

Treating and Preventing Colds and Ear Infections in Children

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Pediatrics

What Causes a Cold?

In order to get a disease such as a cold, there needs to be sort of a triangle between the agent (germs or virus) that causes the infection, the host (the person who will get sick) and the environment in which the agent lives. For example, a cold, which is caused by any one of hundreds of viruses, will only develop when one of these viruses comes in contact with a mucous lining such as in the mouth, ears, nose, throat or eyes of a person. If this happens, then the person may become ill.

Most often, these viruses are transmitted by a child's hands to his or her eyes, nose or mouth and the infection begins. Young children tend to touch everything in sight and put everything in their mouths. A likely scenario: someone with a cold coughs or sneezes and covers his mouth with his hand. He then touches a toy, leaving the cold virus behind. Next, a healthy child touches the same toy and then touches her eyes or puts the toy in her mouth, allowing the virus to come in contact with her mucous membranes. Within two to three days, she may develop a cold.

The first signs of a cold are an itchy throat and watery eyes, followed by a runny nose and achiness which last about three to five days. This is the time when the child's cold is most infectious. Next, a loose cough develops and progresses into a dry cough and then finally disappears. If the symptoms last more than two weeks, appear to worsen or the child is extremely uncomfortable and is having trouble breathing, it's best to see your physician.

Tips for Treating Your Child's Cold.

There's an old adage that if you treat a cold, it takes 2 weeks, but if you don't treat it, it takes 14 days. Since it's caused by a virus, antibiotics are ineffective. The best way to treat a cold is to manage its symptoms through both interventional and medical methods.

Infants and young children typically breathe only through their nose, so when it's stuffed up with mucus, they can't breathe. In turn, this makes it difficult for them to eat; they become dehydrated and tired and irritable. There are three steps to help alleviate this. First, elevate the head of the bed to 30°. This allows gravity to help drain the child's nasal passages. Sometimes this will cause the child to cough and gag, but be assured it's only nature's way of helping the child. Second, use a bulb syringe to suction out as much



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mucous as possible to make the child comfortable. Be careful to not do this too often or it will irritate the mucosal lining even more. The third step is to use a humidifier or vaporizer to add moisture to the air the child is breathing. If these are not available, hold the child in the bathroom while a hot shower is running.

Cold management also includes medications to help alleviate symptoms such as a runny nose, fever or cough. Antihistamines, such as Benadryl, play a big part in reducing nasal drainage and relieving symptoms like itchy, watery eyes. These are best used during the initial stages of the cold.

Read the labels carefully since these medications can be sedating, though some of the newer ones are much less sedating. Expectorants, such as Guaifenesin, help break down the thickened mucus associated with a cold. These are most effective during the middle stage of the cold when the cough begins to sound "rattly."

Cough suppressants are used during the third and final stage of the cold, which is when a dry, irritating cough begins. Look for extromethorphan or the letters "DM" in over-the-counter cough syrups.

Other medications, decongestants, are useful and recommended with caution for young children and infants due to the side effects. Some of these medications cause excessive wakefulness, irritability and a reduced appetite. Since these are already problems associated with young children having a cold, decongestants may worsen these conditions.

Overall, it's best to take only those medications absolutely necessary to help relieve symptoms, and then in the smallest doses possible to achieve relief. In addition, try to get your child to drink as much fluid as possible.

Can I Help Prevent a Cold?

As mentioned earlier, many colds are introduced into the body via the hand. The best way to help prevent a cold is to wash your hands and your child's hands often, especially when one of you is ill. Using a diluted bleach and water solution, also wash common objects such as door knobs, phones, sinks, refrigerator handles and favorite toys.

In general, children, like adults, will get an average of four colds per year. Children in day care can expect to get an additional two or three per year. Most colds do not require any intervention except to

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keep the person comfortable and well-hydrated.

What Causes an Ear Infection?

The anatomy of the ear plays a big role in a child's chances of developing an ear infection. The middle ear compartment (that which typically becomes infected) is directly connected to the back of the throat via the eustachian tube. In growing infants or young children, the eustachian tube is more horizontal so that when they are lying on their backs, any excessive drainage from the nose or throat can accumulate in the middle ear compartment. This fluid is then more likely to become contaminated by bacteria and cause an ear infection. In addition, allergies and environmental pollutants such as cigarette smoke can also predispose a child to ear infections. Lastly, drinking from a bottle while lying down will also increase a child's risk of ear infection.

Most often, an ear infection comes shortly after a runny nose starts, accompanied by fever and irritability, though some children have ear infections without any fever. Also, many children will begin to rub, bat, pull or tug at their ear. However, it's important to note that when children are about six to eight months old, they learn to explore their bodies and will pull on their ears, but their disposition remains pleasant without any irritability. A child who seems happy when sitting upright, but who awakens from sleep screaming, resists being put down for a nap or only sleeps for a short time and wakes up crying, may have an ear infection. Usually, the acute signs of an ear infection (fever, irritability) should begin to subside within the first 48 hours. By two weeks, all signs and symptoms should have disappeared.

Anytime you think your child might have an ear infection, it's best to see your pediatrician within 24 hours.

How are Ear Infections Treated? What About Ear Tubes?

Middle ear infections are always treated with a course of antibiotics. It's important to give your child the complete dosage, even though he or she may be feeling better after just two or three doses, to ensure that the bacteria are completely gone. If there is only fluid in the middle ear with no signs of infection, then it can be treated with decongestants and sometimes antihistamines. Your pediatrician can determine the best treatment. The decision whether

to use ear tubes or not should be made with your pediatrician. Factors such as how frequently the child has ear infections, his or her predisposition to infections, and any allergies the child may have should be considered. Ear tubes are usually inserted for two years, though they may fall out spontaneously as soon as six months later. Eventually, they will often dislodge spontaneously if left in for more than two years.

Can I Help Prevent my Child From Developing an Ear Infection?

The best way to help prevent an ear infection is to avoid irritants that may cause a runny nose. Substances such as cigarette smoke, allergens such as goose or duck down (feathers) in pillows and pet dander, and other irritants such as dust mites and mold spores are some of the most common. As with colds, many children develop ear infections because their ear and throat anatomy is still developing and predisposes them to infection. As the child grows, he or she will outgrow many of these infections.

For more information call Advanced HealthLine at (262)512-2880, or toll-free at 1-888-709-2080 outside the Milwaukee metro area.

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