



COMPLIANT

LEARNING RESOURCES



VOCATIONAL PLACEMENT: (EARLY CHILDHOOD EDUCATOR Certificate III) Anaphylaxis Handbook

Position Title:	Early Childhood Educator (Certificate III)
Name of Preschool/ Long Day Care:	
Responsible to:	Vocational Workplace Supervisor
Requirements:	Current First Aid Certificate, Anaphylaxis and Asthma Management training

In fulfilment of the relevant requirements leading to the qualification:
CHC30113 Certificate III in Early Childhood Education and Care

What is Anaphylaxis?

Anaphylaxis is a severe and sudden allergic reaction. It occurs when a susceptible person is exposed to a specific allergen (such as a food or insect sting). Reactions usually begin within minutes of exposure and can progress rapidly over a period of up to two hours or more. Anaphylaxis is potentially life threatening and always requires an emergency response. Anaphylaxis can occur at any age, but is most common in children and young adults. Anaphylaxis may be triggered by foods such as peanuts, tree nuts, eggs, wheat, cow's milk, soy and seafood. Other substances that can trigger severe allergic reactions include medications (especially antibiotics), bee and other insect stings.

Allergies in early childhood

Although allergic reactions are common in young children, severe life-threatening reactions are uncommon and deaths are rare. Foods are the most common cause of allergies in infants and young children. Food allergies may affect around 5% of children under 3 years, while most children will outgrow their allergy, some will not. Food allergies may become evident during the first 12 months when a child is given a food for the first time. A number of other foods may cause allergies in individuals.

most common	less common
Peanuts	Fish
Tree nuts (cashew, hazelnut, walnut, Brazil nut, almond, pecan)	Shellfish
Cow's milk and other dairy foods	Sesame
Egg	Soy

Allergic reactions and anaphylaxis

Food allergy reactions almost always occur from eating the food or from touching the mouth with contaminated hands, utensils, toys or other objects. Reactions can vary in severity. Even mild symptoms can cause distress to the child.

The signs and symptoms of a mild to moderate reaction may include:

- swelling of the face, lips and eyes
- rapid appearance of hives, itchy raised rash or welts on the skin
- abdominal pain and vomiting.

The signs and symptoms of anaphylaxis may include one or more of the following:

- difficulty breathing; noisy breathing
- difficulty talking and/or hoarse voice
- swelling/tightness of the throat
- wheezing or persistent cough
- paleness and floppiness (in young children)
- collapse and/or unconsciousness.

Although most food reactions are mild or moderate, a minority of reactions will require an emergency response. Peanuts, tree nuts, cow's milk and eggs are the most common allergens responsible for triggering severe reactions in young children attending a children's service.

Reactions can be sudden or may evolve over 1-2 hours. Onset within minutes of eating the food and rapid progression of symptoms over 10-20 minutes is a common feature of severe reactions. Fortunately, deaths are rare, but even relatively mild reactions can be very distressing for the child and for those providing first aid, parents and on-lookers.

Most children grow out of cow's milk and egg allergies before they reach school age or during the primary years, however, peanut, tree nut and seafood allergies tend to persist.

Bee, wasp and ant stings can also cause severe allergic reactions but these are less common than food allergies. Reactions to antibiotics, other drugs and latex mostly occur in hospital or other health care settings. Latex disposable gloves are a significant source of latex exposure in children's services and can be a hazard for children with specific latex allergy. Latex allergy is an uncommon allergy.

Prevention of allergic reactions

(see also Planning and Responding)

For children with a known severe allergy, the key to the prevention of potentially serious reactions is avoiding exposure to the relevant allergen. The greatest risk for such a child is from accidental exposure to the allergen.

The Australasian Society of Clinical Immunology and Allergy Inc (ASCIA) Guidelines note four steps in the prevention of food anaphylactic reactions for children's services:

- 1) obtaining medical information about children who may be at risk
- 2) education of those responsible for the care of children concerning the risk of food anaphylaxis
- 3) implementation of practical strategies to avoid exposure to known triggers, and
- 4) age appropriate education of children with severe food allergies.

