Cough and Cold Remedies for Children

This issue was produced through a special collaboration with the University of Nairobi
Note to our readers:

The goal of Practical Pharmacy is to provide accessible, objective and accurate information on medicines issues for front-line health workers who may not have any pharmaceutical training.

In this issue we focus on COUGH AND COLD REMEDIES FOR CHILDREN

The most common health problem among children is the common cold. Without basic knowledge of the signs, symptoms and recommended treatment for children, parents may worry unnecessarily, may be easily influenced in how they care for their sick child, and may even administer a remedy that is not safe.

Coughs and colds can impact on quality of life, cause anxiety and affect sleep in parents and children.

While adults usually have two to four colds a year, children can catch as many as seven to ten. These episodes seem to be related to youngsters’ relative lack of resistance to infection, and to contacts with other children in day-care centres and schools.

We welcome your feedback to know if we have been successful in achieving our goal with this issue.

Contact us at practicalpharmacy@gmail.com

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Cough and Colds Remedies for Children: Do They Work? Are They Safe?

What are colds?
Colds are mild viral infections involving the nose, throat, bronchi and larynx (upper airways). The symptoms include nasal congestion due to build up of mucus in the airways. Colds are most contagious during the first two to four days after symptoms appear.

The common cold is caused by a few hundred strains of different viruses, including rhinovirus (the most prominent cause), parainfluenza virus, coronavirus, respiratory syncytial virus, adenovirus, and influenza virus.

Influenza (the flu) is distinguishable from the common cold as it occurs in epidemics and is characterized by fever, cough, joint and muscle ache and general malaise.

Colds spread easily because the viruses are shed in the secretions of an infected person’s nose and throat. These viruses can survive on most surfaces for many hours and people acquire them on their hands when they touch these surfaces.

Risk factors and symptoms

The risk of catching a cold may be increased by:

- Being near someone who has a cold
- Touching your nose, mouth, or eyes with contaminated fingers
- Having allergies
- Poor nutrition
- Immunosuppression
- Smoking or being near cigarette smoke
- Cold weather

Symptoms of the common cold usually begin two to three days after infection. These symptoms are shown in Box 1.

**BOX 1: SYMPTOMS OF COMMON COLD**

- Nasal discharge
- Blocking of nasal breathing
- Swelling of the sinus membrane
- Sneezing
- Sore throat
- Cough
- Headache
- Low-grade fever
- Low energy
- Watery eyes
- Aches and pains
- Muscle ache
- Loss of appetite

Cold symptoms can last from 2 to 14 days, but two-thirds of children recover in a week. If symptoms occur often or last much longer than two weeks, they may be the result of an allergy rather than a cold.

What is a cough?

Cough is a sudden and forceful release of air from the lungs due to irritation of the airway; coughs have a characteristic sound.

Children suffering from common colds often suffer from persistent coughing. Coughs in children are common, and accompany many normal childhood illnesses. They are not usually a sign of a serious condition. In fact,
coughing is a healthy and important reflex that helps protect the airways in the throat and chest.

Coughs are generally described as either dry or productive. A cough can further be classified as acute, sub-acute and chronic and may occur only at night, during the day or during both night and day.

In the majority of cases, coughs are caused by respiratory infections such as colds or influenza (the most common cause of cough), bronchitis, whooping cough, pneumonia, tuberculosis and fungal infections, such as aspergillosis, histoplasmosis and cryptococcosis.

Environmental pollutants, such as the smoke from household fires, cigarette smoke, dust, or smog can also cause a cough.

A cough can also be a side-effect of medications e.g. those administered as inhalers.

Complications of common cold

These complications are not common. However, parents should be aware of the signs and symptoms of potential complications, and should seek medical advice if they occur. These complications include:

1) **Ear infection:** A child complains of earache or has pus draining from the ear.
2) **Asthma:** Colds can cause wheezing in children who have not wheezed before, or worsen asthma in children who have a history of this condition.
3) **Sinusitis:** Children who have nasal congestion that does not improve over the course of 14 days may have a bacterial sinus infection.
4) **Pneumonia:** Children who develop a fever after the first 3 days of cold symptoms may have bacterial pneumonia, especially if the child also has a cough and is breathing rapidly. Parents should watch for in-drawing of the chest when the child is breathing.

