

Toronto District School Board

Operational Procedure PR.563 SCH

Title: **ANAPHYLAXIS**
Adopted: November 1, 2000
Revised: **November 5, 2005**
Authorization: Executive Council

1.0 OBJECTIVE

To provide a process for dealing with anaphylaxis in schools

2.0 DEFINITIONS

Anaphylaxis is a severe allergic reaction that can be fatal (see Appendix A)

Epinephrine (see Appendix B)

3.0 RESPONSIBILITY

Associate Director

4.0 PROCEDURES

1.0. Creating an Allergen-Safe Elementary School Environment

Parents may ask that peanuts and peanut products (or other allergens) be banned from the school as part of a prevention plan. Such a request cannot be reliably implemented. There is no legal responsibility in any jurisdiction to reduce the risk of exposure to allergens to zero; the Board cannot assume responsibility for providing a 'peanut-free' (or other allergen-free) environment.

We live in a world that is contaminated with potential allergens. Anaphylactic students must learn to avoid specific triggers (see Appendix C). While the key responsibility lies with anaphylactic individuals and their family, in the case of a young anaphylactic student, the school community must also be aware. The approach is to regularly educate the parent community and solicit the co-operation of families, and to set in place procedures that are designed to safeguard the anaphylactic student.

In classrooms of anaphylactic students, special care is taken to avoid allergens. Parents must consult before supplying food, toys, balloons, or craft materials to these classrooms. Lists of packaged 'safe' food and latex free toys and craft materials can be made available, which can be distributed to the teachers and to the parents of classmates of anaphylactic students.

Note: Lists should be used as guidelines and should highlight the need to always read labels.

In short, the risk of accidental exposure to an allergen can be significantly reduced, although it can never be completely removed.

Given that anaphylaxis can be triggered by minute amounts of allergen, food anaphylactic students must be encouraged to follow certain guidelines:

- to eat only food which they have brought from home unless it is packaged, clearly labelled, and approved by their parents
- wash hands before eating
- not share food, utensils, or containers
- wipe off the desk table area with handiwipe to ensure a clean food space
- place food on a napkin or waxed paper rather than in direct contact with a desk or table
- not leave food unattended

2.0. Creating an Allergen-Safe Secondary School Environment

Procedures must be developed that take into consideration the age, maturity and responsibility level of anaphylactic students. Young students are at greatest risk of accidental exposure, but many allergists believe that more deaths occur among teenagers. Secondary students may possess the necessary level of maturity and responsibility to monitoring their environment for allergens.

Note: While an individual may know how to self-administer epinephrine, he/she may not be capable of doing so during a reaction.

Therefore, increased rather than decreased vigilance is needed in secondary settings and for secondary school age students as they travel further, as they are extremely vulnerable to peer influences, and as they may, at this stage of their development, deny their vulnerability. Secondary schools should follow guidelines as outlined in the administrative procedures. The secondary students with a risk of anaphylaxis should carry the epinephrine at all times. Secondary school staff should:

- ensure cafeteria staff are aware of anaphylactic students and are educated about anaphylaxis, i.e. foods with allergens that could be served or found in the school cafeteria; cross contamination with food handling; labels on packaged foods;
- ensure cafeteria staff wear latex-free gloves when preparing food;
- consider arranging presentation of information on allergy and anaphylaxis through the vehicle of an academic program or through school assemblies.

3.0. Roles and Responsibilities

Ensuring the safety of anaphylactic students in a school setting depends on the co-operation of the entire school community. To minimize risk of exposure, and to ensure rapid response to an emergency, parents, students and school personnel must all understand and fulfil their responsibilities.

(a) School Principal

- (i) Works closely with the parents of an anaphylactic student.
- (ii) Convenes a meeting with parents of each anaphylactic student, and appropriate school staff, to gather medical information related to the condition including: causal factors, severity of allergy, past incidents of anaphylactic reactions, and other health considerations.
- (iii) Ensures that upon registration, parents, guardians and students are asked to supply information on life-threatening allergies, and to complete Form 536A, Administration of Prescribed Medication and Form 536B, Management of Emergency Medical Concerns.
- (iv) Maintains a file for each anaphylactic student of current treatment and other information, including a copy of any prescriptions and instructions from the student's physician or nurse and a current emergency contact list.
- (v) Develops an individual plan for each student who has an anaphylactic allergy, with the following components:
 - details informing employees and others who are in direct contact with the student on a regular basis of the type of allergy, monitoring and avoidance strategies and appropriate treatment;
 - a readily accessible emergency procedure for the student, including emergency contact information; and
 - storage for epinephrine auto-injectors, where necessary.
- (vi) Develops a communication plan for the dissemination of information on life-threatening allergies to parents, students and employees.
- (vii) Ensures parents provide an auto-injector to designated person(s) immediately. At least two auto-injectors are suggested, one located with the student and one located in the school office in a known accessible location.
- (viii) Requests parent to provide bodypouch/backpack/fannypack for transport of auto-injector with student and Medic Alert® bracelet. (Older students may prefer backpacks.)

