

# Module 5

## Anaphylaxis



# Online Module Overview

This document has been provided for participants completing a Revive2Survive First Aid Training course.

Please use this material to complete the Course Pack and answer the online multiple-choice theory assessment.

There are no assessments in these module packs, please use the link and attachment provided in your course confirmation email.

This information is to be used as a learning tool and while information contained in this online learning is frequently updated, medical advice should be sought from a practitioner in an emergency.

**Module 1- CPR Resuscitation & the Airway**

**Module 2- Medical Emergencies**

**Module 3- Bleeds, Burns & Wounds**

**Module 4- Environmental Emergencies**

**Module 5- Anaphylaxis**

**Module 6- Asthma**

**Module 7- Assessment of a Casualty**

**Please note-**

\*\*HLTAID009 Provide CPR is recommended to be renewed every 12 months

\*\*HLTAID011 Provide First Aid is recommended to be renewed every 3 years



# Module 5 Overview

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Incident Review

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Stress Management

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Risk Minimisation

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Communication Plan



# Allergy vs Anaphylaxis

## What is an allergic reaction?

**Mild** – **Moderate** is not life threatening, external of the body

The immune system reacts to allergens in the environment that are harmless to most people. The allergen enters the body and is wrongly identified by the immune system as a dangerous substance.

The immune system overreacts and makes antibodies to attack the allergen.

Antibodies trigger a cascade of immune system reactions, including the release of chemicals (mast cells), most commonly known is histamine.

Histamine causes itching and reddening of the local area.



# Allergy vs Anaphylaxis

## ***What is Anaphylaxis?***

**Severe** allergic reactions are known as **ANAPHYLAXIS**

Anaphylaxis is potentially life threatening. It must be treated as a medical emergency, requiring immediate treatment and medical attention.

There are 4 ways the body can absorb an allergen- **inhale, ingest, absorb or inject.**

## **Triggers:**

People can be anaphylactic to anything but some of the most common allergens include:

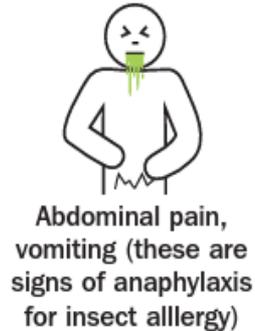
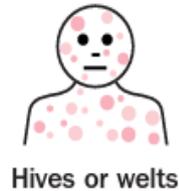
- Food (peanuts, nuts, milk, egg, fruits, seafood etc)
- Insect Bites (bees, wasps, ants etc)
- Medication (aspirin, antibiotics, herbal etc)
- Other: Latex, exercise, cold water, grasses

*If the casualty has both asthma and severe allergy symptoms, treat them with the Adrenaline Device first*

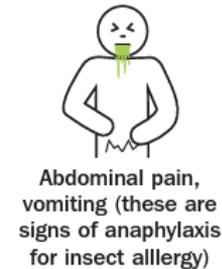


# Signs & Symptoms

## MILD or MODERATE



## SEVERE

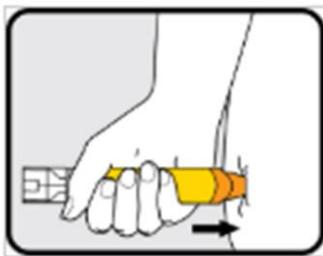


# Adrenaline

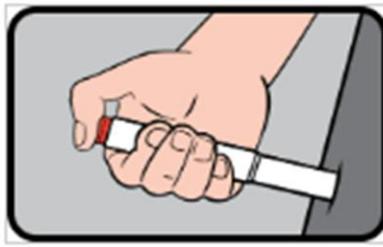
## How does adrenalin/epinephrine work?

- Adrenaline is naturally produced by the adrenal glands in times of stress
- When swelling occurs as an allergic reaction, the soft tissue within the patient's throat can also swell, compromising the airway.

Adrenalin rapidly reverses severe effects of allergic reactions by reducing throat swelling, relaxing and opening airways, and maintaining blood pressure.



