Anaphylaxis:

A Handbook for School Boards

ACCCS CSBA

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Canadian School Boards Association

The Canadian School Boards Association, comprised of provincial school boards associations, is the national voice of school boards, whose mission is to exercise leadership by advocating excellence in public education and promoting the value of locally elected school boards through collaboration, research and information sharing with other partners

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Overview

The pressure on school boards to develop policies to meet the needs of children with life-threatening allergies has continued to grow since the first edition of this handbook was published in 1996. This is due to both an increase in public awareness and an increase in the number of cases of anaphylaxis reported in Canada.

Anaphylaxis, the medical term for “allergic shock” or “generalized allergic reaction”, can be rapid and deadly. It can develop within seconds of exposure, beginning with itching, hives, or swelling of the lips or face. Within moments, the throat may begin to close, choking off breathing and leading to death. In 1994, a student on a field trip to Algonquin Park in Ontario died from trace amounts of peanut butter that had been transferred to a jam jar. A child attending camp in Montreal died after eating a cheese sandwich that had been packed in the same bag with a peanut butter sandwich.

Although precise figures are difficult to obtain, Canadian physicians report that the number of affected individuals is rising, and that by far the most common culprit is the peanut. A recent study of food allergies in the Ottawa and Vancouver areas indicated that 36 percent of those with food allergies were peanut-allergic, compared to U.S. studies showing fewer than 25 percent in the 1980s. The same study showed that 21 percent of those with a peanut allergy were anaphylactic.[1]

The two tragedies described above illustrate several important facts about anaphylactic reactions: trace amounts of the allergen can be fatal; children are at greatest risk when they are removed from the regular routines of home and/or school; and life-saving response must be immediate to avert tragedy. The experience of allergists also suggests that, while younger children experience reactions more frequently, reactions in older children are more likely to be fatal because of their increasing independence and their reluctance to carry medication. This was confirmed by a study of 32 fatalities, in which more than half were adolescents.

Although peanuts are by far the most common allergen causing anaphylaxis in school-aged children, they are not alone. Children can have equally severe, life-threatening allergies to many foods. School systems must be aware that anaphylaxis is a life-threatening condition, regardless of the substance that triggers it. In addition to peanuts, tree nuts (almond, brazil nut, cashew, macadamia, hazelnut or filbert, pecan, pine nut, pistachio, walnut), cow’s milk, eggs, fish, shellfish (crustaceans and molluscs), soy, wheat, and sesame seeds have been identified by an expert committee on food labelling (Agriculture and Agri-Food Canada and Health Canada Food and Drug Regulations) as the most likely to cause severe anaphylactic reactions in Canadians.[2]

How can school boards help to prevent these tragedies?

A growing number of school boards across the country are developing policies to help principals, teachers, and the school community protect anaphylactic children. Since the only way to guarantee their safety is complete avoidance of the allergic substance, these policies usually attempt to eliminate allergens from classrooms where anaphylactic children are enrolled. Such policies are frequently controversial, since they involve limiting the foods that non-allergic children may bring to school. However, when boards strike a balance between the right and convenience of all students to eat what they like and the allergic child's right to relative safety in the school setting, they usually gain general public support for measures to control the allergen in the school.

School boards that stress parental involvement, open lines of communication, and information sharing have reported high levels of community acceptance. By inviting principals, teachers, bus drivers, custodians, classroom aids, volunteers, students, medical advisors, and representatives of local allergy associations to be involved in the policy development process, boards can contribute to greater understanding of the issues facing anaphylactic students, their parents, and the school.

Since no school board or individual can guarantee an allergen-free environment, board policies should also include clear procedures for responding to an anaphylactic emergency. When a reaction occurs, prompt injection of epinephrine usually buys enough time to get the child to a hospital; without it, death can occur within minutes. Therefore, board policies should include procedures to train school personnel in the use of an epinephrine auto-injection device such as EpiPen®, which makes it easy and safe for the lay person to respond quickly in an emergency situation.

What are the legal responsibilities of school boards?

In order to prepare for the possibility of an anaphylactic emergency, school boards need to understand the applicable legislation and case law relating to providing emergency treatment, adapting the school environment for anaphylactic students, obtaining valid consents and waivers, providing medical training to educators, and ensuring student privacy is respected. Though the present state of the law in Canada may not be as clear-cut as educators might wish, it seems clear that school boards with policies in place to address the needs of anaphylactic students both minimize their liability and maximize the ability of children with life-threatening allergies to participate in their school communities.

Providing treatment

To date, the specific question of whether educators have a duty to administer medication to a student experiencing an anaphylactic reaction has not been tested in the Canadian courts. However, it is clear that, based on human rights legislation, boards cannot prohibit anaphylactic students from attending school. In addition, the Supreme Court of Canada has recognized that the "standard of care" owed by an educator to a student is that of a "careful or prudent parent." It is therefore likely that a court would hold that educators have a legal duty both to administer an injection in response to an anaphylactic reaction and to be prepared for that possibility.

Adapting the school environment

It is likely that human rights legislation, when coupled with the provisions in provincial education legislation respecting students' attendance rights, would also require school boards to adapt the school environment to

accommodate anaphylactic students in the school setting. **However, there is no legal obligation to eliminate all risk.** The school board's duty is to exercise reasonable care and skill to see that students are kept reasonably safe. **No school board should ever assume responsibility for providing a completely allergen-free environment.**

Obtaining consent forms and waivers

The failure of school authorities to obtain consent prior to administering medication to a student could result in criminal charges. Though verbal consent may be sufficient in some circumstances, **school boards are strongly encouraged to develop standardized consent and waiver forms to be used for *all* anaphylactic students.** It is important for boards to determine who is the appropriate person to give consent, bearing in mind that the parent is not always in a legal position to give consent, and that consent obtained from the "wrong person" is of no legal effect.

Providing medical training

In order to assist educators in discharging their legal responsibilities and to reduce the school board's potential legal liability, it is recommended that all educators and any other appropriate school personnel be trained to administer the required medication in response to an anaphylactic reaction.

Respecting student privacy

Boards should be aware that protection of privacy and freedom of information statutes may prevent the release of personal information (i.e. that a particular student is anaphylactic) without the required prior consent.

How can families of anaphylactic students help their children in the school setting?

The school should expect the parents of anaphylactic children to participate as actively as possible in the development of procedures to protect their children, in sharing information with school staff and other parents, and in helping their children assume responsibility for their own safety. Parents must take full responsibility for providing the school with medical information, their physician's protocol for treatment, and an adequate supply of up-to-date epinephrine auto-injectors (or other prescribed medication). The school should be willing to give parents the opportunity to discuss their child's needs at staff meetings, parent-teacher association meetings, first-aid seminars, and staff in-service sessions.

Parents of children with life-threatening allergies continuously walk a tight-rope, trying to protect their children from exposure to minute amounts of common food items without depriving them of normal childhood activities. Most teach their children to take responsibility early, since it is generally felt that the sooner children learn to manage their own allergic condition, the more easily they will weather the teen-age years, when peer pressure and the need to conform place additional stresses on them. Children with anaphylaxis usually begin to take responsibility for carrying their own epinephrine auto-injectors early in their school lives, and many know how to inject themselves by the age of 7 or 8. **But those in positions of responsibility should never assume that children or teens will self-inject in the face of an emergency, and should always ensure that a trained adult is on hand.** A severe allergic reaction may be so incapacitating as to inhibit the ability to self-administer, regardless of age.

Helping children strike a balance between a necessary fear of exposure and an unhealthy fear of their expanding world requires the cooperation of the family and the school.

What should school board policies include?

Across Canada, school boards are introducing a wide range of policies and procedures to meet the needs of anaphylactic children. To be successful, policies should be flexible enough to adapt to different allergens, varying ages and maturity levels of students, and different physical properties and organizational structures of schools. Those using this handbook as an aid to policy development should understand that not all recommendations will be suitable and/or necessary in every situation. Although they differ in detail, most comprehensive policies address three general areas:

- information and awareness for the entire school community
- avoidance of the allergen
- emergency response procedures in case of accidental exposure

Information and awareness

Identification of the individual anaphylactic student and a school-wide understanding of procedures to prevent exposure and treat an emergency are the cornerstones of successful school policies. School boards should consider the following components in their policy development:

- Identifying anaphylactic students to school authorities
- Maintaining a current file with up-to-date medical information
- Identifying anaphylactic students to all staff
- Providing in-service for teachers and non-teaching school staff, bus drivers, and volunteers in anaphylaxis prevention, recognition and management, school policy, and the use of the auto-injectors
- Including auto-injector training in all first aid courses provided to staff
- Sharing information with and asking for cooperation from other students, parents, and parent organizations
- Maintaining open communication between parents and the school

Avoidance

Protecting anaphylactic students from exposure to life-threatening substances creates a major challenge for schools. Policies and procedures may vary depending on the age of the child, the organization and physical layout of the school, and the properties of the allergen itself. The following considerations may guide school board policy development in this area.

- Provide allergen-free areas.
- Establish safe lunchroom and eating area procedures, including cleaning and hand-washing routines.
- Avoid allergens hidden in school activities (playdough, stuffed toys, pet foods, etc.).
- Take special precautions around holidays and special celebrations, along with attempts to plan activities that are not food-oriented.
- Establish policies for school bus safety.
- Take special precautions in planning field trips and extra-curricular events.

Emergency response

When accidental exposure triggers an anaphylactic reaction, there is no time to waste. In cooperation with parents, the child's physician, and the public health or school nurse, schools should establish a separate emergency plan for each student, whether at school, on the school bus, or on a field trip, including:

- A rapid response procedure to:
  - administer epinephrine
  - contact an ambulance or drive to hospital
  - include a familiar and trusted adult to accompany the child
  - contact the hospital
  - contact the student's parents
- An easily accessible, up-to-date supply of auto-injectors

A shared responsibility

Ensuring the safety of anaphylactic children in a school setting depends on the cooperation of the entire school community. Chapter VI of this handbook summarizes the responsibilities of all members of the school community in minimizing the risk of exposure and ensuring immediate response to an emergency.

As the occurrence of serious allergies continues to increase, a growing number of schools are entering a partnership with parents and health professionals to protect anaphylactic children from potential tragedy. The information and proposals contained in this handbook are intended to help school boards and their employees fulfill their obligations in that partnership in a way that meets the needs and respects the rights of the whole school community.

Introduction

The Canadian School Boards Association and Health Canada first published Anaphylaxis: A Handbook for School Boards in 1996. At that time, school boards in Canada were just beginning to formalize their response to children with life-threatening allergies by developing policies and procedures to address their needs. Five years later, the level of awareness has changed considerably. Two surveys undertaken by the Canadian School Boards Association in 1999 and 2001 show that more than 80 percent of responding boards have discussed the issue at the board table, and more than two-thirds have policies in place. Many of those policies have relied heavily on the handbook; in fact, a number of school boards require schools to have copies of the handbook on hand as a reference.

Board policies dealing with anaphylaxis range from a brief mention in an overall policy on administration of medication to lengthy documents detailing the steps to be taken by all members of the education community to protect anaphylactic students and to respond to emergency situations. Some boards have developed brief policy statements that direct individual schools to establish their own procedures.

The revision of the handbook has been undertaken to ensure that the information presented reflects the latest thinking of the medical and legal professions, as well as the actual experience of school boards. While most of the information in the 1996 edition remains valid, new board policies developed since that time have provided some additional suggestions and insights which have been included as additions to the original document. As well, recent medical research has contributed to a greater understanding of anaphylaxis. The section on the legal context has been modified substantially to make it more applicable to school boards.

The project has been made possible by funding from Health Canada. It has been supported by an advisory group of health and legal professionals and other stakeholders, and it has relied heavily on the work of countless trustees, administrators, and school personnel whose work in policy development has contributed to both the original document and this revised edition.

We hope this handbook, like its predecessor, will be a useful tool for school boards as they continue to find ways to provide a safe learning environment for children with life-threatening allergies.

Although this guidebook makes observations about usual methods of treatment for anaphylaxis and suggests guidelines for school boards based on those methods, it is not an authoritative medical resource and should be used as a guide to policy development only. Anaphylaxis is a serious, life-threatening condition, and establishing treatment protocols must ultimately be the responsibility of health professionals.

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Anaphylaxis: A Handbook for School Boards
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Anaphlaxis - What Is It?

Anaphylaxis — sometimes called “allergic shock” or “generalized allergic reaction” — is a severe allergic reaction that can lead to rapid death if untreated. Like less severe allergic reactions, anaphylaxis occurs when the body’s immune system reacts to harmless substances as though they were harmful invaders. However, instead of developing the familiar runny nose or rash, sufferers of anaphylaxis respond with an extreme body reaction. The reaction may begin with itching, hives, vomiting, diarrhea, or swelling of the lips or face; within moments, the throat may begin to close, choking off breathing and leading to unconsciousness and death.

Anaphylactic reactions to peanuts have attracted considerable public attention for several reasons:

- Peanuts are one of the most common triggers of anaphylaxis, the most likely of all food allergens to trigger a full-blown anaphylactic reaction, and the most common cause of fatal food anaphylaxis.
- Peanut butter is a staple food for many children.
- Peanut allergy appears to be increasing in frequency.
- Peanuts have been the cause of a number of tragic incidents involving school children.
- Peanuts are difficult to avoid because they are used so widely as an additive in foods. A 1989 study cited by the Canadian Paediatric Society found that 50 percent of children allergic to peanuts had unintentionally consumed them during the previous year.[1]

But peanuts are not alone. Children can have equally severe, life-threatening allergies to many foods. School systems must be aware that anaphylaxis is a life-threatening condition regardless of the substance that triggers it.

Nine groups of foods have been identified by an expert committee on food labelling (Agriculture and Agri-Food Canada and Health Canada Food and Drug Regulations) as being the most likely to cause severe anaphylactic reactions in Canadians.[2] These foods are peanuts, tree nuts (almond, brazil nut, cashew, macadamia, hazelnut or filbert, pecan, pine nut, pistachio, walnut), cow’s milk, eggs, fish, shellfish (crustaceans and molluscs), soy, wheat, and sesame seeds. A tenth component to this priority allergen list is sulphites greater than 10 parts per million (current tests cannot detect sulphites below this level). Anaphylaxis is occasionally induced by fruits and other foods. Non-food triggers of anaphylactic reactions include stings from yellow jackets, wasps, bees or hornets, as well as medications, latex, and, rarely, vigorous exercise. Most individuals lose their sensitivity to milk, soy, eggs, and wheat by school age, but reactions to peanuts, tree nuts, fish, and shellfish tend to persist throughout life.[3] However, fatal reactions to milk, eggs, soy, and other foods have occurred in both children and adults.