- (i) Ensures maintenance staff cover/remove garbage containers to reduce the risk of insect-induced anaphylaxis.
- (ii) Requests the school community not to bring or send allergens to school.
- (iii) Notifies all appropriate school personnel (student's teacher(s), educational assistant, office staff, bus driver, lunch supervisor, cafeteria, workers, etc.) of medical alert concern, treatment and established procedure (Form 536B, Management of Emergency Medical Concerns)
- (iv) Reviews procedures with entire staff each year in September.
- (v) Develops and maintains a Prevention and Management Plan that is consistent with this document.
- (vi) Designates which staff who will carry out emergency procedures and provides them with a copy of Form 536B, Management of Emergency Medical Concerns and Form 536C, Student Medical Alert. Ensures that several staff are trained and available to carry out emergency procedures.
- (vii) Posts Form 536C, Student Medical Alert, forms in the staff room and/or school office, and/or Teacher's Day Book.
- (viii) Arranges for training session(s) for all school personnel (including occasional teachers, secretaries, educational assistants, aquatic staff, caretakers, food services staff, bus drivers, and volunteers) on how to recognize and treat anaphylactic reaction, on school procedures to protect anaphylactic students from exposure, and on school protocol for responding to emergencies. This session and ongoing review sessions should also include training in the emergency administration of the auto-injector. Training should take into consideration the age, maturity and responsibility-level of anaphylactic students.
- (ix) Conducts food safety discussions with all students at beginning of year and at regular intervals throughout the year while exercising sensitivity to impact on affected student's need for privacy.
- (x) Works with School Council to increase community awareness of anaphylaxis, its avoidance, and its treatment.
- (xi) Works to ensure that the school's first aid supplies are allergen-free (non-latex gloves, non-latex bandaids).
- (xii) Provides second auto-injector to ambulance attendants.

(a) Teacher

- (i) Displays Form 536C, Student Medical Alert, in the classroom and staff room for elementary students, with parental approval, when appropriate, based on the age, maturity and responsibility-level of the anaphylactic student(s). Reviews Form 536C, Student Medical Alert, to become aware of likely symptoms and location of EpiPen in secondary schools.
- (ii) Discusses anaphylaxis with the class, in age-appropriate terms.
- (iii) Encourages students not to share lunches or trade snacks.
- (iv) Encourages/organizes celebrations and activities which are not focused on food or if this is not possible choose allergy-free foods for classroom events.
- (v) Establishes procedures to ensure that the anaphylactic student eats only what he/she brings from home.
- (vi) Reinforces with all students the importance of hand washing before and after eating.
- (vii) Facilitates communication with other parents.
- (viii) Enforces school rules about bullying and threats.
- (ix) Leaves information in an organized, prominent and accessible format for occasional teachers.
- (x) Ensures that epinephrine and cellphones are taken on field trips.

(b) Parent(s) of an Anaphylactic Child

- (i) Informs the school of their child's allergies and completes Form 536A, Administration of Prescribed Medication, and Form 536B, Management of Emergency Medical Concerns.
- (ii) Ensures that their child's file is kept up-to-date with the medication the child is taking.
- (iii) Provides a MedicAlert® bracelet for their child.
- (iv) Provides the school with two up-to-date auto-injection kits, clearly labelled with child's name and prescription details; provides student with a body pouch or fanny pack for carrying at least one auto-injector at all times on their body.
- (v) Provides appropriate means of transporting auto-injectors and ensures that one is with the student daily when he/she is sent to school (An alter-

nate arrangement may need to be made for very young students or those who have difficulty in managing responsibility.)

- (vi) Reviews the school Prevention and Management Plan with school personnel and provides in-service support and information as requested.
- (vii) Provides their child with safe foods, including for special occasions.
- (viii) Teaches their child:
 - about their allergen and the substances that trigger it;
 - to recognize the first symptoms of an anaphylactic reaction;
 - to know where medication is kept, and who can get it;
 - to communicate clearly when he or she feels a reaction starting;
 - to carry his/her own auto-injector in a body pouch/backpack/fannypack;
 - not to share snacks, lunches or drinks and to politely explain why he/she is not sharing;
 - to understand the importance of hand-washing;
 - to cope with teasing and being left out;
 - to report bullying and threats to an adult in authority;
 - and to take as much responsibility as possible for his/her own safety;
 - to carry the proper amount of medication at all times;
 - to avoid harmful insects and to report insect stings;
 - to recognize and avoid toys and supplies containing latex.

