months
- Coughing that sounds like a seal barking **and** interferes with breathing
- Coughing that starts suddenly and goes for an hour without stopping
- Coughing with wheezing (whistling sound when breathing in or out)
- Coughing with any difficulty breathing or with chest pain
- Coughing that lasts longer than 3 weeks

Runny, stuffy nose:

- Stuffy nose that isn't improving by 10 days, or gone by 3 to 4 weeks
- Stuffy nose with other symptoms that seem severe (like a high fever, ear pain, or cheek pain)

Ear pain:

- Ear pain with fever or that interferes with sleep and activities
- Ear pain without fever that is not improving after 2 days (you may give ibuprofen for the ear pain)

Sore throat:

- Sore throat without other typical cold symptoms
- Sore throat with fever, headache, stomachache, rash, or vomiting
- Sore throat that is so severe that it's hard to swallow
- Severe sore throat that seems worse than you'd expect with a cold

Breathing problems:

- Unusually fast or shallow breathing
- Distress with breathing
- Skin between the ribs or below the throat pulling in with each breath
- Bluish color in the lips or fingernails

When should I call my doctor?

Call the doctor if any symptoms become severe or aren't improving in about 10 days.

See the doctor about any symptoms that aren't getting better by 14 days — **or if your child just doesn't seem right to you.**

How can I keep my family from getting sick?

Colds and other viral infections are common. Almost everyone has at least one cold a year — and kids often have as many as 12! To help limit the number of colds your family gets, follow these tips:

- Wash your hands often or use a sanitizing hand cleanser. And remind your children — and their caregivers — to wash their hands often, too. This is one of the best things you can do to stay well and prevent the spread of viruses.
- Avoid crowds. If your child goes to day care, try to find a day care with fewer children in a room. And if you can, avoid crowded public places during cold and flu season.
- Get a flu shot every year. Make sure everyone in your family does, too. It doesn't prevent common colds and coughs — it only prevents the flu. But avoiding the flu has been proven to prevent both common and serious complications.
- Avoid smoke. If you smoke, do everything you can to quit. And avoid second-hand smoke. Here are some resources to help you.
 - Ask your care provider for a copy of Intermountain Healthcare's *Journey to Freedom: A Guide to Quitting Tobacco*.
 - Visit Intermountain's preventive health site: intermountainhealthcare.org/prevention.
 - Call the Tobacco Quit Line at 888-567-TRUTH (English) or 877-629-1585 (Spanish).

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