

Combating the common cold in children

We are entering the winter cold season here on the coast of Maine, which is sometimes called the flu season. Don't worry, I'm not writing another article on the flu shot! Most likely, we will all contract some form of a respiratory infection this season. Unless we stay in the house all winter, it is almost impossible to avoid the common cold.

Most of these upper respiratory infections will not be the flu. In fact, there are thousands of different viruses and subtypes of viruses that circulate each year. They have names like Rhinovirus, Coronavirus, Adenovirus, Parainfluenza, Respiratory Syncytial Virus (RSV) and even, as described recently by a medical school classmate of mine, an emerging pathogen named Human metapneumovirus. That's the craziest name yet.

Luckily, we don't have to remember all these names. In most cases, it is not even helpful for doctors to distinguish between them because they all cause similar symptoms and are not individually treatable. We usually just call it a 'viral upper respiratory infection.'

Because there's no cure for the common cold, it makes sense to do whatever we can to protect our families from these infections in the first place. Respiratory infections are best prevented by regular hand-washing, avoiding exposure to cigarette smoke, getting enough sleep, and good nutrition. Most of us have heard from a family member that we were 'going to catch our death of cold' if we didn't put on our scarf. However, going outside without the extra layers really does not cause a cold.

While most colds can be managed at home, sometimes they can progress into something more serious. Call your health care provider for these conditions:

- shortness of breath
- abnormal noisy breathing
- severe lethargy/tiredness
- inability to keep food or liquids down or poor fluid intake
- increasing headache or facial pain
- neck stiffness
- severely painful sore throat that interferes with swallowing
- infant under three months with a temperature of 100.5 or higher
- fever of 103 degrees Fahrenheit or higher
- fever of 101 degrees Fahrenheit or higher that lasts for several days
- swollen glands (lymph nodes) in the neck
- earache

A child's regular caregiver, usually a parent, is the best judge of their condition. I always want to hear about a patient if the caregiver is worried about him or her. I am more concerned about a child that's steadily worsening than one who is stable or improving.

Now that little Hannah has been diagnosed with a cold, what to do? There are many, many cold remedies out there. Looking at the cold treatment aisle in the pharmacy can be an all-day adventure! Most of these remedies are just different combinations of the same few medicines that have been available for years: (more crazy names alert!)

dextromethorphan, chlorpheniramine, pseudoephedrine, brompheniramine. Unfortunately, in research studies, these medicines aren't any better than a sugar pill at helping cold symptoms in most children less than seven years of age. Decongestants may actually make a baby more irritable or cause an irregular heartbeat! It seems that most of these medications are more the product of aggressive marketing than medical science.

Some medicines have proven helpful for cold symptoms: acetaminophen and ibuprofen are definitely helpful for pain or fever at any age. Sometimes I hear parents say that one of the over-the-counter remedies has helped their child feel better, but I'm never sure if the child would have done just the same without it. The only medicines I recommend trying for young children, especially babies, with congestion are saline nose drops or diphenhydramine (a.k.a. Benadryl).

For most of us, the best treatment for a cold is a dose of acetaminophen or ibuprofen for discomfort or fever, some extra rest and plenty of fluids. There is some evidence that high-dose Vitamin C or Zinc nasal gel may diminish the duration of some colds by 5-10%. To me, this seems like a pretty mild benefit, and not worth the potential risk of overdosage. I have found that keeping a humidifier on in a child's room can help soothe dry breathing passages. A bath is also an effective way to loosen secretions, and it can distract the child from their illness. Fun and laughter are therapeutic for everybody!

I am often asked about a child's activity level: should I keep him in bed? Can I send him to school? Usually the child is their own best judge of their energy level: I let them do whatever they feel up to, with a few exceptions. Kids with fever should be kept home from school, because they are often in the contagious phase of their infections. The first 2-4 days of an upper respiratory infection are the most contagious, and viral particles can fly as far as 12 feet from an uncovered sneeze. I recommend against vigorous physical activity, like wrestling with siblings or sledding, as it may infect others or provoke coughing spells. Also, when a child is home from school, it should be considered a recovery period and not a vacation.

We'll probably all have to deal with the common cold this season. Hopefully these tips can help to make it more of an inconvenience than a disease.

Extra stuff about medicating uri's:

There are several medicines available by prescription to treat influenza, but they are only helpful if started within 48 hours of the beginning of the illness. Tamiflu and Relenza are two newer medicines that have been shown to shorten the course of influenza illness by a few days. Tamiflu is the brand name for oseltamivir, and is a liquid available for use in children over one year of age. Relenza is also called zanamivir, and is administered as an inhaler. Amantidine and Rimantidine are older medicines which may also be helpful in some cases.

All of the influenza treatments first require a diagnosis of influenza A or B through laboratory test. The test involves collecting some nasal mucus from the patient, which, can be unpleasant, is not always offered by offices or laboratories. As these tests and medications are relatively new therapies available to children and adults, they are still working their way into the standard treatment protocol. With all of these extra steps that a patient in my practice needs to take before they can actually take the medication, I am

unconvinced that the end result is worth all of the extra effort. In my practice, when I add up the difficulties at getting the patient in within 48 hours, doing the lab test, finding a positive diagnosis, prescribing the medicine and then only cutting the duration of symptoms by one or two days, I'm not convinced the benefit justifies all the extra hoops to jump through.

Of course, we usually diagnose flu without lab tests. Influenza typically starts suddenly, and causes high fever, exhaustion, dry cough, headache and general body aches. Illnesses featuring vomiting, diarrhea, or prominent sore throat are not generally the flu. Influenza is infamous for progressing into pneumonia, which causes fever, wet cough and shaking chills.

RSV is the other virus that is important to know about. Infants and especially premature babies, are the group at highest risk for RSV-related sickness. Children who were born too early, especially those who needed ventilator support, are at risk for serious disease from RSV. These infants may develop noisy breathing, wheezing and severe shortness of breath making it difficult for them to feed well. This condition, known as 'bronchiolitis,' sometimes requires hospitalization for respiratory support.

Some premature infants are candidates for a preventive medicine for RSV bronchiolitis called Synagis, or palivizumab. Again, I'm not the one who makes up the names. Palivizumab is a monthly injected RSV antibody that helps to prevent this potentially lethal disease which preys particularly on premature infants.