Guidelines - Prevention and Management of Anaphylaxis in the School Setting

March 2008 (updated)

Definition

Anaphylaxis is a severe allergic reaction which requires immediate treatment to prevent sudden death from suffocation or cardiac arrest. Anaphylaxis reactions can occur up to 8 hours after exposure to the allergen. Examples of potentially life-threatening allergens include:

- Peanuts
- tree nuts and nut products
- shellfish
- fish
- cows' milk
- eggs
- insect venom
- latex

Introduction

The Board of Trustees for School District No. 22 (Vernon) is committed to providing as safe a learning and teaching environment as possible for anaphylactic students. It is not possible, however, to achieve a completely allergen-free school as there can be hidden or accidentally introduced sources. Instead, schools must strive to become 'allergy-aware' through strategies to educate students, parents and staff about the allergy and the importance of working together to minimize the risk of exposure for the allergic child.

Even though each situation is unique and each child's allergies are different, there must be consistent strategies in each school. Schools must endeavour 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. Parental involvement in all phases of planning must be encouraged as it can result in the greatest degree of success and community acceptance.

Guidelines

The Board of Trustees for School District No. 22 (Vernon), in consultation with the North Okanagan Health Region Medical Health Officer, has approved the following general guidelines to provide assistance to schools in the development of school-based strategies for anaphylactic students. Schools will seek parental involvement in **all phases of planning.**

INFORMATION AND AWARENESS TO MINIMIZE RISK

Identification of Anaphylactic Students

• **Parents/guardians have the prime responsibility** of informing school personnel about their child's severe allergy. School Board Policy 9.6.0 provides direction on collecting health information and establishing medication protocols for individual students.

- The Principal must advise that staff members (teaching, non teaching and transportation supervisor) are aware of students who have potentially life threatening allergies as soon as possible. This includes, but is not limited to teachers on call, school volunteers, custodians and if applicable, bus drivers. Information on the condition and the student's emergency contact information will be kept in an easily accessible location such as the school office.
- With parental permission, schools should find an appropriate method to communicate the identity of an allergic child, description of the allergy and emergency plans which might include:
 - posting pictures in central locations
 - restricted postings in areas not occupied by students
 - colour photocopied pictures of the child circulated to staff members
- Where computer systems are in place, medical alert conditions should be identified on the computer systems.
- Students with life threatening allergies should be identified as at risk students during the elementary to secondary transition process.
- 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.
- Identifying children with life-threatening allergies is more difficult in a secondary school setting. Parents bear the burden of responsibility for reporting the condition to the school.
- 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.
- The child's classroom teacher should ensure that information is kept in a place where it will be highly visible and readily understood by TOCs. If it is not posted in the classroom, it should be kept with the teacher's daybook.
- Schools should post a "universal symbol" to identify the presence of an anaphylactic child in the classroom. Posters should not indicate the room is free of allergen.

In-service for Teachers and Other School Staff

- School administrators must advise staff who may be in a position of responsibility for students with anaphylaxis receive personal training in the recognition of a reaction and the use of epinephrine (EpiPens). This will include first aid attendants, teachers, noon-hour/bus supervisors, bus drivers and cafeteria staff.
- Where possible, parents should be encouraged to participate directly in training staff in emergency response and the use of epinephrine. Public Health Nurses may provide general education to school personnel regarding managing students with severe allergies.

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.
- 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.

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. Parental cooperation is more likely if schools avoid "banning" the substance and ask instead for cooperation.
- When the allergen is a common item in school lunches, such as peanut butter, provide parents with suggestions for alternate foods.
- 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 ingredients 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.
- 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.
- 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
- Sample letters are included in the Appendices.

AVOIDANCE OF FOOD ALLERGIES

It is impractical to achieve complete avoidance of all allergens. 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. In developing school-based strategies to reduce the risk of exposure, various factors need to be considered such as:

- age and maturity of the student
- organization and physical layout of the school
- properties of the allergen itself

Safe Lunch Room and Eating Area Practices

The most minute quantities of allergen can trigger a deadly reaction. Peanut butter on a child's hand could be transferred to a 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.
- Ensure students are advised not to trade or share foods, food utensils, and food containers.
- Eating surfaces must be cleaned thoroughly with a grease-cutting detergent, rinsed, and dried.
- Establish a hand-washing routine by staff and students, before and after eating to minimize risk of exposure to any food allergen residue.
- Alert student monitors or 'buddy classes' with life threatening allergies.
- Increase lunch-hour supervision in classrooms with an anaphylactic child.
- Encourage the anaphylactic child to take meal time 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
 - packing up lunch and leaving it with the lunch supervisor if it is necessary to leave the room during lunchtime.
- It 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.
- School Lunch Program and Cafeterias there is a high probability of accidental exposure to hidden allergens such as nuts when consuming prepared foods. Students with severe food-induced Anaphylaxis should not purchase food from the school cafeteria and should not participate in the school lunch or breakfast program.

