

Clinical Update

For Telephone Triage Nurses

January - February 2012

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- Practical information about coughing in children
- How to reassure a caller whose child is coughing
- The significance of noisy and rattling breathing
- Vomiting with coughing

Coughing Children: How to Reassure Callers

Coughing is a common symptom of childhood. In call centers, it's the second most common call. Most parents become distressed when they see and hear their young child coughing. They call us in hopes that we have a magic potion to eliminate this disruptive symptom.

Your main triage job is to rule out the presence of respiratory distress (work of breathing), wheezing (e.g., seen with bronchiolitis or asthma) or a croupy cough with stridor. But once you've decided that the child doesn't need to be seen urgently, you need to focus on how to keep the parent from needlessly taking their little one to the Emergency Department. Use the following information to reassure and educate worried parents.

- Reassure the caller about the cause. Most coughs are part of a cold. We call it a LRI (lower respiratory infection) or viral bronchitis.
- Educate the caller about the value of the cough. The cough reflex clears out excessive secretions and protects the lungs from pneumonia.
- Noisy breathing (without wheezing or stridor) is usually normal. Reassure the
 parents that pneumonia does not cause any noise. Noisy sounds are often due
 to vibrations from mucus in the nose or pooling in the lower throat. The noisy
 breathing can be eliminated by coughing, throat clearing, swallowing or bulb
 suctioning of the nose.
- Some parents are alarmed when they feel "rattling" over their infant's chest or upper back. Feeling a "rattling in the chest" is caused by the same secretions and vibrations that cause noisy breathing. The vibrations from the airway are easily transmitted through the thin chest wall of infants.
- Difficulty breathing during coughing is usually normal. As long as the child's breathing returns to normal when they are not coughing, all is well. (Exception: if the lips or face turn blue during coughing, this suggests borderline hypoxia and the need to rule out pneumonia, pertussis, bronchiolitis or other respiratory disorders.)
- A productive cough has no clinical significance except it tells us the infection is starting to break up and the child is coughing up the damaged cells. It does not mean complications have occurred. Productive coughs are good coughs. They should be encouraged, not suppressed.
- Coughing up yellow or green sputum (phlegm) is part of the normal healing phase of a viral bronchitis. It does not mean bacterial infection or pneumonia.



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- Coughing spasms are an attack of over 5 minutes of continuous coughing. They
 can cause fear in the patient and parent. The child or teen feels like he or she is
 losing control. The parents are often worried that their child will stop breathing.
 These are not realistic concerns, except in infants where cough apnea can occur.
 Most non-stop coughing can be relieved by sitting in a warm, misty shower
 room and swallowing some warm fluids.
- Vomiting with coughing is common, especially in children with a strong gag
 reflex or a past history of reflux. It can often be relieved by eating smaller
 amounts at 3-hour intervals, since vomiting is more common with coughing
 on a full stomach. If the vomiting is persistent or severe, the child can be seen
 during office hours.
- Parents worry if the cough is not gone by 10 days. Reassure that post-viral coughs can take up to 3 weeks (sometimes 6 weeks) for the trachea to repair itself and the cough to disappear. Chronic coughs are defined as lasting over 6 weeks.
- Some coughs are prolonged because of exposure to second-hand smoke. Explore this possibility and if found, ask the parent to give up smoking or smoke outdoors. Teens who smoke usually have slow recovery from viral bronchitis.
- Coughs that worsen in the evening or at night are not a helpful sign for sinusitis or other secondary bacterial infections. Most coughs worsen at night and this has no clinical significance. Coughs that only occur at night are rare. They may be caused by allergies, as from sleeping with a pet or feather pillow. (Reason: could be an allergic cough or asthma).
- Some parents think that "bronchitis" needs to be treated with an antibiotic. In healthy children, acute bronchitis is viral and part of a cold. Antibiotic therapy provides no benefit. There is no effect on duration of illness, severity of symptoms or ability to return to school.

Summary

- ✓ Coughs in children are almost always part of a cold
- ✓ They're caused by a virus and not helped by antibiotics
- ✓ Most coughs last 2 to 3 weeks because it takes that long to heal the lining of the trachea
- ✓ Yellow or green phlegm tells us the child is getting better, not that the infection has become bacterial.
- ✓ Telehealth nurses need to become experts on helping parents worry less about their child's coughing.

References:

- Chang AB, Glomb WB. Guidelines for evaluating chronic cough in pediatrics: ACCP evidencedbased clinical practice guidelines. Chest 2006;129:260S. PMID-16428719
- Guilbert TW, Taussig LM. "Doctor, he's been coughing for a month. Is it serious?" Contemp Pediatr. 1998;15(3):155-172.
- Margolis P and Gadomski A. Does this infant have pneumonia? JAMA. 1998; 279:308-314. PMID-9450716
- Neuman MI, Monuteaux MC, Scully KJ, et al: Prediction of pneumonia in a pediatric emergency department. Pediatrics 2011;128:246-253. PMID-21746723
- Woods C. Acute bacterial pneumonia in childhood in the current era. Pediatr Ann. 2008;37(10):694-702. PMID-18972852

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