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American Academy of Pediatrics
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Antibiotics for a sore throat, cough, or runny nose

When children need them—and when they don't

If your child has a sore throat, cough, or runny nose, you might expect the doctor to prescribe antibiotics. But most of the time, children don't need antibiotics to treat a respiratory illness. In fact, antibiotics can do more harm than good. Here's why:

Antibiotics fight bacteria, not viruses.

If your child has a bacterial infection, antibiotics may help. But if your child has a virus, antibiotics will not help your child feel better or keep others from getting sick.

- The common cold and flu are both viruses.
- Chest colds are also usually caused by viruses.
- Bronchiolitis is particular type of chest cold that often causes wheezing and can make young infants very sick. It is also caused by a virus.
- Most sinus infections (sinusitis) are caused by viruses. The symptoms are a lot of mucus in the nose and post-nasal drip.



- Mucus that is colored does not necessarily mean your child has a bacterial infection.

Antibiotics do not help treat viruses and some infections.

The flu is always caused by a virus. For these cases, antibiotics may be needed. There are special medications that can be used in some cases to fight the flu virus. Sometimes infants and children get bacterial infections on top of the flu. When a child has BOTH the flu and a bacterial infection, antibiotics may be needed.

Sometimes bacteria can cause sinus infections, but even then the infection usually clears up on its own in a week or so. Many common ear infections also clear up on their own without antibiotics.

Most sore throats are caused by viruses. But some sore throats, like strep throat, are bacterial infections. Symptoms include fever, redness, and trouble swallowing. Your doctor will decide if your child needs a strep test. If the test shows it is strep, then the doctor will prescribe antibiotics.

When does your child need antibiotics?

Your child MIGHT have a bacterial infection in these cases, and you should check with the doctor if these happen:

- A cough does not get better in 14 days.
- Symptoms of a sinus infection do not get better in 10 days, or they get better and then worse again.
- Your child has a nasal discharge and a fever of at least 102° F for several days in a row, or nasal discharge and a headache that won't go away.

Your child WILL need antibiotics in these cases:

- If the child has a bacterial form of pneumonia.
- Whooping cough (pertussis) is diagnosed.
- Your child has strep throat, based on a rapid strep test or a throat culture.

REMEMBER: For infants younger than 3 months of age, call your pediatrician for any fever above 100.4° F. Very young infants can have serious infections that might need antibiotics and even might need to be put in the hospital.

Antibiotics have risks.

Side effects from antibiotics are a common reason that children go to the emergency department. These medicines can cause diarrhea or vomiting, and about 5 in 100 children have allergies to them. Some allergic reactions can be serious and life threatening.

The misuse and overuse of antibiotics encourages bacteria to change, so that medicines don't work as well to get rid of them. This is called "antibiotic resistance." When bacteria are resistant to the medicines used to treat them, it's easier for infections to spread from person to person. Antibiotic-resistant infections are also more expensive to treat and harder to cure.

When used incorrectly, antibiotics waste money.

Most antibiotics do not cost a lot. But money spent on medicines that are not needed is money wasted. In severe cases, infections that are resistant to antibiotics can cost thousands of dollars to treat.

This report is for you to use when talking with your healthcare provider. It is not a substitute for medical advice and treatment. Use of this report is at your own risk.

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