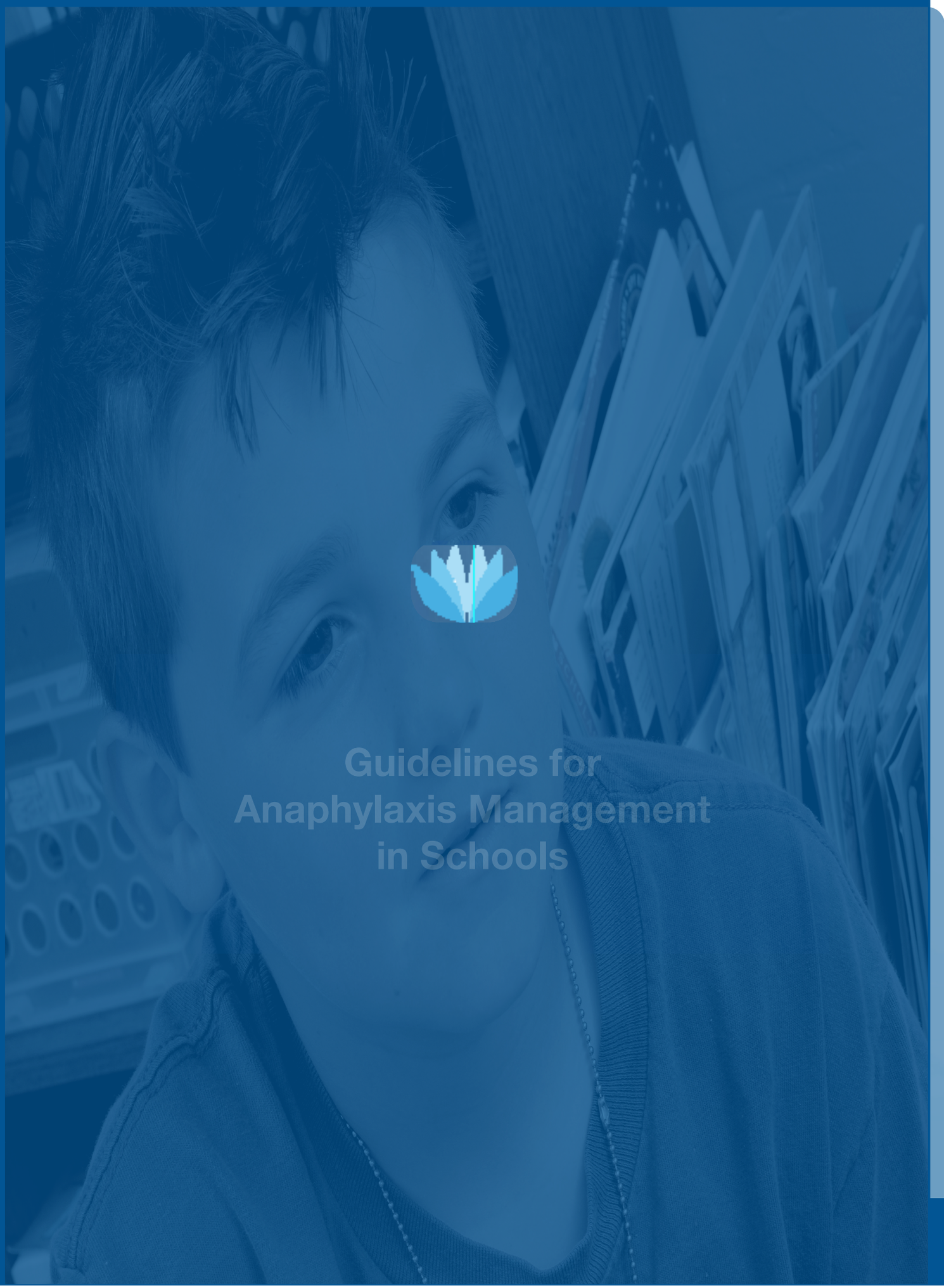
Guidelines for Anaphylaxis Management in Schools