EpiPen®



Anapen®



Jext®



neffy®

If no other option available, a larger Adrenaline Device can be given to children weighing over 7.5kg



# Adrenaline Devices

## Adrenaline Devices:

- Contain one single, pre-measured dose of adrenaline.
- Should be stored safely & out of direct sunlight at a temperature below 25°C.
- Expiry date is listed on the device. An expired Adrenaline Device should not be used unless it is the only device available
- A prescription is not required to purchase an Adrenaline Device.
- Are designed to be used by anyone, including those not medically trained.
- May be administered to a person who appears to have anaphylaxis who has not previously been diagnosed.
- You do not need to call 000 for permission to administer an Adrenaline Device, follow ASCIA Action Plan if available.
- Adrenaline Devices should be replaced if past their expiry date, heat effected or have been administered.



# Anaphylaxis Prevention

## Prevention is better than treatment

### To reduce risk of an anaphylactic reaction you could do the following:

- Have individual ASCIA Action Plans for those diagnosed
- Have in place risk minimisation strategies
- Have a communication plan in place for all staff
- Conduct staff training in First Aid and Anaphylaxis

### Strategies To Avoid Allergens:

- Plan outdoor activities by conducting site checks prior to excursion/outings
- Wearing appropriate clothing
- Bring medication and action plans
- Inform First Aid Officer of those in attendance diagnosed with anaphylaxis
- Clearly label food & check all supplies before use by staff/children, e.g: egg carton for craft



# ASCIA Action Plans

## There are 3 types of ASCIA Action Plans:

- Green:** ASCIA Action Plan for Allergic Reactions
- Orange:** ASCIA First Aid Plan for Anaphylaxis
- Red:** ASCIA Action Plan for Anaphylaxis

Action Plans and Adrenaline Devices should be kept in a centralised location, out of reach of children, not behind a locked door and at a temperature of 20-25 degrees Celsius.

Action Plans must be signed off by a doctor or nurse practitioner.

- Action Plans are recommended to be updated every 12-18 months or after an allergic reaction.
- The Action Plan is specific to the individual and prepared in consultation with the individual, parent or carer and medical practitioner
- Action Plans must include location of the Adrenaline Device, emergency contact details, personal details and relevant medical information



# ASCIA Action Plans



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australian society of clinical immunology and allergy  
www.allergy.org.au

ACTION PLAN FOR

## Allergic Reactions





Name: \_\_\_\_\_ Date of birth: DD / MM / YYYY

Confirmed allergen(s): \_\_\_\_\_

Family/emergency contact(s):

1. \_\_\_\_\_ Mobile: \_\_\_\_\_

2. \_\_\_\_\_ Mobile: \_\_\_\_\_

Plan prepared by: \_\_\_\_\_ (prescriber)  
who authorises medications to be given, as consented by the patient or parent/guardian, according to this plan.

Signed: \_\_\_\_\_ Date: DD / MM / YYYY

Antihistamine: \_\_\_\_\_ Dose: \_\_\_\_\_

This plan does not expire but review is recommended by: DD / MM / YYYY

This ASCIA Action Plan for Allergic Reactions is for people who have allergies but do not have a prescribed adrenaline (epinephrine) device.

### MILD TO MODERATE ALLERGIC REACTIONS

**SIGNS:**

- Swelling of lips, face, eyes
- Hives or welts
- Tingling mouth
- Abdominal pain, vomiting - **these are signs of anaphylaxis for insect allergy**

Mild to moderate allergic reactions may not always occur before anaphylaxis

**ACTIONS:**

- Stay with person, call for help
- **Give antihistamine - see above**
- Phone family/emergency contact
- Insect allergy - flick out sting if visible
- Tick allergy - seek medical help or freeze tick and let it drop off

### SIGNS OF ANAPHYLAXIS (SEVERE ALLERGIC REACTIONS)

**Watch for ANY ONE of the following signs:**

- Difficult or noisy breathing
- Swelling of tongue
- Swelling or tightness in throat
- Wheeze or persistent cough

- Difficulty talking or hoarse voice
- Persistent dizziness or collapse
- Pale and floppy (young children)
- Abdominal pain, vomiting  
**(these are signs of anaphylaxis for insect allergy)**

### ACTIONS FOR ANAPHYLAXIS

- LAY PERSON FLAT - do NOT allow them to stand or walk**
  - If unconscious or pregnant, place in recovery position - on left side if pregnant
  - If breathing is difficult allow them to sit with legs outstretched
  - Hold young children flat, not upright
- GIVE ADRENALINE DEVICE IF AVAILABLE**
- Phone ambulance - 000 (AU) or 111 (NZ)
- Phone family/emergency contact
- Transfer person to hospital for at least 4 hours of observation

**IF IN DOUBT GIVE ADRENALINE DEVICE**

Commence CPR at any time if person is unresponsive or not breathing normally



Scan for adrenaline device instructions



**ALWAYS GIVE ADRENALINE DEVICE FIRST, then asthma reliever puffer** if someone with known asthma and allergy to food, insects or medication (who may have been exposed to the allergen) has **SUDDEN BREATHING DIFFICULTY** (including wheeze, persistent cough or hoarse voice). **Anaphylaxis can occur without skin symptoms.**

If adrenaline is accidentally injected or activated, use another device if available. If adrenaline is accidentally injected contact the local poisons information centre.