Cold prevention tips

- The best way to prevent spread of colds is to teach children to cover their nose and mouth when they sneeze and cough or to sneeze into their elbows rather than their hands.
- Washing hands after coughing, sneezing and wiping your child’s nose
- Washing hands after being in contact with someone who has respiratory infections.
- Avoid close and prolonged exposure to persons who have colds. Ideally, children should be excluded from going to school when they have colds.
- Avoid sharing toys that children put in their mouths until the toys have been washed.

Management of coughs and colds in children

There is no cure for the common cold. Non-medicinal approaches should be considered first.

**Recommendations**

1. **Over-the-counter (OTC) medicines**
   - Should not be given to children younger than 6 years old unless prescribed by the doctor because of the risk of side effects and overdose.
   - It is recommended that parents seek advice from doctors or pharmacists before giving over-the-counter medicines to children under 12 years of age.

Many countries have ruled that coughs and cold medicines containing specified active ingredients should no longer be used in children under the age of six years and that such products indicated for children aged six to twelve years should carry stronger warnings. Some also require that child resistant closures be used for liquid products containing the following specified ingredients:

- Brompheniramine, chlorpheniramine, diphenhydramine, doxylamine, promethazine and triprolidine (antihistamines)
- Guaifenesin and ipecacuanha (expectorants)
- Phenylephrine, pseudoephedrine and ephedrine (decongestants)
Table 1: Characteristics of dry and productive cough

<table>
<thead>
<tr>
<th>Characteristics of a dry cough</th>
<th>Characteristics of a productive cough</th>
</tr>
</thead>
<tbody>
<tr>
<td>► Non-productive (no sputum produced)</td>
<td>► Wet cough with sputum production which could be:</td>
</tr>
<tr>
<td>► High pitched</td>
<td>● Greenish, gray, or brown in bacterial infections</td>
</tr>
<tr>
<td>► Irritating</td>
<td>● Clear or white or creamy in allergy or viral infection</td>
</tr>
</tbody>
</table>

Caution: Although dextromethorphan and pholcodine (antitussives) are useful in adult cases of colds and coughs, they are rarely recommended for use in children.

2. Infants with a stuffed nose
   - A rubber suction bulb can be used to clear the mucus from the nose.
   - Saline nose drops or saline nose spray can be used if the mucus is very thick. In children nasal spray are preferred to drops.

3. Dry and irritating cough
   The following remedies may be used:
   - Steam inhalation
   - Drink a lot of liquids
   - Menthol and other chest rubs are commonly used with some evidence of benefit and minimal risks if used in small amounts.

4. Pain, aches and fever in cough and cold
   - Paracetamol is used to relieve aches and pains and fever
   - Aspirin or any cold medicine containing it should be avoided in any child or teenager [under 16] with colds because it can lead to brain and liver damage in rare cases (Reye’s syndrome).

Caution: Do not give dextromethorphan and codeine containing medicines unless specifically prescribed by a doctor aware of the risks.

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5. **Antibiotic use**
   - Antibiotics have no role in management of cold except when the child develops a bacterial infection such as pneumonia.

6. **Steam inhalation**
   - Helps to thin out the mucus and temporarily relieve symptoms of congestion associated with colds and can also benefit cough in some cases.

7. **Non-pharmacologic measures**
   - Increasing fluid intake by drinking water, tea and soup can help to loosen the mucus, thus allowing the child to unblock the nose or cough more easily.
   - A well balanced diet should be maintained
   - Honey is often found to be soothing to irritated throats.

**Conclusion**

Most colds are not serious. Knowledgeable parents and other care takers with basic understanding of the signs, symptoms and recommended treatment for children with coughs and colds can avoid unnecessary worry. Caretakers should be careful in choice of a safe and effective remedy and – if possible - be guided by knowledgeable healthcare providers. Caution must always prevail when considering the use of cough and cold medicines, due to the well-known risks of side effects with their use in children.
References