Department of Education and Early Childhood Development
Government of Newfoundland and Labrador



Guidelines for Anaphylaxis Management in Schools

Table of Contents

Background and Purpose

It has been estimated that up to 2% of Canadians are at risk of anaphylaxis from food and insect allergy (Lieberman, P., Camargo, C.A. Jr., Bohlke, K., Jick, H., Miller, R.L., Sheikh, A., and Simons, F.E., 2006). It is important that the needs of students at risk of anaphylaxis are addressed while in school. These guidelines clarify the roles and responsibilities of students, parents/guardians, educators, school administrators and other school-based personnel to ensure students at risk of anaphylaxis are provided a safe and caring learning environment.

The information in these guidelines is for educational purposes only and is not a substitute for professional medical advice. If students have been given recommendations by their physician that differ from those outlined in these guidelines, the individualized written instructions for risk reduction strategies and treatment of a reaction should be followed.

Gaining independence at home, at school, and in the community is central to the development of self-reliance, confidence and daily functioning in society. Promoting independence starts early and continues throughout life. It is important for students to be able to meet their potential and not be restricted by dependence on others.

The provision of health support services is the ongoing responsibility of the parent/guardian. Consequently, in requesting the assistance of school personnel in the provision of these services, parents/guardians are temporarily delegating limited authority to the personnel of the public education system, for a particular purpose, rather than relinquishing any part of their parental responsibility.

What is Anaphylaxis?

Anaphylaxis is a serious allergic reaction that is rapid in onset and may cause death (Sampson, H.A., Munoz-Furlong, A., Campbell, R.L. et al., 2006). An anaphylactic reaction can occur within minutes of exposure to an allergen. In rarer cases, a delayed reaction may occur several hours after the initial exposure. An allergen is any substance capable of inducing an allergy. The most common triggers are foods and insect stings. However, medication and exposure to natural rubber latex can also potentially cause life-threatening allergic reactions.

The most common food allergens that cause anaphylaxis are:

• Peanut
• Tree nuts (almonds, Brazil nuts, cashews, hazelnuts, macadamia nuts, pecans, pine nuts, pistachios, walnuts)
• Milk
• Egg
• Sesame
• Soy
	• Wheat
	• Seafood
	  ▪ Fish. e.g. trout, salmon
	  ▪ Shellfish
	  _ Crustaceans, e.g. lobster, shrimp, crab
	  _ Molluscs, e.g. scallops, clams, oysters, mussels
	• Mustard

Students at risk of anaphylaxis may react to a food allergen through:

- Direct ingestion: actually eating a food containing the allergen or touching an allergenic substance and then subsequently putting their hand to their mouth or eye
- Inhalation (small airborne proteins released in vapors when cooking i.e.. fish)
- Skin contact

The symptoms experienced during an anaphylactic reaction may vary from person to person and even from episode to episode in the same person. An allergic reaction usually happens within minutes after being exposed to an allergen, but sometimes it can take place up to several hours after exposure.

An anaphylactic reaction generally involves two or more of the following body systems though low blood pressure alone can also represent anaphylaxis:

- **Skin**: hives, swelling (face, lips, tongue), itching, warmth, redness,
- **Respiratory (breathing)**: coughing, wheezing, shortness of breath, chest pain or tightness, throat tightness, hoarse voice, nasal congestion or hay fever-like symptoms (runny itchy nose and watery eyes, sneezing), trouble swallowing
- **Gastrointestinal** (stomach): nausea, pain or cramps, vomiting, diarrhea
- **Cardiovascular (heart)**: paler than normal skin color/blue color, weak pulse, passing out, dizziness or lightheadedness, shock
- **Other**: anxiety, sense of doom (the feeling that something bad is about to happen), headache, uterine cramps, metallic taste

The most dangerous symptoms of an allergic reaction, both of which can lead to death if left untreated, are:

- **Trouble breathing** caused by swelling of the airways (including a severe asthma attack for people who have asthma)
- **A drop in blood pressure** causing dizziness, light-headedness, feeling faint or weak, or passing out.