Exposure During School Activities

Field Trips

Safeguards must be in place to ensure the safety of at-risk students during school field trips, especially when travel time to the nearest emergency ward is extended. 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 copy the 'serious medical condition planning form' for all field trips which details the student's allergens, symptoms and treatment plans,
- Require all supervisors, staff and parents, to be aware of the identity of the anaphylactic child, the allergens, symptoms and treatment,
- Ensure anaphylactic child travels with the trained supervisor if there is more then one vehicle transporting the class,
- Ensure that a supervisor with training in the use of the epinephrine 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 enough epinephrine to be administered every 10 to 15 minutes (or as outlined in the treatment plan) while en route to the nearest hospital,
- 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.

Insect Venom Allergies – Precautions

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. Those precautions include:

- Check for the presence of bees and wasps, especially nesting areas, and arrange for removal.
- Encourage the use of cups when soft drinks are being consumed outdoors.
- Ensure the garbage is properly covered.
- Caution children not to tamper with insect nests, and to advise staff of their presence.
- Allow anaphylactic students to remain indoors during bee/wasp season.
- Immediately remove a child with an insect venom allergy from the room, if a bee/wasp gets into the classroom.

NOTE: 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.

Other 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 like:
 - play dough;
 - bean-bags, stuffed toys (peanut shells are sometimes used);
 - counting aids, (beans, peas);

- toys, books and other items which may have become contaminated in the course of normal use;
- treats, unless supplied or approved by parents;
- science projects; and
- special seasonal activities, like Easter eggs and garden projects.
- Anaphylactic students should not be involved in garbage disposal, yard clean ups, or other activities which could bring them into contact with food wrappers, containers or debris.
- Computer keyboards and musical instruments should be wiped before and after use.
- Anaphylactic students 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.

Holidays and Special Celebrations

Special occasions tend to be the time when reactions to allergens can occur. Extra caution needs to be taken at these times of year. Food is usually associated with special occasions and events. The following procedures will help to 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 nonperishable treats for those times when other parents send food into the school.
- Focus on activities rather than food to mark special occasions.

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.

- The regular classroom teacher should 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.

Intermediate and secondary schools

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.

Emergency Response Protocol

Since it is impossible to reduce the risk of accidental exposure to zero, a student with severe allergies may require emergency life-saving measures while at school.

- An emergency plan must be developed for each at-risk student in cooperation with the parents/guardians and the student's physician. The public health nurse is also available upon request to assist the parent in the development of the plan.
- Every emergency plan should include procedures to:
 - communicate the emergency rapidly to a staff person who is trained in the use of administering epinephrine.
 - administer the epinephrine (Adult supervision is required.)
 - telephone 911 or an ambulance (inform the emergency operator that a child is having an anaphylactic reaction)
 - telephone the parents
 - re-administer epinephrine every 10 to 15 minutes if breathing does not improve or if symptoms reoccur while waiting for the ambulance and en route to the hospital.
 - assign a staff person to take extra epinephrine, accompany (or follow, if necessary) the child to the hospital and stay with him/her until a parent or guardian arrives.
 - caution must be used in disposing the used needle (carefully place back in original case). If possible the needle should be sent with the child to the hospital.
- In special cases schools may purchase a back up EpiPen. If schools do purchase back ups they must be responsible for checking for expiry dates and ensuring the correct dosage EpiPen 0.3 mg.