The onset of anaphylaxis may be signalled by severe, but non life-threatening reactions, which may become increasingly dangerous with subsequent exposure to the allergen. However, several studies have indicated that for foods and insects, anaphylaxis may commonly occur even if previous allergic reactions have been mild. While the condition often appears in early childhood, it can develop at any age.

The rate of anaphylaxis in the general population has been estimated between 1and 2 percent. Earl Berger reports in the *Canada Health Monitor* (August 1998) that 37 percent of Canadians have been told by a medical doctor that they have one or more allergies, and that 8 percent of those diagnosed have been advised to carry adrenaline (epinephrine). About 9 percent of all respondents to the survey, commissioned by the Anaphylaxis Foundation of Canada (now part of Anaphylaxis Canada), had required emergency treatment for allergies over the previous year. The same study suggests that as many as 800,000 Canadians are at risk of life-threatening allergies, up dramatically from a previous estimate of 50,000.[4]

Approximately 100 food-induced anaphylactic deaths are recognized each year in the United States, while stings of wasps, bees, hornets, and yellow jackets cause approximately 50 deaths per year.[5] Estimates of the number of deaths from anaphylaxis in Canada range from 12 to 50 annually, but these figures are difficult to confirm. Anaphylaxis-induced deaths may be entered into official records as “cardiac arrest” or “asthma”. The Ontario Coroner did report on deaths due to anaphylactic reaction to food in school age children in Ontario between 1986 and 1991. During that period, deaths ranged from zero to three per year, for a total of seven. Six of the fatal reactions were triggered by peanuts or tree nuts; one was caused by sesame seeds.[6] In a recent study of 32 fatal food reactions by Bock, Muñoz-Furlong and Sampson, 21 were attributed to peanuts, 9 to tree nuts, one to milk, and one to fish.[7]

Despite the absence of precise figures, Canadian physicians report that the number of affected individuals is rising. A recent study of food allergies in the Ottawa and Vancouver areas by Dr. Antony Ham Pong indicated that 36 percent of those with food allergies were peanut-allergic, compared to U.S. studies showing fewer than 25 percent in the 1980s.[8] The same study showed that 21 percent of those with peanut allergy were anaphylactic.

A number of theories have been put forward to explain the reason for the increase. One study suggests that the food industry’s increased use of protein additives in prepared foods is a factor.[9] Early childhood exposure to allergens tends to increase susceptibility, resulting in different “triggers” in different food cultures: fish in Scandinavia, rice in Japan, and peanuts in North America, where peanut products have been used for the past few decades as a cheap source of high-quality protein and where the more allergenic form of peanut (i.e., dry roasted) is more commonly used. Dr. Peter Vadas, Head of the Canadian Society of Allergy and Clinical Immunology’s Anaphylaxis Section, has recently demonstrated the presence of peanut protein in the breast milk of mothers eating peanuts. It is possible that allergy-prone breast-fed babies indirectly exposed to this source of the peanut in the susceptible early stages may thereby develop a peanut allergy. Some have proposed a theory, called the “hygiene theory”, whereby the body’s immune system, which is “genetically geared up” to produce antibodies, is more likely to react to harmless substances when parasites and other bacterial invaders have been reduced in the environment, as has occurred in most of the western world.[10]

Anaphylactic reactions can be triggered by a minute amount of allergen — measured in micrograms. Individuals affected by an allergy to peanuts have complained of minor symptoms — for example, an itchy mouth — with as little as the equivalent of 1/70,000 of a peanut kernel, whereas observable reactions have occurred with 1/20 of a peanut kernel. In 1994, a student on a field trip to Algonquin Park in Ontario died from trace amounts of peanut butter that had been transferred to a jam jar. A child attending camp in Montreal died after eating a cheese sandwich that had been packed in the same bag with a peanut butter sandwich. Children have even developed reactions after coming into contact with residual peanut butter on tables wiped clean of visible material and with a basketball that had probably been contaminated with peanut butter.[11] Although medical opinion is not clear on the danger of inhaling airborne particles of the allergen, there have been reports of individuals developing a reaction after exposure to the substance on someone else’s breath,

or from cooking fumes. Anaphylactic reactions due to smell or skin contact without ingestion are likely to be mild, but some reports have indicated breathing difficulties with the smell of peanut products in airplanes or classrooms. Airborne exposure is more likely to lead to asthmatic symptoms than to anaphylaxis.

To date, avoidance is the only way to prevent anaphylaxis to foods. This fact is underscored by the study by Bock et al., in which four individuals died despite the fact that they had used epinephrine immediately.[12]

Immunotherapy (allergy shots) is used successfully to treat anaphylaxis to insect venom, and for a variety of non-food allergies, but it relies on intentional exposure to minute amounts of the allergen, and individuals anaphylactic to foods cannot risk even that exposure level. Researchers are continuing to explore ways of adapting immunotherapy to treat food-induced anaphylaxis, with some encouraging results.

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:[13]

- hives*
- itching (on any part of the body)
- swelling (of any body parts, especially eyes, lips, face, tongue)
- red watery eyes
- runny nose
- vomiting
- diarrhea
- stomach cramps
- change of voice
- coughing
- wheezing
- throat tightness or closing
- difficulty swallowing
- difficulty breathing
- sense of doom
- dizziness
- fainting or loss of consciousness
- change of colour

* Hives may be entirely absent, especially in severe or near-fatal cases of anaphylaxis.

Symptoms do not always occur in the same order, even in the same individuals. Time from onset of first symptoms to death can be as little as a few minutes if the reaction is not treated. Even when symptoms have subsided after initial treatment, they can return as much as eight hours after exposure, regardless of the initial reaction severity.

There is no accurate way to predict who will develop an anaphylactic reaction. In the Bock et al. study, 94 percent of the fatalities followed previous milder reactions, and two individuals died on a first exposure. To the extent that an anaphylactic reaction can be predicted, common risk factors include asthma (even if well controlled) and previous anaphylaxis. A full 96 percent of those who died in the Bock et al. study had asthma.[14]

When is it likely to occur?

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 children are at greatest risk of accidental exposure, but many allergists believe that more deaths occur among teenagers due to their increased independence, peer pressure to relax their usual precautions, and a reluctance to carry medication. Fatalities are more likely to occur away from home, and are usually associated with delayed treatment or failure to treat with epinephrine.

Past history of previous mild reaction to the allergen cannot be relied upon to predict low risk of anaphylaxis. There may also be only minor warning signs before a severe reaction occurs.

Emergency treatment

Anaphylaxis is life threatening, but it can be treated. Students suffering anaphylaxis must be diagnosed by their physician, who is responsible for prescribing the appropriate treatment protocol for their individual conditions. Schools should never assume responsibility for treatment in the absence of a specific treatment protocol prescribed by the child's physician.

Epinephrine must be administered immediately, at the first indication of a reaction to ingestion or suspected ingestion of a food allergen, followed by immediate transportation to hospital, by ambulance if possible. The Canadian Paediatric Society has issued a position statement on fatal anaphylactic reactions to food in children, which supports this treatment protocol: "Epinephrine must be administered promptly at the first warning symptoms, such as itching or swelling of the lips or mouth, tightening of the throat or nausea, and before respiratory distress, stridor or wheezing occur."[15] It is anticipated that most, if not all, peanut-allergic children, and all children who have experienced previous anaphylaxis from other causes, will follow this plan.[16, 17]

Additional epinephrine must be available to be administered every 10 to 20 minutes if the severe allergic symptoms persist or recur, such as breathing difficulties or decreasing level of consciousness.

EPINEPHRINE — also known as adrenaline — is a hormone that the body naturally produces in response to stress. It works on the cardiovascular and respiratory systems to constrict blood vessels and relax the chest muscles to improve breathing. It must be administered by injection and is available as self-administration devices that can be managed by allergic individuals themselves and those responsible for their care. The most commonly used are the EpiPen® and EpiPen® Jr. Auto-Injectors distributed by Allerex® Laboratory Ltd. A training EpiPen® device is also available from this company. Training can provide individuals with an appreciation of how much pressure is needed to activate the device so that a "click" is heard. Although these devices are designed for self-injection, it is dangerous to assume that any person, of any age, will be able to self-inject if the reaction is proceeding rapidly.

It is essential that a person suffering an anaphylactic reaction be taken to hospital to receive immediate medical attention, even if epinephrine has been injected and symptoms disappear. Symptoms may reoccur as long as eight hours after initial exposure to the allergen, and more intensive treatment may be required.

Medical observation for a minimum of four hours is advised, although a longer observation period is strongly recommended. In the study of fatalities cited earlier, two occurred within one hour of a mild reaction that appeared to be under control.[18]

School personnel should note that there are no contraindications to the use of epinephrine for a potentially life-threatening allergic reaction, and immediate response is essential. Accidental administration of the medication, if a reaction is not actually taking place, is not a significant cause for concern, according to the Canadian Paediatric 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."[19] 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, caregivers should not hesitate to administer the medication. Of the 32 fatalities reported by Bock et al., 29 did not have epinephrine immediately available, and treatment was delayed.[20]

Accidental exposure

A recent report prepared by the Allergy, Asthma and Immunology Society of Ontario identifies several factors that may contribute to fatal allergic reactions. They include:

- The failure of institutions to label or identify allergens or to protect individuals from accidental exposure.
- The failure of the anaphylactic individual to protect himself/herself from accidental exposure by forgetting to check food labels carefully, by sharing foods or utensils, by obtaining foods from others when the contents are unknown, by relying on the service personnel in restaurants instead of the chef, or by kissing someone who has eaten the allergen.
- The failure to acknowledge the seriousness of the problem by failing to appreciate that minimal amounts of the allergen can kill, by minimizing or denying the symptoms of previous non-fatal reactions, by failing to speak out when a reaction is first suspected, or by not wearing a MedicAlert® bracelet or necklace.
- The failure of treatment, including the failure to carry and know how to use an auto injector, the failure to use epinephrine immediately, the failure to have a second auto injector on hand, or the failure to be taken to a hospital immediately.[21]

This chapter was prepared with input and advice from Dr. Antony Ham Pong and Dr. Peter Vadas of the Canadian Society of Allergy and Clinical Immunology.

The Legal Context

School boards contemplating the development or revision of policies and procedures for dealing with anaphylactic students in their schools must be cognisant of the applicable legislation and case law relating to providing emergency treatment and adapting the school environment for anaphylactic students, obtaining valid consents and waivers, providing medical training to educators and other school personnel and ensuring the respect of student privacy. School boards will want to know both what they are required to provide by law and what they are not required to provide. Operating as they do, in the court of public opinion and with a commitment to the welfare of children, school boards have generally approached these issues with a willingness to act in the best interest of the student.

The following legal discussion is intended to help trustees and board administrators who wish to understand the general legal issues that may be relevant to their policy development process. It is not meant to replace usual board procedures for ensuring that policies meet the requirements of specific provincial acts and regulations, nor is it intended to be an exhaustive legal brief. Rather, the information presented here is intended for the general interest of the reader; it is not conveyed as legal advice and should not be acted upon without first consulting legal counsel.

Preparing for Anaphylactic Emergencies

Providing emergency treatment to anaphylactic students

Every province and territory in Canada has one or more statutes regulating education, from which school boards derive their authority and responsibilities. In particular, these statutes outline the general duties of educators, which are often broadly worded. For example, in Ontario, s. 265(j) of the *Education Act*, R.S.O. 1990, s. E. 2, provides that a principal has a duty to "give assiduous attention to the health and comfort of the pupils." Provisions to the same or similar effect can be found in the education legislation in most, if not all, provinces and territories.

Some jurisdictions also have additional requirements contained in regulations or guidelines issued by the ministries or departments of education. Ontario Regulation 298 (R.R.O. 1990, s. 20(g)), for example, provides that a teacher "shall ensure that all reasonable safety procedures are carried out in courses and activities for which the teacher is responsible."

The various provincial and territorial requirements not only typically enumerate the duties of educators, but also provide, expressly or implicitly, that certain matters are **not** the responsibility of school boards — or not the **sole** responsibility of school boards. For example, a Memorandum issued by the Ontario Ministry of Education in July 1984 (Policy/Program Memorandum 81) provides that responsibility for the provision of health support services to school-age children is shared by the Ministries of Education, Health, and Community and Social Services, based on the principle that "no school-aged child should be denied access to education because of special health support needs during school hours." The Memorandum provides that "school boards will be responsible for the administration of oral medication where such medication has been prescribed for use during

school hours," but — notably in the context of anaphylaxis — that the **injection** of medication is to be administered **not** by school boards, but by the student, parent or health professional. At the same time, it does not preclude administration of injections in the school setting during emergency situations.

To date, it would appear that the specific question of whether educators have a duty to administer medication to a student experiencing an anaphylactic reaction has not been tested in the Canadian courts. More broadly, the Supreme Court of Canada has recognized that the "standard of care" owed by an educator to a student is that of "a careful or prudent parent."[1] This duty of care serves to protect a student from all **reasonably foreseeable** risks of harm, that is, to avoid **acts or omissions that can reasonably be foreseen** as likely to injure a student in the care of an educator. While the principle is easily stated, in practical terms, the standard of care by which an educator is to be judged by a court will depend upon the particular circumstances of the case in hand.

Modifying the school environment

Provincial human rights legislation generally imposes an obligation on institutions such as school boards to accommodate individuals with disabilities. This obligation is mirrored in the Constitution of Canada and, in particular, s. 15 of the *Canadian Charter of Rights and Freedoms*, which provides that: "Every individual is equal before and under the law and has the right to equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on ... physical disability."[2] It is arguable that humans rights law, when coupled with the provisions in provincial education legislation respecting students' attendance rights, would require school boards to adapt the school environment to accommodate students with medical disabilities in the school setting.

