

Health Tips for Parents

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Does my child have a bacterial or viral infection?

Bacterial and viral infections may have similar symptoms – runny nose, cough, fever, sore throat and difficulty sleeping – but they require different treatments.



Bacteria are single-celled microorganisms that thrive in many different types of environments and exist inside and on our bodies. Viruses are even smaller than bacteria and they grow only within living cells in many animals, including people.



“It is important to understand that antibiotics – which can effectively treat bacterial infections – are not useful in viral infections and can actually be harmful,” states James Cherry, M.D., UCLA pediatric infectious disease specialist.

Although there are some specific antiviral drugs, (such as for the treatment of influenza A and B), there are no drugs to treat most other respiratory viral illnesses. Common viral infections in children usually last only a short time and are best treated by ensuring adequate fluid intake, restricting strenuous exercise and allowing the illness to run its course. Over-the-counter cold medicines should not be used in children.

In some cases, bacterial infections may be the result of secondary infection, meaning that the virus initiated the process and a bacterial infection occurred because of the effects of the viral infection. Sinusitis, ear infections and some pneumonias are common examples of secondary bacterial infections.

The big question that parents are faced with is when they should have their child seen by a doctor. Infections with just runny nose and minimal or no fever can be observed by the parents. However, illnesses with significant fever or overall distress and those that are not improving after five days or so should usually be seen or discussed with the child’s doctor.

It’s important to limit antibiotic use only to bacterial infections. Inappropriate or over-use of antibiotics can contribute to the development of bacteria that become resistant so that they are not easily treatable.

Common Infections

Bacterial Infections

- ear
- sinus
- some sore throats (strep throat)
- whooping cough (pertussis)
- some pneumonia (lung infection)

Viral Infections

- all colds
- most cases of croup
- most cases of bronchitis
- most sore throats
- most cases of diarrhea and vomiting



Exposure to infections builds immunity

A child who is around other children will inevitably be exposed to infections, which will over time help strengthen their immune system. Dr. Cherry explains, “Children will build immunity to infections to which they are exposed and this will help lessen development of bacteria that become resistant to treatment.”

This information is provided courtesy of the pediatricians at Mattel Children’s Hospital UCLA. UCLA Health System pediatricians are conveniently located in your neighborhood. In addition to our Children’s Health Center in Westwood, we have offices in Brentwood, Manhattan Beach, Santa Monica and West Los Angeles. All health and health-related information contained in this publication is intended to be general in nature and should not be used as a substitute for a visit with a healthcare professional.