  Adapted from Anaphylaxis in Schools & Other Settings, *3rd Edition*, 2014, Canadian Society of Allergy and Clinical Immunology

Early symptoms should never be ignored. If a student at risk of anaphylaxis expresses any concern that a reaction might be starting, the student should always be taken seriously. When a reaction begins, it is important to respond immediately, following instructions in the student's Anaphylaxis Emergency Plan.

Training and Communication

All individuals who are in regular contact with students with anaphylaxis should participate in training. Training should be provided at least once a year, preferably during the first week of the school year.

Training shall include the following topics:

- ways to reduce exposure to allergens
- recognition of signs and symptoms of anaphylaxis
- when and how to give the epinephrine auto-injector (Allerject™ and/or EpiPen®)
- emergency response to anaphylactic reactions

Schools can avail of a bilingual on-line course, *Anaphylaxis in Schools: What Educators Need to Know,* at http://www.allergyaware.ca/. This course focuses on the prevention, recognition, and management of anaphylaxis.

Avoidance

Avoidance is the cornerstone of preventing an allergic reaction (Canadian Society of Allergy and Clinical Immunology, 2011). Until there is a cure, avoidance of the allergen(s) is the only way to prevent an anaphylactic reaction. Schools need to become allergy-aware and create an environment that will minimize the risk of exposure to allergens. Schools that claim to guarantee an allergen-free environment (i.e. peanut-free) may set a false sense of security for parents and students, since an allergen-free environment is difficult to guarantee. Measures can be taken to reduce, but not completely eliminate, the risk of exposure.

The principal (or designate) shall work cooperatively with school staff, students, and parents to create an allergy-aware environment and an avoidance policy that balances the rights of all participants yet ensures a safe and caring environment for students with life-threatening allergies. The maturity and reliability of the student should be considered. Primary and elementary students are more dependent and may require greater support and supervision.

The decision to restrict known allergens from the classroom, common areas and/or the entire school environment depends upon the nature of the allergen, the severity of the allergic reaction in each student and student maturity. School avoidance policies should be flexible enough for the school and classrooms to adapt to individual children and the allergens which trigger reactions. Precautions may vary depending upon the properties of the allergen. Peanut butter presents challenges in terms of cross-contamination and cleaning; and while it may be possible to eliminate peanut products from school cafeterias, it would be virtually impossible to do so with milk, egg, or wheat products.

The following measures are recommended to reduce the risk of exposure to food allergen:

- Adult supervision of young students who are eating.
- Individuals with food allergy should not trade or share food, food utensils, or food containers.
- School administrators, parents and food service staff should work closely together to ensure that food being served during lunch and snack programs is appropriate according to their policies around food.
- The use of food in crafts and cooking classes may need to be modified depending on the allergies of the students.
- Ingredients of food brought into the school for special events should be identified.
- Students should be encouraged to comply with a “no eating” rule on school buses during daily travel.
- Students should wash their hands before and after eating.
- Surfaces such as tables, toys, etc. should be carefully cleaned of contaminating foods.

Additional information pertaining to other allergens and approaches to avoidance can be found in the document Anaphylaxis in Schools & Other Settings, 3rd Edition, 2014, Canadian Society of Allergy and Clinical Immunology:

http://www.aaia.ca/en/Anaphylaxis_3rd_Edition.pdf.

All schools in the province have been provided a hard copy of this document.

Emergency Protocol

Accidental exposures may occur. Schools, therefore, should have an Anaphylaxis Emergency Plan in place to help protect students at risk of anaphylaxis.

In accordance with national standards and guidelines, students at risk of anaphylaxis typically carry an auto-injector on his/her person at all times when age appropriate, usually by 6 or 7 years old or as determined by the school team. Staff should assist younger children by having auto-injectors readily accessible in an unlocked area (i.e. in the classroom), but out of reach of other children. A back-up dose of epinephrine should be available as a second injection may be required.

