SEVERE ALLERGIC REACTIONS

The Issue

Life-threatening, severe allergic reactions (anaphylaxis) to foods, insect bites and other triggers are on the rise in Canada. Fortunately, they can largely be avoided or treated.

Background

Severe allergic reactions (e.g. anaphylactic shock) occur when the body's immune system reacts to a particular allergen or irritant. These reactions can be triggered by certain foods or food ingredients, insect stings and medications.

The most common food products that cause reactions are peanuts, tree nuts, sesame, soy, fish, wheat, eggs, milk and seafood. Foods account for most of the cases in children, while drugs and antibiotics like penicillin are more likely to cause a reaction in adults. Stings from yellow jackets, hornets, wasps and bees are the most common cause of insect reactions. Some individuals also experience severe allergic reactions to natural latex rubber.

Severe allergic reactions affect primarily the skin, the upper and lower respiratory systems, the gastrointestinal system and the cardiovascular system. It is estimated that 600,000 Canadians (two percent of the population) may be affected by life-threatening allergies, and the numbers are increasing, especially among children.

Health Effects of Severe Allergic Reactions

When a reaction is triggered, the symptoms of anaphylactic shock may develop quickly. The victim can become faint, weak, anxious, distressed and flushed in the face, and develop a rapid heartbeat. The skin may become red and itchy, the eyes, face, lips, tongue and throat may swell, and there may be difficulty breathing. Vomiting, cramps, diarrhea and a sense of doom may also occur. In its most severe form the allergic reaction can include a complete loss of cardiovascular tone, resulting in blood pressure drop and shock (anaphylaxis) and can cause death very quickly. In milder reactions, symptoms may not appear for several hours. Severe allergic reactions are not predictable. You may have a mild reaction one time and a severe one the next time, or vice versa. Suspected allergies that trigger anaphylaxis should be confirmed by an allergy specialist four to six weeks after the initial reaction.

Severe reactions are usually treated with an injection of epinephrine (adrenalin), antihistamines and/or steroids. Those known to have reactions should carry an EpiPen®, a device that allows you to give yourself an injection of adrenalin quickly. Even if the symptoms go away after an adrenalin injection with the EpiPen®, the victim should always be taken to hospital to be observed for several hours, since the reaction may recur.

Minimizing Your Risk

While there is research being conducted to develop vaccines against severe allergic reactions, there is currently no means of prevention.

If you or any member of your family has had a severe allergic reaction, there are steps you should follow to prevent or minimize your risks of another reaction.

- Know what foods or other factors trigger a reaction and avoid them. When eating away from home, ask what is in the food you are to be served. When in doubt, do not eat the food. In Canada, more than 1800 restaurants, including 9 chains,

participate in Allergy Aware, a new program to help prevent severe allergic attacks. These restaurants provide information about common food allergens in menu items, and can be identified by a posted Allergy Aware symbol.

- Learn to read the nutritional/ingredient labels on foods to avoid even trace amounts of foods to which you are allergic. Contact food manufacturers if you have doubts about a particular food.
- If your family members are subject to severe allergic reactions, train them to read labels and ask questions before eating foods. Anaphylaxis Canada can help you teach and reassure your children (contact information under "Need More Info?").
- Always carry an EpiPen® and know how to use it. If it is your family members who are affected, teach them how to use it and stress the importance of always having it with them. At the cottage or on a trip, be sure to keep one or more EpiPens® on hand.
- Use the EpiPen® at the earliest sign of a reaction. Practice using the EpiPen® every few months and teach other family members as well.

- Always wear a Medic Alert identifier, so that in case of an accident, others know about your allergies and reactions.
- If you or your child are having a serious allergic reaction, go to your nearest Emergency Department, or dial 911 for instructions.

Health Canada's Role

Health Canada is responsible for administering the Food and Drugs Act. This Act and its regulations ensure that drugs and medical devices sold in Canada, including those used to prevent and treat allergic reactions, are safe, effective and well manufactured. Health Canada works with the Canadian Food Inspection Agency (CFIA) and the medical community to identify foods known to cause possible serious medical problems.

The CFIA has communicated with food manufacturers, importers, distributors and their associations, urging them to ensure that foods known to cause possible serious medical problems are always included in the list of ingredients of prepackaged foods. If there is a problem, the CFIA can take corrective measures, such as recalling improperly labeled foods. However, because components of certain foods or food ingredients, such as flavour, spice and seasoning preparations, do not have to be specifically identified in the list of ingredients on food labels, Health Canada is in the process of changing the Food and Drug Regulations to ensure that the most common foods and food components that cause severe allergic reactions are always identified on food labels.

Health Canada also ensures that new information on severe allergic reactions is made available to the public as soon as possible.

Need More Info?

For more information on your family's severe allergic reactions, consult your doctor.

Health Canada has several sources of information on severe allergies, including:
Anaphylaxis: Statement on Initial Management in Non-Hospital Settings, at:
http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/95vol21/dr2122ea.html

How to Breathe Easier magazine:
http://www.hc-sc.gc.ca/english/feature/magazine/2001_04/allergies.htm

See also the It's Your Health article, "Safe use of Medicines," at:
http://www.hc-sc.gc.ca/english/iyh/medical/safe_medicine.html

For information on food recalls, visit the Canadian Food Inspection Agency's Web Site, at:
http://www.inspection.gc.ca/english/corpaffr/recarapp/recaltoce.shtml

Other sources of information include:
Anaphylaxis Canada
416 Moore Avenue, Suite 306,
Toronto, Ontario M4G 1C9
Tel: (416) 785-5666
Email: info@anaphylaxis.ca
Web site: www.anaphylaxis.ca

Canadian Society of Allergy and Clinical Immunology:
http://csaci.medical.org

Allergy and Asthma Information and Research UK:
http://www.users.globalnet.co.uk/~aair/

Additional It's Your Health articles can be found at:
www.healthcanada.ca/iyh
You can also call (613) 957-2991

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