(c) Anaphylactic Student

(Staff must recognize that an anaphylactic student may not be able to self-administer during an anaphylactic reaction.)

- (i) Has an age appropriate understanding of his/her allergy and its triggers. Learns how to inform others of the allergy and its consequences.
- (ii) Complies with taking medication as arranged and approved by Principal
- (iii) Takes as much responsibility as possible for avoiding allergens.
- (iv) Takes responsibility for checking food labels and monitoring food intake (older students).
- (v) Washes hands before and after eating.
- (vi) Takes responsibility for asking for latex-free equipment and supplies where age appropriate.
- (vii) Learns to recognize symptoms of an anaphylactic reaction.

- (viii) Promptly informs an adult, as soon as accidental exposure occurs or symptoms appear.
 - (ix) Keeps an auto-injector on their person at all times.
 - (x) Keeps a backup auto-injector available at all times.
 - (xi) Knows how to use the auto-injector.
- (d) Public Health/Nurse
Acts in an advisory capacity to Principal and staff in order to collaborate and facilitate access to information and other relevant resources.
- (e) All Parents
- (i) Respond co-operatively to requests from school to eliminate allergens from packed lunches and snacks.
 - (ii) Participate in parent information sessions.
 - (iii) Encourage students to respect anaphylactic student and school prevention plans.
- (f) All Students
- (i) Learn to recognize symptoms of anaphylactic reactions.
 - (ii) Avoid sharing food, especially with anaphylactic students.
 - (iii) Follow school rules about keeping allergens out of the classroom and washing hands.
 - (iv) Refrain from bullying or teasing a student with a food allergy.

1.1. Communication Plan

As part of its communication plan to disseminate information on life-threatening allergies, the Board has prepared sample letters to parents, potential newsletter samples, and additional information for school principals and staff.

Sample letters and newsletters can be found on Form 563A: Sample Letters and Newsletters.

1.2. Additional Information for School Principals and Staff

(a) Prevention and Management Plan

If you have students who are subject to anaphylactic reactions, you must have a Prevention and Management Plan. And if you have a plan, it must contain elements that can and will be executed without fail.

By establishing a plan, you can minimize a child's exposure to triggering allergens, limit the need to use emergency measures, and avoid trauma to all involved parties.

Before developing your plan, determine what you and your staff are prepared to commit to. Are your expectations realistic? Can you act with consistency? Plans which are unrealistic and cannot be implemented consistently may endanger the student and increase liability to the Board.

(b) School Prevention and Management Plan

When the school community recognizes the right of parents to feed their students whatever they choose, but acknowledges the right to life and safety as greater, most families are receptive to procedures which protect the allergic child. Part of the task of working with the community is to help see those relative values. This fulfills part of the school's duty to provide a safe environment for all students and the school's responsibility to spread information and create awareness, the first aspect of an anaphylactic policy. The second part is the development of reasonable procedures for avoidance of potentially anaphylactic situations. The third part of a good plan is being able to execute appropriate emergency measures.

Naturally, circumstances will vary greatly from school to school. Your school's plan should consider the individual needs of students according to:

- age
- maturity
- personal characteristics and competencies
- the severity of the allergy
- self-supervision

A prevention plan may include:

- requiring anaphylactic students to eat only food prepared at home;
- if possible, avoid using the classroom of an anaphylactic student as an eating area;
- creating an allergen-free classroom or allergen-free lunch area for anaphylactic students;
- limiting the sharing of food and utensils and containers;
- increasing attention to the cleanliness of food preparation and eating areas;

- encouraging students to wash their hands before and after eating;
- developing strategies for monitoring allergen-free areas, and for identifying high-risk areas for anaphylactic students;
- encouraging the anaphylactic child to make mealtime precautions like:
 - placing food on wax paper or a paper napkin rather than directly on the desk or table;
 - taking only one item at a time from the lunch bag to prevent other students from touching the food;
 - packing up their lunch and leaving it with the lunch supervisor, if it is necessary to leave the room during lunchtime;
 - sending letters home or conducting presentations to enlist parent support;
 - explaining the dangers to students; and
 - controlling the foods served at special events so that only safe foods are provided.
- education programs for classmates, schoolmates, parents, cafeteria staff;
- request to parents of students in classroom to assist in management of exposure to the allergen;
- minimizing the presence of triggering substances in school and school-related activities; and
- creating visual reminders (i.e. Anaphylaxis Alert poster from The Anaphylaxis Network of Canada).

