

Office of Education  
Early Childhood Education and Care

# ANAPHYLAXIS GUIDELINES FOR EARLY CHILDHOOD EDUCATION AND CARE SERVICES



NSW DEPARTMENT OF EDUCATION AND COMMUNITIES

# Foreword

These guidelines for early childhood education and care services have been developed to assist:

1. In the management of the health care needs of children in the service who have been identified by a medical practitioner as being at risk of anaphylaxis
2. In the day-to-day management of the service to reduce the likelihood of exposure to relevant allergens
3. In the development of your service policy and procedures for managing children's medical conditions.

## Application

The guidelines are directly relevant to services regulated under the National Quality Framework, namely preschools, long day care, outside school hours care and family day care, and to services regulated under the *Children (Education and Care Services) Supplementary Provisions Act 2011 and Regulation*. These services include occasional care, home-based care and mobile services.

The guidelines may also be useful to staff in the wider range of services that work with families and young children, for example, early intervention services, supported playgroups and child and family support services.

The Department of Education and Communities requires that NSW government schools and preschools implement the *Anaphylaxis Procedures for Schools*. This document is available at:

[www.schools.nsw.edu.au/studentssupport/studenthealth/conditions/anaphylaxis/index/php](http://www.schools.nsw.edu.au/studentssupport/studenthealth/conditions/anaphylaxis/index/php)

Outside school hours care services may also find useful information in the procedures for above referenced schools as these contain information relevant to older children. However outside school hours care services should still consider the guidelines for Early Childhood Education and Care Services as their principal reference.

## Acknowledgements

These guidelines have been developed by the NSW Department of Education and Communities with the assistance of the NSW Ministry of Health. In developing the guidelines the Department consulted with peak stakeholder groups represented on the Department's Early Childhood Education and Care Reference Group. Feedback received from members has been incorporated in the guidelines.

The medical information provided by experienced medical practitioners for inclusion in this document is current at the time of publication and reflects current best practice in relation to severe allergy and anaphylaxis.

These guidelines were developed with reference to the Australasian Society of Clinical Immunology and Allergy (ASCI) *Guidelines for prevention of anaphylaxis in schools, preschools and childcare: 2012 update*, and the NSW Department for Education and Communities *Anaphylaxis Procedures for Schools 2012*.

## In this document

- The identified child means the child who is diagnosed as having had anaphylaxis or is at risk of anaphylaxis
- Adrenaline autoinjector refers to both Adrenaline autoinjector and Adrenaline autoinjector Junior
- Parent means parent or guardian
- The term staff refers to those working with children in a service and may be taken to include volunteers.

## What is anaphylaxis?

Anaphylaxis is a severe and sometimes sudden allergic reaction. It can occur when a susceptible person is exposed to an allergen (such as food or an 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.

The potential for an anaphylactic reaction to occur can be reduced by risk minimisation strategies but it is not possible to achieve a completely allergen-free environment in any service that is open to the general community. Any anaphylactic reaction always requires an emergency response.

# Regulatory requirements

## Anaphylaxis and early childhood education and care services

Anaphylaxis and severe allergy need to be considered in many aspects of the delivery of an early childhood education and care service. This will include first aid and staff training, food preparation and nutrition, enrolment procedures and parent communication. It involves day-to-day management to reduce the risk of exposure to relevant allergens, and being prepared for emergency responses if an anaphylactic reaction occurs.

For early childhood education and care services regulated under the National Quality Framework (that is, long day care, preschools, outside school hours care and family day care) a number of requirements apply. Services must have policies and procedures dealing with children's medical conditions (Regulations 168 and 169), and the approved provider of the service must take reasonable steps to ensure that these policies and procedures are followed (Regulation 170).

In addition at least one educator who has completed approved anaphylaxis management training is required to be in attendance at any place where children are being educated and cared for by the service, and be immediately available in an emergency, at all times children are being educated and cared for by the service (Regulation 136). This requirement also applies to services regulated under the *Children (Education and Care Services) Supplementary Provisions Regulation 2012*.<sup>1</sup> (Regulations 51, 78 and 84).