In children's services the most hazardous foods are likely to be peanut butter, cow's milk and uncooked egg. In order to prevent an identified child being accidentally exposed to a food contaminated with the allergen, many children's services have developed policy to exclude foods such as peanut butter. Some have also excluded food products with 'may contain traces of ...' statements on the package. However, medical specialists agree that there is no risk from non-allergic children eating such foods in the vicinity of an identified child, unless there is direct sharing of the food. The decision to exclude certain foods may not be necessary and should be made in consultation with the identified child's medical specialist.

It should be made clear to parents and staff that, although allergen avoidance policies (sometimes called 'nut free') are designed to reduce the risk of inadvertent exposure as far as practicable, it is never possible to achieve a completely allergen-free environment in any service that is open to the general community. Management and response must be planned for so that the service is able to act appropriately.

In services where meals are provided the following may be considered:

- for a severely allergic child, it may be preferable to have the parents provide meals prepared at home
- meals containing foods/ingredients that are labeled 'may contain traces of nuts', and similar, are not given to the identified child
- where the identified child is allergic to peanuts, tree nuts or shellfish, these foods may be readily excluded from the menu without compromising general dietary requirements
- sharing of food, containers and utensils should not be allowed.

In services where children bring food from home:

- sharing of food, containers and utensils should not be allowed
- eating areas and utensils should be thoroughly cleaned with warm soapy water, or put through a dishwasher cycle if appropriate, to remove traces of potential allergens.

The risk of accidental exposure to food allergens can also be reduced by:

- asking parents of all children not to send foods that contain the most common allergens for celebrations and occasions when food might be shared
- making sure materials such as cow's milk cartons, egg cartons or eggshells are clean and free of contamination before using for art and craft activities
- being aware of the risk to an identified child of using allergenic foods in cooking activities (e.g. baking cakes, frying eggs)
- keeping grassed areas mown, and reducing plants that attract stinging insects
- working together with the parents of the identified child to gain a shared understanding of the level of risk in routine activities, such as cooking and craft, and the overall philosophy of inclusiveness for all children. For example, the medical specialists on the Anaphylaxis Working Party advise there is little risk to a child with an egg allergy of another group of children mixing eggs into cake batter at a distance in the same room. Clean-up after the activity should ensure that no traces of egg are left that the identified child might inadvertently pick up at a later time. Advice from the identified child's medical specialist may be sought to clarify any concerns, and continuing education and

awareness strategies.

THE EPIPEN® AUTO-INJECTOR

The EpiPen® is currently the most accessible auto-injector in use. It is an auto-injector that delivers a single dose of adrenaline into the muscle of the outer thigh.

There are two dosage sizes – the EpiPen®, and the EpiPen Jr®. The EpiPen Junior is for children weighing between 10kg and 20kg. It is the responsibility of the parent to provide an EpiPen® if their child has been medically diagnosed to be at risk of anaphylaxis.

Medical advice is that any child who has been medically diagnosed as requiring an EpiPen® should not attend the service unless an EpiPen® is provided by the child's parent.

Planning and responding

Effective policy and planning should:

- Minimise the risk of an anaphylactic reaction occurring while the identified child is in the care of the children's service
- Provide, as far as practicable, a safe and healthy environment in which children identified as at risk of anaphylaxis can participate equally in all aspects of the children's program and experiences
- Actively involve the parents/guardians of each identified child in assessing risks, developing risk minimisation strategies and management strategies for their child
- Ensure each staff member has adequate training and knowledge of allergies, anaphylaxis and emergency procedures
- Facilitate communication to ensure the safety and wellbeing of children at risk of anaphylaxis, and
- Raise awareness about allergies and anaphylaxis amongst the service community and children in attendance.

Effective policy and planning needs to:

- Be informed by and relevant to the various requirements of the Children's Services Regulation 2004

- Outline clear procedures for provision of medical and other information at enrolment, and when diagnosis occurs once a child has commenced at a service, so that staff are fully informed and comprehensive planning can take place
- Outline clear procedures for emergencies so that staff members respond appropriately to an anaphylactic reaction by initiating appropriate first aid, including competently administering an EpiPen®, and
- Outline clear day-to-day management procedures that are preventative (eg reduce risk of exposure to allergens, including safe environments, food and nutrition practices) and responsive (eg first aid and emergency response, including communication and training).

