

Anaphylaxis Training Information and Sample Teaching Plans

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Anaphylaxis Training Information

- Schools must conduct annual anaphylaxis training sessions for staff.
Best practice: establish biannual training sessions.
- How long are the training sessions?
 - Training sessions should take approximately 20-30 minutes
- Who should provide the training sessions?
 - Public Health Nurse;
 - Allergy/Asthma Information Association;
 - Anaphylaxis Canada; or
 - Occupational Health & Safety staff member trained in this area
- Who should be involved in the training sessions?
 - All school staff and persons reasonably expected to have supervisory responsibility of school-age students and preschool age children participating in early learning programs (e.g. food service staff, volunteers, bus drivers, custodians).
 - For Middle schools, ask parent/guardian who else should be aware of their child's condition
 - For Secondary schools, ask student directly who else needs to know about their condition
 - **Additional Best Practices:**
 - *Include peer students*
 - *Peer students can play a role in avoidance, awareness and emergency response strategies, and their involvement can decrease incidents of bullying*
 - *Parental consent should be included where required based on the age of the students.*
 - *May simply involve general awareness training for the general school population.*
 - *For more involved training, staff need to recognize the potential liability and confidentiality issues of including peer students in training sessions*
 - *Protecting the identity of anaphylactic students*
 - *Primary emphasis should be on training students to summon help versus training them to be "first responders"*
 - *The age and maturity of the students involved in the training must be considered carefully, and parental consent should be considered if students are being trained to administer medication to other students.*
 - *Include other adults who interact with students regularly in the school setting – e.g. bus drivers, food service staff, volunteers*
 - *Include parents and identified students (but keep the training session general, applicable to all students, not just about what one student needs)*
- When should the training session be conducted?
 - When annually – September (start of school year)
 - When biannually – September and February
- What information should the training sessions include?
 - Definition of anaphylaxis – it is important to convey the life-threatening implications of an anaphylactic reaction

- Aggregate number of identified students at risk within the school
- Where the information on identified students is stored within the school
- Who has the names of identified students (e.g. principal, staff, volunteers)
- What the signs and symptoms of anaphylaxis are
 - A child's symptoms, and their order of appearance, can vary from one anaphylactic reaction to the next¹
 - Key components to look for:
 - Skin – hives², swelling, itching, warmth, redness, rash
 - Respiratory (breathing) – wheezing, shortness of breath, throat tightness, cough, hoarse voice, chest pain/tightness, nasal congestion or hay fever-like symptoms (runny itchy nose and watery eyes, sneezing), trouble swallowing
 - Gastrointestinal (stomach): nausea, pain/cramps, vomiting, diarrhea
 - Cardiovascular (heart): pale/blue colour, weak pulse, passing out, dizzy/lightheaded, shock
 - Other: anxiety, feeling of “impending doom”, headache, uterine cramps in females
 - Bi-phasic reactions³
 - Delayed reactions⁴
 - Common allergens
 - Relationship with asthma
- Standard emergency response protocol
 - It is vital to respond and respond quickly
 - Outline the 7 elements of the standard emergency response (see Section 4b – *School Level Emergency Procedure Plan* in the *Sample School District Anaphylaxis Policy*)
 - If you see the symptoms or think the child /student is having an anaphylactic reaction, use the single dose auto-injector - i.e. when in doubt, give the single dose auto-injector. The side effects of a dose of epinephrine, given to a child who is not experiencing an actual anaphylactic reaction, are relatively mild, whereas anaphylactic reactions that are not responded to with medication (i.e. single dose auto-injector) can be fatal.
 - Administration of subsequent single dose auto-injector dose 5 to 15 minutes after administration of first dose, in cases where there is no relief from first injection or if there are recurring symptoms.
 - Child may not be able to self administer auto-injector during an anaphylactic reaction – adult assistance is critical.
 - For an unidentified child, the standard procedure should be to call emergency medical care (911 where available) and transport them to a hospital – do not administer someone else's single dose auto-injector.

¹ Anaphylactic symptoms may occur in isolation or in combination.

² Anaphylactic reactions can occur with or without the presence of hives.

³ As many as 25% of people who have an anaphylactic reaction will experience a recurrence in the hours following the beginning of the reaction and require further medical treatment, including additional epinephrine injections. This delayed reaction is called *biphasic*, meaning two phases. Source: Stark BJ, Sullivan TJ. *Biphasic and protracted anaphylaxis*. *J Allergy Clin Immunol*. 1986;78:76.

⁴ In some cases, anaphylactic reactions may appear several hours after exposure to the allergen. Source: Fisher M McD. *Clinical observations on the pathophysiology and treatment of anaphylactic cardiovascular collapse*. *Anaesth Intens Care* 1986;14:17-21.