State regulated education and care services are also required to develop a range of policies to promote the health, safety and well-being of children attending the service [Regulation 85]. The Supplementary Regulation refers to many aspects of service delivery that should be considered when planning for the management of severe allergy and anaphylaxis. For example, this should include, but is not limited to: child health, food and nutrition, storage of dangerous substances and equipment, conduct of excursions, illness, accident and emergency treatment, and records in relation to children (Regulations 66, 67, 69, 78, 80 and 92).

Staff should also have approved training in first aid, and relevant staff should be trained in food safety and nutrition so that the service can provide for any special dietary needs of children enrolled at the service. There are also requirements for records to be kept in relation to the child's health and personal information taken at enrolment. Specific information about an allergic child will need to be taken at enrolment, on diagnosis or when the child's medical condition changes.

Education and care services need to plan the way they will respond to unexpected situations. In the case of children at risk of anaphylaxis, staff must be able to respond in an emergency. This requires training for relevant staff in the use of an adrenaline autoinjector, both the EpiPen® and Anapen®.

Both the National Regulations and the Supplementary Regulation allow for the administration of medication to a child in an emergency situation regardless of whether or not an authorisation to administer the medication has been obtained from the child's parent. Specific requirements apply in such situations which are covered in Regulation 94 of the National Regulations and Regulations 80 and 81 of the Supplementary Regulation.

<sup>1</sup> Made under the Children (Education and Care Services) Supplementary Provisions Act 2011

## Medical conditions policy

Services regulated under the National Quality Framework are required to maintain a medical conditions policy (Regulation 90) that sets out practices for:

- the management of medical conditions, including a diagnosis that a child is at risk of anaphylaxis
- informing educators and volunteers of the service's practices for managing the medical conditions covered by the policy
- the requirements that apply if a child enrolled at the service has a specific health care need, allergy or medical condition including requiring:
  - the child's parent to provide a medical management plan for the child
  - staff and volunteers to follow the medical management plan
  - that a risk minimisation plan is developed in consultation with a child's parents
  - the development of a communications plan to ensure staff and volunteers are informed about the medical conditions policy and any medical management plan and risk minimisation plan for a child attending the service, and that a child's parents can communicate any changes to the medical management plan and risk minimisation plan for their child.

In addition, certain health information must be kept in the enrolment record for each child enrolled at a service (Regulation 162), including:

- details of any specific healthcare needs of the child, including any medical condition
- details of any allergies, including whether the child has been diagnosed as at risk of anaphylaxis
- any medical management plan, anaphylaxis medical management plan or risk management plan to be followed with respect to a specific healthcare need, medical condition or allergy recorded in the enrolment record
- details of any dietary restrictions for the child.

A notice is also required to be displayed at the service premises if a child who has been diagnosed as at risk of anaphylaxis is enrolled at the service (Regulation 173).

It is recommended that early childhood education and care services outside the scope of the National Quality Framework also follow these practices and procedures.

## Training and awareness

Despite the best efforts of all concerned to prevent children at risk of anaphylaxis being exposed to allergens, the possibility of exposure cannot be completely eliminated. 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 regulated under both the National Quality Framework and the Education and Care Services Supplementary Provisions legislation are required to have at least one educator who has undertaken current approved anaphylaxis management training to be in attendance whenever children are being educated and cared for by the service.

The Australian Education and Care Quality Authority (ACECQA) is responsible for approving anaphylaxis management training, and for publishing a list of approved training on their website at:

[www.acecqa.gov.au/Qualifications.aspx](http://www.acecqa.gov.au/Qualifications.aspx)

## 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
- emergency treatment, including practical training in the administration of an adrenaline autoinjector.

