

# BRONCHIOLITIS



## BASIC INFORMATION

### DESCRIPTION

Inflammation of the bronchioles, the smallest branches of the respiratory tree. These carry air from the large bronchial tubes to microscopic air sacs in the lungs. The air sacs transfer oxygen to the bloodstream. It mainly affects infants and young children. Bronchiolitis may be confused with inhaled objects lodged in the child's lung.

### FREQUENT SIGNS AND SYMPTOMS

Sudden breathing difficulty, usually preceded by a mild common cold and cough, and characterized by the following:

- Wheezing.
- Rapid, shallow breathing (60 to 80 times a minute).
- Retractions (see-saw movements) of the chest and abdomen.
- Fever (occasionally).
- Dehydration.
- Blue skin or nails (severe cases).

### CAUSES

- Viral infection, usually respiratory syncytial virus (RSV).
- Some young children develop this disorder after every cold.
- Bronchiolitis is contagious and often becomes epidemic.

### RISK INCREASES WITH

- Illness that has lowered resistance, especially respiratory infection.
- Family history of allergies.
- Day care environment.
- Contact with an infected person.

### PREVENTIVE MEASURES

- Use a cool-mist humidifier in the child's room. Use it every night during and after a respiratory infection for a child who is subject to bronchiolitis.
- Observe and avoid any activities that seem to trigger attacks in the child, such as active play in cool night air.
- Decrease the child's exposure to groups of people, especially other children, to avoid colds.

### EXPECTED OUTCOMES

Usually curable in 7 days with treatment. Some studies indicate that infants who have 2 or more episodes of bronchiolitis before age 2 are more likely to develop allergies and asthma.

### POSSIBLE COMPLICATIONS

Rarely, permanent lung damage leading to chronic bronchitis, collapse of a small portion of the lung, bronchiectasis, repeated pneumonia, and rarely, obstructive pulmonary disease (COPD).



## TREATMENT

### GENERAL MEASURES

- Keep the humidity in the child's room as high as possible, preferably with an ultrasonic cool-mist humidifier. Clean humidifier daily. If you don't have a humidifier, run cold or hot water in the shower with windows and doors closed to produce a high-humidity room. Hold the child in this room for 20 minutes several times a day, especially at bedtime. If the child awakens at night with wheezing or shortness of breath, repeat the process.
- Breathing cool outside air may help.
- Hospitalization for intensive care and oxygen (severe cases).

### MEDICATIONS

- Antibiotics to fight secondary bacterial infection.
- Antiviral medications may help in severe cases.
- Bronchodilators (drugs that widen the airways in the lungs) may be helpful.

### ACTIVITY

Have the child rest until symptoms have subsided for 48 hours. Then normal activities may be resumed gradually.

### DIET

Offer the child clear fluids frequently. Give water, tea, carbonated drinks, lemonade, weak bouillon, diluted fruit juice or gelatin.



## NOTIFY OUR OFFICE IF

- You or a family member has symptoms of bronchiolitis.
- Symptoms don't improve in 4 hours, despite treatment.
- Temperature (rectal) rises to 101° F (38.3° C) or higher.
- Breathing becomes more difficult.
- A cough begins that produces colored phlegm.
- The skin, lips or nails turn dark blue.
- The child becomes lethargic.