



Asthma & Colds

Plan ahead to avoid asthma attacks when colds strike

Year round, cold viruses make asthma worse. You can develop a strategy with your doctor to help prevent an attack during a cold.

Maureen dreaded colds. She knew that if her 10 year-old son, Daniel, were to get one, he would also have a severe asthma attack. She wanted him to receive antibiotics with each cold. But Daniel's doctor told her that taking an antibiotic would not prevent an asthma attack, because the problem was the cold virus itself.

The symptoms of an asthma attack during a cold are worsening shortness of breath, cough, wheezing or chest tightness or a combination of these. Some episodes lead to breathing problems that may require a hospital stay. Even weeks after a cold is gone, symptoms of asthma can remain at an increased level.

With a new way to identify viruses, doctors are finding that most wheezing episodes in patients with asthma occur during viral, not bacterial, infections. Viruses often linked with wheezing include rhinovirus or common cold virus. Others are parainfluenza virus and influenza B virus.

Bacteria are found in the lungs about as often during wheezing episodes as during times with no wheezing, according to Dr. C.J. Trigg of London 's St. Bartholomew's Hospital. Viruses, on the other hand, are found much more often when asthma becomes worse. A recent study found viruses in 64% of asthmatic children with worsening of asthma as a result of a cold.

Dr. Karl Nicholson of the University of Leicester in England studied adults with asthma who for about 20 years had bouts of wheezing. He found that colds were linked to increased asthma symptoms in about 90% of cases. Readings from a peak flow meter – which measures air flow – dropped dramatically in about ? of those with viral infections.

How do viruses affect asthma? Dr. Trigg explained that lung responsiveness increased colds. Peak flow meter readings also fluctuate greatly during colds. Even non-asthmatic people who are allergic to ragweed are more likely to have an asthmatic response after exposure to ragweed during a cold. Dr. Trigg believes respiratory viral infections play a role in causing asthma. Specifically, rhinovirus cold infections.

Viruses promote inflammation in the lungs. They promote even more inflammation in persons with allergies. Viruses damage lung cells, allowing foreign substances, including allergens, to enter. The viruses remove protective coverings and expose delicate nerve endings. The body responds by releasing inflammatory substances that can worsen asthma. In a person who is already allergic, a

viral infection can lead to increased allergy inflammation, Dr. Trigg explained. This causes a more severe reaction and a greater risk of persistent symptoms.

Maureen and Daniel's doctor worked out a strategy

- Daniel will get a flu shot every year. Vaccination reduces the ability of the virus in the vaccine to provoke asthma
- Daniel will avoid contact with people who have a cold or flu.
- When Daniel does have a cold, Maureen will follow the doctor's plan. She will start new asthma drugs or increase the dose of the regular asthma drugs or both.
- Daniel will use his peak flow meter twice a day. Maureen and the doctor will have early warning if his asthma is worsening.

Do you have a strategy to avoid asthma attacks during a cold or the flu? Now is the time to work with you doctor to develop one.

Colds can be Dangerous in Asthma

If your asthma gets worse every time you get a cold or flu, work with your doctor to develop a strategy for dealing with your asthma attacks.

1. Have a written plan from your doctor that instructs you whether to add new medications or increase the dose of current medications at the first sign of a cold or flu
2. Use peak flow meter readings for early warning that signals your asthma is getting worse.
3. Call your doctor if your peak flow meter readings drop or your symptoms get worse.
4. Get a flu shot every year. It can lessen the asthmatic response to the virus in the vaccine.

Adapted from the Respiratory Health Monitor