School personnel must be prepared to respond to emergency situations. Advance planning is important in successfully managing a potential crisis. The following measures are recommended:

- The auto-injector (Allerject™, EpiPen®) is usually carried on the student.
- Epinephrine (e.g. EpiPen® or Allerject™) is the first line medication and should be given at the first signs of an allergic reaction.
- Antihistamines and asthma medications should not be used instead of epinephrine for treating anaphylaxis.
- Call 9-1-1 or local emergency services.
- Students receiving epinephrine should be transported to the hospital immediately, ideally by ambulance.
- Additional epinephrine should be available during transport to hospital. A second dose of epinephrine may be administered within 5 to 15 minutes after the first dose is given IF symptoms have not improved.
- Call emergency contact person (e.g. parent, guardian).

All students at risk for anaphylaxis should have an Anaphylaxis Emergency Plan (Part III) as part of the Anaphylaxis Management and Emergency Plan. The plan is two pages. The first page is a form with the student's photo and allergy information and the second page has instructions on how to use an auto-injector.

Anaphylaxis Management: A Shared Responsibility

Anaphylaxis management in schools shall be based on strong collaboration between parents, students, school personnel and health care professionals.

Responsibilities of a Student at Risk of Anaphylaxis

Depending on the age, knowledge, skills, and maturity of the student, a student at risk of anaphylaxis will:

a) Carry their own epinephrine auto-injector (typically by age 6 or 7).

b) Keep a labelled auto-injector in a readily accessible, unlocked location.

c) Wear medical identification which lists the allergen(s).

d) Tell someone (preferably an adult) immediately after accidental exposure to an allergen or as soon as symptoms occur.

e) Practice appropriate food management if they have a food allergy.

Responsibilities of the Parent/Guardian of a Student at Risk of Anaphylaxis

The Parent/guardian will:

a) Be familiar with the Guidelines for Anaphylaxis Management in Schools and fulfil their obligations.

b) Practice appropriate anaphylaxis management.

- Parents/guardians shall educate their child in the management of anaphylaxis. This will include:
  - learning about safe eating practices;.
  - knowledge to recognize the symptoms of an anaphylactic reaction;
  - awareness of the need to carry an auto-injector, when age-appropriate, at all times;
  - knowing where the second auto-injector is stored; and
  - understanding the importance of reporting any symptoms of an allergic reaction immediately to school staff or to another student, who wil inform staff.

c) Make a Plan

- Contact the principal (or designate) for an initial interview.
- Identify their child to the principal (or designate) as well as complete the necessary forms and authorizations including the Anaphylaxis Management and Emergency Plan.
- Provide the school with specific information about their child which will be included in staff training and the student plan.
- Provide the school with the completed Anaphylaxis Emergency Plan during the first week of school.

d) Attend and participate in training.

- Parents/guardians are responsible for working with the school to meet the school's training needs and are encouiraged to attend and participate, where appropriate, in training sessions provided for school personnel.
  - knowledge to recognize the symptoms of an anaphylactic reaction;
  - awareness of the need to carry an auto-injector, when age-appropriate, at all times;
  - know where the second auto-injector is stored;
  - understanding the importance of reporting any symptoms of an allergic reaction to school staff or to another student immediately
  - training in the administration of the auto-injector when age-appropriate; and
  - learning about safe eating practices (e.g.; washing hands, not to share foods etc.).
- Parent/guardians will provide their child with safe foods for consumption at school.

e) Supply the school with two up-to-date doses of epinephrine (2 Allerjects™ or 2 EpiPens®)

f) Provide medical ID

- Parents/guardians shall ensure their child wears a MedicAlert® bracelet or other suitable identification at school

Responsibilities of the Principal (or designate)

The Principal (or designate) will:

a. Request parent/guardian to identify their child at risk of anaphylaxis at registration.

b. Ensure that the Guidelines for Anaphylaxis Management in Schools are made available to parents/guardians and school staff

c. Make a plan

- Parent/guardian shall be provided the opportunity to meet with appropriate staff to develop/update the Anaphylaxis Management and Emergency Plan for their child.
- Each year, the plan must be reviewed by the school's principal (or designate) and the parent/guardian.
- If the service requirements remain the same, only the signatures from the principal (or designate) and a parent/guardian are required to renew the plan.
- If the service requirements are different from the last plan, a new plan must be developed.

