

ALLERGIC SHOCK (ANAPHYLAXIS)

In order for school personnel to effectively respond to life-threatening allergic shock reactions the following guidelines are recommended.

1. Information and Awareness

1.1 Parents

It is expected that, upon registration, parents will identify children with anaphylaxis to the school principal and provide information regarding the following:

1.1.1 Identifying allergens that trigger reaction.

1.1.2 Description of a treatment protocol signed by a physician plus an adequate supply of auto-injectors (or other medications).

1.1.3 Regular updates on the child's condition.

1.1.4 Permission for the posting and sharing of the Child's photographs and medical information normally contained in the medical alert form.

1.1.5 To provide a medical alert bracelet to be worn by the student at all times.

1.2 School Staff

The principal or designate shall ensure that:

1.2.1 All staff is alerted and the child identified to the staff.

- 1.2.2 All staff is alerted to board policy and procedures on managing anaphylaxis.
- 1.2.3 Allergy alert forms are placed in key locations.
- 1.2.4 Parents are included in the decision to post information.
- 1.2.5 Appropriate staff is instructed in the use of the auto-injector in the classroom.
- 1.2.6 Ensure teachers-on-call are informed on any anaphylaxis students when in service.

1.3 Staff Training

The principal with the assistance of public health nurses will provide:

- 1.3.1 Annually to staff, teachers-on-call and volunteers wherever an anaphylaxis child is enrolled in-service on anaphylaxis and how to respond to an emergency.
- 1.3.2 All teachers and staff including bus drivers, who are in a position of responsibility for children with anaphylaxis, will receive personal training in the use of the auto-injector.
- 1.3.3. In-service training including specific information from parents on their child and parent participation in the use of the auto-injector.
- 1.3.4 Information about the potential sources of specific allergens is widely circulated including visible and hidden food sources of allergens such as in prepared foods.
- 1.3.5 The importance of reading labels, and the danger of cross-contamination through shared utensils and non-food sources.

1.4 Sharing Information with Other Students and Parents

- 1.4.1 In elementary schools the principal in cooperation with the public health nurse should identify:

- 1.4.1.1 Students suffering life-threatening allergies to all students in the school and enlist their cooperation.
- 1.4.2.2 This should be done in a manner appropriate to the child's age and maturity and in consultation with the parents of the child.
- 1.4.2 In secondary schools the identification of anaphylaxis students to peers should not take place without consultation with the anaphylaxis student.
 - 1.4.2.1 Schools are required to instruct students on basic procedures concerning anaphylactic shock.
- 1.5 Sharing Information with Parents and Parent Organizations
 - 1.5.1 Principals should inform parents of the presence of a student with life threatening allergies in their child's classroom and/or school and the measures being taken to protect the student.
 - 1.5.2 Parents should be asked to cooperate and avoid including the allergen in school lunches and snacks.
 - 1.5.3 Parents may be informed of alternative foods to the allergen, food labeling, ingredient lists to be provided when food is being brought from home.
 - 1.5.4 Parents should be involved in establishing specific programs for their own children, in training staff in emergency procedures and in reviewing school policies to reduce the risk of exposure to allergens.

2 Avoidance of the Allergen

- 2.1 The following recommendations should be considered in the context of the anaphylactic child's age and maturity:
 - 2.1.1 As children mature they should be expected to take increasing personal responsibility for avoidance of their specific allergens.

- 2.1.2 The balance to be achieved in allergen avoidance is to find 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.
- 2.1.3 It is understood that schools and classrooms will exercise discretion in adapting to the needs of individual children and the allergens which trigger reactions.
- 2.2 Ideas for Providing Allergen-Free Areas:
 - 2.2.1 If possible, avoid using the classrooms of an anaphylactic child as a lunchroom.
 - 2.2.2 If the classroom must be used as a lunchroom, establish it as an allergen free area, using a cooperative approach with students and parents.
 - 2.2.3 Establish at least one common eating area or a section of a single common eating area as allergen- free.
 - 2.2.4 Develop strategies for monitoring allergen-free areas and for identifying high risk areas for anaphylactic students.
 - 2.2.5 If allergen-free eating areas cannot be established provide a safe eating area for the anaphylactic child.
- 2.3 Establishing Safe Lunchroom and Eating Area Procedures:
 - 2.3.1 The minutest quantities of allergens can trigger a deadly reaction.
 - 2.3.2 The school should exercise control over all food products not only those directly consumed by the anaphylactic student.
 - 2.3.3 Require anaphylactic students to eat only food prepared at home.
 - 2.3.4 Discourage the sharing of food, utensils and containers.
 - 2.3.5 Increase lunch-hour supervision in classrooms with an anaphylactic child.

2.3.6 Encourage the anaphylactic child to take mealtime precautions like:

2.3.6.1 Placing food on wax paper or a paper napkin rather than directly on the desk or table.

2.3.6.2 Taking only one item at a time from the lunch bag to prevent other children from touching the food; and packing up their lunch and leaving it with the lunch supervisor if it is necessary to leave the room during lunchtime.

2.3.6.3 Establish a hand-washing routine before and after eating. Success will depend on the availability of hand-washing facilities.

2.3.6.4 If the school has a food service keep the allergen, including all products with the allergen as an ingredient, off the menu.

2.3.6.5 Provide in-service for staff and volunteers with special emphasis on cross-contamination and labeling issues.

2.3.6.6 If the school has a vending machine, ensure that products containing the allergen are not available.

2.3.6.7 Ensure that tables and other eating surfaces are washed clean after eating using a cleansing agent approved for school use.

