

Adrenaline (Epinephrine) for Anaphylaxis Treatment

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: What is 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), which is injected into the outer mid-thigh muscle. Delayed treatment can result in fatal anaphylaxis.

Q 2: What is the best way to manage anaphylaxis?

To manage anaphylaxis, it is important to:

- Identify and avoid the cause where possible.
- Have an ASCIA Action Plan for Anaphylaxis and adrenaline injector close by to use if accidental exposure occurs.

ASCIA Action Plans for Anaphylaxis (emergency response plan) must be completed by a doctor or nurse practitioner and should be kept with the adrenaline injector. The ASCIA Action Plans include instructions on when and how to give an adrenaline injector.

Adrenaline injectors contain a single, fixed dose of adrenaline, and have been designed to be given by non-medical people, such as a friend, teacher, children's education/care worker, parent, passerby, or by the patient themselves, if they are not too unwell.

Q 3: What is adrenaline?

Adrenaline is a chemical that is released by the body as a natural response to the stress of a severe allergic reaction (anaphylaxis). Adrenaline:

- Is a naturally occurring hormone that acts like an antidote to some of the chemicals released during anaphylaxis that affect the lungs, heart, and blood pressure.
- Supports the body's natural response when injected during anaphylaxis.
- Will be destroyed by enzymes in the stomach, so it is not possible to be given by mouth. Inhaling adrenaline is ineffective. The only way to give adrenaline is by injection.
- Is the only medication available for the immediate treatment of anaphylaxis. Adrenaline injected into the outer mid-thigh muscle works rapidly to reduce throat swelling, open the airways, and maintain heart function and blood pressure.

Q 4: When should adrenaline be given?

- Give the adrenaline injector **as soon as possible** if anaphylaxis is suspected. Any delay in treating anaphylaxis can be very harmful, and in some cases, it can be fatal.
- Adrenaline should always be given before CPR commences. It may not always be immediately available. If CPR has commenced, and adrenaline has not yet been injected, give it as soon as possible once it is available.

Q 5: What are the side effects of adrenaline?

Common side effects of adrenaline include increased heart rate, trembling and paleness. These side effects do wear off after a while. The person may still look unwell after the adrenaline injector has been given.

Needles can be painful for some people, but giving adrenaline to someone with anaphylaxis can save their life. If in doubt, give adrenaline.

Q 6: Why does adrenaline need to be injected into the outer mid-thigh?

Injecting adrenaline into the outer mid-thigh means it is:

- Delivered into the muscle tissue where it will be rapidly absorbed, allowing it to work quickly.
- Very unlikely that damage to nerves and tendons will occur, or that it will be accidentally injected into an artery or vein.
- Being injected into the least painful part of the body.

Q 7: What adrenaline injectors are available in Australia and New Zealand?

Australia: EpiPen® and Anapen® adrenaline injector devices are available on PBS authority prescription.
New Zealand: EpiPen® is available and Pharmac registered.

Q 8: Are adrenaline injectors easy to use?

Yes. Each adrenaline injector contains a single fixed dose of adrenaline. Adrenaline injectors are designed to deliver adrenaline to the muscle tissue by a person without any medical training in an anaphylaxis emergency. Instructions for adrenaline injectors are shown on their label and on the ASCIA Action Plans for Anaphylaxis.

It is important for people who have been prescribed an adrenaline injector to learn and practice how to use it using a trainer device which does not contain adrenaline.

Q 9: How should adrenaline be stored?

Adrenaline injectors should be stored in a cool dark place at room temperature. Do not refrigerate these devices as this can cause damage to the injector mechanism.

It is important to keep adrenaline injector devices out of the reach of small children. However, do not store them in a locked cupboard because they must be easy to access when needed.

The shelf life of adrenaline is normally one or two years from the date of supply. Remember to check the expiry date on the adrenaline injector regularly and replace the device if it has expired.

© ASCIA 2024

Content updated March 2024

For more information go to www.allergy.org.au/patients/about-allergy

ASCIA Anaphylaxis e-training including short refresher courses can assist with training and are available free of charge at www.allergy.org.au/about-ascia/about-ascia-e-training

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