- Patient Posture
 - Individuals with anaphylaxis who are feeling faint or dizzy because of impending shock should lie down unless they are vomiting or experiencing severe respiratory distress.⁵
 - To improve blood circulation, caregivers should lift the person's legs above the level of the heart, keeping the legs raised by putting something (e.g. a pillow) underneath. Keep the person lying down until emergency responders arrive. If the person feels nauseated or is vomiting, lay them on their side, head down, to prevent aspiration of vomit. (Note: If the person is having difficulty breathing, they should be sitting up.)⁶
 - It is important that the patient not be made to sit or stand immediately following a reaction as this could result in another drop in blood pressure.⁷
- Information on Student Emergency Procedure Plans
- Avoidance and Awareness strategies
- Single dose auto-injectors and how to use them
 - See sample trainers and posters
- **Best Practice:** Allow participants to role play an emergency situation (similar to practicing a fire drill) – allows trainees to become familiar with emergency procedure and increase confidence in their ability to respond appropriately. Use auto-injector trainers/demonstrators (do not contain needles or medication) to give attendees hands-on practice in how to use an auto-injector properly.

⁵ Source: Pumphrey RSH. Fatal posture in anaphylactic shock. *Journal of Allergy and Clinical Immunology* August 2003 (Letters to the Editor).

⁶ Source: Anaphylaxis in Schools & Other Settings. *Canadian Society of Allergy and Clinical Immunology*.

⁷ Source: Pumphrey RSH. Fatal posture in anaphylactic shock. *Journal of Allergy and Clinical Immunology* August 2003 (Letters to the Editor).

Anaphylaxis Teaching Plan for school staff and persons reasonably expected to have supervisory responsibility of school-age students and preschool age children participating in early learning programs (e.g. food service staff, volunteers, bus drivers, custodians).

BACKGROUND INFORMATION

Anaphylactic reactions are very frightening for the person experiencing the reaction as well as for the people observing and responding to the reaction.

Because the allergen is often a substance that most people tolerate with no difficulty, responses to the idea that someone could die from such exposure range from fear and anxiety to disbelief and denial.

Addressing people's beliefs about the situation and the emotions that accompany those beliefs is a critical component in assisting them to accept the situation, develop plans to prevent exposure and respond appropriately if a reaction does occur.

GOALS

- Increased awareness of prevention and management of anaphylaxis
- Increase knowledge, skill level and confidence of teachers and school staff

OBJECTIVE

- School staff will show an increased awareness and understanding of anaphylaxis, and an increase in early identification and intervention.

TARGET AUDIENCE

- School staff and persons reasonably expected to have supervisory responsibility of school-age students and preschool age children participating in early learning programs (e.g. food service staff, volunteers, bus drivers, custodians).

TIME REQUIRED

- Effective training, including overview, demo, Q&As, and practicing with single dose, single-use auto-injector trainers should take approximately 30 minutes.

TEACHING TOOLS

- Visit <http://www.bcsta.org/anaphylaxis> for sample PowerPoint presentations, handouts, and additional resources (e.g. videos, books, single dose auto-injector trainers) available for purchase.

Optional

- Overhead projector and screen

Anaphylaxis Teaching Plan for Child Audience (Grade K - 3)

BACKGROUND INFORMATION

Children who have anaphylaxis often feel they are the only person who has such a condition, who has such restrictions and who has to take such extreme precautions.

Providing education for the group or class invites other children to be helpful and supportive to the child with anaphylaxis. It also gives some preparation and guidance in the event that the child does have an anaphylactic reaction. Providing information and time for discussion may help to decrease the anxiety of children by responding with compassion and understanding to their curiosity about a child with anaphylaxis. *(NOTE: staff should at the same time recognize potential liability and confidentiality implications in terms of protecting the identity of the anaphylactic student, and parental consent should be included where required due to the age of the student).*

BACKGROUND PREPARATION

If a request comes from the teacher or parent of a child with anaphylaxis, to give a presentation to the class on anaphylaxis, discuss first with parents and, if possible, the child who has anaphylaxis. Assess the comfort level of the child being the focus of attention, and willingness to talk about the allergies and his/her reactions. If possible, involve the child in the presentation. Invite the child's parents to attend. Consider inviting classroom parents so concepts can be reinforced at home. In consultation with parent/teacher/principal, children with tree nut or peanut allergies, determine if the *Sample Letter to Parents Regarding Anaphylactic Student* (modify as necessary to address other allergies) should go home to other parents.

GOALS

- ◆ Improved quality of life for children with food anaphylaxis and bee/wasp anaphylaxis.
- ◆ Increased awareness among other children about anaphylaxis prevention

OBJECTIVES

- ◆ Classmates will show an increased awareness and understanding of anaphylaxis.
- ◆ Children with anaphylaxis will show an increase in comfort in others knowing about their condition.

