

**JAMES BAY LOWLANDS SECONDARY  
SCHOOL BOARD**

# **HANDBOOK**

**PREVENTION AND  
MANAGEMENT  
OF  
ANAPHYLACTIC  
SHOCK**

## PREVENTION AND MANAGEMENT OF ANAPHYLACTIC SHOCK

### 1. CONSIDERATIONS FOR THE MANAGEMENT AND PREVENTION OF ANAPHYLACTIC SHOCK

#### 1.1 Background

Anaphylaxis is an instant allergic reaction in all the major body-organ systems. Unless there is a medical intervention, the victim may suffer a drop in blood pressure, loss of consciousness and death. This can occur within minutes of exposure to the triggering substance. Even a small amount of the allergen can be fatal.

In addition to peanuts, the foods most frequently implicated in anaphylaxis are tree nuts (e.g. hazelnuts, walnuts, almonds, and cashews), cow's milk and eggs. Fish, shellfish, wheat and soy are potentially lethal allergens as well and anaphylaxis is occasionally induced by fruits and other foods. Non-food triggers of anaphylactic reactions include insect venom, medications, latex and rarely, vigorous exercise. Most individuals lose their sensitivity to milk, soy, egg and wheat by school age but reactions to peanuts, tree nuts, fish and shellfish tend to persist throughout life.

The emergency response to an anaphylactic reaction is the administration of adrenalin by syringe usually with an EpiPen or Anakit. The adrenalin can be easily and safely administered with these devices by non-medical personnel with minimum training. The EpiPen is particularly easy to administer.

For many years, there have been students/adults who suffer from this condition. However, the number of people appears to be increasing and corresponding levels of concern have resulted.

#### 1.2 Anaphylaxis to Insect Venom

Food is the most common trigger of an anaphylactic reaction in students and the only allergen which schools can reasonably be expected to monitor. The school cannot take responsibility for possible exposure to bees, hornets, wasps and yellow-jackets, but certain precautions can be taken by the student and the school to reduce the risk of exposure:

- 1.2.1 Avoid wearing loose, hanging clothes, floral patterns, blue and yellow clothing and fragrances;
- 1.2.2 Check for the presence of bees and wasps, especially nesting areas, and arrange for their removal;
- 1.2.3 If soft drinks are being consumed outdoors, pour them into a cup and dispose of cans in a covered container;
- 1.2.4 Ensure that garbage is properly covered;
- 1.2.5 Caution students not to throw sticks or stones at insect nests;
- 1.2.6 Allow students who are anaphylactic to insect stings to remain indoors for physical education during bee/wasp season;
- 1.2.7 Immediately remove a student with an allergy to insect venom from the room, if a bee or wasp gets in.

### 1.3 Allergens Hidden in School Activities

Not all allergic reactions to food are a result of exposure at meal times. Teachers should be aware of the possible allergens present in curricular materials such as:

- 1.3.1 play dough;
- 1.3.2 bean-bags, stuffed toys (sometimes peanut shells are used);
- 1.3.3 counting aids (peas, beans);
- 1.3.4 books and other items which may have become contaminated in the course of normal use;
- 1.3.5 science projects;
- 1.3.6 special seasonal activities (Easter eggs, garden projects).

### 1.4 What Does An Anaphylactic Reaction Look Like?

An anaphylactic reaction can begin within seconds of exposure or after several hours. Any combination of the following symptoms may signal the onset of a reaction:

- SYMPTOMS:**
- Hives;
  - Itching (on any part of the body);
  - Difficulty breathing;
  - Swelling (on any part of the body especially eyes, lips, face tongue);
  - Red watery eyes;
  - Dizziness;
  - Runny nose;
  - Vomiting;
  - Change of colour;

#### 1.4 What Does An Anaphylactic Reaction Look Like? (cont'd)

##### **SYMPTOMS** (cont'd)

- Diarrhea;
- Stomach cramps;
- Sense of anxiety; change of voice;
- Coughing;
- Wheezing;
- Difficulty swallowing;
- Throat tightness or closing;
- Fainting or loss of consciousness.

#### 1.5 Consideration For Plan Development

There is a need to:

- Ensure the safety of students/staff who suffer from extreme allergies;  
and
- Empower the school administrators to respond to their needs consistently.

But at the same time, recognizing individual differences from case to case.

If you have students/staff that are subject to anaphylactic reactions, you must have an emergency response plan. If you have a plan, it must contain elements that can and will be executed without fail. Staff must be trained in the emergency first aid procedures identified in the Plan.