**Refresher training is advised every two years from the date of completion of approved training or when circumstances arise in which the provider considers refresher training to be advisable, for example, following the introduction of a new treatment.**

Services may purchase a trainer adrenaline autoinjector so that staff can have regular practice with the device. Trainer autoinjectors are available at pharmacies. Any trainer autoinjectors should be clearly labelled to avoid confusion with actual autoinjectors containing medication.

Staff and parents should be aware that it is not possible to achieve a guaranteed allergen-free environment even where risk minimisation strategies have been implemented. The service provider should recognise the need for staff awareness about hazards and maintain policies, procedures 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, procedures should be in place to ensure that cooks and other food providers are fully informed about food allergy and follow safe food preparation procedures. Procedures should address the risk of cross-contamination and provide options for nutritionally equivalent substitutes for potential allergens in recipes and food preparation.

# Practice information

## Allergies in early childhood

Although mild, moderate and even severe allergic reactions to foods, stings and bites are common in children, deaths are rare.<sup>2</sup>

Foods are the most common cause of allergies in infants and young children. Estimated rates of food allergy are between 5-10% in infants, preschool age and school age children.<sup>3</sup> Food allergies may become evident during the first 12 months when a child is given a food for the first time.

## Common food allergens in children

- peanuts
- fish and shellfish
- tree nuts (eg. cashew, hazelnut, walnut, Brazil nut, almond, pecan)
- wheat
- cow's milk and other dairy foods
- sesame
- egg
- soy.

A number of other foods may cause allergies in individuals.

Based on prevalence rates, which have increased in recent years, it is likely that most services operating in NSW could have at least one child with a food allergy enrolled.

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, tick 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 and balloons could be a significant source of latex exposure in education and care services and can be a hazard for children with specific latex allergy. Latex allergy is an uncommon allergy.

<sup>2</sup> ASCIA Guidelines for prevention of anaphylaxis in schools, preschools and childcare: 2012 update. [www.allergy.org.au/pospapers/anaphylaxis.htm](http://www.allergy.org.au/pospapers/anaphylaxis.htm)

<sup>3</sup> Osborne, Nicholas J et al. Prevalence of challenge-proven IgE-mediated food allergy using population-based sampling and predetermined challenge criteria in infants. *Journal of Allergy and Clinical Immunology* 2011;129(3): 668-676.

## 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 severity of an anaphylactic reaction can be influenced by a number of factors including minor illness, asthma and, in the case of food allergens, the amount eaten. In the case of severe food allergies, an anaphylactic reaction is usually triggered by ingestion of the food. Contact skin reactions to an allergen are very unlikely to trigger anaphylaxis, however, any skin reaction should be monitored and treated appropriately to minimise the risk.

### **In some cases, anaphylaxis is preceded by signs of a mild to moderate allergic reaction including:**

- swelling of face, lips and eyes
- hives or welts on the skin
- tingling mouth
- stomach pain, vomiting (these are signs of a mild to moderate allergic reaction to most allergens, however, in insect allergy these are signs of anaphylaxis).

### **A severe allergic reaction is indicated by any one of the following:**

- difficult/noisy breathing
- swelling of tongue
- swelling/tightness in throat
- difficulty talking and/or hoarse voice
- wheeze or persistent cough
- pale and floppy (in young children)
- loss of consciousness and/or collapse.

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 an education and care service.

## **Children are at increased risk where they have food induced anaphylaxis and asthma.**

Reactions can be sudden or may evolve over one to two hours. Onset within minutes of eating the food and rapid progression of symptoms over five to 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 as well as for parents and on-lookers.

## **Emergency response**

Anaphylaxis always requires an emergency response. It is important to know which children have anaphylaxis and where their adrenaline autoinjector is located. It is also important to be aware that a child could have their first allergic or anaphylactic reaction at the service.

If in doubt about the seriousness of a reaction, an adrenaline autoinjector should be administered to the child if available and an ambulance called immediately. Early recognition of symptoms and immediate treatment could save a child's life.

For a child with asthma who is also at risk of anaphylaxis, the adrenaline autoinjector should be used first, followed by asthma reliever medication, calling an ambulance, continuing asthma first aid and following the instructions on the child's medical management plan (if one has been provided to the service).