TARGET AUDIENCE

- ◆ Groups or classes of children in which one or more has anaphylaxis

TIME REQUIRED

- ◆ 20 to 30 minutes (without videos)

TEACHING TOOLS

- ◆ Visit <http://www.bcsta.org/anaphylaxis> for teaching resources (e.g. videos, books, single dose auto-injector trainers) available for purchase.

CONTENT	ACTIVITIES/ TEACHING AIDS
1. INTRODUCTION ◆ Help classmates understand why child has to eat special foods or can't eat certain foods, or has to take special medicine, or has to stay away from stinging insects.	
2. UNDERSTANDING ANAPHYLAXIS ◆ Allergies - some foods, which for most people are good, is not good for _____. ◆ Allergies range from mild to life-threatening. ◆ Very severe reactions can happen even if the person eats a very small amount of the thing he or she is allergic to. ◆ They can make the child really sick ◆ Some children getting a bee/wasp sting can make them very sick.	◆ Through discussion, cover main points of allergy/anaphylaxis, common causes and symptoms. List some of the causes and symptoms ◆ Ask children what it means to have an allergy. ◆ Ask if they know of anyone with an allergy. ◆ Ask what happens when the person with the allergy is exposed to the thing they are allergic to. ◆ Explain that reactions can be mild or severe. ◆ Explain that some children can be allergic to a bee/wasp sting. Talk about ways to avoid getting stung.
3. TREATMENT OF ANAPHYLAXIS ◆ When people have very severe allergic reactions, they need special medicine. This medicine comes in a special container called an auto-injector. ◆ 911 (an ambulance) will be called to take care of the person who has had a reaction.	◆ Show the single dose auto-injector trainer. Mention that it is not a real one, but it helps people learn how to use the real one. ◆ Mention that anaphylactic students have a real one and where they keep it. ◆ Show students how it is used. ◆ Give students opportunity to try the trainer (optional). ◆ Emphasize that this is not a toy. We are allowing them to look at the single dose auto-injector trainer, but they should not ask to see or handle the real one. ◆ Tell them what happens to someone if they are accidentally stabbed by the single dose auto-injector (i.e., by playing around with it): - If you accidentally inject yourself, you must go to the hospital. - It won't be available for the person who needs it. - It is very expensive.

CONTENT	ACTIVITIES/ TEACHING AIDS
4. KNOW WHAT TO DO ◆ If someone is having a reaction, adults will become very busy looking after that child. ◆ If this happens, stay in your desk and quietly wait for someone to tell you what to do and to explain what has happened. ◆ The teacher may ask one person to go and get help. ◆ If you see a child having a reaction on a field trip or on the playground, tell an adult right away. The adults will know what to do and they will have a single dose auto-injector for the child.	
5. HOW TO BE A FRIEND ◆ Although you think it's a nice thing to do, it's not a good idea to share your food. There might be a tiny bit of some food that could hurt your friend who has anaphylaxis. ◆ Wash hands before and after eating so that food bits don't get on toys, books, desks and other places that people touch. ◆ Be friendly and helpful. ◆ Include your classmate with allergies in your play and activities. ◆ If your classmate has a reaction, stay with him/her and send someone to get help from an adult and call 911.	◆ Through questions and answers, discuss what it means to be a friend, and how specifically to be helpful to a classmate who has allergies and anaphylaxis. ◆ Discuss with the children how to avoid bee/wasp stings ◆ DO NOT isolate the child with sting allergies Video (Optional) Visit www.bcsta.org/anaphylaxis for video resources available for purchase.
6. CONCLUSION Reinforce that students can be a good friend to their classmate with anaphylaxis by: ◆ Including your classmate with allergies in their activities ◆ Not teasing or harassing your classmate ◆ Not pressuring your classmate to try your food (or sharing foods) ◆ Calling an adult for help if your classmate has a reaction ◆ Send someone to call 911 if you can't find an adult to help	

Anaphylaxis Teaching Plan for Children and Youth (Grade 4 - 12)

BACKGROUND INFORMATION

The request for anaphylaxis education may come from the teacher, the student or the parents. Try to include the student as much as possible in planning whom to invite to the session. The student may need convincing of the importance of sharing personal health information with those who are close to him or her. Friends need and want to know how to help prevent an anaphylactic reaction, and how to respond if a reaction occurs. They may have concerns and misunderstandings that can be addressed in such a session. *(NOTE: staff should at the same time recognize potential liability and confidentiality implications in terms of protecting the identity of the anaphylactic student, and parental consent should be included where required due to the age of the student).*

Work with the student as a “co-presenter” to give him/her the confidence in talking about anaphylaxis as the need arises in the future. This may require some prep work with the student.