The school's prevention plan should consider the individual needs of students/staff according to:

- Age;
- Maturity;
- Personal characteristics and competencies; and
- The severity of the allergy.

#### 1.6 Can You Create a Peanut-Free Environment?

In a word, NO. However, it is important to inform parents and staff members of the serious risks of exposure for some students and staff, and to ask them to provide a nut-free environment. Such a request cannot always be reliably implemented, because it may not be recognized that baked goods contain nuts, and trace elements of peanut butter can be present if someone had peanut butter at home. Nevertheless, every effort must be made to reduce exposure.

### 1.6 Can You Create a Peanut-Free Environment? (Cont'd)

All parents/guardians must be asked to cooperate and check the ingredients of all food sent to school.

Everyone must be aware that no matter how committed the staff and how cooperative the parents/guardians, foods containing the allergen could sneak through.

The best approach is to minimize the allergen in the school with parents/guardians' cooperation and to establish procedures that reduce the likelihood of the student's exposure to the allergen if it is present.

Try:

- limiting the sharing of food and utensils;
- increasing attention to the cleanliness of food preparation and eating areas;
- encouraging the students to wash their hands after eating;
- sending letters home or conducting presentations to enlist parent/guardian support;
- explaining the dangers to the students;
- controlling the foods served at special events;
- designating eating areas.

### 1.7 Involvement of Other Parents/Guardians

Identify the problem to all parents/guardians through a letter or newsletter and request their cooperation in reducing the student's exposure to the allergen.

Provide education session(s) for parents/guardians on the topic of extreme allergies and anaphylactic shock and attempt to gain their support for measures to limit the student's exposure to the allergen.

Provide information session(s) for parents/guardians and school volunteers.

Avoid school or parent/teacher group involvement in fund-raising activities that include foods containing the allergen.

### 1.8 Education and Training

Provide, in cooperation with the Public Health Department, education and training to all adults who may have the opportunity to respond to the needs of a student/staff member suffering anaphylactic shock. This will include:

- Teachers
- Classroom Assistants
- Supply Teachers
- Office Staff
- Custodial Staff
- Bus Drivers
- Volunteers
- Student Teachers

## 2. THE EXTREME ALLERGY MANAGEMENT AND PREVENTION PLAN

When a student who is subject to extreme allergic reactions is identified by a parent/guardian, and it is confirmed in writing by the physician, the principal will convene as soon as possible a meeting of the parent/guardian (s) and appropriate school staff to develop a procedure to enhance the safety of the student. The following elements will be addressed in the Plan.

### 2.1 Prevention

A **Prevention Plan** to minimize the student's exposure to the triggering allergen appropriate to the maturity and reliability of the student and the severity of the problem should be developed.

Prevention measures may include:

- Self-supervision;
- Education programs for classmates, schoolmates, parents/guardians;
- Request to parents/guardians of students in classroom to assist in the management of the exposure to the allergen;
- Provision of an allergen-free area of the cafeteria or separate eating area, in consultation with the parents/guardians; and
- Minimizing the presence of triggering substance in school and school-related activities.

### 2.2 EpiPens

The number of locations in which EpiPens are kept and to whom they are available may be determined based upon the severity of the problem as mutually determined by the parent/guardian and the Principal. **The preferred approach would be for the student to carry the EpiPen at all times with one or more spares available in school locations.**

Staff training with regards to administration of the EpiPen shall occur annually.

A mechanism by which all staff can identify the students at risk should be available.

Provision for reliably informing supply teachers and other temporary staff of the issue and their potential responsibilities should be made.

Instructions on the use of the EpiPen, along with a list of symptoms and emergency procedures, should be posted in a clearly visible location in the student's classroom.

### **NOTE:**

*School personnel should note that there are no contra-indications to the use of epinephrine for life-threatening allergic reactions. Accidental administration of the medication, if a reaction is not actually taking place, is not a significant cause for concern, according to the Canadian Pediatric Society:*

*“In young patients, serious adverse effects of epinephrine such as cardiac arrhythmias and hypertensive crises are extremely rare, and the life-saving benefit of injecting epinephrine in cases of suspected anaphylaxis outweighs any small risk of side effects.”*

*In other words, if there is any reason to suspect an anaphylactic reaction is taking place, and if epinephrine has been prescribed as the treatment protocol, personnel should not hesitate to administer the medication.*

### 2.3 Emergency Action

AS in the case of any potential crisis, advance planning will be helpful in successfully managing the event. In dealing with cases of anaphylactic shock, the Plan must address procedures for:

- Administering the EpiPen;
- Calling 9-1-1 for an Ambulance
- Advising of the need for the EpiPen or transporting the student/staff member to the hospital (preplan and time the emergency route);
- Caring for the student/staff member until the ambulance arrives;
- Communication with parents/guardians and appropriate others; and
- Administering the second EpiPen as required.

