

Policy advisory: Anaphylaxis

Background

Anaphylaxis, defined as a severe allergic reaction that can involve several body systems and lead to death if untreated, is a growing public health issue.

Given the “safe and caring” provision of Alberta’s School Act (45.8) and the safety and emergency response provisions of Alberta’s *Occupational Health and Safety Act*, combined with the legal construct that a school has a duty of care towards its students, it is evident that Alberta’s school boards operate under a legal and ethical framework that requires them to adopt policies and practices that create a safe environment for all individuals attending or employed at jurisdiction schools.

The following concepts, if incorporated into school board policy and procedures in Alberta, would help establish a consistent provincial standard of care in Alberta’s schools with regard to the management of students and staff at risk of life-threatening allergies.

Recommended overall policy statement

An overall policy statement defines a school board’s position on a particular issue. The consensus of expert opinion is that the goal of an anaphylaxis policy is to create an allergy-safe or allergy aware environment rather than an allergy “free” environment and that the management of students at risk of life-threatening allergies is a shared responsibility among the individual, parents, the school system and health care providers. (See Appendix A for example statements that illustrate the recommended policy concepts)

Recommended policy elements

1. About anaphylaxis

This section of the policy/procedure should briefly define anaphylaxis and provide a short overview of potential triggers, signs and symptoms, and the urgent need to respond appropriate. See *Anaphylaxis in Schools and Other Settings*, Canadian Society of Allergy and Clinical Immunology, 2005

2. Identifying individuals at risk

In general, employees and volunteers need to self-identify to their supervisor while parents/legal guardians need to identify at-risk students to the school principal. Once identified, a record should be kept for each person at risk of life-threatening allergies that includes proof of diagnosis, current treatment, emergency procedure, current contact information and appropriately signed consent form. In addition, policy guidelines need to address the issue of the undiagnosed individual. (See Appendix B for sample forms)

3. Communication strategies (information, education and awareness) for the dissemination of information on life-threatening allergies to parents, students and other school staff

Effective and planned communication strategies that target the different participants in a school community will help to reduce fear and uncertainty while building capacity to respond to individuals with severe allergies. (See Appendix C for online resources)

4. Allergy avoidance strategies

Avoidance strategies are fundamental to preventing an allergic reaction. Specific avoidance strategies need to be based on the developmental age of the student and the particular allergen. An avoidance strategy should not imply a guarantee (e.g. peanut free) or that there is zero risk. Rather, avoidance strategies should strive to create an “allergy-safe” rather than an “allergen-free” environment. (See Appendix D for avoidance strategies)

5. An emergency response plan

The creation of an accurate and up-to-date emergency response plan for each individual at risk of life-threatening allergies is the cornerstone of a school’s severe allergy management plan. While the school emergency response protocol may have common elements, a personalized plan should be developed for each individual diagnosed as being at risk of life-threatening allergies, in conjunction with the employee or the child’s parents and the physician. To address the issues of consent and medical efficacy, this plan should be signed by the child’s parents (or employee, as the case may be) and the physician and kept on file in a readily accessible location. (See Appendix E for a sample anaphylaxis emergency plan)

6. Training strategy

The need for regular and comprehensive training is an important component of a school’s anaphylaxis plan. The Canadian School Boards Association (2001) emphasizes the importance of training all educators and any other appropriate school personnel in recognizing the symptoms of an anaphylactic reaction and in the proper administration of the EpiPen and that, ideally, such training is provided by qualified and/or independent instructors. (See appendices A and C)

7. A listing of roles and responsibilities

The safety of students at risk of life-threatening allergies depends on the cooperation of the entire school community including students, parents and school personnel. Each must understand and fulfill their role in a school’s anaphylaxis management plan. (See Appendix F for a description of roles and responsibilities from Anaphylaxis in Schools and Other Settings, 2005)

Appendix A: Example statements that illustrate the recommended policy concepts

1. Overall policy statement

“This policy defines standards and procedures required for the management of students and staff at risk of severe allergic reactions while they are the responsibility of the school system, recognizing that this responsibility is shared among the individual, parents, the school system and health care providers.”
(Based on New Brunswick Policy 704)