Staff and parents need to be aware that it is not possible to achieve a completely allergen-free environment in any licensed service that is open to the general community. Staff should not have a false sense of security that an allergen has been eliminated from the environment. Instead, it is important to recognise the need to adopt a range of procedures and risk minimisation strategies to reduce the risk of a child having an anaphylactic reaction, including strategies to minimise the presence of the allergen in the children's service.

Liabilities

Children's services must provide a safe and appropriate care and educational environment for children. All licensees and staff have a legal duty to take reasonable steps to keep children in their care safe.

Licensees are legally liable for their employees regarding any claims for compensation that may be made in the unlikely event of a child suffering an injury as a result of an employee's actions in dealing with anaphylaxis. The legal principle involved is called vicarious liability. The only exception is where the actions of an employee amount to serious and willful misconduct. Carelessness, inadvertence or a simple mistake do not amount to serious and willful misconduct.

Civil Liability Act 2002

- The Civil Liability Act 2002 requires precautions against a risk of harm where
- the risk is foreseeable
- the risk is significant, and
- a reasonable person in the same circumstances would have taken those precautions.

In determining what is reasonable, the following considerations are relevant:

- the likelihood of harm if care were not taken
- the potential seriousness of the harm, and
- the practicality and social desirability of taking suitable precautions.

Employees Liability Act 1991

The Employees Liability Act 1991 is an additional protection for employees. It is aimed at ensuring that employers have no recourse against their employees in relation to liability claims. Again the only exception is where there has been serious and willful misconduct.

Occupational Health and Safety Act 2000

The Occupational Health and Safety Act 2000 has relevance to employers and employees in relation to safe environments, care for the safety of others and care for anything provided at the workplace in the interests of health, safety and welfare.

Section 20 Duties of employees provides that:

- (1) An employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's acts or omissions at work.

Disability Discrimination Act 1992 and Anti-Discrimination Act 1977

In general a children's service should not seek to avoid risk by refusing enrolment to a child with serious allergies. Under the Commonwealth Disability Discrimination Act 1992, discrimination on the grounds of disability is unlawful unless an unjustifiable hardship would be caused. If there is real doubt about the ability of a children's service to safely accommodate a particular child expert advice should be obtained and carefully considered.

Anaphylaxis action plan

An Anaphylaxis Action Plan is a useful addition to the identified child's records. It is a medical management plan prepared and signed by a medical practitioner relating to a child with a diagnosis of severe allergy or anaphylaxis, and developed in collaboration with the child's parents. It includes the child's name and allergies, a photograph of the child and clear instructions on treating an anaphylactic episode. A copy should be kept with the EpiPen at all times so that the Plan is always at the scene of an emergency along with the medication. It may also be displayed in an accessible location (see under privacy concerns).

A standardised action plan that may be useful for children's services is the Australian Society of Clinical Immunology and Allergy (ASCIA) Action Plan.

Staff dealing with a child with anaphylaxis should be aware of the specific terminology used by parents and medical practitioners and ask for clarification from the child's doctor if necessary.

Privacy concerns

If an emergency response is needed because an identified child is having an anaphylactic reaction, it is crucial to be able to access the child's Action Plan as quickly as possible. However, displaying the Action Plan containing personal health information where it is readily visible may raise concerns about privacy. When developing a management plan, the location where the Anaphylaxis Action plan will be displayed should be discussed with the identified child's parents, and any privacy concerns they may have addressed as far as possible before displaying the Action Plan in the best location/s possible. They should be informed that:

- it is important for all staff, as well as other parents or visitors who may be in the service, to be aware that their child is at risk of anaphylaxis if accidentally exposed to the allergen, and
- it is important that the Action Plan is immediately accessible to staff and others who may be called upon to give first aid and administer an EpiPen®, if an emergency response is necessary for an anaphylactic reaction.