## The adrenaline autoinjector

Adrenaline autoinjectors contain a single dose of adrenaline in a spring-loaded device. Two brands are approved in Australia – the EpiPen® and the Anapen®.

A version containing half the standard dose of adrenaline (EpiPen® Jr and Anapen® Jr) is available in both brands for small children who weigh between 10 and 20 kg or are aged approximately between one and five years.

Anapens and EpiPens look and operate differently – it is important that an adequate number of staff in each education and care service are trained in their use to ensure compliance with regulatory requirements.

It is the responsibility of the parent to provide an adrenaline autoinjector if their child has been medically diagnosed to be at risk of anaphylaxis. It is important to store the autoinjector, together with the child's medical management plan, in a central location which is secure but not locked. Some children attending outside school hours care services may be mature enough to carry their own autoinjector.

Medical advice is that any child who has been medically diagnosed as requiring an adrenaline autoinjector should not attend a service unless an adrenaline autoinjector is provided by the child's parent. This is consistent with the provisions of the *Education and Care Services National Regulations* in relation to matters that are to be covered in a service's medical conditions policy (Regulation 90). (See also section on Liabilities).

## Prevention of allergic reactions

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

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

- 1 obtaining medical information about children at risk of anaphylaxis
- 2 staff training about how to recognise and respond to a mild, moderate or severe allergic reaction, including training in the use of adrenaline autoinjector devices
- 3 implementation of practical strategies to avoid exposure to medically confirmed allergens
- 4 age appropriate education of children with severe allergies and their peers.<sup>4</sup>

In early childhood education and care 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 early childhood education and care services have developed policies to exclude foods such as peanut butter. Some have also excluded food products with 'may contain traces of...' statements on the package. However, this may not always be necessary.

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 or other items, for example, egg cartons, should be made in consultation with the identified child's medical specialist and the child's parents. Services could also consider implementing a 'no food sharing' policy.

<sup>4</sup> ASCIA Guidelines for prevention of anaphylaxis in schools, preschools and childcare: 2012 update

It should be made clear to parents and staff that, although allergen avoidance policies (generally referred to as 'allergy aware') 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. Information on service policy can be provided to parents on enrolment with reminders made through regular parent communications, such as newsletters. Management and response must be planned for so 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 labelled '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, medical specialists 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 and the child's parents can be sought to clarify any concerns
- continuing education and awareness strategies.

## Planning and responding

### Effective policy and planning should:

- **minimise the risk** of exposure to an allergen occurring while the identified child is in the care of the education and care 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 the child
- ensure sufficient staff members have **adequate training in and knowledge** of allergies, anaphylaxis and emergency procedures to ensure a person with the required training and skills is in attendance at all times children are attending a service, including during the conduct of excursions
- **facilitate communication** to ensure the safety and wellbeing of children at risk of anaphylaxis
- **raise awareness** about allergies and anaphylaxis amongst the service community and children in attendance

### Effective policy and planning needs to:

- be undertaken in consultation with parents and staff
- be informed by the relevant requirements of the *Education and Care Services National Law and National Regulations* and the *Children (Education and Care Services) Supplementary Provisions Regulation 2012* (as appropriate)
- outline clear procedures for the 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 emergency care, including competently implementing a medical management plan and administering an adrenaline autoinjector
- 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 education and care service that is open to the general community. 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 education and care service.

## Role of the parent

It is important that parents notify the service if their child has an allergy and is at risk of anaphylaxis. This notification should occur either at the time of enrolment, or if the child is already enrolled, as soon after diagnosis as possible. So that the support provided by the service is effective it is important that a partnership is established between the parent and the service to share information and clarify expectations.