“The purpose of this policy is to minimize the risk of exposure of students with severe allergies to potentially life-threatening allergens without depriving the student with severe allergies of normal peer

interactions or placing unreasonable restrictions on the activities of other students in the school.” (Calgary Board of Education administrative regulation 6003 and reflected in numerous Alberta school board policy statements)

“The Division recognizes the dangers faced by students and staff with severe reactions to certain allergens. While the Division can not guarantee an allergen-free environment, the Division will take reasonable steps to ensure a safe environment for students with life-threatening allergies further to the goal of maintaining an appropriate learning environment for all students.” (Based on Battle River School Division No. 31 administrative procedure 317 and Grande Yellowhead Regional Division No. 35 administrative procedure 314)

2. Identifying individuals at risk

“Parents of students with severe allergies must advise the principal and home-room teacher about the student’s severe allergy when the allergy is diagnosed, at the beginning of each school year, or when the student changes schools.” (Calgary Board of Education)

“Every school principal shall ensure that, upon registration, parents, guardians and pupils shall be asked to supply information on life-threatening allergies.” (From Sabrina’s Law)

“It is the responsibility of parents with children at risk of anaphylaxis to identify their children to the Principal and bus driver and to ensure that their child wears an allergy alert bracelet and carries an EpiPen.” (Based on Battle River School Division administrative procedure 317)

3. Communication strategies

- “The principal must ensure
 - That all teaching staff, school-based non-teaching staff and lunch program supervisors receive training annually or more frequently if required, in the recognition of a severe allergic reaction and the use of injectors and the emergency response protocol;
 - That all members of the school community including substitute teachers, student teachers and volunteers have appropriate information about severe allergies including background information on allergies, anaphylaxis and safety procedures;
 - That all off-site activity service providers are notified of the student’s severe allergy, if necessary;
 - With the consent of the parent, the principal and the classroom teacher must ensure that the student’s classmates are provided with information on severe allergies in a manner that is appropriate for the age and maturity level of the students, and that strategies to reduce teasing and bullying are incorporated in this information.” (Calgary Board of Education administrative regulation 6003)

- “If the principal has information that a student who is registered at the school is at risk of anaphylactic shock...the principal should:
 - Ensure that the student allergy is red flagged in SIS (computerized student information system)
 - Provide information about the student and the student’s allergies to the school staff, cafeteria staff, bus driver and substitute personnel who may be required to assess the student’s need for administration of the EpiPen and administer the EpiPen
 - Arrange for information and training session for staff who deal with the student, including the bus driver
 - Develop a medical response plan, with parents and staff, as part of the student’s IPP” (Buffalo Trail Public Schools – IHCD exhibit 11)

4. Allergy avoidance strategies

- Thnadiae Can Society of Allergy and Clinical Immunology Consensus Statement recommends the following avoidance strategies:Adult supervision of young children while eating is strongly recommended.
 - Individuals with food allergy should not trade or share food, food utensils, or food containers.
Parents should work closely with foodservice staff to ensure that food being served during lunch and snack programs is appropriate.
 - The use of food in crafts and cooking classes may need to be modified or restricted depending on the allergies of the children.
 - Ingredients of food brought in for special events by the school community, served in school cafeterias, or provided by catering companies should be clearly identified.
 - All children should be encouraged to comply with a ‘no eating’ rule during daily travel on school buses.
 - All children should wash their hands before and after eating.
 - Surfaces such as tables, toys, etc. should be carefully cleaned of contaminating foods.
- With regard to insect stings, the Canadian Society of Allergy and Clinical Immunology Consensus Statement (2005) recommends the following as avoidance strategies:

- Keep garbage cans covered with tightly fitted lids in outdoor play areas. Consider restricting eating areas to designated locations inside the school building during daily routines. This allows for closer supervision, avoids schoolyard cleanup, and helps reduce the prevalence of insect stings.
- Have insect nests professionally relocated or destroyed, as appropriate.
- Other examples of avoidance strategies are included in Appendix D.