### 2.4 Responsibility

In developing a procedure for the management of students with severe allergic reactions, it is essential that there be a clear understanding among the parent/guardian and school regarding their individual responsibilities in the process. These may include:

#### 2.4.1 Parent/Guardian

- Notification to school of problem, with written confirmation from the physician;
- Provision of two EpiPens and carry pouches (if necessary) in sufficient quantity to execute Action Plans;
- Replacement of EpiPens as required;
- The reliable execution of agreed-upon parent/guardian commitments in the **Emergency Action and Prevention Plan**;
- Authorization for all staff to administer EpiPens with the assurance that they will not be held responsible for any adverse reactions resulting from such administration.

#### 2.4.2 The School

- The reliable execution of the agreed-upon **Emergency Action and Prevention Plan**.

### 2.5 Alternatives: Prevention and Management Plan Components

The following alternatives are identified which may be included or adapted in individual Prevention and Management Plans. The alternatives are not exhaustive and in many cases more than one alternative related to a specific area might be included. In the recording of individual plans, the principal may wish to include a number of the specific alternatives indicated below in a more general statement.

#### 2.5.1 Identification To Staff

- Require students/staff members to wear Medic Alert bracelets to identify specific allergies;
- Provide a copy of the **Extreme Allergy Management and Prevention Plan** with a photo of the student to all staff;
- Post a photo of the student with a description of the problem and emergency action plan in the staff room and/or staff area of the school office;



- Include a copy of **Extreme Allergy Management and Prevention Plan** with a photo of the student in the Teacher Planning Book, staff room and school office;
- Conduct a staff meeting to identify the issue, communicate the planned response and identify the student(s).

### 2.5.2 Class Room Prevention

- Write a letter to parents/guardians requesting their cooperation and support to avoid sending foods containing the allergen to school;
- Identify the problem to students and enlist their cooperation and support in avoiding bringing foods containing an allergen to school;
- Discourage sharing of snacks;
- Require students with allergies to eat only foods which are brought from home;
- Encourage all students to wash hands before and after eating;
- Require parents/guardians to provide a list of ingredients for any foods sent to the school to be shared;
- Establish a procedure to ensure that supply teachers are aware of measures for classroom prevention;
- Expect the student to accept personal responsibility for avoidance of consumption or exposure to foods containing the allergen.

### 2.5.3 Lunch Room Prevention

- Suggest that student eat at home if possible;
- Discourage sharing of lunches or snacks;
- Encourage all students to wash hands before and after eating;
- Arrange for the student to eat alone or with a few friends in a location outside the cafeteria;
- Designate a separate area of the cafeteria;
- Assign staff to clean cafeteria furniture and food preparation areas thoroughly before and after lunch to minimize the possibility of exposure both at lunch and when the facilities are being used for other purposes;
- Require that lists of ingredients are available to students for all foods served in the cafeteria;
- Expect the student to accept personal responsibility for avoidance of consumption or exposure to foods containing the allergen, when age appropriate.

### 2.5.4 Out of School Prevention

- Discourage sharing of food in the school yard and school bus;
- Discourage students from eating on the school bus;

- Ensure that all bus drivers receive copies of the **Prevention Plan** and have received training in administration of the EpiPen;
- Try to ensure that foods provided by the school or food providers on field trips exclude an allergen;
- Request parents to avoid sending foods containing the allergen in packed lunches for field trips;
- Inform food providers of restrictions and require that they eliminate foods containing the allergen from menus;
- Ensure a list of ingredients of meals in overnight accommodations are accessible to the student, staff, and parents/guardians;
- Request the parent/guardian to accompany their child on field trips;
- Prohibit students with allergies from participating on trips where their safety cannot be ensured, in consultation with parents/guardians;
- Assign school personnel and/or trained volunteers to assure suitable supervision of the student on field trips;
- Ensure that a hospital or emergency service are accessible;
- Ensure that a copy of the **Prevention Plan** is held by field trip supervisors;
- Expect the student to accept personal responsibility for avoidance of consumption or exposure to foods containing the allergen, when age appropriate.