Despite the foregoing, there is no legal obligation to eliminate all risk. To date, the courts to date have refused to accept the general proposition that a school board is an "insurer" of all risks potentially confronting its students. Rather, a school board's duty is to exercise reasonable care and skill to see that students are kept reasonably safe. Numerous cases interpreting the provincial human rights legislation and s. 15 of the *Charter* have applied a roughly analogous standard holding that, aside from any duties prescribed by other legislation, school boards have an obligation to make **reasonable efforts** to accommodate students with medical disabilities. The standard of accommodation is not one of perfection but of reasonableness, short of undue hardship. **No school board should ever assume responsibility for providing a completely allergen-free environment.**

The duty of accommodation also places some responsibility on the affected individual. Students with medical disabilities are expected to co-operate in the accommodation process. This may well mean that the student and/or the parent/guardian must advise the school of the student's medical condition and work with the school to determine what medical accommodations are necessary and appropriate.

Implications for school boards

The duties imposed on educators by provincial education legislation are typically couched in broad language. Such legislation does not specifically impose an express obligation on educators to administer an injection in response to an anaphylactic emergency. For example, the Memorandum mentioned above does not prevent Ontario educators from administering injections in an emergency, but neither does it impose an obligation to do so.

Nevertheless, it is clear that school boards cannot prohibit anaphylactic students from attending school because of their medical condition. Based on human rights legislation, it is very likely that a court would hold that educators have a legal duty both to administer an injection in response to an anaphylactic emergency and to be prepared for that possibility.

In addition, the standard of the careful or prudent parent appears broad enough to require educators to respond to such an emergency. One of the complicating factors from the legal perspective — which serves to reinforce the educator's duty to act — is that, where a student is known to suffer from an anaphylactic condition, the school may have difficulty arguing that the anaphylactic reaction is unforeseeable. In these circumstances, the medical treatment of an anaphylactic reaction, from a legal perspective, may not be a response to an "emergency". In this case, it is very likely that the case law requirement that educators respond to "reasonably foreseeable risks" would encompass a duty on the part of educators to both prepare for and administer an injection in response to an anaphylactic reaction. Indeed, one commentator has concluded: "with respect to the administration of emergency medication (that is, medication which may have to be administered to an identified pupil to counteract a specific known risk, say, a potentially fatal allergy)..., it must be accepted that implicit in the 'job descriptions' of school personnel is the obligation to administer emergency medication to pupils when the circumstances so warrant."[3]

Obtaining valid consent and waiver forms for treatment

In law, generally speaking, touching or administering medication to another person without that person's informed consent constitutes an assault. Therefore, the failure of school authorities to obtain consent prior to administering medication to a student could result in criminal charges of assault or expose the school board and its employees to a claim for damages in the civil courts. With this in mind, school boards may wish to have their schools advise all parents and students periodically that an anaphylactic condition must be brought to the attention of the school. Having done so, the onus is on the student and/or the parent to advise the school.

What type of consent and waiver must be obtained?

Though verbal consent may be sufficient in some circumstances, **school boards are strongly encouraged to develop standardized consent and waiver forms to be used for *all* anaphylactic students.** The consent and waiver forms can be viewed as an opportunity to exchange information with the parent/guardian and/or student, as well as an opportunity to minimize school board liability.

The required information may be included on a single form or on a series of forms that should be maintained together in a single file. Among other things, such forms should:

- inform the parent/guardian and/or student that it is not possible, despite best efforts, to provide a school environment that is guaranteed to provide no exposure whatsoever to the allergen in question. A school board is not legally required to provide this assurance and, practically speaking, is not in a position to do so.
- require the parent/guardian and/or student to provide **regularly updated** medical information. School boards may wish to consider requiring the student's physician to provide or review this medical information.
- define what the school board is prepared to do for an anaphylactic student, such as how and where medication will be stored. This may need to be tailored to each student. In particular, the parent/guardian and/or student should be advised that educators are not medically trained and that the primary responsibility for the student's welfare remains with the parent/guardian and/or student.
- expressly acknowledge that the parent/guardian or student has requested the procedures outlined and consents to them being performed, should the need arise.

Regarding anaphylaxis in schools and other child care settings, parents are advised not to sign consent and waiver of liability forms that purport to absolve schools from responsibility if epinephrine or other appropriate medical treatment is not provided.[4] It is questionable whether such documents would be enforceable, and a finding to the contrary would leave the school board open to liability claims that may have been otherwise avoided. Individual boards considering the use of such a waiver would be wise to seek legal advice.

Nevertheless, **school boards ought not to abandon the protection of consent and waiver forms that would exempt them from liability if they *do* provide treatment that was contemplated and agreed upon by the student and/or parent/guardian and school authorities.**

It is recommended that legal counsel review the language of consent forms and waivers before implementation. Such forms require precise language, are sometimes held by the courts to be ineffective where a deficiency in language exists, and may be subject to particular legislative requirements or prohibitions, such as those found in privacy and freedom of information legislation and provincial education statutes.

Who must give consent?

School boards must determine who is the appropriate person to provide consent, bearing in mind that a consent obtained from the "wrong person", that is, from one who has no legal capacity to give such consent, is of no force and effect.

When dealing with minor students the board must determine whether consent must be obtained from the parent/guardian of the student, or whether it is sufficient to obtain the consent of the minor child. This issue is often not clear-cut, especially in cases involving the so-called "mature minor" (see below). In such circumstances it is recommended that the school board obtain the consent of both the student and parent/guardian in order to reduce potential liability.

Consent by the student. The law regarding a minor's capacity to provide an effective and valid consent to medical treatment is governed by statutes and case law, which vary across the provinces and territories. Statutes may specify not only at what age a minor can provide consent but in what circumstances a minor **must** provide his or her own consent. Some provinces — Quebec and New Brunswick, for example — have legislation providing for minors aged 14 and 16, respectively, to be deemed competent to consent to treatment in certain circumstances.[5]

In the other provinces, the law requires that the decision about the competency of a minor be made on a case-by-case basis, applying the principle that minors gain the right to determine whether or not they have medical treatment "when the child achieves a sufficient understanding and intelligence to enable him or her to understand fully what is proposed."6 For example, in 1993, the Newfoundland Supreme Court held that a 15-year old boy was a "mature minor"; in a more recent, highly publicized decision of the Saskatchewan Court of Queen's Bench in 1999, a 13-year old boy refusing cancer treatment was found not to be a mature minor.

Even in provinces with statutory legislation providing for a deemed age of consent, there may be circumstances specified in which a minor under the age of deemed consent may give valid consent, in a manner somewhat akin to the mature minor analysis.[6]

Consent by the parent/guardian. It is all too easy to assume that the person who must provide consent for an injection to be administered to an anaphylactic student is the parent. This assumption is not always correct, and even where the right to consent does not belong to the student, it does not always belong to the parent. Parents who are separated, divorced, or living apart may be governed by a court order or domestic

agreement. Even in the absence of a court order or agreement, it cannot be assumed that either parent will suffice; it may be that only the parent with whom the child lives can legally provide the consent. Additionally, there may be other situations where a legal guardian has been appointed or where, for example, a grandparent has informal custody of a student in the absence of the parents. School boards should seek legal advice regarding the applicable provincial legislation.

Refusal to provide consent. An educator who is aware of an anaphylactic student whose parent/guardian fails to make or refuses to make adequate or appropriate provision for the student may have a legal obligation to report these circumstances to the police or a child welfare agency, in accordance with child welfare legislation. Again, such legislation varies from jurisdiction to jurisdiction.

Educators may also become aware of anaphylactic students who refuse to consent to medical treatment in the event of an anaphylactic reaction. Such a refusal to consent may occur for reasons ranging from *bona fide* religious beliefs to, for example, a teenager's social embarrassment. In such circumstances, the school board must carefully consider its obligations under the governing human rights legislation and the *Charter*. In some cases, the school board may wish to consider whether the student should be allowed to continue attending the school in the absence of appropriate cooperation. Legal advice in this regard is strongly recommended.

An even greater conundrum is posed by a student who refuses administration of medication in the course of an anaphylactic reaction. As a careful or prudent parent, the responsible educator might attempt to administer the medication despite such protests. A student may have a "right" to refuse treatment despite the potentially dire consequences; however, in the throes of an anaphylactic reaction, he or she may not be in a state of mind to make informed medical decisions.

These potential situations demonstrate why it is imperative to obtain the appropriate prior consent.

Providing medical training for the administration of medication

The layperson's perception of the relative ease with which epinephrine injections may be administered should not be allowed to lull school boards into a false sense of security. In order to assist educators in discharging their legal responsibilities and to reduce the school board's potential legal liability, it is recommended that all educators and any other appropriate school personnel be trained to administer the required medication in response to an anaphylactic reaction. Staff may also require training in the recognition of an anaphylactic reaction. Ideally, such training should be provided by qualified and/or recognized independent instructors. A record of any such training should be kept so that it can be produced, if necessary.

Respecting student privacy

While a school board policy may provide procedures for communicating with internal school staff or the larger school community about anaphylaxis generally or an anaphylactic student specifically, such procedures ought to be prepared with the privacy rights of the student and his or her family in mind. Again, protection of privacy and freedom of information statutes may prevent the release of personal information (i.e., that a particular student is anaphylactic) without the required prior consent.

Conclusion

Though the present state of the law in Canada may not be as clear-cut as educators might wish, it seems clear that school boards that have policies and procedures in place to address the in-school needs of students with life-threatening allergies not only minimize their liability, but maximize the ability of anaphylactic children and their parents/guardians to participate in their school communities.

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The Anaphylactic Child and Family

Anaphylactic children learn early in life to take their allergies very seriously. By the time they reach school age, chances are that they have had more than one brush with disaster. As soon as they can talk, they learn to say "no" to foods away from home. As soon as they can read, they learn to check ingredient lists. As soon as they are old enough to be responsible, they carry life-saving medication in a fanny-pack around their waist and learn to use it. Despite the best efforts of parents and schools, anaphylactic children live with a level of stress that most children do not experience. It's a matter of life and death.

The parents of children with life-threatening allergies continuously walk a tightrope, trying to protect their children from exposure to even minute amounts of common food items like peanut butter or milk, without depriving them of normal childhood activities. Helping their children strike a balance between a necessary fear of exposure and an unhealthy fear of their expanding world is a difficult balancing act — and one that requires the cooperation of all who are part of the child's life, including the school.

Most parents of anaphylactic children are eager to cooperate with the school to ensure their child's safety. Because other members of the school community are often unaware of the seriousness of anaphylactic reactions, these parents frequently find themselves pressing for changes that seem extreme and overprotective to teachers or other parents. As one mother of an anaphylactic child said, "What they don't understand is that, for my child, a peanut-butter sandwich is like a spring-loaded gun in the classroom." Another said, "I'm asking other parents and children to give up their right to eat what they want — in exchange for my child's right to live. Surely the right to live is paramount."

Routine is an important factor in protecting young children from exposure; most accidents occur when the child is away from home. Four of six fatal reactions reported in a U.S. study occurred in school.[1] Parents and teachers must double their vigilance during high-risk occasions, and ensure that those who deal with the child intermittently, such as substitute teachers and volunteers, are aware of risks and routines to prevent exposure and are trained in emergency response procedures, including the use of auto-injectors.

Children with anaphylaxis usually begin to take responsibility for carrying their own epinephrine auto-injectors early in their school lives, and many know how to inject themselves by the age of 7 or 8 — but those in positions of responsibility should never assume that children or teens *will* self-inject in the face of an emergency, and should always ensure that a trained adult is on hand. Most parents encourage their children to take greater responsibility for their own safety as they move through elementary school. It is generally felt that the earlier children learn to manage their own allergic condition, the more easily they will weather the turbulent teen-age years when peer pressure and the need to conform place additional stresses on anaphylactic students.

Most anaphylactic children do learn to balance the need for extreme caution with the usual activities of their age group. However, some respond to their condition by becoming frightened and withdrawn. Others, especially as they become older, are inclined to take foolish risks because danger is a constant factor in their lives. Families and teachers need to be aware of the stress that living with life-threatening allergies places on children.

Too often, teasing and bullying contribute to that stress. One child received an anonymous e-mail which said "I'm Peanut. You're Dead"; another was chased by a schoolyard bully brandishing a peanut; a third had the pouch containing epinephrine taken as a prank.[2] Families and schools must work together to educate the anaphylactic child's peers and to convey the message that teasing and bullying are unacceptable and carry consequences.

Parents of anaphylactic children have formed support groups in most Canadian cities, and national and provincial organizations provide support and information to help families adjust to the challenges facing children with anaphylaxis.

Interpreting food labels

Anaphylactics must become ingredient detectives. The layperson may not realize that terms like casein, livetin or hydrolysed vegetable protein may indicate the presence of milk, eggs, or peanuts respectively, but families of anaphylactic children must learn these and other codes that indicate the presence of potentially deadly allergens. They must be particularly aware of "component ingredients" (i.e., unlabelled ingredients within labelled ingredients).

Labelling regulations currently allow manufacturers to use the term "may contain" to indicate the possible presence of ingredients; however, because the use of this phrase is not legislated, both its use and meaning are inconsistent. While "may contain" labels protect the manufacturer from possible legal action, they limit the foods that seriously allergic individuals can consume with confidence. In an effort to strengthen Canada's labelling regulations, a working group, including representatives of the Canadian Food Inspection Agency (CFIA), the Health Protection Branch, Health Canada, and a practicing allergist have recommended that foods known to cause severe adverse reactions in hypersensitive individuals should be labelled on pre-packaged foods.[3]

The recent decision of Nestlé Canada Inc. to maintain its peanut/nut free production line — after an earlier announcement of closure met with widespread criticism from the public — is an indication of the growing awareness and concern about cross-contamination and hidden ingredients in food products.

The anaphylactic teenager

As students enter the teen years, they become bolder, more experimental, less willing to follow the rules, and more likely to move away from familiar places and routines. Adolescents, especially adolescent males, perceive themselves as invincible. They are not. While young children with life-threatening allergies are most at risk of accidental exposure, many allergists believe that teenagers, because of their new independence, are at greater risk of fatal reactions. Of the 32 fatalities reported in a recent study, more than half were adolescents.4 Eating out with friends is a major social component in the life of an adolescent; however, eating what everyone else is eating can have serious consequences.

Both parents and the school must be cautious about letting down their guard; at the same time, they must respect the teen's need to move beyond the controlled environment of early and middle childhood. These years bring additional stress to the families of anaphylactic students. Fanny packs with auto-injectors are no longer acceptable attire; auto-injectors in jeans pockets are too conspicuous; going off with friends for an evening increases the risk of accidental exposure; the fear of being labelled "different" or "weird" may mean fewer people are aware of the possibility of a dangerous reaction; even symptoms themselves may be ignored because the adolescent fears becoming the centre of attention.