Training and awareness

Despite the best efforts of all concerned to prevent children at risk of anaphylaxis being exposed to allergens, accidents can happen. Even if there is no child enrolled who is known to be at risk of anaphylaxis, it is possible that an initial episode could occur unexpectedly in a child not previously diagnosed as having a food allergy.

All staff should have an awareness of anaphylaxis and understand the service policy on prevention and response. Services can consider whether all staff, or only certain identified staff, should have specific anaphylaxis training, so there is confidence about the service's capacity to respond to an emergency situation.

Anaphylaxis training should include:

- awareness about those allergens that could cause a severe reaction
- preventative measures to minimise the risk of an anaphylactic reaction
- recognition of the signs and symptoms of anaphylaxis, and
- emergency treatment, including practical training in the administration of an EpiPen®.

Refresher training is advised every two years or when the needs of the service or the child/ren changes. This would include the enrolment of a child at risk of anaphylaxis or when an already enrolled child is diagnosed as at risk of anaphylaxis.

Services may purchase a trainer EpiPen® so that staff can have regular practice with the device (purchase through Anaphylaxis Australia, <http://www.allergyfacts.org.au/>).

Staff and parents should not have a false sense of security even if steps have been taken to remove an allergen from the environment. Instead the licensee should recognise the need for staff awareness about hazards and ensure policy and training to recognise and manage a severe allergic reaction or anaphylaxis with confidence.

In environments where food is provided for children at risk of anaphylaxis, cooks

and other food providers should be fully informed about food allergy, risky food preparation procedures, cross-contamination, and the options for nutritionally equivalent substitutes for potential allergens in recipes and food preparation.

Please refer to Appendix 4 and Appendix 5 for further information about training.

Appendix 1

Examples of strategies to avoid allergens

Risk	Strategy
Food allergies Sharing food	<ul style="list-style-type: none"> • regular discussions with children about the importance of eating your own food and not sharing • food is eaten in specified area which is a focus of supervision • encourage parent/carer of identified child to be involved on special days that involve food.
High risk foods in the kitchen (e.g. peanut butter)	<ul style="list-style-type: none"> • inform cooking and food preparation staff of identified child and the foods to which they are allergic • place a copy of the Anaphylaxis Action Plan on the wall of the kitchen (NB the importance of displaying the plan and any privacy concerns are discussed with of the identified child's parents) • identify foods that contain or are likely to contain known allergen and replace with other suitable foods (e.g. egg substitute) or remove the food altogether.
Parties and celebrations	<ul style="list-style-type: none"> • advise parent/carer of the child identified ahead of time so that they can provide suitable food • food for the identified child should only be approved and provided by the child's parent/carer • inform other parents of known food allergies and, particularly if the allergen is peanuts or tree nuts. Request that these parents avoid these foods to the children's service • consider non-food rewards • parents of the identified child can provide specially prepared cupcakes/muffins to be stored in a clearly labelled container in a freezer. These can be given to the identified child when other children are having birthday cake.
Insect sting allergies Grassed and garden areas	<ul style="list-style-type: none"> • decrease number of those plants in grounds that attract bees, • ensure grass is kept short • ensure allergic child wears shoes at all times • keep lids on garbage bins; do not leave drinks or drink bottles exposed in the outdoor area. • remove insect nests.
Latex allergies	<ul style="list-style-type: none"> • avoid contact with party balloons and latex gloves.

Appendix 2

Information on the EpiPen®

What is an EpiPen®?

The EpiPen® is an auto-injector device containing a single dose of adrenaline in a spring-loaded syringe. A version containing half the standard dose of adrenaline (EpiPen Jr) is available for small children (who weigh between 10kg and 20 Kg). The EpiPen® has been designed as a first aid device for use by people without formal medical or nursing training.

When adrenaline is injected, it rapidly reverses the effects of a severe allergic reaction by reducing throat swelling, opening the airways, and maintaining blood pressure. Adrenaline (also called epinephrine) is a natural hormone released in response to stress. It is a natural “antidote” to the chemicals released during severe allergic reactions (anaphylaxis) to common allergens such as drugs, foods or insect stings. Adrenaline is destroyed by digestive enzymes in the stomach, and so it needs to be administered by injection.

