

Anaphylaxis Canada



Living Confidently With Food Allergy

A guide for parents and families



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PLEASE READ THIS NOTE BEFORE READING THE HANDBOOK

The information in this handbook is general in nature and for information and educational purposes only. It is meant to help people learn how to manage a child's allergies. It is not meant to give specific medical advice, recommendations, diagnosis, or treatment.

Readers should not rely on any information contained in this handbook as a replacement or substitute for professional medical advice or diagnosis or treatment. Nor should they delay getting professional medical advice or treatment because of information contained in this handbook. Medical knowledge is constantly developing.

Please speak with your child's doctor or other healthcare professional before making any medical decision that affects your child or if you have any questions or concerns about their food allergies.

The authors of this handbook – Michael Pistiner, Jennifer LeBovidge and Anaphylaxis Canada – as well as individual contributors and reviewers will not be held responsible for any action taken or not taken based on, or as a result of, the reader's interpretation or understanding of the information contained or referred to herein.

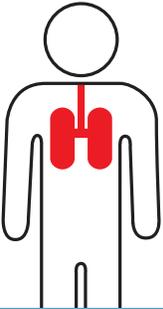
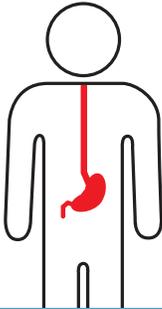
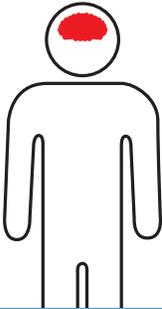


Signs & Symptoms

Learn how to recognize the signs and symptoms of an allergic reaction so that you can give life-saving treatment early. Most allergic reactions happen within minutes to a few hours after contact with an allergen. Reactions can differ each time. Keep in mind that an allergic reaction can start with mild symptoms that can get worse quickly.^{2,3}

Don't depend on seeing hives! Some anaphylactic reactions occur without any skin symptoms (e.g. hives or swelling).¹⁴

An allergic reaction can involve **any** of the following symptoms, which may appear alone or in any combination.^{2,3,4} Make sure to talk to your child's doctor about how to recognize anaphylaxis.

				
SKIN	RESPIRATORY	GASTROINTESTINAL	CARDIOVASCULAR	NEUROLOGICAL
hives, swelling, itching, warmth, redness	coughing, wheezing, shortness of breath, chest pain or tightness, throat tightness, trouble swallowing, hoarse voice, nasal congestion or hay fever-like symptoms, (sneezing or runny or itchy nose; red, itchy or watery eyes)	nausea, stomach pain or cramps, vomiting, diarrhea	dizziness/ lightheadedness, pale/blue colour, weak pulse, fainting, shock, loss of consciousness	anxiety, feeling of "impending doom" (feeling that something really bad is about to happen), headache
				OTHER^{2,3} uterine cramps

Small children can have a hard time describing their symptoms. They may complain of a "funny feeling" in their mouth or throat. Be aware of words that children may use to describe an allergic reaction. They may say, "my mouth feels funny" or "my tongue is itchy".

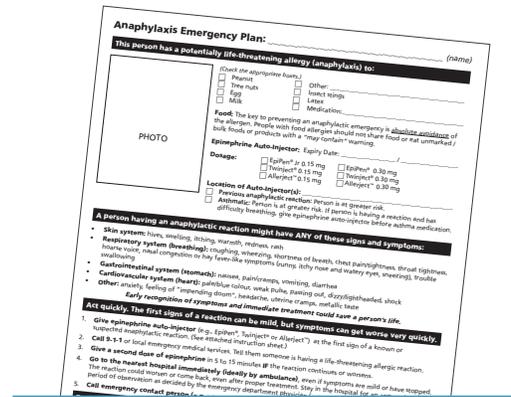
It is not possible to know how bad an allergic reaction will be. **Don't ignore early symptoms**, even if they seem mild, especially if your child has had a reaction in the past.

Dealing with Emergencies

Being prepared

When you are prepared to treat an allergic reaction, it makes a real emergency situation less stressful.

Have a written Anaphylaxis Emergency Plan with a picture of your child. Post this plan in a place where you can see it and have a copy available at all times. Any person caring for your child should have a copy. It will be useful to refer to during an emergency. Ask your doctor to help you fill out a copy and explain the emergency steps. You should be able to recognize the symptoms of anaphylaxis and treat your child with an auto-injector.



