

THE BASICS OF ASTHMA, ALLERGIES, AND ANAPHYLAXIS

UNDERSTANDING THE DIFFERENCES AND THE SIMILARITIES

	ASTHMA	ALLERGIES	ANAPHYLAXIS
What is it?	Asthma is described as a chronic inflammatory disease of the airway. When in the presence of triggers, the airways react by narrowing or obstructing which can make breathing difficult. If not treated properly, this can cause death.	Allergies occur when the immune system becomes unusually sensitive and overreacts to common substances that are normally harmless, e.g., pollens, dust, foods, etc. These substances are called allergens.	Anaphylaxis is a serious allergic reaction. It has the potential to be life-threatening, especially if the student also has asthma. Approximately 1-2% of Canadians live with anaphylaxis. Although it is most often diagnosed in childhood, anaphylaxis can also develop later in life.
Causes	<ul style="list-style-type: none"> • Asthma triggers (e.g., smoke, furry or feathered pets, dust, pollen, air pollution, cold air, chalk dust, indelible markers, dusty gym mats, old books, mould, cleaning products, fumes and perfumes) • Exercise 	<ul style="list-style-type: none"> • Allergies result from a genetic tendency followed by exposure to allergens that lead to sensitivity. 	<ul style="list-style-type: none"> • The most common triggers include peanuts, tree nuts, shellfish, fish, milk, eggs, soy, sesame seeds, wheat, insect stings, drugs, and latex. • Sulphite is often added to processed foods and beverages and can trigger an allergic reaction in sulphite-sensitive people. • Exercise-induced anaphylaxis (often in conjunction with a food allergy).
Symptoms	<ul style="list-style-type: none"> • Wheezing • Coughing • Chest tightness • Shortness of breath • Difficulty breathing 	<p>Depending on the individual and the allergen, many symptoms are possible. Allergies and symptoms can range from mild to severe.</p> <ul style="list-style-type: none"> • Rash or hives • Itchy, watery eyes • Congestion • Difficulty breathing • Itchiness • Anaphylaxis • Sneezing • Coughing • Wheezing • Nasal Symptoms 	<p>Think...F.A.S.T! A person experiencing an allergic reaction might have any of the following symptoms:</p> <p>Face: itchiness, redness, swelling of face and tongue.</p> <p>Airway: trouble breathing, swallowing or speaking.</p> <p>Stomach: stomach pain, vomiting, diarrhea.</p> <p>Total: hives, rash, itchiness, swelling, weakness, pallor (paleness), sense of doom, loss of consciousness.</p>

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Treatment	<p>There are two types of asthma medication:</p> <ul style="list-style-type: none"> ● Controllers, also referred to as “preventors.” ● Relievers, also referred to as “rescue” medication. 	<ul style="list-style-type: none"> ● Allergies can be cured. ● Avoidance is the best approach, followed by careful use of medications. 	<ul style="list-style-type: none"> ● Students at risk for anaphylaxis should always carry an epinephrine auto-injector called an EpiPen® and know how to use it properly. ● Students must learn how to avoid the things to which they are allergic. ● Students should wear special identification such as a MedicAlert® bracelet which provides medical personnel with important information.
What You Can Do To Help	<ul style="list-style-type: none"> ● Be prepared: have an action plan so that you know what to do if an episode occurs. ● Be aware of and remove asthma triggers. ● Research medication. ● If you are a physical educator, be aware of the possible need to adapt an activity for students in order to control asthma. <p>For more information, access the <i>Students With Asthma: What Educators Need to Know Resource Package</i> available in your school visit the Asthma Society of Canada at www.asthma.ca or visit the Ontario Lung Association at www.lung.on.ca</p>	<ul style="list-style-type: none"> ● Research the allergies of students in your class. ● ‘Allergy-proof’ your classroom. <p>For more information, visit the Allergy Asthma Information Association (AAA) at www.aaia.ca. AAIA is a national not for profit organization dealing with all three allergic conditions: allergies, asthma and anaphylaxis, in English and French.</p>	<ul style="list-style-type: none"> ● Administer EpiPen® immediately. ● Call 911, wait for the ambulance to transport the student to the nearest emergency facility. ● Call parents or family. <p>For more information, go online to www.anaphylaxis.ca. Anaphylaxis Canada is a national non-profit organization dedicated to helping people at risk for anaphylaxis live safely.</p>

This fact sheet is provided for general information purposes only. For further information, individuals are advised to seek the advice of a physician or other healthcare professional. Ophea would like to thank the Asthma Society of Canada, the Lung Association, and the Public Health School Asthma Pilot Project for their contributions to this resource. Funding for this resource was provided by the Government of Ontario. The views expressed in this fact sheet are those of Ophea and do not necessarily reflect the views of the Government of Ontario.

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