

Respiratory Problems and Lungs

Asthma

Parents are mystified by the term asthma{ XE “asthma” }. It is important to understand asthma, because it is the most common chronic respiratory disease in children and adolescents. Asthma affects the bronchial passages of the lungs. When an asthmatic child is affected by this condition, the bronchial tubes become narrow, making it difficult to breathe. This happens because small muscles surrounding the bronchial passages constrict, the lining of the bronchial tubes becomes swollen and extra mucus blocks air flow.

Many different symptoms can appear, if asthma is active in your child. Some children have the feeling of tightness or pain in the chest as they breathe. Some children with a mild but persistent form of asthma, can appear fatigued. They show signs of strain and working to breathe. Other children may have only a nighttime cough lasting for weeks or months. Some others will cough with play or exercise.

As I mentioned, cough is an important sign in asthma. The term “attack{ XE “asthma attack” }” is often used to describe fierce bouts of coughing, making it difficult to breathe. In some cases, coughing is almost absent. The strained effort to force out air trapped in the lungs, produces a unique sound called wheezing. Many different factors can start the symptoms of asthma.

In children, infections are the most common trigger. Asthma and allergies are often used interchangeably with each other, but they are not the same. Allergies are reactions to foreign substances like house dust, animal dander, pollens, molds, medications, and foods. These substances cause the body to produce histamines, which are chemicals that produce swelling, redness, itching and irritation. Not all allergic children have asthma, and many asthmatics are not allergic.

Changes in temperature or weather can start the symptoms of asthma. Exercise can also bring on the symptoms of asthma. Certain types of exercise seem to be tolerated easily like swimming, whereas long-distance running and basketball seem to be tolerated less. Irritants very commonly cause a child’s asthma. Cigarette smoke, chemical sprays, air pollution, gasoline, and perfumes are examples of irritants that can cause a child’s wheezing or cough.

Emotions can play a role in causing an asthma attack, but this can easily be over-played as a cause of asthma. Some asthmatics will develop complications with their asthma, although most problems can be avoided, if asthma is managed appropriately. Many asthmatics have secondary infections like ear and sinus infections. Pneumonia can develop if the symptoms go untreated.

The diagnosis of asthma is customarily made from the symptoms present, and the medical history of the child and family. Sometimes chest and sinus X-rays are valuable to determine if an infection exists. Sinusitis may hinder the rapid resolution of symptoms. Pneumonia can produce the same symptoms as asthma.

When a strong allergy history is present, allergy testing can help determine the cause of asthma. This testing is usually restricted to children over 5 years, because the results are not specific or dependable for children under 5. There are many effective treatments for asthma. If any symptoms of asthma are present in your child, an office visit is recommended.

Smoking and your child

Parents should be aware of all the new information available about the effects of the secondhand{ XE “secondhand smoke” } and sidestream smoke { XE “cigarette smoke” } on your child’s health. Secondhand smoke is all the smoke from the parent when they exhale and sidestream smoke is the smoke rising from the end of the cigarette while it is burning.

It is said that a child who spends one hour a day in a very smoky room with multiple smokers, inhales as much harmful chemicals as if he or she smoked 10 or more cigarettes. Some of these same harmful chemicals are present in the breast milk of a smoking mother. Smoking parents and *Sudden Infant Death Syndrome*{ XE “SIDS, smoking” } appear to be linked. There is an increased rate of *SIDS* in homes where there is secondhand smoke.

I always caution parents who smoke who have asthmatic children. Their frequency of complications, the frequency of doctor visits, and number of hospitalizations are all increased when an asthmatic child lives with one or two smoking parents.

There is a long list of conditions that are worsened when your child is exposed to secondhand smoke:

- pneumonia
- coughs or bronchitis
- croup or laryngitis
- wheezing or bronchiolitis
- influenza (respiratory flu)
- ear infections
- middle ear fluid
- colds and other upper respiratory infections
- sinus infections
- sore throats eye irritation
- school absenteeism

Secondhand smoke?

The most important thing is to give up smoking. An especially critical time is during pregnancy. Children’s growth is known to be effected by cigarette smoke.

Smaller babies are often the result of a smoking mother. Children who grow up in home where one or both parents smoke are 2 to 3 times as likely to be smokers when they make a choice to smoke themselves.

It is easy for me to say stop smoking but it is very difficult to do. At least try to change your smoking habits. Either smoke only when your away from the home. If you must smoke at home please smoke on the patio or garage. When you must smoke in doors use only one room. Try to keep the room well ventilated to the outdoors by opening a window. Even with these measures smoke often permeates through the rest of the house. This should also apply to visitors.

Avoid smoking when you hold your child. Do not smoke in their room. Never smoke in the car when your child is a passenger.

It is also important to check out the care giver for your child. They should not be smokers.

Although we might try to prevent our children from cigarette smoke it is not realistic to expect that they will never be in contact with other smokers. If we do our best to decrease the amount of time they are around secondhand smoke{ XE “secondhand smoke” } you can expect minimal effects from smoke and decrease the chances for illnesses and disease.

Bronchiolitis

Respiratory Syncytial virus (RSV){ XE “Respiratory Syncytial virus (RSV)” } causes many types of upper respiratory illnesses in the winter months, especially bronchiolitis. It is notorious for causing remarkable coughing that can last for weeks. Many children with bronchiolitis are diagnosed as having pneumonia. Children, particularly infants, may wheeze like an asthmatic and those under 6 months of age may have such distress from the wheezing and labored breathing, they can’t drink.

Children with bronchiolitis{ XE “bronchiolitis” } may need to be admitted to the hospital so oxygen and intravenous fluids can be given. Since this infection is caused by a virus, antibiotics don’t have a direct benefit. Secondary ear infections or pneumonia can develop. In which case, antibiotics serve a valuable purpose.

In limited situations, an antiviral drug called Ribavirin™ may be used just for RSV life-threatening infections. It is not recommended for most cases of bronchiolitis, since most children do well and are not bothered by the severe cough or it’s complications.