Some teenagers report that the support and understanding of friends makes their allergies easier to manage during these years. Those who have lived with anaphylaxis through their elementary school years have usually accepted their limitations and risks and make the adjustment to secondary school with few difficulties. On the other hand, those who have been well-protected by parents and schools are sometimes inclined to let down their guard because they do not remember experiencing a reaction and begin to question whether they are still allergic.

Teens who have been diagnosed recently with a life-threatening allergy have more difficulty acknowledging the seriousness of their condition and the need to make changes in their lives.

All adults who live and work with anaphylactic teens need to be aware of their struggle to balance a growing need for independence with a degree of caution that is foreign to most youth.

Developing Board Policy

School boards across Canada are being asked to make adjustments for and commitments to anaphylactic children and their families. While CSBA's surveys show that some continue to meet the needs of those children on an informal, ad hoc basis, a growing number are choosing to develop formal board policies or guidelines to clarify the role of the school in protecting anaphylactic students and responding to anaphylactic reactions if and when they occur. Two surveys conducted by CSBA in 1999 and 2001 show an increase in policy development in this area. More than 80 percent of the boards responding to the two surveys had discussed the issue at the board table, and more than 70 percent of those responding in 2001 had developed policies, up from 46 percent two years earlier.

Protecting children with life-threatening food allergies means imposing some limitations on the foods that other children and school staff can bring into the school or on the places where those foods can be enjoyed. Because one of the most common allergens is peanut, and peanut butter is one of the most popular items for school lunches, emotions have run high in some boards when attempts have been made to "ban" peanut butter. In fact, experience suggests that the outright banning of any substance is not only controversial, but it is also less successful than cultivating understanding and enlisting the voluntary support of members of the school community.

The policy development process itself can help set a tone of mutual concern and cooperation if the board uses an inclusive approach. To that end, the board may consider a number of strategies to ensure that the concerns of all segments of the school population and the broader community are considered in its policy development process.

- Invite a knowledgeable speaker — a representative from a local allergy association, a parent of an anaphylactic child, or a health professional — to speak to the board or to a public meeting.
- Arrange for local media coverage of the issue of anaphylaxis in general and its impact on families and schools in your communities.
- Establish a policy committee that includes wide representation from the school system and the wider community. Remember that many adults come into contact with the anaphylactic child and should be given a voice in developing board policies and procedures. Consider including:
  - trustees
  - parents (with and without anaphylactic children)
  - principals
  - teachers
  - non-teaching staff
  - custodians, because of the importance of cleaning routines in protecting children from exposure
  - bus drivers, because of the high-risk environment on school buses
  - school crossing guards
  - students (both anaphylactic and non-anaphylactic)
  - public health or school nurse
  - medical advisors — the involvement of a respected member or members of the medical profession will add credibility and authority to the policy development process
  - representatives of local allergy associations

- Consider an advertisement in the local newspaper to solicit volunteer committee members and to inform the public of the policy initiative.
- If the entire board is not involved in the policy development process, bring regular reports of its progress to public board meetings.
- Invite schools to evaluate existing practices for anaphylactic children and to make suggestions for policy development.
- Keep the public informed of the policy development process as it evolves, through school newsletters and the media.
- Involve board or association legal counsel as the policy development nears completion, to ensure that the board will not be asked to approve a policy that overlooks important legal considerations.

Some boards incorporate their policies and procedures on life-threatening allergies into larger policies on student health or the administering of medications in school. From an organizational standpoint this makes good sense, but it is important that the information relating directly to anaphylaxis be clearly identifiable within the larger policy, so that school personnel can access it easily and copy it in a usable form for distribution.

Regardless of the policy development process used, once a policy protecting anaphylactic students has been adopted, school board personnel should concentrate on ensuring that implementation is consistent across the board's jurisdiction.

Elements of Board Policies

School board policies and guidelines on anaphylaxis vary according to the needs and organizational requirements of individual boards and communities. In all cases, their objective is to provide a safe environment for anaphylactic students, to promote an understanding of their needs to the wider school community, and to provide guidelines that allow school staff to respond to individual circumstances and provide emergency treatment to the anaphylactic child.

The following policy components suggest elements that boards may wish to include, based on an examination of existing policies and the recommendations of professionals involved with anaphylaxis. Since they are based on an extensive review of school board policies on anaphylaxis from across the country, those using this handbook as an aid to policy development should understand that not all recommendations will be suitable and/or necessary in every situation. In the final analysis, boards will have to weigh these suggested points against the recommendations coming from their own policy development process and the circumstances in their own school communities.

All policies and procedures should be flexible enough to respond to the age and maturity of the student, the nature and prevalence of the allergen, and the organizational and physical properties of the school itself. Some procedures will be appropriate for any life-threatening allergy. Others may be more applicable to peanut allergy in particular because of the widespread use and popularity of peanut products and the viscosity of peanut butter.

In general, boards have found that a strategy of encouraging affected families to be involved with other professionals in developing classroom educational programs has led to an open and balanced discussion of rights and responsibilities. When the school community recognizes the right of parents to feed their children whatever they choose, but acknowledges the right to life and safety as greater, most families are receptive to policies and procedures that protect the allergic child.

School boards must recognize and communicate to parents that, in spite of their best efforts, cooperation cannot be guaranteed and accidents may occur. However, once reasonable precautions have been taken, neither staff, parents, nor other students should feel responsible for accidental exposure. If accidental exposure does occur, appropriate emergency measures must be in place and acted upon immediately.

Most literature about anaphylaxis in school settings divides the school's responsibility into three distinct categories: information and awareness, avoidance, and emergency response. This chapter organizes possible school board policy options into those three categories of activity.

Information and awareness

A. Identification of anaphylactic students to school authorities

- It is the responsibility of parents with anaphylactic children to identify their children to the school principal and provide information regarding:
  - the foods that trigger an anaphylactic reaction
  - a treatment protocol, signed by the child's physician
  - any changes in the child's condition from previous years or since last reported
  - permission to post photographs and medical information in key locations such as classroom, school bus, staff room, etc.

  Note: Most school boards require parents to file a routine medical emergency questionnaire. It is appropriate for this form to include information about life-threatening allergies, but the onus for providing this information should not fall on the school. Some school boards include a specific allergy survey, in addition to the medical emergency questionnaire, which can be used to survey the entire school population for statistical purposes or to identify trends (See Appendix A-8).
- Students with life-threatening allergies should be identified during the elementary to secondary transition.
- Identifying children with life-threatening allergies is more difficult in a secondary school setting. Although parents must still bear the burden of responsibility for reporting the condition to the school, school boards may wish to explore ways of encouraging and reminding them to do so, particularly with older students, those who have moved into the system, and those who have been recently diagnosed.
- Secondary school students may choose to provide a one-page information sheet on their allergies to each of their teachers at the beginning of each school year.

B. Identification of anaphylactic students to staff

- All staff members (teaching and non-teaching) should be made aware that a child with anaphylaxis is attending their school, and the child should be identified, either individually or at a staff meeting, **before** the school year begins.
- The board or school policy on managing anaphylaxis in schools should be provided to all staff, as well as to volunteers, bus drivers, and others who come into regular contact with students, along with specific information about each anaphylactic child in attendance.
- An allergy-alert form, with photograph, description of the allergy, and treatment and action plan, should be attached to the student's cumulative file and placed in key locations, such as the office, the staff room, the school bus, and wherever the child's epinephrine auto-injector is stored.
- Where school computer systems are in place, children with anaphylaxis should be identified on the computer system.
- Parents should be included in a decision about whether posters should also be placed in the child's classroom and other public places, such as school buses. For younger children, this may be advisable. For older children, issues of personal privacy should be considered.
- Instructions on the use of the auto-injector, along with a list of symptoms and emergency procedures, should be posted in a clearly visible location in the child's classroom, whether or not the child's picture is posted.

- The child's classroom teacher should ensure that information is kept in a place where it will be highly visible and readily understood by supply teachers. If it is not posted in the classroom, it should be kept with the teacher's daybook.
- The student should wear a MedicAlert® bracelet or necklace that identifies specific allergens.
- Some schools have pinned a badge with an embroidered message on young children's clothing, to be worn at all times, on school trips or for the benefit of substitute teachers. The ease of identification must be weighed against the risk of teasing by other children.
- One school board has suggested that a "universal symbol" be developed for use in all jurisdictions to identify the presence of an anaphylactic child in the classroom.
- See Appendices A1 to A8 for a selection of sample forms to be used for ensuring that the school has appropriate information available.

C. In-service for teachers and other school staff

- The school board or the principal should ensure that in-service is provided annually to school personnel, substitute teachers, bus drivers, custodians, cafeteria staff, volunteers, and others who are in regular contact with anaphylactic children. In-service should focus on how to recognize and treat an anaphylactic reaction, school policies to protect anaphylactic children from exposure, and school protocol for responding to emergencies.
- In-service may be appropriate even in schools where no identified anaphylactic students are in attendance. First exposure reactions (for example, to bee stings) can be serious, and an understanding of anaphylactic reactions can lead to a quicker and more appropriate response.
- All teachers and staff who may be in a position of responsibility for children with anaphylaxis (including bus drivers, crossing guards, noon-hour supervisors, and cafeteria staff) should receive personal training in the use of an auto-injector.
- Parents of the anaphylactic child should ensure that the specific information about their child is made available to school personnel, to be included in in-service programs.
- Where possible, parents should be encouraged to participate directly in training staff in emergency response and the use of an auto-injector, either as part of formal in-service or in brief, one-on-one sessions with individual staff.
- Local Public Health Units and school nurses, where they are available, should play a role in developing and delivering in-service.
- Representatives of allergy groups or local medical professionals should be invited to share their expertise with school staff.
- Information about the potential sources of specific allergens should be widely distributed by the board and incorporated into the health curriculum (See Appendix B). In addition to the usual, visible food sources of allergens, the school community should be made aware of:
  - the possible hidden sources in prepared foods, like cookies, cakes, cereals, granola bars, and candies
  - the importance of reading labels
  - "component ingredients" (i.e., unlabelled ingredients within labelled ingredients)
  - the danger of cross-contamination through shared utensils, papers, towels, etc.
  - ingredients in pet foods and litters for classroom pets
  - non-food sources of food allergens, such as play-dough, scented crayons, cosmetics, soaps (which often contain coconut oil), peanut-shell stuffing in bean-bags, and stuffed toys
- The principal should maintain an up-to-date record of school personnel who have received in-service and training in the use of the auto-injector.

D. Sharing information with other students

- With the permission of parents, the school should identify students suffering life-threatening allergies to all students in the school, and enlist their cooperation. This should be done in a way that is appropriate to the students' age and maturity, without creating fear and anxiety, and in consultation with the parents of individual anaphylactic children.
  - The risk of teasing or threatening anaphylactic children is reduced if classmates are introduced to the situation at a young age. In any case, the risk of ignorance is generally judged to be greater than the risks associated with sharing information.
  - A number of books and audiovisuals are available to help young children understand life-threatening allergies without frightening them (See Appendix J).
  - Information may be included in health classes.
  - The use of auto-injectors may be taught as part of secondary school first aid programs.
  - Parents of anaphylactic children, and older anaphylactic children themselves, may be excellent resources for sharing information with students.
- Identification of anaphylactic students to their peers in the secondary school setting should not take place without consultation with the anaphylactic student.

E. Sharing information with parents and parent organizations

- The school should develop a communication strategy to inform parents of the presence of a student with life-threatening allergies in their child's school and the measures being taken to protect the student. The student should be identified by name only, with permission of the parents.
- Letters should be sent home at the beginning of the year asking parents to avoid including foods containing the allergen in school lunches and snacks. Most boards have found that parental cooperation is more likely if schools avoid "banning" the substance and ask instead for cooperation. For sample letters, see Appendices C-1 to C-5.
- When the allergen is a common item in school lunches, such as peanut butter, provide parents with suggestions for alternate foods (See Appendix F).
- Provide parents with information about food labelling as it applies to the allergen in question.
- Follow up with reminders around special holidays or other occasions when food is being brought from home to school.
- Discourage parents from sending foods prepared at home to the classroom. If such foods are brought into the classroom, require ingredient lists.
- A letter to all parents from the parents of the anaphylactic child is an effective reminder and an opportunity for them to express their appreciation of support and cooperation.
- Parent organizations should be encouraged to plan an information night on life-threatening allergies in school children.
- Reminders or information articles in school newsletters are a way of reaching most parents (See Appendix D).
- Parents and other members of the school community should be encouraged to bring any concerns about controlling the contents of school lunches and snacks to the principal, **not** to the parents of the anaphylactic student.
- The school should provide parents and other interested members of the community with lists of readily available information materials on life-threatening allergies (See Appendix K).
- When, in spite of requests for cooperation, students continue to bring allergens into the classroom or allergen-free area, the school should follow up by:
  - reminding students of the dangers involved for the anaphylactic student
  - sending a letter home with the student reinforcing the need for cooperation

- having the teacher telephone the parent/guardian of the student to ask for consideration
- requiring the student who has brought allergens to eat away from the anaphylactic student

F. Maintaining open communication between parents and the school

- The school should maintain open lines of communication with the parents of anaphylactic students.
- Parents should be involved in establishing specific programs for their own children and in training staff in emergency procedures.
- Parents should be invited to review and provide input into school policies to reduce the risk of exposure to allergens.

Avoidance

The goal of the board's policy is to provide a safe environment for children with life-threatening allergies, but it is not possible to reduce the risk to zero. The following list of precautions offers school boards suggestions of ways to minimize the risk while allowing the anaphylactic child to attend school with relative confidence.

It is strongly recommended that policies and procedures be flexible enough to allow schools and classrooms to adapt to the needs of individual children and the allergens that trigger reactions, as well as the organizational and physical environment in different schools. It should also be noted that precautions may vary depending on the properties of the allergen. The viscosity of peanut butter, for example, presents particular 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 or wheat products.

All of the following recommendations should be considered in the context of the anaphylactic child's age and maturity, and the school, parents, and student should work together to develop an individual management plan that includes procedures appropriate to the individual situation. As children mature, they should be expected to take increasing personal responsibility for avoidance of their specific allergens (See Appendix E for one school board's checklist for establishing a management plan).

Schools are encouraged to find innovative ways to minimize the risk of exposure without depriving the anaphylactic child of normal peer interactions or placing unreasonable restrictions on the activities of other children in the school. For example, one school developed a "red card" system, where any child who ate peanut butter left a red card on the table, signalling it as a high-risk area for the anaphylactic student until properly cleaned.

