Immediate reactions to COVID vaccines are usually due to fainting or an allergy.

Recognise signs and symptoms of anaphylaxis early:

**Skin/mucosa**
- Itchiness
- Skin rash (hives)
- Swelling of eyes, lips, tongue, face, or hands/feet
- Widespread redness
- Nasal congestion

**Respiratory**
- Wheeze or cough
- Throat tightness/stridor
- Shortness of breath
- Hoarseness
- Oxygen saturation < 92%
- Trouble swallowing/drooling

**Cardiovascular**
- Low blood pressure
- Dizziness
- Weakness
- Collapse
- Chest pain
- Palpitations

**Gastrointestinal**
- Nausea
- Vomiting
- Diarrhoea
-Cramps/bloating

**Treat suspected anaphylaxis**

1. Lie client down and raise legs, unless severe stridor in which case sit client up, leaning forward.
2. **Call for help:** ask colleague to inform supervisor and doctor, if available. Ask colleague to call emergency medical services and report suspected anaphylaxis.
3. Give adrenaline IM into mid outer thigh immediately (see table). Repeat every 5 minutes if needed.
4. If signs of shock (cold peripheries, prolonged capillary refill time, tachycardia or low BP) present: give sodium chloride 0.9% 500mL IV rapidly. Repeat until signs of shock have resolved. Stop if breathing worsens.
   - Give oxygen, if available, 8-10L/min via facemask, up to 100% oxygen, as needed.
5. Give oxygen, if available, 8-10L/min via facemask, up to 100% oxygen, as needed.

**Adjunctive treatment:**

6. If persistent wheeze or difficulty breathing despite adrenaline, also give salbutamol 2-3 puffs via spacer and face mask. Repeat as needed.
7. If severe symptoms or if known asthma, and wheeze persisting after other anaphylaxis symptoms/signs have resolved, give promethazine 25-50mg IM (if < 16 years old, give 15mg IM) and hydrocortisone 200mg IM/slow IV (if < 16 years old, give 100mg IM/slow IV).

**Refer all cases of suspected anaphylaxis.**
If delay in referral: take blood, within 2 hours of symptoms onset, to confirm vaccine-related anaphylaxis (tryptase sampling):
- Collect blood in 2x yellow topped tubes (SST) and send with client. If delay > 4 hours, store tubes on ice.

**Monitor and treat other allergic reactions**

- Monitor for longer (at least 30 minutes) to pick up any other symptoms that may develop:
  - If rash only, with no other associated symptoms and patient remains well, **pseudoallergic self-limiting rash** likely: reassure client and advise oral antihistamines.
  - Advise to seek urgent health care if any of the following develop: swelling of face, lips or tongue; difficulty breathing, abdominal pain, nausea or vomiting.

**Report**
Report electronically using the **Med Safety app** or
- Complete a NDoH Case Reporting Form (CRF) for an AESI* if anaphylaxis, or an AEFI** if other allergic reaction, and send to aefi@health.gov.za.
- Report to sub-district/district office and provincial EPI manager within 24 hours.

**Replace all medications/equipment used and seal emergency kit.**

*AESI - Adverse Event of Special Interest | **AEFI - Adverse Event Following Immunisation

**Created for the Western Cape Department of Health by the Knowledge Translation Unit.**