Adrenaline (Epinephrine) Devices
Frequently Asked Questions

This document has been developed by ASCIA, the peak professional body of clinical immunology/allergy specialists in Australia and New Zealand. ASCIA information is based on published literature and expert review, is not influenced by commercial organisations and is not intended to replace medical advice.
For patient or carer support contact Allergy & Anaphylaxis Australia or Allergy New Zealand.

Q 1: Why is adrenaline needed to treat anaphylaxis?

Anaphylaxis is a medical emergency and adrenaline is a life saving treatment, which:

- Reverses a severe allergic reaction by treating signs and symptoms of anaphylaxis.
- Assists breathing, maintains heart function and improves blood pressure.
- Works within minutes and the effects last around 10 to 20 minutes.
- Is a hormone produced naturally in the body and is safe when given using an adrenaline device.

Q 2: What are adrenaline devices?

Adrenaline devices:

- Contain a single fixed dose of adrenaline.
- Are designed to be used by people who do not have medical training.

Adrenaline injector devices:

- Are given by injecting into the outer mid-thigh (around halfway between the hip and knee).
- Can be given through a single layer of clothing (taking care to avoid seams, pockets and very thick clothing).
- Include instructions and an expiry date on the label.

Adrenaline nasal spray devices are given by placing the device nozzle into the nostril and spraying.

Device instructions are on the ASCIA website www.allergy.org.au/hp/anaphylaxis/how-to-give-devices

Q 3: What adrenaline devices are available in Australia and New Zealand?

ASCIA recommends the use of adrenaline as the first line emergency/first aid treatment for severe allergic reactions (anaphylaxis) using any of the following adrenaline devices that are approved for use in Australia or New Zealand, and PBS or Pharmac listed.

Therapeutic Goods Administration (TGA) registered (AU)	Pharmaceutical Benefits Scheme (PBS) listed (AU)	Medsafe registered (NZ)	Pharmac listed (NZ)
EpiPen® Jr	EpiPen® Jr	EpiPen® Jr	EpiPen® Jr
EpiPen®	EpiPen®	EpiPen®	EpiPen®
Anapen® 500	Anapen® 500		
Jext® Jr	Jext® Jr		
Jext®	Jext®		
neffy® 1mg	*neffy*® 1mg		
neffy® 2mg	*neffy*® 2mg		

Q 4: How many devices can be prescribed on the PBS (AU) or Pharmac (NZ)?

Australian Government Pharmaceutical Benefits Scheme (PBS) - The initial PBS authority prescription for up to two adrenaline devices can be provided to patients:

- Assessed to be at significant risk of anaphylaxis by a clinical immunology/allergy specialist, respiratory physician, or a paediatrician, or by a GP in consultation with one of these specialists; or
- After treatment with adrenaline for anaphylaxis when they are discharged from a hospital or emergency department.

A doctor (including a GP) or nurse practitioner can provide follow-up PBS authority prescriptions for replacement of devices just prior to expiry, or devices used for treatment of anaphylaxis.

New Zealand Government Pharmaceutical Management Agency (Pharmac) - The initial Pharmac authority prescription for up to two adrenaline devices can be provided to patients:

- Assessed to be at significant risk of anaphylaxis by a relevant practitioner; or
- Who have experienced a previous anaphylactic reaction which has resulted in presentation to a hospital or emergency department.

Additional prescriptions are limited to replacement of devices just prior to expiry, or devices used for treatment of anaphylaxis.

Q 5: Why are two adrenaline devices usually prescribed for people at risk of anaphylaxis?

- For children's education and care (CEC) services or school, having two adrenaline devices means it is possible for one to be kept with the child at all times (whilst in or out of the home), and another to be kept at the CEC service or school.
- For older children or adults weighing 50 kg or more, this allows two adrenaline devices to be kept with them at all times, in case more than one dose of adrenaline is required.
- Ideally, people at risk of anaphylaxis should always have two devices available in case the ambulance is delayed during an emergency, and a second dose of adrenaline is required. As stated on the ASCIA Action Plan for Anaphylaxis: **Further adrenaline may be given if there is no response after 5 minutes.**

Q 6: Are adrenaline devices available without a prescription?

Yes. Adrenaline devices are available from pharmacies without a prescription at full retail price (not PBS subsidised). If they are purchased directly from pharmacies without a prescription, you should request training from the pharmacist on how to use the adrenaline device.

Q 7: Can an adrenaline device be purchased for general use?