A. Providing allergen-free areas

Eliminating allergens from areas within the school where the anaphylactic child is likely to come into contact with food may be the only way to reduce risk to an acceptable level.

- If possible, avoid using the classroom of an anaphylactic child as a lunchroom.
- If the classroom must be used as a lunchroom, establish it as an "allergen-free" area, using a cooperative approach with students and parents.
- Establish at least one common eating area — or a section of the single common eating area — as "allergen-free".
- Develop strategies for monitoring allergen-free areas and for identifying high-risk areas for anaphylactic students.
- As a last resort, if allergen-free eating areas cannot be established, provide a safe eating area for the anaphylactic child.

B Establishing safe lunchroom and eating area procedures

The most minute quantities of allergen can trigger a deadly reaction. Peanut butter on a child's hand could be transferred to volleyball or a skipping rope. Therefore, protection of the anaphylactic child requires the school to exercise control over all food products, not only those directly consumed by the anaphylactic student.

- Require anaphylactic students to eat only food prepared at home or approved for consumption.
- Discourage the sharing of food, utensils, and containers.
- Increase lunch-hour supervision in classrooms with an anaphylactic child.
- Encourage the anaphylactic child to take mealtime precautions such as:
  - placing food on waxed paper or paper napkin rather than directly on the desk or table
  - taking only one item at a time from the lunch bag to prevent other children from touching food
  - packing up lunch and leaving it with the lunch supervisor if it is necessary to leave the room during lunchtime
- Establish a hand-washing routine before and after eating. Success will depend on the availability of hand-washing facilities.
- If the school has a cafeteria, keep the allergen, including all products with the allergen as an ingredient, off the menu. Provide in-service for cafeteria staff, with special emphasis on cross-contamination and labelling issues.
- If the school has a vending machine, ensure that products containing the allergen are not available.
- Ensure that tables and other eating surfaces are washed clean after eating, using a cleansing agent approved for school use. This is particularly important for peanut-allergic students because of the adhesive nature of peanut butter.
- See Appendix F for school lunch suggestions that avoid peanut products.

C. Allergens hidden in school activities

Not all allergic reactions to food are a result of exposure at meal times.

- Teachers, particularly in the primary grades, should be aware of the possible allergens present in curricular materials such as:
  - Playdough
  - beanbags, stuffed toys (peanut shells are sometimes used)
  - counting aids (beans, peas)
  - toys, books, and other items that may have become contaminated in the course of normal use
  - science projects
  - special seasonal activities, such as Easter eggs and garden projects
- Computer keyboards and musical instruments should be wiped before and after use.
- Anaphylactic children should not share musical instruments that go in the mouth.
- School fund-raising activities should avoid products containing the very allergens that parents are being asked to avoid sending with their children to school.
- Schoolyard cleanliness contributes to the safety of children with life-threatening allergies. Additional yard clean-ups may be advisable after special occasions such as Halloween, Easter, or special outdoor school events.
- Anaphylactic children should not be involved in garbage disposal, yard clean-ups, or other activities that could bring them into contact with food wrappers, containers, or debris.
- Foods are often stored in lockers and desks. Allowing the anaphylactic child to keep the same locker and desk all year may help prevent accidental contamination. Thorough cleaning of lockers and desks at the end of the school year is crucial.

D. Holidays and special celebrations

Food is usually associated with special occasions and events. The following procedures will help protect the anaphylactic child.

- Establish a class fund for special events, and have the classroom teacher or the parent of the anaphylactic child provide only safe food.
- If foods are to come into the classroom from home, remind parents of the anaphylactic child's allergens and insist on ingredient lists.
- Limit the anaphylactic child to food brought from his or her own home.
- Suggest that the parents of the anaphylactic child provide the school with a supply of non-perishable treats for those times when other parents send food into the school.
- Focus on activities rather than food to mark special occasions.

E. Field trips

In addition to the usual school safety precautions applying to field trips, the following procedures should be in place to protect the anaphylactic child.

- Include a separate "serious medical conditions" section as a part of the school's registration/permission forms for all field trips in which the details of the anaphylactic student's allergens, symptoms, and treatment can be recorded. A copy of this information should be available on site at any time during the field trip.
- Require all supervisors, both staff and parents, to be aware of the identity of the anaphylactic child, the allergens, symptoms, and treatment.
- Ensure that a supervisor with training in the use of an auto-injector is assigned responsibility for the anaphylactic child.
- Ensure access to a telephone, cell phone, or radio communication in case of emergency.
- Require the parent of the anaphylactic child to provide two to three auto-injectors to be administered every 10-20 minutes en route to the nearest hospital in the event that symptoms persist or reoccur.
- If the risk factors are too great to control, the anaphylactic child may be unable to participate in the field trip. Parents should be involved in this decision.

F. Substitute teachers, parent volunteers, and others with occasional contact

All schools involve adults in their classrooms who are unfamiliar with individual students and school procedures. The following suggestions would help prepare them to handle an anaphylactic emergency.

- Require the regular classroom teacher to keep information about the anaphylactic student's allergies and emergency procedures in a visible location.
- Ensure that procedures are in place for informing substitute teachers and volunteers about anaphylactic students.
- Involve substitute teachers and volunteers in regular in-service programs or provide separate in-service for them.

G. School bus safety

- The environment on a school bus is particularly dangerous for children with life-threatening allergies. Parents, principals, bus operators, bus drivers, and the child need to cooperate in order to minimize risk of accidental exposure. Precautionary measures taken in the classroom must be extended to the school bus.
- Bus operators must be informed of the presence of an anaphylactic child, and drivers must be trained in emergency response procedures.

- Bus drivers should be included in the school's in-service training program.
- The school, in cooperation with the bus operator and bus driver, should develop both a risk-reduction and an individual emergency response plan for the school bus, which takes into account the bus route, distance from medical help, etc.
- Any school bus that carries a child with life-threatening allergies should be equipped with a reliable communication device — radio or cell phone.
- A copy of the allergy alert form and the emergency response procedure should be posted in a prominent place on the school bus.
- An epinephrine auto-injector should be located in a safe and accessible place on the bus, or the school principal should confirm with parents that an auto-injector is carried by the anaphylactic student in an identified location while on the school bus.
- In the event that a "trained" driver cannot be available on a particular day, parents should be informed and should be willing to provide transportation for their own child.
- See Appendix A-7 for an example of an emergency information form for school buses.
- Some measures that may help reduce risk on the school bus include:
  - a buddy system, where the "buddy" watches for unusual behaviour
  - a designated seat for the anaphylactic student, preferably near the front of the bus (especially for younger students)
  - a "no-food" policy

H. Intermediate and secondary schools

The Ottawa-Carleton District School Board (Ontario), for example, has devoted a section of its policy to the need for special attention to intermediate and secondary school students. Following are some points to consider with older students.

- Students should be encouraged to speak up immediately if they are aware of accidental exposure or an impending reaction, enabling staff to assist and avoid creating a "scene."
- Staff should recommend that the student select a friend who will be advised if a reaction is occurring and can get help if necessary.
- Most reactions that result in death in this group of students can be related to the fact that the student was not carrying an auto-injector. The student should be encouraged to carry an EpiPen® and ensure that there is a back-up in the office.
- Anaphylactic students need to know they have the support of school staff, and all complaints should be taken seriously.

I. Anaphylaxis to insect venom

Food is the most common trigger of an anaphylactic reaction in school children and is the only allergen that 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. It should also be noted that desensitization treatment for allergies to insect venom is available and has a 95% success rate (Ontario Allergy Society, "Information Notes: Allergic Reactions to Insect Stings").

- Avoid wearing loose, hanging clothes, floral patterns, blue and yellow clothing, and fragrances.
- Check for the presence of bees and wasps, especially nesting areas, and arrange for their removal.
- If soft drinks are being consumed outdoors, pour them into a cup and dispose of cans in a covered container.
- Ensure that garbage is properly covered.

- Caution children not to throw sticks or stones at insect nests.
- Allow students who are anaphylactic to insect stings to remain indoors for recess during bee/wasp season.
- Immediately remove a child with allergy to insect venom from the room if a bee or wasp gets in.

In case of insect stings, never slap or brush the insect off, and never pinch the stinger if the child is stung. Instead, flick the stinger out with a fingernail or credit card.

Emergency response plan

Even when precautions are taken, an anaphylactic student may come into contact with an allergen while at school. It is essential that the school develop a response plan and that all staff be aware of how to implement it. A separate emergency plan should be developed for each anaphylactic child, in conjunction with the child's parents and physician, and kept in a readily accessible location. The plan should clearly identify individual roles.

Anaphylactic children usually know when a reaction is taking place. **School personnel should be encouraged to listen to the child.** If he or she complains of any symptoms that could signal the onset of a reaction, staff should not hesitate to implement the emergency response. There is no danger in reacting too quickly and grave danger in reacting too slowly.

School boards should be aware of local ambulance regulations and take them into account when developing their own procedures. In some cases, ambulance attendants are not qualified to administer epinephrine. In some jurisdictions, school staff are not permitted to accompany the child in the ambulance.

A. Every emergency plan should include procedures to:

- communicate the emergency rapidly to a staff person who is trained in the use of an auto-injector
- administer the auto-injector (Note: Those in positions of responsibility should never assume that children or teens will self-inject. Individuals of any age may require help during a reaction because of the rapid progression of symptoms or because of the stress of the situation. Adult intervention or action is required.)
- telephone 911 or an ambulance — inform the emergency operator that a child is having an anaphylactic reaction; in some areas, hospitals will send a physician on the ambulance to begin emergency treatment at once
- if no ambulance service is available, transport the child to hospital at once with at least one adult as well as the driver — school boards should ensure that their insurance policies cover such an emergency situation
- telephone the hospital to inform them that a child having an anaphylactic reaction is en route
- if transportation is by car, provincial police should be notified and provided with a description of the vehicle and licence number
- telephone the parents of the child
- re-administer epinephrine every 10 to 20 minutes while waiting for the ambulance and en route to the hospital if symptoms do not improve or reoccur
- assign a staff person to take extra auto-injectors, accompany the child to the hospital, and stay with him or her until a parent or guardian arrives — an adult should accompany the child in the ambulance as this can be a particularly traumatic experience
- see Appendices G1 – G2 for sample emergency response plans

B. Location of epinephrine auto-injectors

- Epinephrine auto-injectors should be kept in a covered and secure area, but unlocked for quick access. Although epinephrine is not a dangerous drug, it can cause injury if it is injected into a fingertip, major blood vessel, or nerve.
- As soon as they are old enough, students should carry their own auto-injectors. Many young children carry one or two EpiPens® or EpiPens Jr.® in a fanny pack around their waist at all times.
- An up-to-date supply of auto-injectors, provided by the parents, should be available in an easily accessible, unlocked area of the child's classroom and/or in a central area of the school (office or staff room).
- The number of auto-injectors will depend on the estimated time from the school to a medical facility. It may be necessary to re-inject every 10 to 20 minutes.
  Note: Epinephrine auto-injectors are expensive. If families have difficulty providing the school with an adequate supply, the school board should consider seeking financial assistance to ensure that medication is available whenever and wherever it is required.
- All staff should know the location of auto-injectors. Classmates should be aware of location of the auto-injector in the classroom.

C. Training older students to assist

Older students may be trained to administer the auto-injector and can play a role in the emergency response, particularly in a secondary school setting. Information about anaphylaxis and auto-injector training may be included in the health curriculum.

D. Role-playing

The school should occasionally simulate an anaphylactic emergency, similar to a fire drill, to ensure that all elements of the emergency plan are in place.

E. School buses and out-of-school emergencies

A separate emergency procedure should be developed for school buses, field trips, and other out-of-school events during which an anaphylactic reaction may occur. This plan should include:

- a rapid communication strategy
- access to auto-injectors
- availability of an adult trained in the emergency procedure

In the event of an anaphylactic emergency on a school bus, the school bus driver should:

- secure the vehicle
- secure the passengers
- administer the auto-injector as per emergency response protocol
- follow board-approved communication procedure to secure help
- help the student remain calm
- monitor the student and await the arrival of emergency help

F. Review Process

School emergency procedures for each anaphylactic student should be reviewed annually with staff and parents. In the event of an emergency response, an immediate evaluation of the procedure should be undertaken, and any auto-injectors used must be replaced immediately.

A Checklist to assist in the development of your board's policy can be found in Appendix H.

Division of Responsibilities

In a school setting, ensuring the safety of children affected with anaphylaxis depends on the cooperation of the entire school community. To minimize risk of exposure and to ensure rapid emergency response, parents, students, and school personnel must all understand and fulfill their responsibilities. Some school boards have prepared formal agreements between the school and the parents, outlining the commitments that each is prepared to make in order to protect the anaphylactic student.