The image shows a sample 'Anaphylaxis Emergency Plan' form. It includes a section for 'This person has a potentially life-threatening allergy (anaphylaxis) to:' with checkboxes for various allergens like Peanut, Tree nuts, Eggs, Milk, Sesame, Shellfish, and Medication. There is also a section for 'Epinephrine Auto-injector' with fields for brand name, dose, and location. A prominent warning states: 'A person having an anaphylactic reaction might have ANY of these signs and symptoms: Skin system (hives, swelling, itching, warmth, redness, etc.); Respiratory system (breathlessness, coughing, wheezing, shortness of breath, chest pain/tightness, throat tightness, hoarseness, nasal congestion or hay fever-like symptoms during, itchy nose and watery eyes, wheezing, trouble swallowing); Cardiovascular system (weakness, pain/pressure, vomiting, diarrhea); Other: anxiety, feeling of "fainting/dizziness", headache, urticaria, hives, metallic taste.' The form also lists 'Act quickly' steps: 1. Give epinephrine auto-injector (e.g., Epipen®, Twinject® or Allergoject®) in the outer thigh of a known or suspected anaphylactic reaction. Use immediately (do not shake). 2. Call 9-1-1 or local emergency medical services. Tell them someone is having a life-threatening allergic reaction. 3. Give a second dose of epinephrine in 5 to 15 minutes if the reaction continues or worsens. 4. Go to the nearest hospital immediately (ideally by ambulance), even if symptoms are mild or have stopped. The reaction could return or come back, even after proper treatment. Stay in the hospital for an overnight period of observation as decided by the emergency department (do not drive to the hospital for an overnight period). 5. Call emergency contact person for emergency department (do not drive to the hospital for an overnight period).

Learn to use your child's auto-injector. Talk to your child's doctor about when and how to use it. Each brand of auto-injector has a website with instructions and videos to help you learn how to use the device. Practice with a training device, which looks like a real auto-injector but does not contain a needle or the drug. This will help you prepare for an emergency and feel more confident about using the auto-injector.

Keep an emergency plan and epinephrine auto-injector with your child at all times.

Always have your child's auto-injector available. If you forget to bring it with you, go home and get it. **It is wise to have two doses of epinephrine with your child**, because some people may need a second dose during a reaction.¹⁵ Discuss this with your doctor.

Use medical identification jewelry. If your child is alone or is unconscious, the identification jewelry gives others credible information about their allergy.

Teaching Children

- Teach your child about the possible symptoms of an allergic reaction.
- Tell your child to talk to an adult immediately if they think they may have accidentally eaten an unsafe food or feel any symptoms of an allergic reaction.
- Let your child know that you keep their emergency medicine close by. If they have an allergic reaction, using it will help them to feel better quickly. It is never too early to help your child become confident about the use of an auto-injector.
- Talk to your child about the emergency steps, so that going to the hospital won't be a surprise.
- Help your child to feel more in control by practicing with a training device. Even preschool-aged children learn from medical play, just as they might by playing with a toy stethoscope before visiting their doctor. This can be a great way to make sure they understand about the auto-injector and how it will help them in an emergency.
- Your child may think the needle in the auto-injector is as long as the device. If your child is worried about this, you can tell them it is much shorter. The typical length of an auto-injector needle is less than 1 inch or 2.5 centimetres.



If there is an emergency

If you think your child is experiencing an anaphylactic reaction, follow the steps of the emergency plan. Talk to your doctor about when and how to use your child's auto-injector.

Remember that epinephrine is the first line treatment for anaphylaxis. This is the medicine of choice for a severe allergic reaction. It works quickly and helps to treat life-threatening symptoms by opening up the airways and increasing blood pressure. Deaths from allergic reactions to foods are rare, but the risks are real and need to be taken seriously. In most cases, deaths from allergic reactions to foods have been caused by a delay in treatment with epinephrine.^{2 16}

Contact emergency services. Call 9-1-1 (or the emergency service in your area) and stay with your child while waiting for the ambulance. Get another person to show paramedics where your child is. **Do not make your child stand up or walk to the ambulance.**



Place your child on their back with their legs raised while waiting for the ambulance. This position will help the blood flow to the vital organs of the body (heart, brain and lungs) and help to reduce the symptoms of shock.^{17,18}



If your child is vomiting (throwing up) or feels nauseated, place them on their side (recovery or semi-prone position) so that if they vomit, they will not choke. It is very important to keep their airway clear.

If your child is finding it difficult to breathe, they may prefer to be in a more upright position. **Do not raise them into an upright position** until they have been seen by a doctor because raising them can cause a sudden drop in blood pressure, which can be dangerous.¹⁸

If symptoms come back or get worse while waiting for the ambulance, a second dose of epinephrine can be given as early as 5–15 minutes after the first dose.^{2,3} Keep in mind that epinephrine can wear off, and your child may need more epinephrine, as well as other treatments. It is important that your child is taken to the emergency department to be seen by a doctor.

