

Your child's respiratory health

Your infant or child will experience numerous respiratory infections on the road to adulthood. The illnesses are usually highly contagious and can be passed through infected droplets during coughing or sneezing or other contacts with other children, adults, or family members.

The **respiratory syncytial** (sin-sish'-äl) **virus** (RSV), which causes infections of the upper respiratory tract and lower respiratory tract, is the most common cause of lower respiratory

tract infections in infants and children under the age of 2. Infections can range from mild to life-threatening, from a common cold to pneumonia.

A study in the October 20, 1999, issue of *JAMA* reports that hospitalization rates of infants with **bronchiolitis** (see definition on this page) substantially increased from 1980 to 1996. The researchers suggest that the total hospitalizations due to RSV, which can cause bronchiolitis and pneumonia, may have been underestimated in the past.

COMMON RESPIRATORY CONDITIONS:

- ✓ **Asthma** – A lung disorder that causes inflammation of the airways, resulting in narrowing of the airways and difficulty breathing. It can be triggered by a number of environmental and physical factors. During an asthma attack, a child will make a wheezing sound when he or she breathes out. The condition is chronic and should be managed under a doctor's supervision.
- ✓ **Bronchiolitis** – A viral infection that causes the lung's smaller airways (called the bronchioles) to become inflamed. The inflammation causes the bronchioles to narrow, causing wheezing, coughing, and difficulty breathing.
- ✓ **Common cold** – An infection of the nose and throat that can be caused by more than 200 different viruses. Infants with a cold usually experience sneezing, runny nose, and sometimes vomiting and diarrhea. As thick mucus blocks the nose, infants may have difficulty nursing because they have to breathe through their mouths.
- ✓ **Croup** – An inflammation of the larynx (voice box), trachea (windpipe), and bronchi (passages into the lungs). It is usually caused by a virus and results in a barking, "croupy" cough.
- ✓ **Influenza** (or the "flu") – A highly contagious respiratory tract infection caused by a number of viruses. Besides the common symptoms of chills, headache, muscle aches, fatigue, and loss of appetite, children also may experience nausea, vomiting, or diarrhea.
- ✓ **Pertussis** (or "whooping cough") – Infection of the respiratory tract caused by a bacteria known as *Bordetella pertussis*. Most infants in the United States are immunized against pertussis, but the immunity can fade as the children grow into early adulthood. Symptoms are much like a cold, accompanied by a cough that can last well over a minute. At the end of a coughing spell, a child may gasp for air with a characteristic "whooping" sound.
- ✓ **Pneumonia** – A lung infection that can be caused by viruses, bacteria, or other germs. Symptoms can vary, depending on the child's age and the specific germ causing the pneumonia. Some common symptoms include fever, chills, cough, unusually rapid breathing, breathing that makes a "grunting" or wheezing sound, and chest pain.

WHEN TO SEE A DOCTOR:

If your child has:

- Problem breathing
- Blue or gray coloring to fingernails, lips, and skin
- Signs of dehydration – dry mouth, no tears, or dry diaper for several hours
- Blocked nostrils that make feeding difficult
- Fever or coughing in an infant less than 2 months old

PREVENTION:

The most effective way to prevent the spread of RSV and other respiratory viral infections is to wash your hands and your child's hands frequently and carefully. Once a child is infected with RSV, he or she is infectious before symptoms appear and can remain infectious up to 3 weeks after the symptoms clear up.

DANGERS OF TOBACCO SMOKE:

Infants or young children who are exposed to tobacco smoke are at increased risk of a number of respiratory problems, including upper respiratory tract infections, and lower respiratory tract infections such as bronchitis and pneumonia. They also can develop asthma, or if they already have asthma, experience additional episodes and more severe wheezing.

FOR MORE INFORMATION:

- Centers for Disease Control and Prevention
National Center for Infectious Diseases
888/CDC-FACTS
or www.cdc.gov/ncidod
- American Academy of Pediatrics
www.aap.org
- American Medical Association
AMA Health Insight
www.ama-assn.org/consumer.htm

INFORM YOURSELF:

To find this and previous *JAMA* Patient Pages, check out the AMA's Web site at www.ama-assn.org/consumer.htm.

Additional Sources: American Academy of Pediatrics, National Center for Infectious Diseases, AMA's Health Insight Web site (www.ama-assn.org/insight)

Mi Young Hwang, Writer

Richard M. Glass, MD, Editor

Jeff Molter, Director of Science News

The JAMA Patient Page is a public service of JAMA and the AMA. The information and recommendations appearing on this page are appropriate in most instances; but they are not a substitute for medical diagnosis. For specific information concerning your personal medical condition, JAMA and the AMA suggest that you consult your physician. This page may be reproduced noncommercially by physicians and other health care professionals to share with patients. Any other reproduction is subject to AMA approval. To purchase bulk reprints, call 212/354-0050.