GOALS

- ◆ Improved quality of life for youth with anaphylaxis.
- ◆ Increased awareness among youth and their peers about anaphylaxis prevention.

OBJECTIVES

- ◆ Classmates and friends will show an increased awareness and understanding of anaphylaxis.
- ◆ Youth with anaphylaxis will show an increase in confidence and self-reliance in preventing anaphylaxis.

TARGET AUDIENCE

- ◆ Classmates or friends of students with anaphylaxis.

TIME REQUIRED

- ◆ 20 to 30 minutes (without videos)

TEACHING TOOLS

- ◆ Visit <http://www.bcsta.org/anaphylaxis> for sample handouts, and additional teaching resources (e.g. videos, books, single dose auto-injector trainers) available for purchase.

CONTENT	ACTIVITIES/ TEACHING AIDS
1. INTRODUCTION ◆ Introduce self (and student if presenting together) and reason/purpose of presentation.	
2. UNDERSTANDING ANAPHYLAXIS ◆ Allergies are reactions that some people have to some foods, drugs, insect stings and latex. Allergies range from mild to life-threatening. ◆ Life-threatening reactions are referred to as anaphylaxis. ◆ Life-threatening reactions can happen even if the person is exposed to a very small amount of allergen (food, stinging insects, latex, medication) he/she is allergic to. ◆ Inhaling, ingesting (eating) or touching the allergen can cause a life-threatening reaction. ◆ Sometimes these reactions can cause death.	◆ Have students share what they already know about anaphylaxis. ◆ Ask if they know of anyone with anaphylaxis or know of a situation where someone has had an anaphylactic reaction. ◆ Go over the symptoms of anaphylaxis.
3. TREATMENT OF ANAPHYLAXIS ◆ The only treatment for anaphylaxis is epinephrine, also known as adrenaline. This comes in a single dose auto-injector. The purpose of the epinephrine is to ensure that the heart and brain have continuous blood supply, and to open the airways. ◆ Call 911 after giving the single dose auto-injector. You must do this as soon as possible. There could be a second reaction as you are waiting for the ambulance and the student may need a second single dose auto-injector dose. The ambulance will take the person to the hospital for further treatment and observation. ◆ If someone is accidentally injected with the single dose auto-injector, call 911 – that person MUST go to hospital.	◆ Show single dose auto-injector trainer. Note that it is not a real single dose auto-injector but is used for learning to use a real single dose auto-injector. There is no needle or medicine in the trainer. ◆ Note that the student has a real one. ◆ Show students how it is used. ◆ Grasp the single dose auto-injector in your fist. ◆ EpiPen - Remove cover from <u>top</u> of the single dose auto-injector; ◆ Twinject - Remove end cap labeled “1” then end cap labeled “2”. ◆ Press the black tip (EpiPen) or rounded tip (Twinject) to <u>outer thigh</u> until it clicks. Count to 10. Pressure activates the needle and medicine is automatically injected. ◆ Single dose auto-injectors can be given through clothing, except thick items such as snowsuits or denim seams (avoid pant seams when administering single dose auto-injector).

CONTENT	ACTIVITIES/ TEACHING AIDS
	◆ Give students opportunity to try the trainer on themselves and another person. ◆ Consider role-playing to reinforce learning.
4. PREVENTION OF ANAPHYLAXIS ◆ Be aware of what your friend is allergic to. ◆ Do not tease or harass your friend about their allergy ◆ Do not pressure your friend to try (or expose themselves) to something they are allergic to. ◆ Be aware of where your friend keeps their single dose auto-injector. ◆ Encourage your friend not to keep their single dose auto-injector in their locker. Know the number and combination of their locker. ◆ If your friend has a food allergy, wash your hands before and after eating the food your friend is allergic to, so you don't cause your friend to have a reaction. ◆ If your friend has a reaction, stay with him/her, give single dose auto-injector and send someone to call 911.	◆ Go over available handouts (<i>visit www.bcsta.org/anaphylaxis for sample handouts</i>). ◆ Through questions and answers, discuss what it means to be a friend, and how they could specifically be helpful to their friend or classmate who has allergies and anaphylaxis. <u>Video (Optional)</u> ◆ May be used to stimulate discussion. Give opportunity for students to ask questions and make comments about videos used. Visit www.bcsta.org/anaphylaxis for video resources available for purchase.
5. CONCLUSION ◆ Reinforce the main point in the discussion. ◆ Know what your friend is allergic to. ◆ Know where their single dose auto-injector is kept. ◆ Know how to administer their single dose auto-injector. Call emergency medical care (911 – where available). ◆ Get help from an adult.	