

A Message from NSW Health:

Pharmacist talking points: Anaphylaxis management

10 August 2020

Below is this month's "Pharmacist talking point" from the Pharmacy Guild of Australia and the Pharmacy Council: **Anaphylaxis management**.

The [NSW Pharmacist Vaccination Standards](#) require that an in-date and complete anaphylaxis response kit is available prior to administering vaccines. Advice on preparing a response kit is available from the digital Australian Immunisation Handbook. This advice includes:

Before each vaccination session, check that you have the protocols, equipment and medicines to manage anaphylaxis. Always keep an anaphylaxis response kit on hand. This kit should contain:

- adrenaline 1:1000 (at least 3 ampoules — check expiry dates)
- at least three drawing-up needles
- at least three 1 mL syringes and 25 mm needles (22 or 23 gauge) for intramuscular injection
- cotton wool swabs
- pen and paper to record the time the adrenaline was administered
- laminated copy of [Table. Doses of intramuscular 1:1000 adrenaline for anaphylaxis](#)
- laminated copy of [Table. Recognising and treating anaphylaxis](#)

Signs of anaphylaxis

The most serious immediate AEFI is anaphylaxis. Severe anaphylactic reactions usually happen rapidly, within 15 minutes of vaccination. Anaphylaxis after routine vaccination is very rare, but can be fatal.

All immunisation providers must be able to recognise all the symptoms and signs of anaphylaxis. Anaphylaxis is characterised by sudden respiratory compromise and/or circulatory collapse.

Early signs involve the skin — for example:

- generalised erythema
- urticaria
- angioedema

Early signs can also involve the gastrointestinal tract — for example:

- diarrhoea
- vomiting

Severe cases may have:

- circulatory collapse
- altered level of consciousness
- hypotension
- weak or absent pulse
- marked respiratory compromise from upper airway oedema or bronchospasm.

All immunisation providers must be able to distinguish between anaphylaxis, convulsions and fainting. A table providing further information is available from: <https://immunisationhandbook.health.gov.au/resources/handbook-tables/table-clinical-features-that-may-help-differentiate-between-a-vasovagal>

Management of anaphylaxis

Rapid intramuscular administration of adrenaline is the cornerstone of anaphylaxis treatment. Adrenaline is lifesaving and must be used promptly.

Antihistamines or hydrocortisone are not recommended to manage anaphylaxis in an emergency.

The recommended dose of 1:1000 adrenaline is:

- 0.01 mL per kg body weight (equivalent to 0.01 mg per kg or 10 µg per kg)
- up to a maximum of 0.5 mL
- given by deep intramuscular injection, preferably in the anterolateral (upper outer) thigh

Repeat the dose of 1:1000 adrenaline every 5 minutes until there is clinical improvement. The adrenaline dosage for management of anaphylaxis is age/weight dependent. A useful table is available from the digital Australian Immunisation Handbook: <https://immunisationhandbook.health.gov.au/resources/handbook-tables/doses-of-intramuscular-11000-adrenaline-for-anaphylaxis>

A factsheet on managing anaphylaxis is attached.

Use of EpiPens

Adrenaline autoinjectors (EpiPen) are devices that administer a single, pre-measured dose of adrenaline.

Autoinjectors are usually not appropriate to include in first aid kits for general use. This is because:

- they are single use only
- they are dose-specific
- multiple pens would be needed to allow for repeat dosing and varying ages/weights of patients

The above advice on the signs of anaphylaxis and managing anaphylaxis is available in the digital Australian Immunisation Handbook: <https://immunisationhandbook.health.gov.au/resources/handbook-tables/table-recognition-and-treatment-of-anaphylaxis>

Should people receive a second influenza vaccine in the same season?

The following advice is available from the National Centre for Immunisation Research and Surveillance (NCIRS) webpage (Q11): http://ncirs.org.au/sites/default/files/2020-04/Influenza-FAQs_7%20April%202020_Final.pdf

Annual influenza vaccination is recommended for everyone ≥ 6 months of age. Most people should receive 1 dose of influenza vaccine each year. However, the following people should receive 2 doses (4 weeks apart), children aged 6 months to < 9 years receiving influenza vaccine for the first time and people of any age receiving influenza vaccine for the first time after haematopoietic stem cell or solid organ transplant. Pregnant women may be vaccinated with the next season's influenza vaccine if it becomes available in the latter part of their pregnancy, even if they were vaccinated with the previous season's vaccine prior to or earlier in pregnancy. There is not enough evidence to routinely support a second dose in the general population at this time, including the elderly and those aged > 65 years, even if the influenza vaccine was given early in the season. Further information is available in the [influenza section](#) of the online [Australian Immunisation Handbook](#) and [NCIRS FAQs and Influenza factsheets](#).