

## ASTHMA

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Audio	Suggested visual
<p>You cough, wheeze and feel tightness in your chest. Suddenly, your airways narrow and you gasp for breath. You are experiencing an asthma attack.</p> <p>An asthma attack is frightening to both the person experiencing it and to others around the person. A severe attack can be a life-threatening emergency that requires immediate and professional attention. If not treated adequately and promptly, the attack can be fatal.</p> <p>Doctors are not sure what causes asthma. However, its prevalence is increasing worldwide among children as well as adults in mainly urban communities.</p> <p>According to the <i>Global Burden of Asthma Report</i>, released by the Global Initiative for Asthma in 2004 an estimated 300 million people worldwide have asthma. It affects people of all ethnic groups, socio-economic level and ages.</p> <p>In Malaysia, it is estimated that about 10% of the population suffer from asthma.</p> <p>In this programme, we look at the causes of asthma attacks, how to avoid attacks and the treatment options.</p> <p>Asthma is defined as a condition in which the airways narrow, usually reversibly, in response to certain stimuli.</p> <p>For children, asthma has a genetic link and is closely associated with allergies. An estimated 75% of children with asthma have significant allergies. For example, some kids may be highly allergic to cats and develop wheezing when he or she is around them.</p>	<p>Play acting – Asthma attack</p>

Audio	Suggested visual
<p>What causes asthma? .</p> <p>Ten years ago, scientists thought that air pollutants might be the cause. However, they now believe that the causes are more complex. They are now examining the role of genetic factors and the immune system.</p> <p>One school of thought views asthma as an inflammatory disease linked to poor dietary habits, chemical additives in food and hidden food allergies.</p> <p>While the causes are not clear, the factors that set off asthma attacks are better understood. The triggers include inhaled allergens such as dust, mites, pollen, tobacco smoke and other air pollutants.</p> <p>Exercise, stress and anxiety, strong emotional expressions such as crying and laughing hard are also contributory factors.</p> <p>In children, asthma is often triggered by allergies. Children can suffer reactions to ordinary materials like pollen, moulds, food and animals. During an allergic reaction, chemicals such as histamine are released producing swelling of the lining of the airway, excessive mucus secretion and muscle contraction in the airways.</p> <p>Viral infections can also trigger asthma in children. As such, children who have frequent coughing or respiratory infections (bronchitis or chest colds) should be evaluated for asthma.</p> <p>The best known symptom of asthma is wheezing. Other signs include a cough which is usually worse at night or after exercise, tightness in the chest or difficulty breathing.</p>	<p><i>Chart</i></p> <p><b><i>What can trigger asthma attacks</i></b></p> <ul style="list-style-type: none"> <li>• <i>Cigarette smoke</i></li> <li>• <i>Dust</i></li> <li>• <i>Mites or animal hair</i></li> <li>• <i>Weather changes</i></li> <li>• <i>Strong emotions</i></li> <li>• <i>Exercise</i></li> <li>• <i>Allergies</i></li> <li>• <i>Respiratory infections</i></li> </ul>

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<p>As mentioned earlier, an asthma attack is characterised by the narrowing of airways. How does this happen?</p> <p>The narrowing is caused by the swelling of the lining of the airways, tightening of the muscles around the airway and clogging of the tiny airways in the lungs by mucus. All these changes produce airway obstruction, chest tightness, coughing and wheezing. If severe, this can cause shortness of breath and low blood oxygen. The severity of the attack varies with the each individual.</p> <p>How is asthma diagnosed?</p> <p>This is usually confirmed with the use of spirometry tests, which assesses the severity of airway obstruction.</p> <p>We get more details from Dr. Zainuddin Md Zin, chairman of the Asthma Council Malaysia.</p> <ol style="list-style-type: none"> <li>1. What type of tests are needed to diagnose asthma?</li> <li>2. Please explain how a spirometer assesses airflow in the lungs and when it indicates asthma?</li> <li>3. What is a peak flow meter and how does it help in the diagnosis of asthma?</li> <li>4. Is a chest X-ray helpful in diagnosing asthma?</li> </ol> <p>Asthma cannot be cured but it can be effectively managed and controlled with awareness and know-how.</p> <p>Asthmatics are advised to take an active role in managing their own condition. They should</p> <ul style="list-style-type: none"> <li>• Avoid asthma triggers</li> <li>• Reduce the need for frequent medication</li> <li>• Discuss with their doctors on an action plan in case of severe attacks</li> </ul>	<p><i>Diagram</i> <b>How Airways Narrow</b></p> <p><i>During an asthma attack, the smooth layer of the airway goes into spasm, narrowing the airway.</i></p> <p><i>The middle layer swells because of inflammation, and more mucus is produced.</i></p> <p><i>In some segments of the airway, the mucus from clumps that nearly or completely blocks the airway.</i></p> <p><i>Source: Merck Manual of Medical Information Second Edition</i></p> <p><i>Interview with Dr. Zainuddin Md Zin Damansara Specialist Hospital Tel: 03-77222692 Ext 1190</i></p> <p><i>Demonstration</i></p> <ol style="list-style-type: none"> <li>1. Use of spirometer</li> <li>2. Use of peak flow meter</li> </ol> <p><i>Chart</i> <b>Preventing Asthma Attacks</b></p> <ul style="list-style-type: none"> <li>• Know and avoid what triggers your asthma attack</li> <li>• Stop smoking</li> <li>• Take medication</li> <li>• Know what to do in case of emergency</li> </ul>