Location of Epinephrine Auto Injectors

- As soon as they are old enough, students should be encouraged to carry their own autoinjectors. Many young children carry one or two EpiPens in a fanny pack around their waists at all times.
- All students, regardless of whether or not they are capable of epinephrine self administration
 will require the help of others because the severity of the reaction may hamper their attempts
 to inject themselves.
- An up to date supply of epinephrine, provided by the parents, and not carried by the student, will be stored in a covered, secure **unlocked area** for quick access.
- All **staff** will know the location of the injectors.
- It is the responsibility of parents to check expiry dates of injectors and replace as necessary.
- Stored epinephrine 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, especially if injected into the fingertip.
- Epinephrine must be stored in a dark, unlocked cupboard with easy access. Temperatures should not go below 15 degrees C or above 30 degrees C.

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.

Appendix A Sample Letters to Parents

Dear Parents/Guardians:

A student in your child's class, Ms. Smith's Grade _ room has a severe life-threatening allergy to peanuts and peanut products. Exposure to even a minute amount of the food substance could cause anaphylactic shock and, without immediate emergency medical assistance, loss of consciousness and death.

We are requesting that parents avoid including "peanuts and peanut products" in lunches or snacks. The most minute amount of "peanut butter" on a friend's hand could be transferred to a volleyball or skipping rope. Therefore, protection of the anaphylactic child requires the school to establish guidelines for all food products, not only those directly consumed by the anaphylactic student. Information on school lunch ides is attached; a number of alternatives to "peanut butter" sandwiches are suggested.

Please discourage your child from sharing any food, knives, forks, spoons and food containers with other students. We encourage all students to get in the habit of washing their hands before and after eating. Teasing can become a problem in such situations and we ask all parents to discourage this hurtful practice.

The school has established an emergency plan for the student. Our objectives are to establish and maintain, to the extent possible:

- classrooms attended by the student be free of any substance that places the student at risk of anaphylactic shock;
- school practices which reduce the possibility of exposure to substances which cause anaphylactic shock (e.g. hand-washing routines); and
- school buses which are free of substances which could place an allergic student at risk.

Our teachers will be discussing the above points with students in Ms. Smith's classroom and we hope that parents will reinforce them at home with their children. While this request may pose an inconvenience for you when packing your child's snack and lunch, I wish to thank you for your support and understanding of this potentially life-threatening allergy. Please feel free to contact me with any comments or questions.

Signed Principal

Sample Letter to Kindergarten Parents

Date

Dear Parents
Kindergarten students are given an opportunity to eat a snack sent from home each day to provide for their nutritional needs.
As there is a child attending your child's class who suffers from a life threatening allergy to peanut products, i.e. peanut butter, peanut oil, etc. we ask your cooperation by not sending any snacks with your child containing peanut products.
Students who have severe allergies to such food substances are exposed to a health risk when peanut products are consumed in their environment or shared with them. Please speak with your child about not sharing their snacks with other children. Alternative snack ideas are included in the attached sheet.
Your understanding and cooperation are appreciated so that we might provide for the health needs of students at risk of life threatening reactions.
Yours truly,
Principal

Sample Letter

Date
Dear Parents
One of our Grade students has a life-threatening allergy to all nuts. The only way to ensure a safe environment for this student is to try to make our classroom allergy safe or allergy aware. 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 nut and does not pose any risk.
In a classroom setting, cross-contamination is the greatest risk from this type of allergy. Cross-contamination is when a few crumbs from one student's snack are dropped and then picked up by an allergic student. 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 student's parents. There is also an information package available at the school.
Yours sincerely,
Principal

Appendix B 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. Additional suggestions are available from Public Health

Sandwich Fillings:

- chicken, turkey sliced, smoked or salad
- lean beef or ham minced or sliced
- pork sliced or chopped, try adding applesauce or relish
- lean luncheon or deli meats
- cheese spread or molasses
- processed cheese with sliced apple, pickles or crumbled bacon
- cream cheese with chopped maraschino cherries or chopped olives

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, cracker or rice cakes

Ideas for Wide Mouth "Hot" Thermos:

- spaghetti, macaroni, other pasta or rice dishes
- soups, stews, and casseroles
- chicken nugget 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 ticks and a small container to dip

Miscellaneous Other Favourites:

- pizza
- whole grain muffins with yogurt or cheese
- cooker wiener, split and stuffed with cheese
- whole grain cold cereal bring in separate covered bowl and add milk from a thermos

To make sure a lunch is nutritionally balanced, enjoy a variety of foods from the four good groups in Canada's Food Guide to Healthy Eating. To keep packed lunches cool, chill as much as possible overnight or try packing a small lunch-size ice pack in the lunch box or insulated lunch bag. Some items can even be packed frozen and will thaw in time to be eaten.