Yes. Many schools and some CEC services, workplaces and restaurants purchase adrenaline devices for general use which can be included in a first aid kit. These general use devices should be:

- Given, if available, when a person having anaphylaxis does not have a prescribed device.
- Considered as an addition to prescribed adrenaline devices, NOT a substitute for them.
- Stored with the ASCIA First Aid Plan for Anaphylaxis.

Follow the instructions on the device label or ASCIA First Aid Plan for Anaphylaxis.

Advice and training from the local education and/or health authorities should be sought regarding adrenaline devices for general use.

Q 8: Why are multiple brands of adrenaline devices required?

Most countries have multiple brands of adrenaline devices available, and this is important for the following reasons:

- To ensure continued supply of life saving adrenaline, particularly if one brand has stock shortages.
- To provide choice for consumers to access devices with points of difference to best suit their needs.
- To encourage suppliers to provide devices with longer shelf life.
- To provide doctors with a choice of dose, who may prefer to prescribe a higher dose (500 microgram device) for people over 50kg. A 500 microgram device can potentially prevent the need for further doses of adrenaline (which is important due to increasing ambulance delays and many people carrying only one device).

ASCIA Action Plans for Anaphylaxis that are brand specific are available.

Updated ASCIA Action Plans for Anaphylaxis, e-training courses and other resources which include multiple adrenaline device instructions are available at www.allergy.org.au/hp/anaphylaxis

Q 9: What doses of adrenaline devices are prescribed in Australia and New Zealand?

ASCIA Guidelines recommend the doses listed in the table below, based on expert consensus and standard practice by ASCIA members, which are slightly different to the product information.

For the emergency treatment of anaphylaxis, administer adrenaline (as shown in the table below) without delay using:

- Adrenaline device if available, or
- Adrenaline ampoule and syringe injected into the outer mid-thigh.

<table>
<tr><th>Age (years)</th><th>Weight (kg)</th><th>Volume (mL) of adrenaline 1:1,000 ampoules</th><th>Adrenaline injector devices</th><th>Other adrenaline devices</th></tr>
<tr><td>~<1</td><td><7.5</td><td>0.1 mL</td><td>Not available</td><td rowspan="2">Not available</td></tr>
<tr><td>~1-2</td><td>7.5</td><td>0.1 mL</td><td rowspan="2">7.5-20 kg
EpiPen® Jr 150 microgram
Jext® Jnr 150 microgram</td></tr>
<tr><td>~2-3</td><td>15</td><td>0.15 mL</td><td rowspan="2">15-30 kg
neffy® 1mg
nasal spray device
(minimum age 4 years)</td></tr>
<tr><td>~4-6</td><td>20</td><td>0.2 mL</td><td rowspan="3">20 kg and over
EpiPen® 300 microgram
Jext® 300 microgram</td></tr>
<tr><td>~7-10</td><td>30</td><td>0.3 mL</td><td rowspan="3">30 kg and over
neffy® 2mg
nasal spray device</td></tr>
<tr><td>~10-12</td><td>40</td><td>0.4 mL</td></tr>
<tr><td>>12 and adults</td><td>>50</td><td>0.5 mL</td><td>50 kg and over
EpiPen® 300 microgram
Jext® 300 microgram
Anapen® 500 500 microgram</td></tr>
</table>

ASCIA Guidelines are consistent with the Acute Anaphylaxis Clinical Care Standard for Australia, Australian Immunisation Handbook, and recommendations from the World Allergy Organisation (WAO), Canada and the UK.

Q 10: Can a different dose or brand be given if the prescribed device is not available?

Yes**.** As stated on the ASCIA Action Plan for Anaphylaxis, if in doubt give adrenaline device using the following dosing guide:

- **For children 7.5-20kg (around 1 to 5 years of age),** a 150 microgram adrenaline injector device should be used. However, if only a higher dose device is available (300 micrograms) this should be used in preference to not using one at all. Under-treatment of anaphylaxis is more harmful (and potentially life threatening) than over-treatment of a mild or moderate allergic reaction.

  If the only device available in an anaphylaxis emergency is a 500 microgram adrenaline injector device and the child is 20 kg or under, phone emergency services. Ask a paramedic or medical officer to provide advice and guidance prior to proceeding with treatment before their arrival.
- **For children less than 7.5kg** phone emergency services and follow their advice/guidance before giving a general use 150 microgram adrenaline injector device, if available.
- **For children 15-30 kg,** a 1mg adrenaline nasal spray device may be given (4 years and over).
- **For children over 20kg (aged around 5 years or over) and adults**, a 300 microgram adrenaline injector device should be used. However, a 500 microgram adrenaline injector device can be given if a 300 microgram device is not available.
- **For children and adults 30 kg and over,** a 2mg adrenaline nasal spray device may be given.
- **For children (aged around 12 years or older) and adults over 50kg**, a 300 microgram adrenaline injector device OR 500 microgram adrenaline injector device should be used. If only a lower dose device is available, this should be used in preference to not using one at all.
- **For children or adults over 50kg** a 500 microgram adrenaline injector device may be prescribed. However, if a 500 microgram device is not available, a 300 microgram adrenaline injector device can be given to any child or adult over 20kg.
- **Phone emergency services regarding management if no adrenaline device is available or if an adrenaline device has been given.**