Responsibilities of the parents of an anaphylactic child

- Inform the school of their child's allergies
- Provide a MedicAlert® bracelet for their child
- Provide the school with current medical instructions from their physician
- Provide the school with up-to-date auto-injectors, and keep them current
- Provide the school with an auto-injector trainer if necessary
- Provide support to school and teachers as requested
- Provide in-service for staff if requested
- Participate in parent advisory/support groups
- Assist in school communication plans
- Assist in developing policies and procedures for reducing risk to their child
- Participate in the development of an emergency response plan for their child
- Review both the emergency protocol and the procedures for reducing risk with school personnel annually
- Provide transportation for their child until emergency procedures are in place for busing or when, for any reason, the bus company cannot provide a trained driver
- In cooperation with the principal and classroom teacher, implement a "buddy" system to identify unusual behaviour
- Supply information for school publications
  - recipes
  - foods to avoid
  - alternate snack suggestions
  - resources
- Be willing to provide safe foods for special occasions
- Teach their child:
  - 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 fanny-pack
  - not to share snacks, lunches, or drinks
  - the importance of hand-washing

- to cope with teasing and being left out
- to report bullying and threats to an adult in authority
- to take as much responsibility as possible for his/her own safety

- Welcome other parents' calls with questions about safe foods

Responsibilities of the school principal

- Work as closely as possible with the parents of an anaphylactic child
- Ensure that the parents have completed all necessary forms
- Develop a school policy or procedure (or implement the board policy or procedure) for reducing risk in classrooms and common areas
- Ensure that the parents of anaphylactic child are aware of all relevant board and school policies and procedures and have the opportunity to review them
- Ensure that an emergency response plan, based on physician's instructions, is developed and reviewed annually for each child with a life-threatening allergy
- Ensure that instructions from the child's physician are on file
- Notify the school community of the anaphylactic child, allergens, treatment
- Post allergy-alert forms in staff room and office
- Maintain up-to-date emergency contacts and telephone numbers
- Ensure that all staff and volunteers have received information on anaphylaxis, and that those in positions of responsibility for the anaphylactic child receive training in the use of an auto-injector
- Maintain an up-to-date list of school personnel who have received in-service and training in the use of an auto-injector
- Advise the bus driver of the presence of a child with life-threatening allergies on his/her bus, and ensure that he/she receives appropriate information and training in emergency response procedures
- Advise the parents of other students on the school bus, explaining anaphylaxis and the need for their cooperation
- In cooperation with the parents and classroom teacher, implement a "buddy" system to identify unusual behaviour
- Ensure that all substitute teachers are informed of the presence of an anaphylactic child and have been adequately trained to deal with an emergency
- Inform all parents that a child with life-threatening allergies is attending the school and ask for their support
- Work with the school council to increase community awareness of anaphylaxis and the role of the school in protecting students with life-threatening allergies
- Arrange for annual in-service
- Store auto-injectors in easily accessible locations
- Establish safe procedures for field trips and extra-curricular activities
- Establish a disciplinary procedure for dealing with bullying and threats

Responsibilities of the classroom teacher

- Participate in the review of the individual plan for children in his/her classroom with life-threatening allergies
- Display photo-poster in the classroom, with parental approval and regard to the privacy needs of older children
- Discuss the anaphylaxis with the class, in age-appropriate terms
- Encourage students not to share lunches or trade snacks
- Choose allergy-free foods for classroom events
- Establish procedures to ensure that the anaphylactic child eats only what he/she brings from home
- Reinforce hand washing before and after eating
- Facilitate communication with other parents
- In cooperation with the parents and the principal, implement a “buddy” system to identify unusual behaviour
- Follow the school policies for reducing risk in classrooms and common areas
- Enforce school rules about bullying and threats
- Leave information in an organized, prominent, and accessible format for substitute teachers, parent volunteers, or others who may have occasional contact
- Plan appropriately for field trips:
  - ensure that emergency response plans are considered
  - ensure that auto-injectors are taken

Responsibilities of bus operators and bus drivers

- Once a student has been identified as anaphylactic, ensure that drivers trained in emergency response procedures are assigned to the student’s bus
- Attend in-service sessions provided by the board; learn to watch for symptoms of an anaphylactic reaction
- Receive training in the use of an auto-injector
- Carry a copy of the emergency alert form on the school bus, displayed in a prominent location
- Ensure that the principal and/or parents are informed if a trained driver is unavailable
- Assist in developing procedures to minimize risk while travelling on the school bus
- Assist in developing an emergency action plan that relates directly to busing
- Carry out emergency action plan as necessary
- Ensure that an auto-injector is stored in a safe and accessible place on the bus or that the child carries an auto-injector in an identified location while on the school bus

Responsibilities of public health/school nurse

- Consult with and provide information to parents, students and school personnel
- Participate in planning school policy
- Participate in in-service and auto-injector training
- Assist in developing emergency response plans
- Refer known cases of anaphylaxis to the school principal

Responsibilities of anaphylactic students

- Take as much responsibility as possible for avoiding allergens
- Eat only foods brought from home or approved for consumption
- Take responsibility for checking labels and monitoring intake (as developmentally appropriate)
- Wash hands before eating
- Learn to recognize symptoms of an anaphylactic reaction (as developmentally appropriate)
- Promptly inform an adult as soon as accidental exposure occurs or symptoms appear
- Keep an auto-injector handy at all times
- Know how to use the auto-injector (as developmentally appropriate)

Responsibilities of all parents

- Respond cooperatively to requests from school to eliminate allergens from packed lunches and snacks
- Participate in parent information sessions
- Encourage children to respect anaphylactic child and school policies
- Inform the teacher prior to distribution of food products to any children in the school

Responsibilities of all students (as developmentally appropriate)

- Learn to recognize symptoms of anaphylactic reaction
- Avoid sharing food, especially with anaphylactic children
- Follow school rules about keeping allergens out of the classroom and washing hands
- Refrain from “bullying” or “teasing” a child with a food allergy

Endnotes

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Appendices

Appendix A-1

CALGARY BOARD OF EDUCATION

SEVERE ALLERGY ALERT FORM

The personal information on this form is collected under the authority of the School Act, the Student Record Regulation and the Freedom of Information and Protection of Privacy Act. The purpose of this collection is to respond to potential emergency situations involving your student whom you have identified as subject to a potentially life-threatening allergy. If you have any questions concerning the collection, use, or disclosure of this information please contact your school principal either in writing or by telephone.

STUDENT INFORMATION (To be completed by Parent/s)

Name of Student: _____ **Date of Birth:** _____

Address: _____

Home Telephone: _____ **Medic Alert I.D.:** _____

Name of Parent: _____ **Business #:** _____

Name of Guardian: _____ **Business #:** _____

Emergency Contact Person(s): _____ **Telephone #:** _____

_____ _____

PHYSICIAN INFORMATION (To be completed by Physician)

Nature of Allergy/Allergens: _____

_____

Symptoms of Reaction: _____

_____

_____

Recommended Response to Reaction: _____

_____

_____

Medication: _____ **Dosage:** _____

_____ _____

Additional Instructions or Information: _____

_____

_____

_____

Name of Physician: _____ **Telephone:** _____

Signature of Physician: _____ **Date:** _____

TO BE COMPLETED BY PARENT **[TO BE POSTED, FOLLOWING PARENTAL CONSENT]**

Student's Name_____

- **ALLERGY - DESCRIPTION**

This student has a **DANGEROUS,** life-threatening allergy to the following:

_____

_____

_____

and all substances containing them in any form or amount, including the following kinds of items:

_____

_____

_____

Place Student's Photo Here

- **AVOIDANCE**

The key to preventing an emergency is **ABSOLUTE AVOIDANCE** of these allergens at all times.

- **GENERAL PRECAUTIONS**

_____

_____

_____

_____

_____

SYMPTOMS FOLLOWING EXPOSURE TO A PARTICULAR MATERIAL CAN INCLUDE:

- hives and itchiness on any part of the body;
- nausea, vomiting, diarrhea;
- difficulty breathing or swallowing;
- panic or sense of doom;
- throat tightness or closing.
- swelling of any body parts, especially eyelids, lips, face or tongue;
- coughing, wheezing or change of voice;
- fainting or loss of consciousness;
- other, please specify _____

EMERGENCY MEASURES

- Get **EpiPen® (epinephrine)** or other **Medication** and administer immediately.
- **HAVE SOMEONE CALL AN AMBULANCE** and advise of need for an **Epipen® (epinephrine).**
- Unless student is resisting, lay student down, tilt head back and elevate legs.
- Cover and reassure student.
- Record the time at which **Epipen® (epinephrine)** was administered.
- Have someone call the parent.
  If the ambulance has not arrived in 10-15 minutes, and breathing difficulties are present, administer a second **Epipen® (epinephrine).**
- Even if symptoms subside, students require medical attention because there may be a delayed reaction, take the student to hospital immediately in the ambulance.
- If possible, have a school staff member accompany the student to the hospital.
- Provide ambulance and/or hospital personnel with a copy of the Severe Allergy Alert Form for the student and the time at which the **Epipen® (epinephrine)** or **Medication** was administered.

I agree that the school may post my student's picture, take the Emergency Measures and that this information will be shared, as necessary, with the staff of the school and health care providers.

_____ _____

Date Parent's Signature

Appendix A-2

APPENDIX A3

EMERGENCY ANAPHYLACTIC PROTOCOL

(to be updated at the beginning of each school year)

Valid for School Year: _____

Student's Name: _____

Place Student's

Photo Here

Please Post in:

Classroom

Lunch Room

Staff Room

Office

School Bus

and place in Fanny Pack

ALLERGY - DESCRIPTION:

This student has a DANGEROUS, life threatening allergy to the following:

_____

_____

_____

In the case of food allergens: foods containing them in any amount are:

_____

_____

_____

This student wears medical alert information located:

_____

AVOIDANCE

The key to preventing an emergency is ABSOLUTE AVOIDANCE of food allergens at all times. WITHOUT EPIPEN, THIS STUDENT MUST NOT BE ALLOWED TO EAT ANYTHING.

Eating Rules (List eating rules for your child in this space)

_____

_____

_____

SYMPTOMS

Difficulty swallowing, swollen tongue, coughing (*could sound like throat clearing*), burning or itching throat, hives, generalized swelling, redness, itching, vomiting, breathing difficulties.

_____

_____

_____

ADDITIONAL SYMPTOMS

_____

_____

_____

ACTION:

If there are ANY suspicions that the student may have been in contact with an allergen:

- DO NOT WAIT
- Send a runner to immediately notify the student's classroom teacher and the principal or designate to call an ambulance a _____.
- Lay the student on the floor
- Get EpiPen(s) from the student's fanny pack
- Inject EpiPen
- Massage area for 10 seconds.

- TO INJECT:
- Remove EpiPen from fanny pack
- Pull off gray safety cap
- Firmly press against OUTER MID-THIGH of the student's leg with the black tip end of the needle. (*This may be done through the student's clothing, if necessary*)
- Wait for fluid to enter body (*10 seconds - an accurate way to count: one-one thousand, two-one thousand, etc.*)
- A support person should send a runner to obtain additional EpiPen(s) stored in _____.
  A support person must accompany the student during transport.
- The student should be rushed to the hospital; additional EpiPens should accompany the student should subsequent injections be required if breathing becomes laboured once again (*one for every 15 minutes*).

PHONE:

- Call Parents:

Mother: _____ Father: _____
or emergency contact: _____

Do Not Hesitate to Administer Medication or Call Ambulance, Even if Parents Cannot Be Reached

This form, once completed, should be shared with every teacher who comes into contact with the Anaphylactic Student

Appendix A-3

CLASSIFICATION		CODE
Section : Students	CONFIDENTIAL	File: *JHCCB-E-1

TITLE **STRATEGIES IN PREVENTION AND MANAGEMENT OF ANAPHYLAXIS IN THE SCHOOL SETTING**

Exhibit

APPENDIX A1

PHYSICIAN INFORMATION FORM FOR ANAPHYLAXIS

(Parent(s) / guardian(s) requests physician to complete and sign this form.)

- Student Name: _____
- Specific potentially life-threatening allergens.

  _____
  _____
  _____
  _____

- The nature of the reaction. (Check all applicable.)

  ☐ Physical contact with this allergen may cause an anaphylactic reaction.
  ☐ Airborne contact with this allergen may cause an anaphylactic reaction.
  ☐ Ingestion of food may cause an anaphylactic reaction.
  ☐ Other (please explain below):

  _____
  _____
  _____
  _____

- Recommended treatment in the event of accidental exposure.

  _____
  _____
  _____
  _____

Date: _____ _____
(Physician)

Date: _____ _____
(Witness)

(This must be filed in the student's record)

Page 1 of 1

Appendix A-4

ANAPHYLAXIS ALERT

_____ has a DANGEROUS life-threatening allergy to

- _____
- _____
- _____

The key to preventing an anaphylactic emergency is **ABSOLUTE AVOIDANCE** of the allergen. _____ cannot share food or eat unmarked baked goods, bulk foods, or other products that are labeled "may contain traces of peanuts/nuts".

SYMPTOMS

Mouth	Tingling sensation, itchiness, swelling of tongue and lips, metallic taste
Skin	Itchiness, redness, hives, swelling of skin – face or body
Throat	Itchiness, tightness, hoarseness, hacking cough, difficulty swallowing
Lungs	Difficulty breathing, shortness of breath, repetitive coughing, wheezing
Gut	Vomiting, nausea, stomach pain, diarrhea
Heart/Brain	Dizziness, unsteadiness, drowsiness, sense of impending doom, coma

Anaphylaxis can lead rapidly to unconsciousness and death

EMERGENCY PLAN – ACT

Administer EpiPen® immediately the child displays any of the symptoms above

The EpiPen® 'buys' you 15 minutes to seek medical attention

- Pull off grey safety cap
- Grip with a tight fist and jab/press firmly black tip into outer thigh. Keep pressed against thigh and hold for a count of 10. Do not place thumb at end of EpiPen®.
- Keep the child calm

Note: Used EpiPens® need to be discarded in a needle-proof container to minimize any chance of injury

Call 911 or your local emergency number

- Advise dispatcher that t child is having an anaphylactic reaction.
- Treat with second dose of epinephrine if necessary, in 10-15 minutes if an ambulance has not arrived and the symptoms have re-appeared

Transport child to hospital immediately even if symptoms subside

- Remain in Emergency Room for 4 to 6 hours for observation

EpiPens® are located

CONTACTS

Mother (H) _____ (O) _____ (Cell) _____

Father (H) _____ (O) _____ (Cell) _____

The undersigned parent/guardian hereby authorizes any adult to administer the EpiPen ® to the above-named child in the event of an anaphylactic reaction as described above. This protocol has been recommended by a qualified allergist.

_____ _____

Parent/Guardian *Date*

Anaphylaxis Canada

Appendix A-5

HASTINGS AND PRINCE EDWARD DISTRICT SCHOOL BOARD
PROCEDURE - STAFF ADMINISTRATION OF MEDICATION

E - 1
Page 11

Form E-1F6

CONSENT FORM
FOR INJECTION OF EPINEPHRINE
AND TRANSPORTATION TO HOSPITAL

In the event of our child experiencing an anaphylactic medical emergency, we consent to the injection of epinephrine.

Child _____ Class _____

Parent/Guardian _____ _____
Please print Signature of parent

_____
Signature of parent

Date _____

n the event of our/my child experiencing an anaphylactic medical emergency, we consent to the transportation f our/my child to the hospital by private vehicle , as outlined in the Emergency Plan.

Child _____ Class _____

arent/Guardian _____ _____
please print Signature of parent

_____
Signature of parent

ate _____

Appendix A-6

APPENDIX A2

PARENT(S)/GUARDIAN(S) CONSENT FORM

I _____ authorize the Renfrew County Board
(name of parent(s)/guardian(s)

of Education to display a picture of _____ and identify that this is a
(name of student)

person with _____. I understand that this display will be in
(nature of condition/risk factor)

_____ and may be in places within the school,
(name of school)

such as entrance ways to classrooms and the staff room, and school bus. It is understood that the reason for this display is to enable Board personnel and associated personnel to be better able to respond to potential emergencies. This authorization is valid from the date signed until revoked.