A second wave of anaphylaxis is called a biphasic reaction.¹⁹ This happens after the initial symptoms are resolved, usually several hours after the first reaction.



The paramedics should take the child to the ambulance by stretcher.

Stay calm. Your child will feel less anxious if they see that you are in control.



Ask the doctor to prescribe auto-injectors before leaving the hospital. Purchase the auto-injectors as soon as possible.

Deaths from anaphylaxis are rare and most can be avoided. Epinephrine works the best when given early. It can be dangerous to wait to give epinephrine.

Learning from a reaction

When your child has a reaction it can be very stressful for both you and your child. Try to learn from your experience.

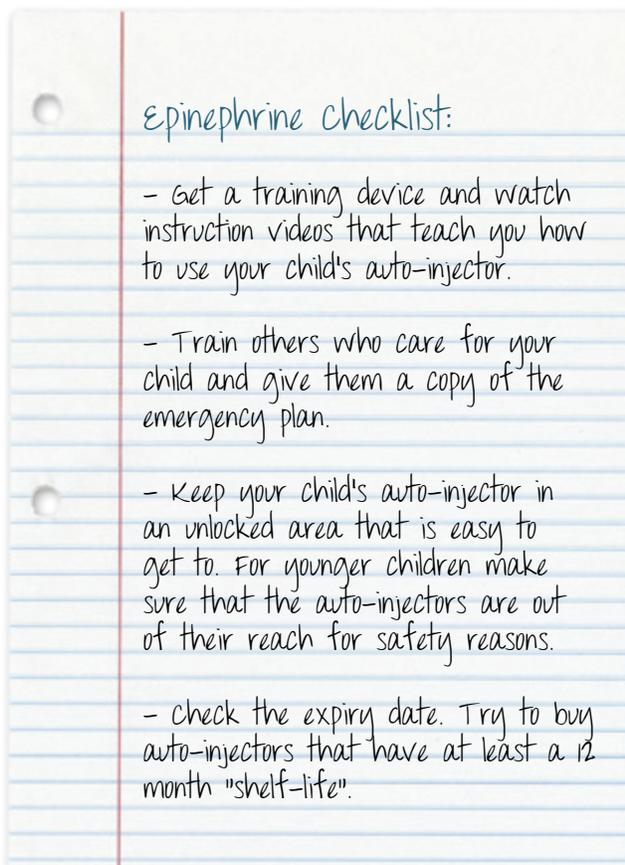
- If possible, speak with the people involved and let them know that you appreciate their support in helping your child. Discuss what went well and what could be improved. Taking steps to improve emergency procedures will help to better protect your child.
- Sometimes people get excited during an emergency, raising their voices or crying. Let your child know that they didn't do anything wrong and that no one was angry with them.
- Try to answer your child's questions in a way that they can understand. You don't have to have all the answers. It is fine to tell your child that you need to think about their question, or ask the doctor, and then get back to them with an answer. Remember, if your child feels that a topic makes you uncomfortable, they will keep questions to themselves and make up their own answers, which may cause unnecessary fear.
- Make an appointment to see your child's allergist to review the allergic reaction and the emergency plan.
- Think about speaking with a mental health professional if you are feeling extremely anxious about the reaction.

Epinephrine

Epinephrine is safe to use in normally healthy individuals. It rarely causes harm, even if given when not needed. Possible side effects can include rapid heart rate, paleness, dizziness, weakness, tremors and headache.⁴ These side effects are generally mild and go away within a few minutes.⁴

Facts about epinephrine^{2 3}

- Even if epinephrine has been given, your child still needs to go to the hospital for observation by medical professionals because your child may need further treatment.
- Many parents worry they might mistake anaphylaxis for an asthma attack. Epinephrine can be used to treat the symptoms of an anaphylactic reaction and an asthma attack. In the past, epinephrine was used to treat asthma attacks before modern asthma medications were available. Discuss this with your doctor.
- Give other medications, such as asthma drugs and antihistamines after giving epinephrine.
- Keep in mind that **antihistamines** are slow to act and **have not been proven to stop anaphylaxis**.



Epinephrine can be damaged by heat and cold so remember:

- Keep your child's auto-injector at room temperature (15-30°C/59-86°F).
- Do not store it in a car or a fridge.
- In the case of cold weather, keep it inside your child's coat. In hot weather, keep it in the shade.

Sign up for expiry notifications on pharmaceutical websites.

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