As stated on the ASCIA Action Plans, further adrenaline may be given if no response after 5 minutes:

- **If a 300 microgram adrenaline injector device has been used as a first dose** and the child (over 20kg) or adult requires a second dose, the adrenaline device that is available should be used (adrenaline injector or nasal spray devices).
- **If a 150 microgram adrenaline injector device has been used as a first dose** and the child (under 20kg) requires a second dose (if symptoms of anaphylaxis persist or recur), a 300 microgram adrenaline injector device may be used if a 150 microgram adrenaline injector device is not available.

Q 11: Why are adrenaline devices recommended in non-medical settings?

ASCIA recommends that adrenaline devices are used to treat anaphylaxis in schools, CEC services, and any other non-medical settings, to avoid delay in adrenaline administration and ensure that the correct dose of adrenaline is given.

Students and children may be prescribed any available adrenaline device, so staff in schools and CEC services should be trained to administer all available (injector or nasal spray) adrenaline devices.

Adrenaline ampoules, needles and syringes are used by trained health professionals to treat anaphylaxis. However, this is an advanced skill that is only appropriate in a medical setting. In non-medical settings such as schools, CEC services, and workplaces, adrenaline devices are the safest and most appropriate device to use when administering first aid.

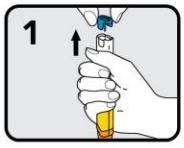
Q 12: How do you give adrenaline devices?

Device instructions are on the ASCIA website: www.allergy.org.au/hp/anaphylaxis/how-to-give-devices

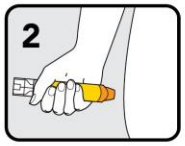
ascia
australasian society of clinical immunology and allergy
www.allergy.org.au

How to use adrenaline (epinephrine) devices

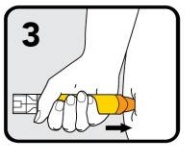
EpiPen®



Form fist around Epipen® and pull off blue safety release



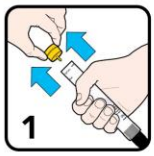
Hold leg still and place orange end against outer mid-thigh (with or without clothing)



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

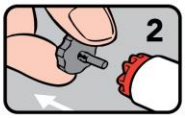
Place black injector tip against outer mid-thigh (with or without clothing)

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

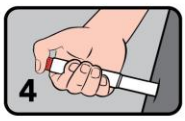
Anapen®

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 2026 ASCIA is the peak professional body of clinical immunology/allergy specialists in Australia and New Zealand.

Q 13: Who can give an adrenaline device?

Adrenaline devices can be used by people without medical training in an anaphylaxis emergency. This includes a friend, teacher, CEC service worker, parent, other relative or the person with anaphylaxis themselves (if they are well and old enough).

Instructions are shown on the ASCIA Action Plan for Anaphylaxis:

- To give an adrenaline device you may need to kneel beside the person to give the device.
- If another person is present, they can assist by phoning an ambulance and/or assisting with CPR if required.

Some older children or adults can self-administer adrenaline devices if they are not too unwell or unconscious:

- They should lay flat once it has been given, or sit with legs outstretched if breathing is difficult, or in the recovery position if they are vomiting or pregnant.
- If a person who knows how to self-administer is too unwell, they will need another person to give the adrenaline device.

Q 14: If you are unsure if it is anaphylaxis, should you use an adrenaline device?

Yes. If in doubt, it is better to use an adrenaline device than not to use it:

- Under-treatment of anaphylaxis is more harmful (and potentially life threatening) than over-treatment of a mild or moderate allergic reaction.
- Further adrenaline may be given if there is no response after 5 minutes.

Temporary side effects of adrenaline can include increased heart rate, trembling and paleness. Someone may still look unwell even after the adrenaline device has been given.

Q 15: If you are unsure if it is asthma or anaphylaxis, should an adrenaline device be used?

Yes. For people with asthma, who are also at risk of anaphylaxis, the adrenaline device should always be given first followed by the asthma reliever puffer and phoning an ambulance.

Asthma first aid should continue, and it is important to keep following the ASCIA Action Plan for Anaphylaxis.

