

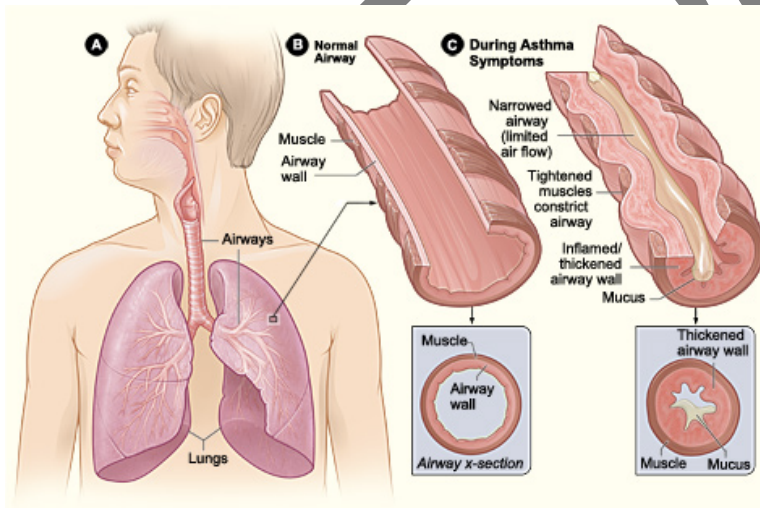
Asthma

Coughing, wheezing, and feeling suffocated just because the neighbours' cat is in the area? It could be asthma. Asthma is a permanent infection within the lungs. Unfortunately, it's not fully curable with medication so it will cause infections throughout the person's life. The lungs of an asthmatic patient are very sensitive to triggers like smoke, animals, dust mite and certain types of food. These triggers can cause a so-called 'asthma attack' which makes them feel like they are suffocating and can cause severe coughing fits. Both can result in difficulty breathing. Although asthma attacks are not normally fatal, they are extremely stressful for the sufferer.



What happens within the lungs during an asthma attack?

Triggers like smoke and animals set all sorts of physical responses in motion that eventually lead to an asthma attack. As you can see in the picture below on the right side, the airways within the lungs are swollen and the walls around them are contracting. This starts with the mucous membranes of the nose, throat, and lungs. They will swell and produce more fluid and mucus than usual; this is where the actual obstruction takes place (Chung et al., 2013).



First, the inflammation causes the smooth muscles (muscle you can't control) that cover the airway to constrict. There are two types of nerves affecting this smooth muscle. The nerves that release Beta-receptors cause relaxation. The nerves that release muscarinic cause the constriction and that is the one that gets triggered. The tensed smooth muscles will tighten up the airway, making it hard to breathe.

Second, people who have allergic asthma often show elevated levels of Immunoglobulin-E (IgE), which is an antibody that is related to hypersensitivity and allergies. IgE affects the release of histamine that causes a severe swelling within the airways. Both processes result in limiting the amount of oxygen you can get in and out. The flow rate of fresh air – that contains the needed oxygen – decreases quickly during an attack. Almost immediately, the patient will start coughing, wheezing and having shortness of breath.

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important tendencies. These tendencies are not absolute causes but they do increase the chance that you will suffer from attacks during your lifetime.

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Thirdly, many environmental aspects affect your tendency to develop asthma. Being constantly exposed to poor air quality (i.e. smog), allergens and other harmful airborne particles increases your chances of developing asthma during your lifetime.



Beijing Smog Comparison August 2005. The left photo is immediately after a rain when the smog is absent. The phone on the right shows the maximum smog experienced in the area – Photo originally taken by Tamas Kadar and adapted by CMBJ {cc-by-sa-2.5}

Reading Comprehension Questions

1. Name some triggers that can cause an asthma attack.
2. Describe
3. How
4. How
5. Name the three important tendencies that increase the likelihood that you will get asthma.
6. If both of your parents have asthma, what is the chance that you will get it as well?
7. How

Extension Questions

8. What is the difference between rescue and long-term medication?
9. Create an

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References

Akinbam, L.J., Moorman, J.E., Baily, C., Zahran, H.S., King, M., Johnson, C.A. and Liu, X. (2012). Trends in Asthma Prevalence, Health Care Use, and Mortality in the United States, 2001-2010. NCHS data brief, no 94. Hyattsville, MD: National Center for Health Statistics. 2012.

Chung, K.F., Wenzel, S.E., Gaga, M. and Mauad, T. (2013). International ERS/ATS guidelines on definition, evaluation and treatment of severe asthma. European Respiratory Journal.

Learn how to control asthma. (n.d.) Retrieved May 20, 2016, from <http://www.cdc.gov/asthma/faqs.htm>

Understand your medication. (n.d.) Retrieved May 20, 2016, from <http://www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/living-with-asthma>