d. Inform the parent/guardian that they are to supply two doses of epinephrine (2 Allerject™ or 2 EpiPen® auto-injectors) to the school and shall take reasonable steps to obtain these items.

e. Inform the parents/guardians that their child will be required to carry one of the supplied auto-injectors on his/her person at all times when age appropriate, usually by 6 or 7 years old. If the child is unable to carry their device due to their age and/or other factors, other arrangements will be determined.

f. Ensure that the second auto-injector is kept in a secure, accessible area and never under lock and key, and in its original case.

g. Inform staff members of any student at risk of anaphylaxis, the specific allergens, the emergency protocol, and the location of the second Allerject™ or EpiPen® auto-injector.

h. Ensure that the Anaphylaxis Emergency plan is placed in prominent and accessible locations within the school and on the school bus as agreed upon by the principal and parent/guardian.

i. Ensure that training is provided at least annually to all appropriate school personnel who may be in a position of responsibility for a student at risk of anaphylaxis.

j. Ensure that an avoidance policy is in place and reasonable communicated to staff, students, parents of all students, food services and other school visitors at the beginning of the school year.

k. Ensure that anyone providing food to be served and/or sold in the school will be made aware of avoidance strategies and cross contamination procedures.

l. Consider special events and activities

- Modifications may need to be in place for special events and activities at the school and other extra-curricular events.
- A parent/guardian of a student at risk of anaphylaxis should be given advance notice, to the extent possible.
- An adult should be designated to ensure the student's care is managed according to his/her plan and/or special event form, and ensure the student has his-her auto-injector.
- A copy of the Anaphylaxis Emergency plan should be available on all excursions off school grounds.

Responsibilities of Teachers

Teachers will:

a. know the identity of students at risk of anaphylaxis in their classroom;

b. meet with the parent/guardian of the student(s) at risk of anaphylaxis at the beginning of he school year;

c. choose allergen-safe foods for all classroom events and encourage all students and parents to do the same;

d. advise all students not to share lunches or snacks and to respect the school's allergy-safe policy especially in school, on the school bus, and field trips;

e. receive training in the administration of an auto-injector (Allerject™, EpiPen®);

f. know the location of the stored second dose of epinephrine;

g. inform their substitute teachers, classroom v olunteers and others in direct contact with the student of the student's presence in the class and place the Anaphylaxis Emergency Plan and appropriate student information in a visible and accessible area; and

h. be able to recognize the signs of anaphylaxis and respond according to the Anaphylaxis Emergency Plan; and ensure that the second dose of epinephrine (Allerject™, EpiPen®) is taken on field trips/inter-school visits.

Anaphylaxis Management and Emergency Plan

School Year 20_____ - 20_____

Part 1 - Student Information

Name of Student: _____

Date of Birth: _____ MCP Number: _____

Home Room Teacher: _____

Contact Information

Parent/Guardian: _____

Telephone: Home: _____ Work: _____Cell: _____

Address: _____ Email: _____

Parent/Guardian: _____

Telephone: Home: _____

Address: _____

Student's Physician: _____Telephone: _____

Other/Emergency contact:

Name: _____ Relationship: _____

Telephone: Home: _____ Work: _____Cell: _____

Notify parents/guardian or emergency contact in the following situations:

_____

_____

_____

Any other conditions that may affect the treatment of your child

_____

_____

_____

Part II — Anaphylaxis Management Plan

Allergen(s):

_____

_____

_____

Historical Symptoms of Allergic Reaction:

_____

_____

_____

Allergen Management for the Classroom:

_____

_____

_____

Allergen Management for Special Events in the School:

_____

_____

_____

Allergen Management for Extra-Curricular Events:

_____

_____

_____

Student Name:_____

DOB:_____

Part III — Anaphylaxis Emergency Plan

EpiPen®

http://foodallergycanada.ca/wp-content/uploads/AnaphylaxisEmergencyPlanwithEpiPen2015.pdf.