If someone with known food or insect allergy suddenly develops severe asthma-like symptoms, **always give the adrenaline device first**, then the asthma reliever puffer.

Q 16: Can adrenaline be given if CPR has commenced?

Yes. Adrenaline should always be given before CPR commences. However, it may not always be immediately available. If CPR has started, and adrenaline has not yet been administered, give it as soon as it is available.

There is no need to stop CPR while the adrenaline device is being given if there is a second person there to assist. If no adrenaline device is available, CPR must continue until emergency services arrive.

Q 17: Why do adrenaline injector devices need to be administered into the outer mid-thigh?

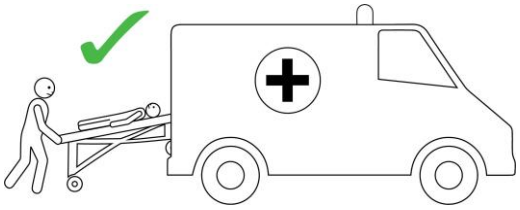
Injecting adrenaline into the muscle of the outer mid-thigh ensures:

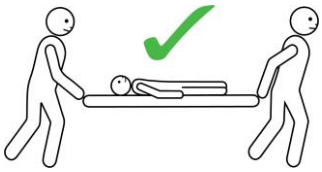
- The adrenaline is delivered into the muscle tissue where it will be rapidly absorbed, allowing it to work quickly.
- It is very unlikely that damage to nerves and tendons will occur, or that it will be accidentally injected into an artery or vein.

Another adrenaline device (if available) may be given if there is no response after 5 minutes. There is no evidence that injecting the second dose of adrenaline into the same thigh is a problem.

The most important thing is to give another dose of adrenaline (after 5 minutes) if symptoms persist, and to phone an ambulance.

Q 18: What needs to be done after using an adrenaline device?





- Phone ambulance - 000 (AU) or 111 (NZ).
- Phone family/emergency contact.
- Further adrenaline may be given if no response after 5 minutes.
- Commence CPR at any time if the person is unresponsive and not breathing normally.
- Transfer person to hospital (or other medical facility) for at least 4 hours of observation*.
- Give ambulance staff the used device and the time it was given.
- The person having anaphylaxis should not be allowed to stand, sit up suddenly, or walk, even if they look like they have recovered. They should be carried on a stretcher or trolley bed to the ambulance.

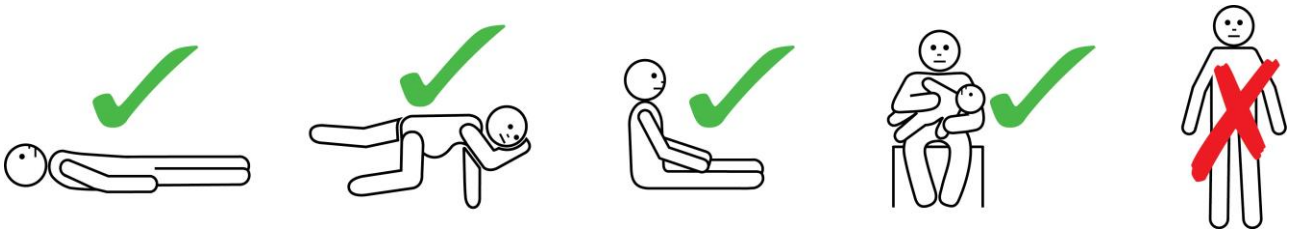
Observation for at least 4 hours is recommended after the last dose of adrenaline because relapse, refractory and/or biphasic reactions may occur. Biphasic or recurrent anaphylaxis is defined as delayed recurrences of anaphylaxis that happen without re-exposure to the trigger, after initial resolution.

Q 19: How should a person with anaphylaxis be positioned?

Before, during and after using adrenaline, it is important to lay a person flat.

- When a person has anaphylaxis their blood pressure can drop rapidly, which reduces blood flow to the heart.
- Laying the person flat will help blood flow to the heart which improves the blood pressure.
- Standing can make anaphylaxis worse by causing the blood pressure to drop.

It is important to 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.
- The person should **NOT** stand, walk, or be held upright, even if they appear to have recovered.

Do not allow the person who is having anaphylaxis to walk to their medication, instead, the adrenaline device should be brought to them as quickly as possible.

The ASCIA website includes information about positioning with infographics and a video.

Q 20: What should people avoid doing when they have anaphylaxis?

Do not allow the person to take a shower. Under no circumstances should a person with anaphylaxis take a shower, even if they feel very hot, for the following reasons:

- Standing can cause a further drop in blood pressure.
- Warm showers promote vasodilation (widening of the blood vessels), which can also lower blood pressure.
- Bathroom floors are hard, so there is a greater risk of injury if the person faints and falls.

