

bronchiolitis

Bronchiolitis is a lung infection which causes wheezing especially in infants and children. Parainfluenza, influenza, adenoviruses and even mycoplasma cause bronchiolitis, but most are caused by respiratory syncytial virus (RSV). Because an infant's airways are so tiny, even small amounts of mucus cause significant blockage of the bronchioles. That's what causes wheezing and why your child might sound like an asthmatic now.

Bronchiolitis looks like a cold at first with several days of runny nose and low grade fever. The infection then moves into the chest. It would be great to figure out how to keep it from moving down into the chest, as many kids get the same virus and it goes away without causing any breathing problems. In fact 99% of kids get an RSV infection in 2 year's time (very contagious but variably symptomatic) !!

Some kids wheeze with every cold, and those kids have asthma. Bronchiolitis irritates their lungs, as do many other things like smoke, cat dander, dust and molds. Just because your child is wheezing now does not mean they will get asthma. But go ahead and be overly-cautious by eliminating as many irritants from your child's environment after this bronchiolitis attack. Some believe exposure to smoke and mold may promote development of asthma. Oddly, a recent study showed kids with more "dirt" in their pillows were less likely to develop asthma. Go figure!

Bronchiolitis typically lasts about a week. Breathing is worse at night. After struggling all night parents bring their children into the office the next day and they frequently look great. Then they go home and have another bad night at home! This is common. The mucus seems to plug up the lungs while kids are lying down. For that reason, propping your child's head, even letting them sleep in the car seat (in the house) may help the breathing.

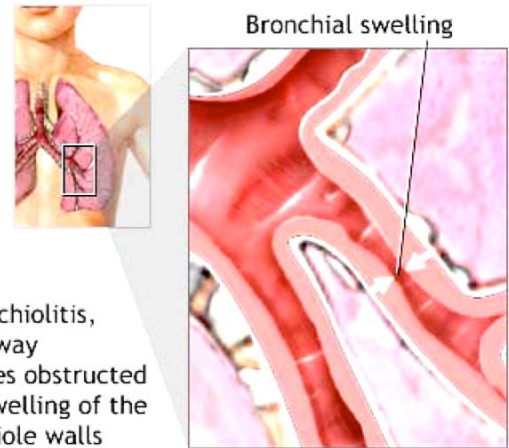
Mist also helps. So when you have one of those attacks at night, try taking your child in your arms into the shower with you. They may not like it and even object with bad crying and even vomit, but in an infant, that will usually bring up some good mucus and make the breathing more comfortable for a few hours. Using a vaporizer may help as well. If it is a steam vaporizer, make sure your child cannot get burned by it. If you can, rig up some sheets to make a "mist tent."

Since your child is probably too small to cooperate with an inhaler, sometimes we use a home nebulizer machine (really just a low pressure compressor) to atomize the medicine. Holding it over your child's face for 20 minutes brings a lot of relief. Use it prior to a feeding as well as prior to napping. The treatments can be given every 4 hours. They may make your child jittery but that wears off before the benefit to the lungs wears off. Between this and the mist tent most children do well while the virus gets out of their system. What we do in the hospital is not much different, so we encourage you to use these measures at home even though it is several nights of work for you.

Although no medicine kills the bronchiolitis virus, for children with serious lung diseases and (<32 wk) prematurity, there is a preventative medicine (Synagis [palivizumab- at 15 mg/kg, a monoclonal antibody against RSV]) which protects the child from RSV if they had an injection *that month*. It costs about \$5000 per season to treat one child, so it is used only in those at highest risk of complications.

Call us if these warning signs are present:

- Your child is vomiting a lot and can't keep liquids down.
- Your child is tugging his or her ears, has ear pain, or prolonged fever over 102.
- Your child is breathing very fast, more than 50 breaths in 1 minute.
- You can see your child's skin pull in-between the ribs with each breath.
- Your child is more sleepy than usual, is urinating less, has a dry mouth or cries without tears.
- Your child's skin develops a bluish color, especially around the lips or in the fingertips.



In bronchiolitis, the airway becomes obstructed from swelling of the bronchiole walls

Bronchial swelling