A prevention plan should include:

- procedures for record keeping of forms and daily logs;
- training and in-servicing programs for staff and volunteers;
- distribution of information about anaphylactic shock;
- distribution of lists of allergen containing products;
- developing guidelines to reduce risk in common areas, e.g., computer room, library, gym, music room, lunch room; and
- removing/covering garbage to reduce risk of insect-induced anaphylaxis.

2.0 APPENDICES

Appendix A: What is Anaphylaxis?

Appendix B: Epinephrine

Appendix C: Anaphylaxis Triggers

3.0 REFERENCE DOCUMENTS

Forms:

563A: Sample Letters and Newsletters

536A: Administration of Prescribed Medication

536B: Management of Emergency Medical Concerns

536C: Student Medical Alert

The Anaphylaxis Network of Canada (416-785-5666). www.anaphylaxis.org).

What is Anaphylaxis?

Anaphylaxis is a severe allergic reaction that can be fatal.

A conservative estimate is that one in fifty Canadians suffers from extreme life-threatening allergies to certain foods, medications, or insect stings, or non-food materials such as latex, or to vigorous exercise. For them, exposure to even a minute amount of the substance to which they are allergic can trigger an anaphylactic reaction. Although peanuts and peanut products are the most common foods to cause anaphylaxis, shellfish, fish, eggs, sulphites, milk, sesame seeds, or any other food can cause this dangerous condition. In recent years, anaphylaxis has increased dramatically among children and adolescents.

Anaphylactic reactions occur when the body's sensitized immune system overreacts in response to the presence of a particular allergen. Anaphylaxis affects multiple body systems, including skin, upper and lower respiratory, gastrointestinal, and cardiovascular.

Symptoms may include any of the following:

- itchy eyes, nose, face
- flushing of face and body
- swelling of eyes, face, lips, tongue and throat
- hives
- vomiting
- diarrhoea
- wheezing
- a feeling of foreboding, fear, and apprehension
- weakness and dizziness
- inability to breathe
- loss of consciousness
- coma

The recommended emergency treatment for a student suffering an anaphylactic reaction is the administration of epinephrine (adrenaline) by an auto-injector (i.e., *EpiPen*® or by an Anakit). The person affected must then be rushed to hospital to receive further medical attention, even if the symptoms decrease with the administration of the epinephrine or by an Anakit®.

The greatest risk of exposure is in new situations, or when normal daily routines are interrupted, such as birthday parties, camping or school trips. Young students are at greatest risk of accidental exposure, but many allergists believe that more deaths occur among teenagers due to their increased independence, peer pressure, and a reluctance to carry medication.

There is a need to ensure the safety of students who suffer from extreme allergies and empower school administrators to respond to their needs consistently but at the same time recognize individual differences from case to case. The following procedure is intended to achieve this end.

Appendix B

Epinephrine

The emergency response to this condition is the administration of epinephrine, usually with an *EpiPen*® auto-injector. The epinephrine can be easily and safely administered with this device by non-medical personnel with minimal training. EpiPens® can be safely transported, are easy to administer, and, since the needle is hidden, can be managed by even the most squeamish. A single injection of the auto-injector may not be sufficient to stop an anaphylactic reaction but will normally give the sufferer 10 to 20 minutes of relief--often sufficient time to reach an emergency room. It is recommended that people with severe allergies have at least two auto-injectors available to them at all times, with at least one always carried on their body.

Anakits® can also be used for an anaphylactic reaction. While they provide the same medicine--epinephrine (adrenaline)--they are not auto-injectors, and require an actual injection using a prepared syringe. They are not as convenient for most people to administer.

Anaphylaxis Triggers

(a) Foods which are Sources of Anaphylactic Reaction

(It should be noted that any food could trigger an anaphylactic reaction. Cross-contamination of foods is also a concern.)

- peanuts/peanut butter/peanut oil: the most prevalent among school students
- tree nuts: hazelnuts, walnuts, pecans, almonds, cashews
- sesame seeds and sesame oil
- cow's milk
- eggs
- fish
- shellfish
- wheat
- soy
- bananas, avocados, kiwis and chestnuts for children with latex allergies.

The Anaphylaxis Network of Canada has allergen information cards which may be helpful.

(b) Other Possible Sources in Prepared Foods:

- cookies
- cakes
- cereals
- granola bars
- candies

(c) Non-Food Sources:

- Playdough (may contain peanut butter)
- scented crayons and cosmetics
- peanut-shell stuffing in "bean-bags" and stuffed toys
- wild bird seed, sesame
- insect venom (bees, wasps, hornets, yellow-jackets)
- rubber latex (e.g., in gloves, or balloons, erasers, rubber spatulas, craft supplies, Koosh balls)
- vigorous exercise
- plants such as poinsettias, for children with latex allergies