5. An emergency response plan

- The Canadian Society of Allergy and Clinical Immunology Consensus Statement (2005) makes the following recommendations regarding common elements that need to be included in an emergency response protocol.
 - Epinephrine is the first line medication, which should be used, in the emergency management of a person having a potentially life-threatening allergic reaction. In studies of individuals who have died as a result of anaphylaxis, epinephrine was underused, not used at all, or administration was delayed. Epinephrine should be injected in the muscle on the outer side of the thigh.
 - Antihistamines and asthma medications must not be used as first line treatment for an anaphylactic reaction. While they do no harm when given as additional or secondary medication, they have not been proven to stop an anaphylactic reaction.
 - All individuals receiving emergency epinephrine must be transported to hospital immediately for evaluation and observation. While epinephrine is usually effective after one injection, the symptoms may recur and further injections may be required to control the reaction.
 - Additional epinephrine must be available during transport. A second dose may be administered within 10 to 15 minutes or sooner, after the first dose is given if symptoms have not improved. The second dose should only be given in situations where the allergic reaction is not under adequate control; that is, the reaction is continuing or getting worse.
 - 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. 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 or until the patient has fully recovered.

- No person should be expected to be fully responsible for self-administration of an epinephrine auto injector. Individuals may not physically be able to self-administer epinephrine when they are suffering from a reaction.
- Sample policy statements include:
 - “The Principal must ensure that an individual student emergency response protocol
 - Is developed for each student with severe allergies in cooperation with the parents, the student’s physician and where the principal deems it necessary, the public health nurse
 - Includes emergency contact information and procedures; and
 - Is kept in a readily accessible location at the school.” (Calgary Board of Education)
- “The principal shall ensure:
 - The parents, and student when appropriate, are provided with an opportunity to meet with designated staff, prior to the beginning of each school year or as soon as possible to develop/update the Extreme Allergy Management and Emergency Plan. This shall include a written agreement on the procedure to be followed in the event of a medical emergency, describing the parent’s, school’s and student’s (when appropriate) respective roles. The...Plan is to be signed by the parent, the principal, the student if 16 years old or older, and the student’s physician.” (New Brunswick policy 704)

6. Training strategy

The Canadian Society of Allergy and Clinical Immunology Consensus Statement (2005) recommends: “All individuals who have been prescribed an epinephrine auto-injector – or their parents – should know how to use it before an emergency arises. All individuals who are in regular contact with children at risk of anaphylaxis should participate in training sessions. In the school setting, they would include; school staff, nurses, foodservice staff, bus drivers, coaches, camp counselors, lifeguards and so forth. The principal or delegate should keep a record of staff who have completed the training...Standardized anaphylaxis training should be provided once a year at a minimum, preferably around the start of the school year...Optimally, a follow up refresher training session should be given mid-year. Training should include ways to reduce the risk of exposure, recognition of signs and symptoms of anaphylaxis and when

and how to give the epinephrine auto-injector...with proper training, people can successfully learn how to use an epinephrine auto-injector with confidence.” (p. 19)

Examples of policy statements include:

“The school principal should ensure that in-service is provided annually to school personnel in schools where students prone to anaphylaxis are enrolled on how to recognize and treat anaphylactic reaction, on the school policies to protect students with severe allergies from exposure and on the school protocol (including the use of an EpiPen) for responding to emergencies.” (based on Westwind School Division policy # 374)

“The principal shall ensure: (c) A training session on anaphylactic shock is held at the beginning of each school year. Efforts shall be made to include the parents in the training. The Allergy/Asthma Information Association (AAIA) Anaphylaxis Resource Kit must be used for the training and the session must cover EpiPen administration and the emergency plan to be put in place. Training must be delivered to all staff, including the principal, teachers, school day care personnel, bus drivers, custodians, lunchroom supervisors, resource staff, and any casual employees, including substitute teachers.” (New Brunswick policy 704)