Complied by Jackie Hamm, Allergy/Asthma Information Association. Nutritional Assistance by Jackie Vloet-Koughan, Dietician Department of Health and Social Services.

Appendix C Division of Responsibilities

(Adapted from Canadian School Board Association Handbook)

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 bussing 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 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 schools 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 lifethreatening 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 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)

Appendix D Food Allergy Facts

(Adapted from Canadian School Board Association Handbook)

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
- Hives, itching
- Tightness in throat, mouth, chest
- Difficulty breathing, swallowing
- Wheezing
- Coughing, choking
- Vomiting, upset stomach
- Loss of consciousness

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 speciality 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 checkout 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 . . .



X 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 E Sample Newsletter Articles

(Adapted from Canadian School Board Association Handbook)

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

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 New York Board of Education

Appendix F-1

To be Posted with Life-Threatening Allergy Protocol

Emergency Procedure – Anaphylaxis

In case of Emergency!

(Adapted from Canadian School Board Association Handbook)

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:

- Removed EpiPen® from case.
- Pull off grey safety cap.
- Jab into OUTER MID-THIGH of child's leg with 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 used EpiPen® should be placed back in the original container and sent to the hospital with the student. (There is a reservoir for the needle).

2. Have someone call 9-1-1.

Tell them that a student has had an anaphylactic reaction. Give them 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 or transport if necessary.
- 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).

Appendix F-2

(Adapted from Canadian School Board Association Handbook)

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 anymore 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 G Possible Sources of Information

Allergy Asthma Information Association

AAIA has developed an Anaphylaxis Reference Kit, which provides both parents and schools with information about managing Anaphylaxis. The package includes overheads and a suggested script for presentations to interested groups.

AAIA also publishes information materials and a regular newsletter.

AAIA National Office: 111 Zenway Boulevard, Unit 1 Vaughan, Ontario L4H 3H9 1-905-265-3322

Toll Free: 1-800-611-7011

www.aaia.ca

In addition to its national office, AAIA has a provincial office, which can be reached at 1-877-500-2242 or e-mail bc@aaia.bc

Food Allergy Network

The Food Allergy Network has developed an education package and video on children and food allergies. It also has an extensive list of publications.

11781 Lee Jackson Hwy, Suite 160 Fairfax, VA 22033 Toll Free: 1-800-929-4040 http://www.foodallergy.org

Canadian Medic-Alert Foundation

2005 Sheppard Ave East, Suite 800 Toronto, Ontario M2J 5B4 Toll Free: 1-800-668-1507 1-416-696-0267 www.medicalert.ca

Anaphylaxis Canada

2005 Sheppard Avenue East, Suite 800 Toronto, Ontario M2J 5B4 1-416-785-5666 1-866-785-5660 www.anaphylaxis.ca

Appendix H Resources

The following are excellent resources about food allergies for use in the classroom.

Videos

Alexander the Elephant who Couldn't Eat Peanuts

- for preschoolers and young children
- available from the Food Allergy Network

Food Allergies: Fact or Fiction

- for young teens
- available from the Food Allergy Network

It Only Takes One Bite: Food Allergy and Anaphylaxis

- for parents, teachers and older students
- available from the Food Allergy Network

Books

No Nuts for Me

- for primary students
- available from AAIA

A search of the Internet under "Anaphylaxis" yields many interesting articles, updates on research, and access to on-line support groups. Any information so obtained should be verified.

"Anaphylaxis" by Susan Daglish, B.A. AAIA Info letter

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.

<u>The Canadian Allergy and Asthma Handbook</u> by Dr. Barry Zimmerman, Dr. Milton God, 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, <u>Canadian Medical Association Journal</u>, 1994.

"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.

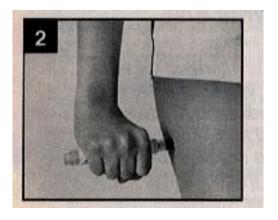
Appendix I

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

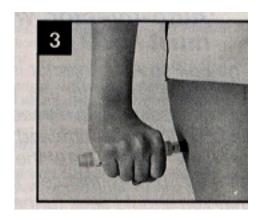




1 Pull off grey safety cap.



2 Place black tip into outer thigh until unit activates



3 Push EpiPen Auto-Injector against thigh until unit activates, and hold in place several seconds