_____ _____
(Date signed) (Signature of Parent(s)/Guardian(s)

PARENT AGREEMENT:

I/we _____ acknowledge my participation in the development of this Emergency Action Plan and agree to execute reliably the parent(s)/guardian(s)' commitments listed within them. I also acknowledge that **my/our failure to do so may result in the cancellation or non implementation of the** emergency action plan.

I also give my consent for the staff of the Renfrew County Board of Education and its agents and without limiting the generality of the foregoing the staff of _____ Public School to execute the school's commitments as outlined within this plan. In the event of an emergency, I authorize the Renfrew County Board of Education's staff, including the staff of _____ Public School to administer the designated medication and obtain suitable medical assistance. I agree to assume all costs associated with medical treatment and absolve the Renfrew County Board of Education and its employees of responsibility for any adverse reactions resulting from administration of the medication.

_____ _____
(Date signed) (Signature of Parent(s)/Guardian(s)

Appendix A-7

FORM II

TURTLE MOUNTAIN SCHOOL DIVISION NO. 44

AN EPIPEN EMERGENCY

TRANSPORTATION INFORMATION

SCHOOL YEAR - _____

Student Name _____

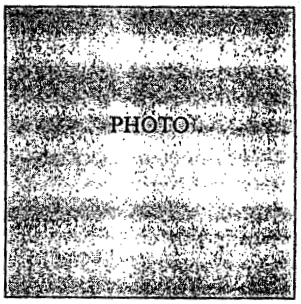
School _____ Grade _____

Parents _____

Telephone/Home _____

Address _____

Telephone/Work _____



Location of the EpiPen _____

Family doctor _____ Telephone _____

School Bus Operator _____

A.M. Bus _____ Driver _____

Mid-Day Bus _____ Driver _____

P.M. Bus _____ Driver _____

Medical condition _____

Allergy to _____

_____

Administer EpiPen if reaction occurs. Student must immediately be transported to nearest hospital.

DISPATCH

CITY

1. Obtain exact location/time of administration.
2. Call 9-1-1.
3. Call Supervisor of Transportation.

RURAL

In Division:

1. Call supervisor via F.M. radio and indicate emergency. Supervisor will call 9-1-1.
2. If near a farm home, send a designate to call 911 and inform supervisor.
3. If indicated transport student to hospital.

Outside Division:

1. Phone 911 or other emergency number.
3. State location and arrange transport to nearest medical facility.
4. Notify Supervisor of Transportation.

Supervisors:

Boissevain – John Reimer	**534-6269**	**534-2903 (home)**
Killarney – Don Parker	**523-8380**	**523-4233 (home)**

Appendix A – 8

APPENDIX I

STUDENT ALLERGY SURVEY

TO PARENTS,

This survey is designed to obtain information concerning life-threatening allergies. Please return the completed survey to your student's school.

_____ Student's Name _____ Parent's Name

1. Does your child have a life-threatening allergy? ___YES ___NO

2. Does your child have any allergies which produce any of the following symptoms following exposure to a particular material?
   (a) Difficulty breathing or swallowing. ___YES ___NO
   (b) Fainting or collapse. ___YES ___NO
   (c) Swelling of the tongue, lips or face. ___YES ___NO
   (d) Other (specify) ___YES ___NO _____

3. Have any of the symptoms referred to in question 2 occurred after:
   (a) eating a particular food? ___YES ___NO
   (b) receiving an insect bite? ___YES ___NO
   (c) receiving a sting? ___YES ___NO

IF YOU RESPONDED YES TO ANY OF THE ABOVE QUESTIONS, PLEASE CONTINUE.

4. Has your child been seen by a medical doctor for the treatment of an allergic reaction?
   ___YES ___NO

5. Has your child been tested for allergies?
   ___YES ___NO

   If yes, indicate types of tests and results _____

6. Have you been told by your medical doctor that your child requires an emergency medical kit available in the school?
   ___YES ___NO

7. What foods or materials must your child avoid? _____
   _____

8. Name of family doctor: _____

I agree that this information will be shared, as necessary, with the staff of the school and health care systems.

_____ Date _____ Parent's Signature

ATTENTION PRINCIPAL: If a **YES** response was given to any question, please forward the Survey to the public health nurse.

Appendix B

Food Allergy Facts

What is a food allergy?

An allergy is a specific reaction or sensitivity by the body to a particular food protein. A food allergy occurs when the food that causes a reaction is eaten, inhaled or touched.

What is Anaphylaxis?

A severe allergic reaction that can cause unconsciousness, coma and death.

Signs and Symptoms:

- Tingling in mouth
- Swelling – eyes, lips, face, tongue
- Difficulty breathing, swallowing
- Coughing, choking
- Loss of consciousness
- Hives, itching
- Tightness in throat, mouth, chest
- Wheezing
- Vomiting, upset stomach

Prevention:

Reactions to food allergens can be life threatening, but avoiding contact with the allergic food can prevent allergic reactions. Unfortunately, contact is often caused by cross-contamination.

What is cross-contamination of food?

All foods have proteins. When the protein from one food comes in contact with another food, their proteins mix. While we may not see traces of the food, there may be enough protein present to cause a serious reaction if you are allergic to that food.

How can cross-contamination occur?

Cross-contamination occurs anytime one food protein comes in contact with another food or surface. This can occur by direct contact during processing and when using serving utensils that have not been properly cleaned.

Things to consider

- Always check the oil in which foods are cooked. Peanut oil must be avoided if you have a peanut allergy, while those with a fish allergy will have to ensure that foods such as french-fries are not cooked in the same oil in which fish was cooked.
- When using mayonnaise or other spreads, ensure that the knife and/or spoon used to spread a filling such as egg, tuna or salmon is not put back into the jar as this will contaminate the mayonnaise.
- Never dip a knife into jam after it was used to spread peanut butter.
- When serving cookies or sandwiches, use different serving trays or plates for each type. For example, traces of egg, fish or peanut butter will contaminate other sandwiches on a plate.
- When serving ice-cream, use a different scoop for each type of ice cream as small amounts of nuts are left on the scoop and spread to “safe” ice cream.
- Avoid buffet foods in restaurants as the ingredients are usually not known and the same serving spoon may be used for more than one dish. Also, avoid casseroles and dishes with mixed ingredients.
- Use caution in donut shops that display donuts on metal racks as small amounts of coconut and nuts may fall from one donut to another.

- Never eat any food that has been touched by a food to which you are allergic. For example, removing peanuts from a sundae does not make it safe to eat.
- For certain people, food additives such as nitrates, artificial flavours, preservatives and colours can trigger allergic reactions. Always read labels thoroughly.
- Caesar salad dressing should be avoided by those with a fin fish allergy as it contains anchovies.
- In restaurants, always ask about the ingredients in foods including toppings, stuffing, sauces, gravies, etc. Stuffing may contain nuts and eggs are often used in sauces.
- Avoid "exotic" or mixed fruit drinks if you are allergic to certain fruits such as strawberry and kiwi.
- Never eat unwrapped candy from coin-operated vending machines. Previously, the machine may have contained a food to which you are allergic, such as peanuts. Also, the ingredients may not be listed on the vending machines.
- Always use clean utensils for each type of food you are preparing and serving. Traces of food may be left on cutting boards, counters, knives, serving spoons, dish clothes, towels and even hands and may unknowingly be spread to other foods.
- Ensure that the foods to which you are allergic are not cooked on the same grill as the food you are going to eat. The grill and utensils need to be cleaned before use.
- Be careful of "the kiss" – avoid kissing a child if you have just eaten a food to which the child is allergic.
- Bird seed often contains peanuts and should not be handled by those with a peanut allergy – always check the ingredients.
- Always check the contents of sun tanning oils, shampoos, and body lotions as they may contain coconut oil, eggs or nut extracts.

At the grocery store...

- Use caution with bulk food bins as there may be cross-contamination Also, the scoop may have been used in more than one bin and may be contaminated with traces of other foods. For example, chocolate covered peanuts may easily drop into the chocolate covered raisins.
- Be aware of specialty coffees and the machines used to grind the coffee beans. Traces of the food you are allergic to may end up in your coffee! Almond amaretto coffee beans are flavoured with either real almonds or artificial flavouring, and if you are allergic to almonds you may have a reaction. The same holds true for hazelnut, mocha, and others.
- In the deli section, automatic bread, cheese and meat slicers may contain traces of the foods to which you are allergic (e.g., a fruit and nut loaf may have been sliced before your bread).
- Check to see if fish and meats are stored at the same deli-counter. Fluids from fish may have leaked and contaminated the meats. This may also happen at the grocery check-out if the previous person's groceries included fish.
- If you have a fish allergy, be aware of the "sumiri" or imitation crab or lobster. Sumiri is made from fish muscle that is reshaped and flavoured from actual shellfish.
- You may consider showing a child the food to which they are allergic. For example, a child may know that he/she is allergic to nuts, but may not know what nuts look like.

When travelling...

- Always take your own food with you on a plane, train, bus, or ferry. When making airline reservations, inform the company of your allergy and ask that they not serve that food while you are travelling.

Remember...When in doubt...throw it out!!

Adapted with permission from a publication of The Airway Group, St. John's, Newfoundland

Appendix C – 1

SUBJECT: ADMINISTRATION OF URGENTLY REQUIRED MEDICATION/TREATMENT	N.E.P.N. CODE: JHCF Draft – May 8, 2001

APPENDIX D

"Sample Letter to Parents/Guardians Regarding Life Threatening Allergies"

(School Logo)

DRAFT

(Date)

Dear Parents/Guardians:

There is a child in our school/your child's classroom/lunch program, who has a severe allergy to _____. Even exposure to a tiny amount of this item could be potentially serious and life threatening. We can all play a role in preventing such a dangerous and frightening situation at school. The specific child and his/her family must take responsibility to avoid exposure. However, staff, other children and their families can also help to make the school environment safer. Your assistance is needed to:

- please check the list of ingredients on items you send to school
- avoid sending _____ or items containing _____ with your child to school, including: _____
- teach your children to understand this very serious situation and discourage teasing of this child.

This may be an inconvenience for you, but please realize how important your assistance is. We would take the same care should your child have such a health care need.

Thank you for your support. For more information, please call _____

Sincerely,

Principal

Appendix C – 2

Example of a letter to parents

Dear Parents:

I am writing to you on behalf of our student (name of student) and his parent(s). (Name of student) is (age of student) old in (name of teacher) grade (level) class. He has a life-threatening allergy to peanuts and all types of nuts. If peanut butter or even the tiniest amount of peanut or any type of nut enters his body (through his eyes, nose or mouth), he experiences very strong reactions. His face swells and breaks out in hives, his throat swells and tightens. Without immediate medical treatment he could die within minutes.

After discussions with school staff and other knowledgeable parties in the medical community, it has been suggested that the best way to provide a safe environment for (name of student) would be to enlist the support of the grade parents to help make his classroom a "peanut-and-nut-free environment". This means that each child entering this grade is asked to bring snacks and lunches free of any peanuts or nuts. Though it sounds simple, it means no peanut butter sandwiches or peanut butter cookies. It means you should read the labels of other foods like muffins, granola bars and cereals before you put them in your child's snack. Our concern is for foods where peanuts or nuts might be a "hidden" ingredient, and where cross-contamination may occur.

I realize this request poses an inconvenience for you when packing your child's snack and lunch; however, I wish to express sincere appreciation for your support and understanding of this potentially life-threatening allergy. In the very near future the school will announce a parent meeting for you to become acquainted with this situation. Literature will be provided suggesting healthy and nutritional alternatives to peanuts, nuts and their by-products.

Sincerely,

Principal

This letter may only be sent with the written consent of the parents concerned.

Appendix C – 3

Appendix 12

Example

Letter to Parents

Dear Parents:

Re: Medical Danger

One of our (state grade level) students has a life-threatening allergy to all nuts. The only way to ensure a safe environment for this child is to try to make our classroom ***nut-free***. To do this we need everyone's co-operation.

Please check the ingredients of all foods your children bring to school. Coconut is not a risk for nut allergies only for students with specific coconut allergies.

In a classroom setting, cross-contamination is the greatest risk from this type of allergy. Cross-contamination is when a few crumbs from one child's snack are dropped and then picked up by an allergic child. ***Even a small amount can kill.***

It is difficult at the best of times to get children to eat healthy snacks; however, I hope you will appreciate the seriousness of this condition and that you will assist us at the school in our efforts to create as safe an environment as possible. With your co-operation we can minimize the risk of an allergic reaction.

Anyone wishing further information about this type of allergy may contact the child's parents. There is also an information package available at the school.

Yours sincerely,

Teacher

Please return this portion to the home room teacher

We, the parents/guardians of: _____
Name of Student

have received and read the letter regarding the student with the life-threatening allergy.

_____ _____
Signature of Parent/Guardian Date

Appendix C – 4

Appendix 15

Example

Sample Reminder/Thank You Letter

Dear Parents:

Re: Peanut and Nut Product Allergies

The children in our school with severe peanut and nut product allergies, and their families, would like to join me in thanking you for your understanding and co-operation as a result of the request to avoid sending peanut and nut products to school. There has been a reduction in the number of peanut and nut products brought to school in snacks and lunches, and we would like to thank you for continuing not to send these products to school with your child.

Since even a minute amount of the allergic substance can cause a life-threatening reaction, keeping it out of the classroom is our best method of preventing a serious reaction at school.

If your child does bring a food to school containing peanut or nut products, please ask the child to let the teacher know.

Thank you again for your co-operation in this important issue.

Yours sincerely,

Principal

Appendix D

Sample Newsletter Articles

I

Allergy Alert

We felt that all parents would like to be aware that there is a child (or several children) in our school with a severe life threatening food allergy (anaphylaxis) to peanuts and nuts. This is a medical condition that causes a severe reaction to specific foods and can result in death within minutes. Although this may or may not affect your child's class directly, we want to inform you so that you may choose to send foods to school with your child that are free from peanuts or nut products. There will be more information about anaphylaxis at our Meet the Teacher Night. Thank you for your understanding and cooperation.

Reproduced with permission of the former Carleton Board of Education

II

Life-Threatening Allergies

Many children have allergies. A few, however, are life threatening. Some children, for example, are severely allergic to peanut products, including peanut butter. Even a tiny bit can be fatal within minutes. Nuts, shellfish, fish, eggs, and milk are also known to cause severe reactions.