What if the child is unable to administer his or her own injection?

At any age, a child or young person may be unable to administer their own medication, particularly if they become too distressed or incapacitated. A staff member should administer the EpiPen® immediately. Waiting for help to arrive may endanger the child’s life.

How quickly does an EpiPen® work?

Signs of improvement should be seen rapidly, usually within a few minutes. If there is no improvement, or the symptoms are getting worse, then a second injection may be administered after 5 to 10 minutes.

Is giving an EpiPen® safe?

Administration of the EpiPen® is very safe. The needle is thin and short (14 mm) so damage to nerves and blood vessels is not a concern when it is administered in the outer mid-thigh according to standard instructions.

When it is suspected that a person is having an anaphylactic reaction, not giving the EpiPen® can be much more harmful than giving it when it may not have been necessary.

What would happen if the EpiPen® is given and it was subsequently found to be unnecessary?

The speed and force of the heartbeat could increase and the child may have palpitations and feel shaky for a few minutes. This should wear off after 10 to 15 minutes.

How should a used EpiPen® be disposed of?

The time of administration of the EpiPen® should be noted. The used EpiPen® should be placed into its screw-top container and given to the ambulance crew so they will know what medication the child has received.

Appendix 3

Things to consider

- Is the centre prepared for an emergency for identified child/ren?
- Are you prepared for an emergency for child/ren in your care that might have their first severe allergic or anaphylactic response?
- Are all staff aware of severe allergy and the implications for children's services? Does this include casual/relief staff, cooks, cleaners and administration staff?
- Are all staff aware of any child/ren within the service who are at risk of severe allergy and what the allergen is? Does this include casual/relief staff, cooks, cleaners and administration staff?
- Are volunteers aware of the policy and procedures? Will they be able to alert staff to the issue if necessary?

NB: If younger siblings attending when a parent is volunteering should not wander about with food or play with toys while eating.

- Is there a plan for on-going management to reduce risk of exposure to allergens?
- Have staff responsible for an identified child/ren received practical training in responding to anaphylaxis? Do staff attend refresher training?
- Has a management plan for identified child/ren been negotiated with their parents? Is the plan kept up-to-date?
- Have parents provided an Anaphylaxis Action Plan for identified child/ren following negotiation with their doctor/specialist? Is the plan kept up-to-date? Have we discussed the importance of displaying the Action Plan with the child's parents and addressed any privacy concerns they may have? Is the Action Plan displayed in the best possible location/s? Are all staff aware of the need to deal with such information sensitively and confidentially?
- Is the centre as safe as is practicable for child/ren with severe allergy?
- Are service policy and procedures reviewed regularly so that information is up-to-date, and staff are confident and prepared?
- Is the whole service community well educated about the issue and the service policy?

Appendix 4

Resources and information

For further information about severe allergy and anaphylaxis see:

- NSW Health website: <http://www.health.nsw.gov.au/topics/index.html> and http://www.health.nsw.gov.au/public-health/clinical_policy/topics/allergies/index.html
- Australasian Society of Clinical Immunology and Allergy (ASCI), at www.allergy.org.au, provides information on allergies and guidelines for schools and children's services. The Anaphylaxis Action Plan can be downloaded from this site. Contact details for Allergists may also be provided. Phone: 0425 216 402
- Anaphylaxis Australia Inc, at www.allergyfacts.org.au, is a non-profit support organisation for families with food anaphylactic children. Items such as storybooks, DVDs, EpiPen® trainers and so on are available for sale from the Product Catalogue on this site. Anaphylaxis Australia Inc provides a telephone support line for information and support to help manage anaphylaxis.
- Allergy units at public hospitals, including: Royal Prince Alfred Hospital, Sydney Children's Hospital, The Children's Hospital at Westmead, The John Hunter Hospital provide information about allergies and services provided by the hospital (services may include training).
- For information and model policy see the Victorian website: www.office-for-children.vic.gov.au/children/ccdnav.nsf/childdocs/ - or the UK website: http://www.allergyinschools.org.uk/preschools_manage.html
- Training can currently be sought from a range of Registered Training Organisations including St John's and Red Cross.