

APPENDIX 11

Information about adrenaline autoinjectors

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 20 Kg).

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 school 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 <http://www.allergy.org.au/health-professionals/anaphylaxis-resources> or click here for [EpiPens®](#) and [Anapens®](#)

What if the student is unable to administer his or her own autoinjector?

At any age, students may be unable to administer their own medication, particularly if they become too distressed or incapacitated. Where that is the case, another person should administer the adrenaline autoinjector immediately. Waiting for help to arrive may endanger the student’s life.

How quickly does an adrenaline auto injector 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 person 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 student 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?

If the adrenaline autoinjector has been given, then an ambulance should be called. The time of administration of the autoinjector should be noted. The used autoinjector should be placed into its screw-top container and given to the ambulance crew so they will know what medication the student 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 small children, however, they must be readily available when needed and NOT in a locked cupboard. An ASCIA Action Plan for Anaphylaxis should always be stored with an adrenaline autoinjector.

Make sure the adrenaline autoinjector is readily accessible from the classroom/s and playground and that staff know where it is located. Note: It is not appropriate to store adrenaline autoinjectors in a locked classroom during recess/lunch breaks or to store an autoinjector in a fridge.

The shelf life of adrenaline autoinjectors is normally around 1 to 2 years from date of manufacture. The expiry date on the side of the device needs to be marked on a calendar and the device must be 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 student's individual health care plan for anaphylaxis should include details for replacing used and expired adrenaline autoinjectors in a timely way.

Students who carry their own adrenaline autoinjectors

Students at risk of anaphylaxis usually only carry their own adrenaline autoinjector/s once they travel independently to and from school. This often coincides with high school or the latter years of primary school.

Where a student carries their own adrenaline autoinjector it is advisable that the school requests the parent provide a second adrenaline autoinjector to be kept in a central location at school.

Older students may carry an adrenaline autoinjector on their person, as specified in their individual health care plan. If this is the case, a second autoinjector should be kept in a central

location within the school 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 student does choose to carry an autoinjector, they should be sufficiently mature and the exact location of the autoinjector should be easily identifiable by school staff. Hazards such as identical school bags should be considered.

Where an autoinjector is carried on their person, a copy of the ASCIA Action Plan for Anaphylaxis should also be carried.

Adrenaline autoinjectors for general use, not specifically prescribed for a student

Adrenaline autoinjectors are available from pharmacies without a prescription (not Pharmaceutical Benefits Scheme (PBS) subsidised). While it is the role of the parent to provide adrenaline autoinjectors for students diagnosed at risk of anaphylaxis, government schools and their preschools must have a general use adrenaline autoinjector as part of their first aid kit, to use for example, as a backup, or to use if a previously undiagnosed student is having a first episode of anaphylaxis.

For information about general use adrenaline autoinjectors in first aid kits see the Work Health and Safety [First Aid Policy and Procedures](#) and [Safety Alert No 35](#) (Intranet only).

The NSW Ministry of Health advises that the 150 microgram adrenaline autoinjector (EpiPen® Jr and Anapen® Jr) should be used by preschools and the 300 microgram adrenaline autoinjector (EpiPen® and Anapen®) should be used by schools from Kindergarten to Year 12.

Systems should be in place 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:

<http://www.allergy.org.au/health-professionals/anaphylaxis-resources/adrenaline-autoinjectors-for-general-use>

Timing and 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 student's condition after 5 minutes (i.e. there is no response) a second adrenaline autoinjector should be administered to the student if available.

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

Another student's adrenaline autoinjector may be used if a second adrenaline autoinjector is required, or a general use adrenaline autoinjector purchased by the school, if available. If there are concerns that the other student may be placed at risk by using their adrenaline autoinjector he or she can be transported to hospital.

In the event of an emergency and an ambulance is called government schools can print and ambulance report from within ERN for the student

ASCIA Action Plans and the adrenaline autoinjector

An ASCIA Action Plan for Anaphylaxis should be stored with the adrenaline autoinjector as the plan includes instructions on how to use the adrenaline autoinjector and the signs and symptoms of an allergic reaction, including anaphylaxis.

For more information and frequently asked questions about adrenaline autoinjectors see the ASCIA website at <http://www.allergy.org.au/health-professionals/anaphylaxis-resources/adrenaline-autoinjectors-faqs>