Our school board has a policy in place to help protect children with life-threatening allergies. If you are the parent of a child with life-threatening allergies, we need your cooperation in providing the school with current medical information and assistance in developing a plan to protect your child's health. When that plan is in place, we will be asking for the cooperation of all parents and students in the school to help protect the allergic child from danger.

With your help, we will do our best to prevent mishaps and to make sure that all of our students are safe, healthy, and able to concentrate on learning.

If you would like further information about our policies and practices, please call the school.

Reproduced with permission of the former North York Board of Education

Appendix E

Avon District School Board Maitland
Learning for a Lifetime

STEPS IN THE DEVELOPMENT OF THE INDIVIDUAL MEDICAL MANAGEMENT PLAN

STUDENT _____

SCHOOL YEAR _____

ACTION	DATE
1. Following general screening, consult with Public Health Nurse re: need for individual management plan, on a case by case basis.	
2. Complete detailed screening. Obtain authorized medical treatment protocol and relevant parental consents.	
3. Schedule planning session; invite parent(s)/guardian(s) and student, where developmentally appropriate. List participants: _____ _____	
4. Delineate all components of Individual Medical Management Plan. Consider prevention as well as intervention. Consider location of necessary materials or equipment, unusual circumstances (off-site activities, impact on transportation), role of medically-at-risk student. Determine location(s) of Individual Management Plan.	
5. Arrange for relevant training of designated staff.	
6. Arrange for relevant education and dissemination of information to all staff.	
7. Establish procedures for appropriate notification and training of occasional staff.	
8. Where appropriate precautionary measures impact on other persons, provide relevant information to school community.	
9. Following an incident, review adequacy of Individual Medical Management Plan and amend accordingly.	
10. If no incident, simulate an emergency.	
11. Review annually, through verification and amendment process.	

Page 5

Appendix F

CLASSIFICATION	CODE
Section: Students	File: *JHCCB-E-4

TITLE **STRATEGIES IN PREVENTION AND MANAGEMENT OF ANAPHYLAXIS IN THE SCHOOL SETTING**

Exhibit

APPENDIX A4
SCHOOL LUNCH IDEAS

Although no food is universally safe for all food allergic individuals, the following are some interesting suggestions for alternatives to peanut butter sandwiches.

Sandwich Fillings

- Chicken -sliced, smoked, chicken salad
- Turkey- sliced, smoked or turkey salad
- Lean beef or ham - minced or sliced
- Pork - sliced or chopped, try adding apple sauce or relish
- Lean luncheon or deli meats
- Cheese spread or molasses
- Sliced cheddar with jam or mayonnaise
- Processed cheese with sliced apple, pickles, or crumbled bacon
- Cream cheese with chopped marachino cherries or chopped olives
- Sliced meat loaf

Tired Of Plain Bread? Try:

- Whole wheat, oatmeal, rye, or pumpernickel
- Pita pockets or English muffins
- Bagels, hot dogs or hamburger buns, soft tortilla shells
- Hard rolls, sub buns, biscuits, croissants, crackers or rice cakes

Ideas For Wide-mouth "Hot" Thermos

- Spaghetti, macaroni, other pasta or rice dishes
- Soups, stews, and casseroles
- Chicken nuggets, or leftovers

Try These In A Wide-mouth "Cold" Thermos

- Potato salad or pasta salad with cubes of cheese or meat
- Chef salad or vegetable salad with a separate dish of dressing
- Fruit salad with cottage cheese
- Cubes of meat or cheese to accompany crackers, carrot and celery sticks and a small container of dip

Miscellaneous Other Favorites

- Pizza
- Whole grain muffins with yogurt or cheese
- Cooked wiener, split and stuffed with cheese
- Whole grain cold cereal - bring in separate covered bowl and add milk

Appendix G-1

HASTINGS AND PRINCE EDWARD DISTRICT SCHOOL BOARD

PROCEDURE - STAFF ADMINISTRATION OF MEDICATION

E - 1
Page 14

EMERGENCY HEALTH ALERT for _____

Our child has _____ Student's Picture

Although he/she is normally a healthy child, we would like you to know what to expect if an emergency occurs.

Things my child should avoid are:

_____

_____

My child wears a Medic Alert Tag: Yes _____ No _____

Regular Medication:

Name	How Much, How Often	Possible Side Effects

Signs of Emergency:

_____

_____

_____

SPECIFIC INSTRUCTION (in order) to follow if my child has an emergency:

1. _____
2. _____
3. _____
4. _____
5. _____

Emergency Medication: _____

Contacts:

Mother: Home _____ Father: Home _____

Work _____ Work _____

Other Contact Person: Name _____ Phone _____

Doctor: _____ Phone _____

Date: _____ Signature: _____

Appendix G – 2

Appendix 3

To be Posted with Life-Threatening Allergy Protocol

Emergency Procedure - Anaphylaxis

In Case of Emergency!

1. **Administer the EpiPen®.**
   Don't hesitate. It can be life saving.

   The student should rest quietly. DO NOT SEND THE CHILD TO THE OFFICE.

   To Inject:
   - Remove EpiPen® from case.
   - Pull off grey safety cap.
   - Jab into OUTER MID-THIGH of child's leg with the black tip end of the needle. (This may be done through light or a single layer of clothing if necessary (no thicker than jeans). A click will be heard.
   - Wait for fluid to enter body (10 seconds—an accurate way to count: one-one thousand, two-one thousand, etc.).
   - The child should be rushed to the hospital after administration of EpiPen®; any additional EpiPens® should accompany the child in case a second injection **(a maximum of three to be administered)** is required if symptoms persist or recur.
   - The time of the first injection should be noted so that the second EpiPen® can be administered in 10 to 20 minutes, if symptoms persist or recur. (The provision of an adequate number of EpiPens® is the responsibility of the parent/guardian.)
   - The used EpiPen® should be placed in a strong, puncture-proof plastic container and sent to the hospital with the student. Do not put it back in the original case as the needle will go through the container and you could injure yourself.

2. **Have someone call 9-1-1.**
   Tell them that a student has had an anaphylactic reaction.
   Give the name and address of the school (use 911 Protocol).

3. **Help the student to remain calm and to breathe normally. An adult must stay with the student.**

4. **Call the parents/guardians/emergency contact.**

5. **Observe and monitor the student until the ambulance arrives.**

6. **Administer a second EpiPen® - if needed.**
   Administer approximately 10 to 15 minutes after the first, (a maximum of 3 doses to be administered).

7. **Send any additional EpiPens® with student in the ambulance (maximum 3 doses).**

How to use the EpiPen® Auto-Injector... Three simple steps:

Comment utiliser l'auto-injecteur d'adrénaline EpiPen® en trois étapes simples.

1. Pull off grey safety cap.

1. Enlever le couvercle gris de sécurité.

2. Jab black tip into outer thigh until unit activates.

2. D'un coup sec, placer le bout noir sur la cuisse jusqu'au déclenchement du mécanisme d'auto-injection.

3. Hold EpiPen® in place several seconds. Then discard unit.

3. Laisser en place pour plusieurs secondes. L'unité EpiPen® doit ensuite être enlevée et jetée.

Appendix 5

To be Posted by Telephone

911 Protocol - Anaphylaxis

1. **Emergency Phone Number**

2. **Hello, my name is** _____

3. **We are located at:**

   Address: _____

   Nearest major intersection: _____

4. **Tell them:**
   "We need an ambulance immediately. We have a child going into anaphylactic shock. An EpiPen® is being given now."

5. **Give the following information about the child:**
   - level of consciousness
   - breathing
   - bleeding
   - age

6. **My phone number is** _____

7. **The closest entrance for the ambulance is on:**

   _____

8. **Do you need any more information?**

9. **How long will it take you to get here?**

10. **Tell them:** "A staff member will meet you at the entrance to provide further information."

11. **Call the parents/guardians/emergency contact.**

Appendix H

Anaphylaxis Policy Checklist

Use this checklist to help develop your school/board policy on anaphylaxis.

Information and Awareness

- ❑ Allergy alert form on file
- ❑ Consent to administer epinephrine on file
- ❑ Anaphylactic child identified to all staff
- ❑ Allergy-alert form placed in key locations
- ❑ Instructions on use of auto-injector posted in child's classroom
- ❑ Information placed in visible location for supply teachers

Inservice, including training in use of auto injector, provided for

- ❑ Teaching staff
- ❑ Non-teaching staff
- ❑ Substitute teachers
- ❑ Bus drivers
- ❑ Volunteers
- ❑ Others

Information sharing in place for

- ❑ Students
- ❑ Parents
- ❑ Parent organizations

Letters asking for cooperation sent to

- ❑ Parents of children in class
- ❑ All parents in school

Avoidance

- ❑ Allergen-free areas established
- ❑ Safe lunchroom and eating area procedures established
- ❑ Staff alerted to non-food allergens in school
- ❑ Procedures for holidays and special celebrations established
- ❑ Procedures for field trips established
- ❑ School bus procedures established

Emergency Response

- ❑ Emergency plan on file for each anaphylactic student
- ❑ Rapid communication strategy in place
- ❑ Auto-injectors stored in safe and accessible location
- ❑ School bus emergency procedure in place
- ❑ Role-playing session planned
- ❑ Role-playing session implemented
- ❑ Review process in place

Appendix I

Sources of Information

National Anaphylaxis Advisory Committee of the Allergy Asthma Information Association
AAIA National Advisory Committee
c/o AAIA Atlantic
20 South Road
Doaktown, New Brunswick
E9C 1G1
Phone: (506) 365-4501

The National Advisory Committee has prepared an Anaphylaxis Reference Kit, including speakers notes and overheads, as a teaching tool to help educators and to inform about anaphylaxis and the procedures that should be followed to protect individuals with anaphylaxis.

Allergy Asthma Information Association
(National Office)
P.O. Box 100
Etobicoke, ON
M9W 5K9
Telephone: (416) 679-9521
Fax: (416) 679-9524
e-mail: national@aaia.ca
www.aaia.ca

AAIA has the following regional offices: BC/Yukon, Prairies/NWT/Nunavut, Ontario, Quebec, and Atlantic.

Anaphylaxis Canada maintains an extensive Web site with links to many information sources, articles, and other sites of interest. The network also has an extensive list of publications, audio tapes, video tapes, and supplies for adults and children.

Anaphylaxis Canada
416 Moore Ave. Suite 306
Ontario
Canada M4G 1C9
Phone: 416 - 785-5666
1-888-ANA-PHYL-AXIS
Fax: 416 - 785-0458
Email: network@anaphylaxis.org
www.anaphylaxis.org

Calgary Allergy Network's Web site is another excellent source of information.
http://www.cadvision.com/allergy

Food Allergy and Anaphylaxis Network is an American organization with an extensive education and publication program. In addition to its main Web page, it maintains Web pages for kids and teens. For more information, visit www.foodallergy.org

The Food Allergy and Anaphylaxis Network
10400 Eaton Place, Suite 107
Fairfax, VA. USA 22030-2208
Tel: (703) 691-3179
Fax: (703) 691-2713
http://www.foodallergy.org/

Canadian MedicAlert Foundation is Canada's leading medical information service, serving more than one million Canadians, including over 100, 000 children and teenagers. For more information, visit www.medicalert.ca

Canadian MedicAlert Foundation
2005 Sheppard Ave. E.
Suite 800
Toronto, ON
M2J 5O4

Appendix J

Educational Materials for Children

Videos

*"Alexander, The Elephant Who Couldn't Eat Peanuts"
For pre-school and elementary age children

*"It Only Takes One Bite"
For adults and children.

*Food Allergies: Fact or Fiction!?!
Video designed for teenagers.

Never Take a Chance/Pas de risque à prendre
In French or English, for children aged 4 to 7.
Available from Allergy Essentials, 59 Robertson Road, Suite 148, Nepean, ON K2H 5Y9

Food Allergies Can Kill
Targets teenage group.
Available from AAIA

Books

A Preschooler's Guide to Peanut Allergy

*No Nuts for Me!/Les Noix, C'net Pas Pour Moi
by Aaron Zevy

*Aaron's Awful Allergies

*Alexander and His Pals Visit the Main Street School
*A Special Day at School
*Alexander Goes to a Birthday Party
*Alexander Goes Trick or Treating

*Andrew and Maya Learn About Food Allergies

*Available from Anaphylaxis Canada

Appendix K

Suggested Publications and Videos

"Peanut and Nut Avoidance"
AAIA Infoletter, 1999

Anaphylaxis in Schools and Other Child Care Settings
by Drs. Milton Gold, Gordon Sussman, Michael Loubser and Karen Binkley
Published jointly by The Canadian Society of Allergy and Clinical Immunology, The Ontario Allergy Society, and The Allergy, Asthma Information Association, 1995.

The Canadian Allergy and Asthma Handbook
by Dr. Barry Zimmerman, Dr. Milton Gold, Dr. Sasson Lavi, Dr. Stephen Feanny
Random House/Lorraine Greey, 1991

"Fatal Anaphylactic Reactions to Food in Children." Position Statement, Allergy Section, Canadian Pediatric Society, Canadian Medical Association Journal, 1994.

"Common Allergenic Foods and Their Labelling in Canada — A Review,"
by Marion Zarkadas, MSC, Fraser W. Scott, PhD., John Salminen, BASc, Anthony Ham Pong, MBBS, FRCPC. Canadian Journal of Allergy and Clinical Immunology 4 (1999): 118-141.

"Fatal and Near Fatal Anaphylactic Reactions to Food in Children and Adolescents" by Hugh A. Sampson, M.D., Louise Mendelson, M.D., James P. Rosen, M.D. New England Journal of Medicine, 6 August 1992

"Medication of Pupils and Related Issues" by William F. Foster, 1995.

"Surviving Anaphylaxis" by Dr. Karen Binkley
Ontario Medicine, 5 October 1992

"Foods That Can Kill" by Sidney Katz
Reader's Digest, September 1991

"Your Child and The Peanut Allergy"
Sully's Living Without" Spring, 1998
www.livingwithout.com/feature_peanuts.htm

*Taking Control: Anaphylaxis and You" (video and booklet)
Endorsed by the Canadian Society of Allergy and Clinical Immunology.

*Anaphylaxis Resource Manual

*Living with Anaphylaxis (2 tapes)
*Available from Anaphylaxis Canada