Allerject™

http://foodallergycanada.ca/wp-content/uploads/AnaphylaxisEmergencyPlanwithAllerject2015.pdf.

Part IV – Sign-off

I have read and understand the Anaphylaxis Management and Emergency Plan and agree to the care described in this plan and the sharing of information relevant to the service requested with those who must know in order to provide the service.

Student (16 years and older):_____ Date: _____

I hereby request and authorize school personnel to provide the care described above to my child. I understand the trained persons have no medical qualifications and will perform the requested service in good faith and within the scope of the training received in accordance with this agreement.

In the event of an emergency, I authorize school personnel to administer the device specified in this agreement and provided by me, and to obtain suitable medical assistance. I agree to assume responsibility for all cost associated with medical treatment.

I hereby acknowledge my responsibilities, as set out in these guidelines and agree to carry these out to the best of my ability.

I agree to notify the school in writing of any changes to the information provided on this form.

I agree that the information provided on this form will be shared on a need-to-know basis with anyone who will be involved in the care of my child on behalf of the school.

I agree to have relevant information about my child's health/medical condition available in strategic areas of the school (e.g. classroom, kitchen, principal's office, staff room, school bus) to assist in providing emergency services to my child. I will provide a photo of my child for this purpose.

Yes No

Additional comments:

_____

_____

I agree that the principal or his/her designate may contact my child's physician in the event of a medical emergency or should he/she require clarification about the school's responsibilities as set out in this agreement. Yes No

Parent/Guardian: _____ Date: _____

I hereby acknowledge and accept my responsibilities and those of my staff, as set out in this agreement.

Principal (or designate):_____ Date: _____

Student Name: _____

DOB: _____

Part V - Annual Review

Note: If the requirements of the service requested have changed, complete a new *Anaphylaxis Management and Emergency Plan.* If there are no changes, use this sign-off sheet to confirm the plan has been reviewed with the parent.

This plan remains in effect for the 20___to 20___school year without change.

Parent/Guardian: _____ Date:_____

Principal (or designate): _____ Date: _____

This plan remains in effect for the 20___to 20___school year without change.

Parent/Guardian: _____ Date: _____

Principal (or designate): _____ Date: _____

This plan remains in effect for the 20___to 20___school year without change.

Parent/Guardian: _____ Date:_____

Principal (or designate): _____ Date:_____

This plan remains in effect for the 20___to 20___school year without change.

Parent/Guardian: _____ Date: _____

Principal (or designate): _____ Date: _____

Student Name: _____

DOB: _____

Websites and Training Videos

Allergy/Asthma Information Association www.aaia.ca
Allerject™ http://www.allerject.ca/
Canadian Society of Allergy and Clinical Immunology www.csaci.ca
EpiPen® http://www.epipen.ca/en/about_epipen/how_to_use_epipen/
Food Allergy Canada http://foodallergycanada.ca/

References

Anaphylaxis in Schools and Other Settings, 3rd Edition. The Canadian Society of Allergy and Clinical Immunology, 2014

Lieberman,P., Camorgo, C.A. Jr., Bohlke,K., Jick,H., Miller, R.L., Sheikh, A., and Simons, F.E. (2006). Epidemiology of anaphylaxis: Findings of the ACAAI Epidemiology of Anaphylaxis Working Group. Ann Allergy Asthma Immunol, 97: 596-602.

Sampson H. A., Munoz-Furlong, A., Campbell, R.L. et al. (2006) Second Symposium on the Definition and Management of Anaphylaxis: Summary Report – Second National Institute of Allergy and Infectious Disease/Food Allergy and Anaphylaxis Network Symposium. Journal of Allergy and Clinical Immunology:117(2) 391-397.

3rd Floor, West Block, Confederation Building
100 Prince Phillip Drive, St. John's, NL
www.ed.gov.nl.ca