# ASCIA Action Plans

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www.allergy.org.au

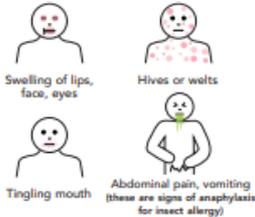
FIRST AID PLAN FOR

## Anaphylaxis

Anaphylaxis is the most severe type of allergic reaction and should always be treated as a medical emergency. Anaphylaxis requires immediate treatment with adrenaline (epinephrine). If treatment with adrenaline is delayed, this can result in fatal anaphylaxis.

### MILD TO MODERATE ALLERGIC REACTIONS

#### SIGNS



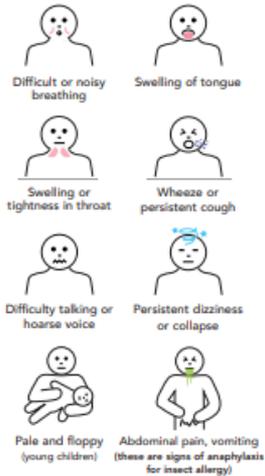
#### ACTIONS

- Stay with person, call for help
- Locate adrenaline device
- Phone family/emergency contact
- Insect allergy - flick out stinging if visible
- Tick allergy - seek medical help or freeze tick and let it drop off

Mild to moderate allergic reactions may not always occur before anaphylaxis

### ANAPHYLAXIS (SEVERE ALLERGIC REACTIONS)

#### WATCH FOR ANY ONE OF THE FOLLOWING SIGNS



#### ACTIONS

- 1 LAY PERSON FLAT - do NOT allow them to stand or walk
- If unconscious or pregnant, place in recovery position - on left side if pregnant
- If breathing is difficult allow them to sit with legs outstretched
- Hold young children flat, not upright

#### 2 GIVE ADRENALINE DEVICE

- 3 Phone ambulance - 000 (AU) or 111 (NZ)
- 4 Phone family/emergency contact
- 5 Further adrenaline may be given if no response after 5 minutes
- 6 Transfer person to hospital for at least 4 hours of observation



#### IF IN DOUBT GIVE ADRENALINE DEVICE

Commence CPR at any time if person is unresponsive or not breathing normally

**ALWAYS GIVE ADRENALINE DEVICE FIRST** if someone has **SEVERE AND SUDDEN BREATHING DIFFICULTY** (including wheeze, persistent cough or hoarse voice). **THEN SEEK MEDICAL HELP.** Anaphylaxis can occur without skin symptoms.



See page 2 for adrenaline device instructions or scan this code



Scan for translations of this plan

If device is accidentally injected or activated, use another adrenaline device if available. If adrenaline is accidentally injected, contact the local poisons information centre.

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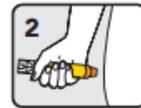
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www.allergy.org.au

## How to use adrenaline (epinephrine) devices

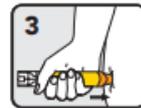
### EpiPen®



Form fist around EpiPen® and pull off blue safety release



Hold leg still and place orange end against outer mid-thigh (with or without clothing)



Push down hard until a click is heard or felt and hold in place for 3 seconds. Remove EpiPen®

EpiPen® Jr (150 mcg) is prescribed for children 7.5 - 20kg  
EpiPen® (300 mcg) is prescribed for children over 20kg and adults

### Jext®



Form fist around Jext® and pull off yellow cap



Place black injector tip against outer mid-thigh (with or without clothing)



Push black tip firmly until a click is heard and hold in place for 3 seconds. Remove Jext®

Jext® Jr (150 mcg) is prescribed for children 7.5 - 20kg  
Jext® (300 mcg) is prescribed for children over 20kg and adults

### Anapen®



Pull off black needle shield



Pull off grey safety cap from red button



Place needle end firmly against outer mid-thigh at 90° angle (with or without clothing)



Press red button so it clicks and hold for 3 seconds. Remove Anapen®

Anapen® 500 is prescribed for children over 50kg and adults

### neffy®



Hold as shown. Do not test spray



Place nozzle into nostril until fingers touch nose.