### It is the role of the parent to:

- promptly notify the education and care service if they are aware that their child has been diagnosed as being at risk of a severe allergic reaction
- promptly notify the education and care service if the health needs of their child change
- promptly notify the education and care service if their child has a severe allergic reaction while not at the service, either at home or at another location
- inform the education and care service of any other health care needs, disability or learning or behaviour difficulties which may impact on the management of anaphylaxis

- assist in the development of a risk minimisation plan for the service to support their child's health care needs
- provide a medical management plan completed and signed by the child's medical practitioner. A new plan should be completed by the doctor each time an adrenaline autoinjector is prescribed. It is important that parents provide the education and care service with a copy of any updated plan
- provide the equipment and consumables for carrying out health care support procedures as specified in the child's medical management plan including, where relevant, the appropriate adrenaline autoinjector
- replace the adrenaline autoinjector in a timely manner before it expires or after it has been used
- authorise the service to administer prescribed medications where necessary. For example, some children are prescribed antihistamine or have other health conditions that require administration of prescribed medications.

## Liabilities

Education and care services must provide a safe and appropriate service environment for children. All providers and staff have a legal duty to take reasonable steps to keep children in their care safe from risk of foreseeable harm. Such 'reasonable steps' include the administration of an autoinjector and/or any other emergency care provided when a child has an anaphylactic reaction at an education and care service.

Employers of persons working in education and care services will generally be legally liable for the acts or omissions of their employees at work which result in a breach of the duty of care to a child attending an education and care service. This is called the principle of vicarious liability. It essentially means that employers are legally responsible for what their staff do as part of their work. The exception is where the actions of an employee amount to serious and wilful misconduct. Carelessness, inadvertence or a simple mistake do not amount to serious and wilful misconduct.

### ***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 exception is where there has been serious and wilful misconduct.

### ***Work Health and Safety Act 2011***

The Work Health and Safety Act 2011 provides that a person conducting a business or undertaking must ensure as far as is reasonably practicable that the health and safety of persons at the workplace are not put at risk from work carried out as part of the conduct of the business or undertaking (section 19).

Section 28 of the *Work Health and Safety Act* provides that a worker must:

- take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons
- comply, so far as the worker is reasonably able, with any reasonable instruction that is given by the person conducting a business or undertaking to allow compliance with the Act
- co-operate with any reasonable policy or procedures of the person conducting the business or undertaking relating to health and safety at the workplace that has been notified to workers.

### ***Disability Discrimination Act 1992 and Anti-Discrimination Act 1977***

A child who is at risk of anaphylaxis may be held to have a disability for the purposes of the *Disability Discrimination Act 1992* and/or the *Anti-Discrimination Act 1977*.

Refusing enrolment or continued access to a service in circumstances other than where there are unresolvable safety concerns or an unjustifiable hardship arises may amount to unlawful discrimination. It is recommended that independent legal advice is sought before a decision is made to reject a child's enrolment at an education and care service or to limit the extent to which he or she is able to participate in any activities conducted by the service on the basis of the child's anaphylaxis.

# Appendix 1

## Examples of strategies to avoid allergens

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

# Appendix 2

## Information on the adrenaline autoinjector: the EpiPen® and the Anapen®

### What is an adrenaline autoinjector?

Adrenaline autoinjectors are auto-injector devices containing a single dose of adrenaline in a spring-loaded syringe. Two brands are approved for sale in Australia by the Therapeutic Goods Administration: the EpiPen® and the Anapen®. A version containing half the standard dose of adrenaline (EpiPen® Jr and Anapen® Jr) is available in both brands for small children (under 20kg). Anapen® is also available in a 500mcg/0.50mg dose prescribed for any patient over 60kg.

Adrenaline autoinjectors have been designed as first aid devices 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.

It is important for service staff to be aware that EpiPen® devices look and operate differently to the Anapen® devices. Information showing the differences between EpiPens® and Anapens® and how they operate can be found on the ASCIA website resources page at:

[www.allergy.org.au/health-professionals/anaphylaxis-resources](http://www.allergy.org.au/health-professionals/anaphylaxis-resources)

### Administering the autoinjector

Under preschool and preschool aged children attending early childhood education and care services would not be able to administer their own injection. A staff member should administer the adrenaline autoinjector immediately. Waiting for help to arrive may endanger the child’s life.

