THE BASICS OF ASTHMA, ALLERGIES, AND ANAPHYLAXIS UNDERSTANDING THE DIFFERENCES AND THE SIMILARITIES

	Asthma	Allergies	Anaphylaxis
What is it ?	Asthma is a chronic inflammatory disease of the airways in the lungs. Triggers like allergens and irritants (see below) can make airways swell and narrow, making breathing difficult, and if left untreated, can be life-threatening.	Allergies occur when the immune system becomes unusually sensitive and overreacts to common substances that are normally harmless, like pollens, dust mites, animals/pets, foods, etc. These substances are called allergens. People who don't have an allergy will not react to them.	Anaphylaxis is the most serious type of allergic reaction. It has the potential to be life-threatening, especially in people with asthma. Life-threatening allergies can develop at any age, but are most often diagnosed in childhood.
Causes/ Triggers	Common Allergens: moulds, dust mites, animals, pollens Common Irritants: tobacco smoke, extremes in weather, strong odours (i.e., scented products, cleaning products, art supplies, paint fumes), viral infections (i.e., colds and flu), physical activity, stress, air pollution	Allergies result from genetic and/or environmental factors including exposure to allergens that lead to sensitivity (becoming allergic to the substance).	 Food: peanuts, tree nuts (almonds, Brazil nuts, cashews, hazelnuts, macadamia nuts, pecans, pine nuts, pistachios, walnuts), seafood (fish [e.g., trout, salmon], shellfish [e.g., scallops, clams], crustaceans [e.g., lobster, shrimp]), milk, egg, sesame, soy, wheat, mustard Other: insect stings, medication, physical activity (usually after eating a specific food), latex
Symptoms	Asthma symptoms can include: • Cough • Wheeze • Difficulty breathing • Chest tightness • Shortness of breath	 Many symptoms are possible and they can range from mild to severe: Rash, hives, or itchy skin Itchy, watery eyes Nasal congestion, runny and/or itchy nose, frequent sneezing Difficulty breathing, coughing, throat clearing, wheezing Stomach pain, vomiting, diarrhea 	ThinkF.A.S.T! A person at risk for anaphylaxis might have any of these symptoms: Face: hives, itching, redness, swelling of face, lips or tongue Airway: trouble breathing, swallowing or speaking, nasal congestion, sneezing Stomach: stomach pain, vomiting, diarrhea Total Body: hives, itching, swelling, weakness, dizziness, sense of doom, loss of consciousness Think F.A.S.T. concept developed by Food Allergy Canada ©2000-2016.
Medication	There are two main types of asthma medication that work in different ways: Controllers ("preventers"): controllers are used on a daily basis to prevent swelling and mucus build up in the airways. These are typically taken in the morning and before bed and therefore usually kept and administered at home. Relievers ("rescue" medication): relievers quickly open up the airways by relaxing the muscles in the airways. They are taken when needed to relieve asthma symptoms and should always be easily accessible, preferably carried by the person with asthma .	 Knowing and avoiding your allergens is the best approach, followed by careful use of medications 	 Allergen avoidance is the key to preventing an anaphylactic reaction Epinephrine is the recommended treatment for anaphylaxis People at risk for anaphylaxis should always carry an epinephrine auto-injector (e.g., EpiPen*) (when age appropriate)
You can control your condition by	 Being aware of and avoiding or minimizing exposure to your asthma triggers Taking your medications as recommended by your health care provider Talking to your health care provider about the best ways to control your asthma and having an asthma action plan. An action plan is a written plan that explains how to monitor your asthma to identify when it is controlled or uncontrolled and the steps taken to regain or maintain asthma control. Living a healthy lifestyle 	 Talking to your health care provider to make sure you know your allergies Avoiding or reducing exposure to your allergens Taking medications as directed by your health care provider 	 Being aware of your allergens and avoiding them Giving epinephrine immediately (EpiPen*) if an anaphylactic reaction occurs Calling 9-1-1 and going to the nearest emergency facility (ideally by ambulance) for medical care For those reacting to insect stings, speak to your allergist about venom immunotherapy

Developed in partnership with the Asthma Society of Canada and the Ontario Lung Association. For more information on asthma and allergies please visit the websites of the Ontario Lung Association (www.on.lung.ca), the Asthma Society of Canada (www.asthma.ca) and the Allergy/Asthma Information Association (www.aaia.ca). If you require information on asthma in schools, please visit www.ophea.net/asthma or www.asthmainschools.com. For more information on food allergy and anaphylaxis, please visit FoodAllergy Canada at http://foodallergycanada.ca. To speak to a Certified Respiratory Educator, please call The Lung Association Lung Health Information Line 1 – 888 – 344 – LUNG (5864).



The content of this fact sheet is based on current available evidence and has been reviewed by medical experts. It is provided for informational purposes only. The views set out in this guide are those of the authors and do not necessarily reflect those of the Government of Ontario. The information is general in nature and is not intended to be a substitute for sound clinical judgment. Seek the advice and expertise of your health. Funding for this resource was provided by the Government of Ontario.

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