2.4. Ideas Regarding Allergens Hidden in School Activities:

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

2.4.2 Teachers, particularly in the primary grades, should be aware of the possible allergens present in curricular materials like:

2.4.2.1 Play-dough.

- 2.4.2.2 Bean-bags, stuffed toys (peanut shells are sometimes used).
- 2.4.2.3 Counting aids (beans, peas).
- 2.4.2.4 Toys, books and other items which may have become contaminated in the course of normal use.
- 2.4.2.5 Science projects
- 2.4.3 Special seasonal activities, like Easter eggs and garden projects.
- 2.4.4 Computer keyboards and musical instruments should be wiped before and after use.
- 2.4.5 Anaphylactic children should not be involved in garbage disposal, yard cleanups or other activities which could bring them into contact with food wrappers, containers or debris.
- 2.4.6 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.
- 2.5 Ideas for Holidays and Special Celebrations:
 - 2.5.1 Establish a class fund for special events, and have the classroom teacher or the parent of the anaphylactic child provide only safe food.
 - 2.5.2 If foods are to come into the classroom from home, remind parents of the anaphylactic child's allergens and insist on ingredient lists.
 - 2.5.3 Limit the anaphylactic child to food brought from his or her own home.
 - 2.5.4 Focus on activities rather than food to mark special occasions.

2.6 Field Trips Ideas:

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

2.6.1.1 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.

2.6.1.2 A copy of this information should be available on site at any time during the field trip.

2.6.1.3 Require all supervisors, staff and parents to be aware of the identity of the anaphylactic child, the allergens, symptoms and treatment.

2.6.1.4 Ensure that a supervisor with training in the use of the auto-injector is assigned the responsibility for the anaphylactic child.

2.6.1.5 If practical, consider providing a cell phone for buses used on field trips.

2.6.1.6 Require the parent of the anaphylactic child to provide several auto injectors to be administered every 10-15 minutes en route to the nearest hospital if breathing problems persist or if symptoms reoccur.

2.6.1.7 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.

2.7 Ideas for Teachers-On-Call, Parent Volunteers and Others with Occasional Contact

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

2.8. Anaphylaxis to Insect Venom

- 2.8.1 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. These are:
 - 2.8.1.1 Avoid wearing loose, hanging clothes, floral patterns, blue and yellow clothing, and fragrances.
 - 2.8.1.2 Check for the presence of bees and wasps, especially nesting areas and arrange for their removal.
 - 2.8.1.3 If soft drinks are being consumed outdoors, pour them into a cup and dispose of cans in a covered container.
 - 2.8.1.4 Ensure that garbage is properly covered.
 - 2.8.1.5 Caution children not to throw sticks or stones at insects, nests.
 - 2.8.1.6 Allow students who are anaphylactic to insect stings to remain indoors for recess during bee/wasp season.
 - 2.8.1.7 Immediately remove a child with an allergy to insect venom from the room if a bee or wasp gets in.
 - 2.8.1.8 In case of insect stings, never slap or brush the insect off and never pinch the stinger if the child is stung. Instead, pluck the stinger out with a fingernail or credit card.

3 EMERGENCY RESPONSE PROTOCOL

Even when precautions are taken, an anaphylactic student may come into contact with an allergen while at school.

It is essential that the school develops a response protocol and that all staff is aware of how to implement it. A separate emergency plan should be developed for each anaphylactic child, in conjunction with the child's parents, physician, and school nurse 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, which could signal the onset of a reaction, they should not hesitate to implement the emergency response. There is no danger in reacting too quickly but there is grave danger in reacting too slowly.

3.1 Emergency Plans

3.1.1 Every emergency plan should include procedures to:

- 3.1.1.1 Communicate the emergency rapidly to a staff person who is trained in the use of the auto-injector.
- 3.1.1.2 Administer the auto-injector (Note: Although most anaphylactic children learn to administer their own medication by about age 8, 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 supervision is required).
- 3.1.1.3 Telephone 911 (if available) or the local health centre (Inform the operator that a child is having an anaphylactic reaction).
- 3.1.1.4 If no ambulance service is available transport the child to hospital at once.
- 3.1.1.5 Telephone the hospital to inform them that a child having an anaphylactic reaction is en route.

- 3.1.1.6 Notify the police and provide them with a description of the vehicle and license number if transportation is by car.
- 3.1.1.7 Telephone the parents of the child.
- 3.1.1.8 If breathing does not improve or if symptoms reoccur administer epinephrine every 10-15 minutes while waiting for the ambulance and on route to the hospital.
- 3.1.1.9 Assign a staff person to take extra auto-injectors, accompany (or follow, if necessary) the child to the hospital, and stay with him or her until a parent or guardian arrives.

3.2. Location of Auto-injectors

- 3.2.1 Auto-injectors should be kept in a covered and secure area, but unlocked for quick access. Although epinephrine is not a dangerous drug, the sharp needle of the self injector can cause injury especially if injected into the fingertip.
- 3.2.2 As soon as they are old enough, students should carry their own auto-injectors.
- 3.2.3 Many young children carry an injection kit in a fanny pack around their waist at all times.
- 3.2.4 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).
- 3.2.5 All staff should know the location of the auto injectors. Classmates should be aware of the location of the auto-injector in the classroom.

3.3 Training Older Students to Assist

- 3.3.1 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.

3.3.2 Information about anaphylaxis and auto-injector training may be included in the health curriculum.

3.4 Role-Playing

3.4.1 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.

3.5 Review Process

3.5.1 School emergency procedures for each anaphylactic student should be reviewed annually with staff, the school nurse and parents. In the event of an emergency response, an immediate evaluation of the procedure should be undertaken.