Do not allow the person to eat or drink anything. This can cause them to vomit, which may be inhaled (aspirated).

Q 21: Can the adrenaline device be reused?

No. Each adrenaline device releases a single, fixed dose of adrenaline once the device is triggered. The adrenaline is expelled quickly once the device is activated, which can only be done once.

Q 22: What precautions should be taken when using an adrenaline device?

There are no situations where adrenaline should not be given to treat the person who is having anaphylaxis. However, it is important to:

- Follow the instructions and not test the adrenaline device, as they are all single use.
- Ensure that the needle end of the adrenaline injector device is on the person's outer mid-thigh and that the needle is not touched after administration, to avoid needle stick injury.

Q 23: Where should adrenaline devices be stored?

Adrenaline devices should be stored:

- Where they are readily available and not in a locked cupboard, but out of the reach of children.
- In a cool dark place at room temperature up to 25°C and not refrigerated or frozen.
- In an insulated wallet if a person carrying a device is outside for an extended time in the heat (such as hiking or at the beach). However, *neffy*® can be exposed to temperatures up to 50 degrees Celsius for short periods.
- With a **RED** ASCIA Action Plan for Anaphylaxis, clearly labelled with the name of the person who has been prescribed the device, including if the device is carried by the person.
- With an **ORANGE** ASCIA First Aid Plan for Anaphylaxis if they are for general use (not prescribed for a person).

Q 24: At what age can students carry their own adrenaline device at school?

The decision as to whether a student can carry their own adrenaline device should be made when developing the student's anaphylaxis management plan, in consultation with the student, their parents/guardians and their medical practitioner. This decision is generally based on a combination of factors, including age, maturity, and ability to use the device.

If a student carries their own adrenaline device, they:

- Should be educated that if they self-administer, to immediately alert a staff member and an ambulance must be phoned.
- Need to have a second adrenaline device (provided by the parent/guardian) kept on site at the school in an easily accessible, unlocked location that is known to all staff.
- May not physically be able to self-administer because of anaphylaxis.

Q 25: When do adrenaline devices expire?

The shelf life of adrenaline devices is normally one to two years from date of manufacture. The expiry date of the device needs to be marked on a calendar and the device must be replaced prior to this date. Registration with a reminder service may assist, to provide reminders about expiry dates.

Q 26: Can an expired, cloudy, or discoloured adrenaline device be used?

Expired adrenaline devices or adrenaline injector devices with discoloured adrenaline are not as effective and should not be relied on to treat anaphylaxis. However, the most recently expired adrenaline device available should be used if there is no in-date device available.

Q 27: What documents are needed to take an adrenaline device in airline flight hand luggage?

People at risk of anaphylaxis who are travelling on airlines should:

- Have an ASCIA Travel Plan for people at risk of anaphylaxis which needs to be completed and signed by the adrenaline device prescriber and attached to the ASCIA Action Plan for Anaphylaxis.
- Carry their adrenaline device in a container with a pharmacy label.
- Notify their travel agent, insurer and airline of their allergy and the need to carry an adrenaline device, in case additional documentation or preparation is required.

Further information about travelling with allergies, including a checklist, is available from the ASCIA website www.allergy.org.au and the Allergy & Anaphylaxis Australia website allergyfacts.org.au

Q 28: Why are adrenaline training devices used?

It is important to have regular practice using adrenaline trainer devices which:

- Do not contain adrenaline and do not have a needle, so they do not expire and can be reused.
- Should be stored in a different location than the real devices and clearly labelled as trainer devices.
- Can be purchased from the device supplier, pharmacies or patient organisations.
- Should be used for regular practice to ensure correct use in an emergency. Best practice guidelines recommend at least twice each year - www.allergy.org.au/schools-childcare

Q 29: Where can online training be accessed?

ASCIA anaphylaxis online training (including a short refresher video and course) can assist with training and are available free of charge at https://training.ascia.org.au/

Q 30: Where can I find more information about adrenaline devices?

Adrenaline device suppliers for Australia and New Zealand:

- Viatris - EpiPen® www.myepipen.com.au
- Arrotex - Anapen® anapen.com.au
- CSL Seqirus – *neffy*® www.cslseqirus.com.au
- Biocelect – Jext® www.biocelect.com/

© ASCIA 2026

Content updated July 2026

For more information go to www.allergy.org.au/patients/about-allergy or scan the QR code

To support allergy and immunology research go to www.allergyimmunology.org.au/donate