Press plunger firmly

neffy® 1mg is prescribed for children 15 - 30kg (4 years and over)  
neffy® 2mg is prescribed for children and adults 30kg and over

Follow the ASCIA Action Plan or First Aid Plan for Anaphylaxis

Each device is for single-use only.

Give the used device to the ambulance with the time it was given.



Scan this QR code for instructions on the ASCIA website.



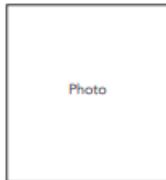
# ASCIA Action Plans



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www.allergy.org.au

ACTION PLAN FOR  
**Anaphylaxis**





Name: \_\_\_\_\_ Date of birth: DD / MM / YYYY

Confirmed allergen(s): \_\_\_\_\_

Family/emergency contact(s):

1. \_\_\_\_\_ Mobile: \_\_\_\_\_

2. \_\_\_\_\_ Mobile: \_\_\_\_\_

Plan prepared by: \_\_\_\_\_ (prescriber) who authorises medications to be given, as consented by the parent/guardian, according to this plan.

Signed: \_\_\_\_\_ Date: DD / MM / YYYY

Adrenaline device/s prescribed: \_\_\_\_\_

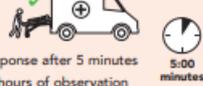
Antihistamine: \_\_\_\_\_ Dose: \_\_\_\_\_

This plan does not expire but review is recommended by: DD / MM / YYYY

## MILD TO MODERATE ALLERGIC REACTIONS

SIGNS	ACTIONS
 Swelling of lips, face, eyes   Hives or welts   Tingling mouth   Abdominal pain, vomiting (these are signs of anaphylaxis for insect allergy)	<ul style="list-style-type: none"> <li>Stay with person, call for help</li> <li>Locate adrenaline (epinephrine) device</li> <li>Give antihistamine - see above</li> <li>Phone family/emergency contact</li> <li>Insect allergy - flick out sting if visible</li> <li>Tick allergy - seek medical help or freeze tick and let it drop off</li> </ul> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-top: 10px;">                     Mild to moderate allergic reactions may not always occur before anaphylaxis                 </div>

## ANAPHYLAXIS (SEVERE ALLERGIC REACTIONS)

WATCH FOR ANY ONE OF THE FOLLOWING SIGNS	ACTIONS
 Difficult or noisy breathing   Swelling of tongue   Swelling or tightness in throat   Wheeze or persistent cough   Difficulty talking or hoarse voice   Persistent dizziness or collapse   Pale and floppy (young children)   Abdominal pain, vomiting (these are signs of anaphylaxis for insect allergy)	<ol style="list-style-type: none"> <li><b>1 LAY PERSON FLAT - do NOT allow them to stand or walk</b> <ul style="list-style-type: none"> <li>If unconscious or pregnant, place in recovery position - on left side if pregnant</li> <li>If breathing is difficult allow them to sit with legs outstretched</li> <li>Hold young children flat, not upright</li> </ul> </li> </ol> <div style="text-align: center; margin: 10px 0;">  </div> <ol style="list-style-type: none"> <li><b>2 GIVE ADRENALINE DEVICE</b></li> <li><b>3 Phone ambulance - 000 (AU) or 111 (NZ)</b></li> <li><b>4 Phone family/emergency contact</b></li> <li><b>5 Further adrenaline may be given if no response after 5 minutes</b></li> <li><b>6 Transfer person to hospital for at least 4 hours of observation</b></li> </ol> <div style="text-align: center; margin: 10px 0;">  </div> <p><b>IF IN DOUBT GIVE ADRENALINE DEVICE</b></p> <p>Commence CPR at any time if person is unresponsive or not breathing normally</p>



See page 2 for adrenaline device instructions or scan this code

**ALWAYS GIVE ADRENALINE DEVICE FIRST**, then asthma reliever puffer if someone with known asthma and allergy to food, insects or medication (who may have been exposed to the allergen) has **SUDDEN BREATHING DIFFICULTY** (including wheeze, persistent cough or hoarse voice). **Anaphylaxis can occur without skin symptoms.**

If device is accidentally injected or activated, use another adrenaline device if available. If adrenaline is accidentally injected, contact the local poisons information centre.