### 3. CHECK LISTS

#### 3.1 Working with Parents/Guardians

- √ Meet with parents/guardians to gather medical information at registration related to the condition including:
  - Causal factors;
  - Severity of allergy;
  - Past incidents of anaphylactic shock;
  - Other health considerations.
- √ Request that parents/guardians provide written instructions from the student's physician. Use the **Extreme Allergy and Management Plan**. Review the physician information each school year.
- √ Complete the **Extreme Allergy and Management Plan**. For suggestions, please see *The Extreme Allergy Management and Prevention Plan*, Section 2. The Plan should be reviewed and updated annually with the student's parent/guardian(s) to ensure that information is accurate.
- √ Request the parent/guardian to provide EpiPens to appropriate staff immediately. At least two EpiPens are **REQUIRED**, one located with the student and one located in the school office in an accessible location. If

the student does not carry an EpiPen, one must be located in the class room and school office.

- ✓ Request the parent/guardian to provide a body pouch for transport of the EpiPen with the student. The student should be instructed to wear the pouch at all times.
- ✓ Invite the parent/guardian and/or Public Health Nurse to provide information to other parents for awareness and to support the parent/guardian of the affected student. Presentations could also be made to the School Council.
- ✓ Communicate with other parents/guardians requesting assistance with the implementation of the **Prevention and Management Plan**, as required.

### **3. CHECK LISTS**

#### **3.2 Working With Staff**

- ✓ Notify all appropriate school personnel:
  - Supply Teachers;
  - Student Teachers;
  - Class room assistants;
  - Office Staff;
  - Custodial Staff;
  - Parent Volunteers;
  - Bus Drivers.

of the medical alert and of the established **Management and Prevention Plan**.

- ✓ Visually identify with a photo the student to all staff, as per the **Prevention Plan**.
- ✓ Review procedures with the entire staff each year in September.
- ✓ Inform long-term occasional staff or supply staff as necessary. Indicate to the staff member, the location of the Plan located in the class room.
- ✓ Conduct food safety discussions with all students at the beginning of the year and at regular intervals throughout the year while exercising sensitivity to the impact on the affected student's self-esteem.
- ✓ Ensure that the student has an EpiPen available for all school activities and excursions.

- √ Plan and implement safe lunch program practices. These practices should be clearly outlined in the Plan.

4. **FOODS THAT CAN CAUSE ALLERGIC REACTIONS**

**\*** Any food can cause a reaction in someone. **But** certain foods do cause problems more frequently than others:

- milk
- fish
- eggs
- nuts
- wheat
- berries

Source: Allergies and Children: A Handbook for Parents, pg. 56, The Hospital For Sick Children

Foods That Can Cause Allergic (General) Reactions

<b>SEEDS</b> Sesame Cottonseed Caraway Mustard Flaxseed Poppyseed Psyllium Sunflower	<b>NUTS</b> Brazil Black walnuts Pecans Hazelnuts Hickory Pistachios Chestnuts English walnuts Almonds
<b>LEGUMES</b> Peanuts Chickpeas Pinto beans Soybeans Kidney beans	<b>ALL FISH/SHELLFISH</b> Lobster Crab Other

Source: Living With Your Allergies and Asthma, Theodore Berland, Lucia Fischer, PAP, M.D.

5. FORM ADMIN 319-01

JAMES BAY LOWLANDS SECONDARY SCHOOL BOARD

**EXTREME ALLERGY MANAGEMENT AND PREVENTION PLAN**

A. **Student Information** (To be Completed by Parent/Guardian)

Name of Student: \_\_\_\_\_

Student Health Card No.: \_\_\_\_\_

Address: \_\_\_\_\_

Home Phone #: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Name of Father: \_\_\_\_\_ Work No.: \_\_\_\_\_

Name of Mother: \_\_\_\_\_ Work No. : \_\_\_\_\_

Emergency Contact Person: \_\_\_\_\_

Emergency Contact No.: \_\_\_\_\_

B. **Physician Information** (To be Completed by Family Physician)

Nature of Allergy: \_\_\_\_\_

Symptoms of Reaction: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Recommended Response to Reaction: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Medication: \_\_\_\_\_ Dosage: \_\_\_\_\_

Additional Instructions or Information: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of Physician: \_\_\_\_\_ Telephone: \_\_\_\_\_

\_\_\_\_\_  
Signature of Physician

\_\_\_\_\_  
Date

**Insert  
Student  
Photo  
Here**