### How quickly does an adrenaline autoinjector 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 minutes.

### Is giving an adrenaline autoinjector safe?

Administration of the adrenaline autoinjector 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 child is having a severe allergic reaction, not giving the adrenaline autoinjector can be much more harmful than giving it when it may not have been necessary.

### What would happen if the adrenaline autoinjector 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 adrenaline autoinjector be disposed of?

The time of administration of the adrenaline autoinjector should be noted. In the case of the EpiPen®, a needle shield covers the needle after use so there is no sharp evident. In the case of the Anapen, a sharp is evident after use as the needle does not fully retract and so it should be stored carefully until ambulance officers arrive. Any used adrenaline autoinjector should be given to the ambulance officers for safe disposal. This also assists the ambulance crew in knowing what medication the child has received.

### Adrenaline autoinjector storage, shelf life and replacement

Adrenaline autoinjectors should be stored in a cool dark place (such as an insulated wallet) at room temperature, between 15 and 25 degrees Celsius. They must not be refrigerated, as temperatures below 15 degrees Celsius may damage the autoinjector mechanism.

Adrenaline autoinjectors should be kept out of the reach of children attending the service, however, they must be readily available when needed and NOT locked in a cupboard. A copy of the child's medical management plan should also be stored with their adrenaline autoinjector.

The shelf life of adrenaline autoinjectors is normally around 1 to 2 years from the date of manufacture. The expiry date on the side of the device should be noted, for example, in a diary or calendar, and the device replaced prior to this date. Expired adrenaline autoinjectors are not as effective when used for treating allergic reactions. However, a recently expired adrenaline autoinjector should be used in preference to not using one.

It is the role of the parent to provide the prescribed adrenaline autoinjector and to replace it when it expires or after it has been used. A child's medical management plan should outline a process for replacing used and expired adrenaline autoinjectors in a timely way.

### **Children who carry their own adrenaline autoinjectors in outside school hours care services**

In some cases children over preschool age attending a service as part of a before/after school or vacation care program might carry their own adrenaline autoinjector. Children at risk of anaphylaxis usually only carry their own adrenaline autoinjector once they travel independently to and from school. This often coincides with high school or the latter years of primary school. For services regulated under the National Quality Framework an authorisation for a child over preschool age to self-administer medication is required (Regulation 96).

Where a child carries their own adrenaline autoinjector it is advisable that the service requests the child's parent to provide a second adrenaline autoinjector to be kept on the service premises.

Older children may carry an adrenaline autoinjector on their person, as specified in their individual medical management plan. If this is the case, a second autoinjector should be kept in a central location within the service in order to provide a safe environment, as it should not be relied upon that the autoinjector is always being carried on their person.

If a child does carry an autoinjector the exact location of the autoinjector should be easily identifiable by service staff. Hazards such as identical school bags in before and after school care should be considered.

Where an autoinjector is carried on their person, a copy of the child's medical management plan should also be carried.

### **Adrenaline autoinjectors for general use (not specifically prescribed for a child)**

Adrenaline autoinjectors are available from pharmacies without a prescription (not Pharmaceutical Benefits Scheme (PBS) subsidised). While it is the role of a parent to provide adrenaline autoinjectors for children diagnosed at risk of anaphylaxis, a service may decide to purchase one or more additional adrenaline autoinjectors to have as a back-up. The inclusion of a general use adrenaline autoinjector as part of a service's first aid kit is recommended to use, for example, in a situation where a previously undiagnosed child is having a first episode of anaphylaxis. Where a service purchases one or more adrenaline autoinjectors for general use it is recommended that these be included in first aid kits brought on excursions.

The NSW Ministry of Health advises that the 150 microgram adrenaline autoinjector (EpiPen® Jr and Anapen® Jr) should be used in early childhood settings.