# Adrenaline Device Administration

## What do you do if a severe reaction occurs...

1. Lie casualty down, do not stand or walk – if hard to breathe, sit upright with legs out in front. Check for dangers.
2. If the reaction is due to an insect allergy, remove the stinger with fingernail or credit card.
3. Check Action Plan and administer Adrenaline Device.
4. Note the time!
5. Call 000-Provide time the reaction started, time adrenaline administered and vital signs.
6. If difficulty breathing continues after 5 minutes, administer further doses.

**Commence CPR if breathing stops.**

Give used Adrenaline Device to paramedics, pharmacist or dispose of in a sharps container.

If you accidentally inject yourself with the casualty's Adrenaline Device, lay down, contact your local Poison Information Centre (13 11 26) and administer the generic Adrenaline Device to the casualty.



# Adrenaline Device Administration

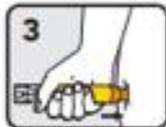
## EpiPen®



1 Form fist around EpiPen® and pull off blue safety release



2 Hold leg still and place orange end against outer mid-thigh (with or without clothing)



3 Push down hard until a click is heard or felt and hold in place for 3 seconds. Remove EpiPen®

EpiPen® Jr (150 mcg) is prescribed for children 7.5 - 20kg  
EpiPen® (300 mcg) is prescribed for children over 20kg and adults

## Jext®



1 Form fist around Jext® and pull off yellow cap



2 Place black injector tip against outer mid-thigh (with or without clothing)



3 Push black tip firmly until a click is heard and hold in place for 3 seconds. Remove Jext®

Jext® Jr (150 mcg) is prescribed for children 7.5 - 20kg  
Jext® (300 mcg) is prescribed for children over 20kg and adults

## Anapen®



1 Pull off black needle shield



2 Pull off grey safety cap from red button



3 Place needle end firmly against outer mid-thigh at 90° angle (with or without clothing)



4 Press red button so it clicks and hold for 3 seconds. Remove Anapen®

Anapen® 300 is prescribed for children over 20kg and adults

## neffy®



1 Hold as shown. Do not test spray



2 Place nozzle into nostril until fingers touch nose.



3 Press plunger firmly

neffy® 1mg is prescribed for children 15 - 20kg (8 years and over)  
neffy® 2mg is prescribed for children and adults 20kg and over



# Medical Handover

After the arrival of Paramedics, it is vital to provide a detailed handover.

## Information they require:

- Introduce the casualty
- The history (if known) including time the reaction started
- Allergen (if known)
- Time the reaction started
- Time you administered the adrenaline dose/s
- What the casualty is reporting/reported about their condition
- Signs and symptoms that were observed
- Give the used Adrenaline Device/s to the Paramedics
- Give a copy of the ASCIA Action Plan to the paramedic (if available) which includes parent contact details
- All children should be accompanied by a carer/teacher



The casualty requires transport to hospital by ambulance for observation for a minimum of 4 hours



# Review of Incident

- Debrief with staff, children & families involved. Talk to the children about their emotions and response to the event, refer to additional support if needed.
- Complete workplace incident report.
- Notify relevant authorities e.g. Government Departments, relevant governing bodies.
- Replace Adrenaline Device.
- Update Action Plan.
- Review response/procedure.

## **Review, evaluate and assess the response**

- Was the response timely?
- Where are the Adrenaline Devices kept?
- How would I get the generic Adrenaline Device in a hurry?
- Does the casualty carry their Adrenaline Device with them?
- Do their friends know how to recognise signs, symptoms and/or administer the Adrenaline Device (if age appropriate)?



# Stress Management

## After an incident it is important to observe for signs of stress:

- Observe changes in behaviour
- If upset, ask if they want to talk about it
- Offer reassurance
- Listen attentively, be calm and supportive
- For children if they don't want to talk, they may want to draw pictures to describe how they are feeling
- Talk to the parents/carers of your observations if you are concerned



# Risk Minimisation

Employers have a responsibility to provide a safe caring environment.

