

# PARENT EDUCATION

## Upper Respiratory and Ear Infections, Sinusitis

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The upper respiratory tract includes the nose, throat, mouth, and the related cavities like the middle ear and sinuses. Viral upper respiratory tract infections (URI's) are very common with an average of six to eight infections per child per year. Some of those viruses cause mild infections, but some can be nasty. Viral infections resolve spontaneously and only 15-30% are complicated by a secondary bacterial infection like ear infections and pneumonia, including 5-10% that lead to sinusitis. Most sinusitis (about 60%) will resolve spontaneously even without antibiotics.

Ear infections are also very common. More than one-half of infants will have at least one ear infection by their first birthday and more than 80% will have it by their third birthday. 50% of infected children have three or more episodes by the third birthday. Most ear infections are due to bacterial invasion of the middle ear, but about 10% are sterile and mostly viral in nature. Even though most ear infections are bacterial 80% will resolve spontaneously even without antibiotics.

Daycare attendance is a major risk factor for upper respiratory tract and ear infections . This is due mainly to the fact that they are a necessary evil. Parents have to send their kids to daycare even if they are sick, which exposes other kids to their illness. Daycares are usually crowded with kids who share toys and put everything in their mouths. It is tough to watch all the kids all the time.

Smoking is also a major risk factor for all upper respiratory infections including ear infections. Smoking spreads easily from room to room, so smoking anywhere in the house will eventually reach the child. Also smoking in the car even if the child is not present will contaminate the circulation of the car and will irritate the child's upper airways when he or she travels in the car. The only solutions are quitting or smoking outside.

Pacifiers used past the age of ten months and feeding babies lying down are also risk factors for ear infections.

Viruses and bacteria spread mainly by direct contact mostly on hands and by touching the secretions of a sick person. This makes hand washing very important in preventing the spread of infections especially before and after eating, after using the bathroom, after feeding or handling the secretions of a sick child and before feeding or handling an infant or child.

Breast feeding is a protecting factor against most of these infections, especially ear infections and stomach viruses.

During a viral upper respiratory tract infection we can make the child more comfortable by treating the symptoms until the child's immunity kicks the virus out of the body, but antibiotics are not a solution and may even be a problem. Antibiotics work only on bacteria and will not kill the virus. If antibiotics are given in the course of a viral infection, they will increase the chance of a secondary bacterial infection by selecting for more resistant bacteria that are more likely to invade and cause disease. Ear infections and sinusitis are treated with antibiotics since they are mainly bacterial infections.

Finally, what starts as a cold doesn't always end as such and a complication such as a bacterial infection or wheezing can develop at any time. There are many infections like chicken pox, hepatitis and pertussis that start as a cold before more specific signs develop. The parents have to keep a watchful eye on their child and contact the doctor if any new symptom develops.