Appendix B

Calgary Board of Education’s Severe Allergies Resource Package (pp 2-3) sample [Severe Allergy Alert form](#) (PDF–96K)

Appendix C: Resources available online

[Allergy/Asthma Information Association](#)

[Calgary Board of Education](#) (PDF–68K)

[Calgary Allergy Network](#)

[Anaphylaxis Canada](#)

[Alberta Asthma Centre](#)

Appendix D: Avoidance strategies

[Anaphylaxis in Schools and Other Settings](#) (pp 41-47), Canadian Society of Allergy and Clinical Immunology

[Allergy/Asthma Information Association](#)

Anaphylaxis: A Handbook for School Boards (pp 31-35) published by the Canadian School Boards Association

Appendix E

[Anaphylaxis emergency plan](#) (PDF–668K)

Appendix F: Roles and responsibilities: Anaphylaxis in schools and other settings (2005)

Anaphylaxis management is a shared responsibility that includes allergic children, their parents, caregivers, and the entire school community

Parents

Parents should make every effort to teach their allergic children to self-protect. Good safety habits should be established from an early age. Parents:

- Must educate the allergic child on avoidance strategies.
- Are responsible for informing the school about the child's allergies, updating the school on any changes (e.g. diagnosis of an additional allergy, outgrowing an allergy),
- Providing the child/school with an epinephrine auto-injector which is not expired.
- Should complete an Anaphylaxis Emergency Plan which has the child's photograph and allergy information, emergency contact numbers, emergency protocol, and signature of the parent/guardian and physician.
- Should provide consent which allows school staff to use an epinephrine auto-injector when they consider it necessary in an allergic emergency.
- Should not sign a waiver absolving the school of responsibility if epinephrine was not injected.
- For food-allergic children, should provide non-perishable foods and safe snacks for special occasions.
- Should communicate with school staff about field trip arrangements.
- Should meet with foodservice staff to inquire about allergen management policies and menu items, if their child is to eat foods prepared at school.

Children at risk

Allergic children who have been diagnosed as being at risk of anaphylaxis should:

- Have one auto-injector with the child's name on it, kept in a readily available location which is unlocked (preferably carried on the person).
- Be encouraged to carry their own auto-injector when age appropriate.
- Be discouraged from eating if they do not have an auto-injector with them.
- Be very cautious when eating foods prepared by others.

- Wear medical identification, such as a Medic Alert bracelet (or necklace for older children) which clearly identifies their allergy, or a special badge in the case of very young children in the nursery setting.

School community

- All school staff should be aware of children who have an allergy that may predispose them to anaphylaxis and be prepared to treat an allergic reaction. Information about children with life-threatening allergies should be made available. Many teachers keep a copy of their student's Anaphylaxis Emergency Plans in their day book; this is where important information is organized for substitute teachers.
- School staff should consult with the parent before posting the child's plan. It should be kept in areas which are accessible to staff, while respecting the privacy of the child (e.g. office, staff room, lunch room or cafeteria). Older children are often more reluctant to have their plan posted in the classroom where it is visible to all.
- The entire school population should be educated regarding the seriousness of anaphylaxis and be taught how to help their peers. This could be achieved through general awareness sessions in an assembly or a health lesson. Peers should be taught that bullying and teasing students at risk of anaphylaxis is unacceptable. Bullying and teasing incidents should be dealt with immediately.

Foodservice and bus companies/drivers

- Foodservice companies operating in a school setting are responsible for ensuring that their personnel are trained to reduce the risk of cross-contamination through purchasing, handling, preparation, and serving of food. The contents of foods served in school cafeterias and brought in for special events should be clearly identified.
- Bus companies should include anaphylaxis training as part of the regular first-aid training which drivers are required to complete. Bus companies are encouraged to establish and enforce a 'no eating' rule during daily travel on buses.
- Staff at both foodservice and bus companies should participate in the school's anaphylaxis training, which includes the identification of students at risk and how to use an epinephrine auto-injector.