## Key steps are:

- Find out which individuals are known to have Anaphylaxis – obtain current action plan.
- Develop individual Anaphylaxis Management Plans for those who have been identified and implement practical strategies to avoid exposure to known allergens
- Remove potential sources of allergens or identify those that cannot be removed.
- Note differing environments and how this impacts risk.
- Develop communication to raise awareness of Anaphylaxis. This includes age-appropriate education of children with allergies.
- Ensure staff are trained in treating Anaphylaxis.
- Ensure ASCIA Action Plans and adrenaline Adrenalin Device are stored together in an unlocked location.
- Develop an Emergency Response Plan for Anaphylaxis & educate relevant staff.
- Review management plans annually or after an anaphylactic event.

For examples of risk minimisation strategies for schools, preschools and childcare service



# Communication Plan

It is important that everyone in a workplace/school/ childcare facility is aware of the seriousness of severe allergic reactions, how to avoid them, how to identify signs and symptoms and the correct emergency first aid response.

Communication plan is informing stakeholders of the workplaces policies and procedures and their roles and responsibilities in an emergency.

Communication can be distributed via face to face, flyers, noticeboards, online portals, emails etc. Communication plans should be reviewed at a minimum annually.

## **This information should be circulated amongst:**

- Workplace first aiders
- Students
- Teachers/early childhood staff
- Parents/careers/volunteers
- Casual or specialist staff
- Caterers, cooks or canteen staff
- Providers of camp/conferences
- Incursions visitors
- Excursion facilitators

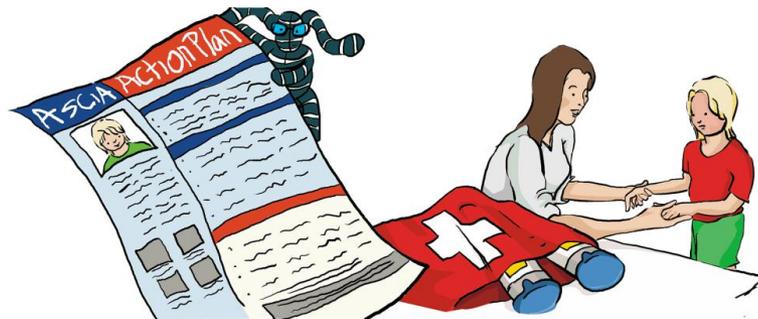


# Communication Plan

## Key information needing to be communicated:

- Those at risk
- Awareness of the seriousness of the condition
- Triggers of allergic reactions
- Signs and symptoms
- ASCIA Action Plan location
- Adrenalin Device location

*Communication plans should be reviewed annually to ensure effectiveness.*



# Information

## To find out current information , guidelines, protocols and state information, contact:

- Australasian Society of Clinical Immunology and Allergy (ASCIA)  
[www.allergy.org.au](http://www.allergy.org.au)
- Allergy and Anaphylaxis Australia  
[www.allergyfacts.org.au](http://www.allergyfacts.org.au)
- National Allergy Strategy  
[www.nationalallergycouncil.org.au](http://www.nationalallergycouncil.org.au)
- Ministerial Order 706- Anaphylaxis Management in Victorian Schools  
[www2.education.vic.gov.au/pal/anaphylaxis/policy](http://www2.education.vic.gov.au/pal/anaphylaxis/policy)
- Australian Children's Education & Care Quality Authority  
[www.acecqa.gov.au](http://www.acecqa.gov.au)
- Australian Resuscitation Council  
[www.resus.org.au/guidelines](http://www.resus.org.au/guidelines)
- Education and Care Services National Law  
[www.education.vic.gov.au/childhood/providers/regulation/Pages/anaphylaxis.aspx](http://www.education.vic.gov.au/childhood/providers/regulation/Pages/anaphylaxis.aspx)

## The best practice recommendation for educational currency in Anaphylaxis includes;

- Refresher training be undertaken whenever a new adrenaline device becomes available in Australia
- Training in 22578VIC Course in First Aid Management of Anaphylaxis be renewed every two years
- Skills and knowledge relating to using adrenaline Adrenaline Devices be refreshed annually



# Information

Australasian Society of Clinical Immunology and Allergy (ASCIA) have created a Non-Accredited Refresher e-training for schools, children's education/care and community into a short, accessible animated video.

You can choose watch this to reinforce the information in this presentation by clicking on the below link. This video runs for 16 minutes.

- Click [here](#) to view the presentation.



# Module 5 Complete

Please continue to Module 6



For first aid supplies visit

[www.firstaidgearaustralia.com.au](http://www.firstaidgearaustralia.com.au)