Audio	Suggested visual
<p>Let us now look at how medication can help in asthma management. Dr. Zainuddin, please explain what are the medications normally prescribed for asthmatics.</p> <ol style="list-style-type: none"> <li>1. How do drugs suppress inflammation of the airways?</li> <li>2. What are the side effects of the long term use of these drugs?</li> <li>3. How often must these drugs be taken?</li> <li>4. How long does it take before the drugs take effect and reduce the symptoms of an attack?</li> <li>5. In cases of severe attacks, what is the treatment given in the emergency ward?</li> </ol> <p>As many asthma medicine are inhaled, proper use of inhaler or puffer is essential for effective treatment. Let's look at how to use an inhaler to ensure that the medicine gets into the lungs where it is needed.</p> <p>What about children with asthma? How can parents help them to manage their condition? Parents of children with asthma have added responsibilities. Dr. Norzila Mohamed Zainuddin, consultant paediatrician and paediatric chest physician enlightens us on this.</p> <ol style="list-style-type: none"> <li>1. How does a parent explain asthma to a child?</li> <li>2. How do parents manage asthma attacks at home?</li> <li>3. Are schools prepared to deal with asthma attacks?</li> <li>4. What else can parents do to cope with asthmatic children?</li> </ol>	<p><i>Interview with Dr. Zaimuddin</i></p> <p><i>Demo Emergency Room – Use of nebulizer</i></p> <p><i>Demo - How to use a puffer correctly</i></p> <p><i>Step one</i></p> <p><i>Step two</i></p> <p><i>Step three</i></p> <p><i>Step four</i></p> <p><i>Step five</i></p> <p><i>Interview with Dr. Norzila Mohamed Zainuddin KL Hospital Tel; 03-26155555 Ext 6921</i></p>

Audio	Suggested visual
<p>Besides Western medicine, asthmatics can look for remedies in complementary medicine. In this programme, we feature homeopathy which is said to be promising in reducing frequency of asthma attacks.</p> <p>Homeopathy is traced to the teachings and writings of Dr. Samuel Hahnemann (1755-1843). "Let likes be cured by likes," is the primary principle of homeopathy. A homeopath searches for a substance that produces in a healthy person those same symptoms a patient experiences.</p> <p>Dr. Yoon Kok Weng, from Klinik Homeopathy Yen, tells us that homeopathy emphasizes the person and not just the particular illness. He notes that the homeopathic remedies work fast for acute asthma attacks. We meet Dr. Yoon to find out more about homeopathic remedies for asthma.</p> <ol style="list-style-type: none"> <li>1. What is the homeopathic approach to treating asthma?</li> <li>2. What is a homeopathic medicine made from?</li> <li>3. Is it safe for children as well as adults?</li> <li>4. Is the medicine suitable for acute attacks only?</li> <li>5. Is it advisable to mix Western and homeopathic remedies in treatment?</li> <li>6. What is the time frame to see the effectiveness of homeopathic remedies for asthma?</li> </ol>	<p><i>Interview with Dr. Yoon Kok Weng 2, Jalan Kubu, 75300 Melaka Tel: 012-6380977/06-2829466</i></p>