Where a service purchases an adrenaline autoinjector for general use the service should also have in place a system to replace expired or used general use autoinjectors in a timely way.

Further information about adrenaline autoinjectors for general use can be found on the ASCIA website at:

[www.allergy.org.au/health-professionals/anaphylaxis-resources/adrenaline-autoinjectors-for-general-use](http://www.allergy.org.au/health-professionals/anaphylaxis-resources/adrenaline-autoinjectors-for-general-use)

### **Giving a second dose of an adrenaline autoinjector**

If an adrenaline autoinjector is administered it is important to note the time of administration. If there is no change in the child's condition after 5 minutes (ie. there is no response) a second adrenaline autoinjector should be administered to the child if available and, if not already done, an ambulance called immediately.

Information about the time that a child has been administered an adrenaline autoinjector should also be provided to ambulance personnel when they arrive at the school.

Subject to service policy, another child's adrenaline autoinjector may be used if a second adrenaline autoinjector is required or, if available, a general use adrenaline autoinjector purchased by the service. If there are concerns that the child whose adrenaline autoinjector has been used may be placed at risk because their adrenaline autoinjector is no longer available, he or she can also be transported to hospital.

# Appendix 3

## Things to consider

- Is your service prepared for an emergency for identified child/ren?
- Is your service prepared for an emergency for child/ren that might have their first severe allergic or anaphylactic response while attending the service?
- Are all staff aware of severe allergy and the implications for education and care 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 are attending when a parent is volunteering they should not wander about with food or play with toys while eating.
- Is there a plan for ongoing management to reduce risk of exposure to allergens?
- Have staff responsible for identified child/ren received approved training in anaphylaxis management? Do staff attend refresher training?
- Have parents provided a medical management plan for identified child/ren following negotiation with their doctor/specialist? Is the plan kept up-to-date? Has the importance of displaying the plan been discussed with the child's parents, and any privacy concerns they may have been addressed? Is the 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 service premises as safe as is practicable for child/ren with severe allergy?
- Are service policies and procedures reviewed regularly so that information is up-to-date, and staff are confident and prepared?
- Are children with allergies (and other special needs) considered when developing excursion policies and procedures and when conducting risk assessments?
- 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 Ministry of Health

Allergies and anaphylaxis factsheets

[www.health.nsw.gov.au/factsheets/general/allergies.html](http://www.health.nsw.gov.au/factsheets/general/allergies.html)  
[www.chw.edu.au/parents/factsheets](http://www.chw.edu.au/parents/factsheets)

### Australian Children's Education and Care Quality Authority

Approved anaphylaxis management training

[www.acecqa.gov.au/First-aid-qualifications-and-training](http://www.acecqa.gov.au/First-aid-qualifications-and-training)

### Australasian Society of Clinical Immunology and Allergy (ASCIA)

Anaphylaxis resources, including the ASCIA Action Plan for Anaphylaxis (a type of medical management plan) and anaphylaxis e-training.

[www.allergy.org.au](http://www.allergy.org.au)  
[www.allergy.org.au/content/view/10/3/](http://www.allergy.org.au/content/view/10/3/)  
<http://etraining.allergy.org.au>

### Allergy and Anaphylaxis Australia

A support organisation for anyone needing to manage allergy and the risk of anaphylaxis. This includes families with food anaphylactic children and childcare and teaching professionals. Items such as storybooks, DVDs and medication and training accessories are available for sale from the online store.

[www.allergyfacts.org.au](http://www.allergyfacts.org.au)

## The Children's Hospital at Westmead

Allergy factsheets

<http://kidshealth.chw.edu.au/fact-sheets>

Allergy units at other public hospitals also provide information about allergies and services provided by the hospital.

EpiPen® and Anapen® trainers can be purchased from pharmacies.

Information about how to use an EpiPen® autoinjector is available at [www.epiclub.com.au](http://www.epiclub.com.au) and information about how to use an Anapen® autoinjector is available at [www.analert.com.au](http://www.analert.com.au)