



Avoiding shoulder injury related to vaccine administration

Shoulder injury related to vaccine administration (SIRVA) is a rare complication of incorrect vaccine administration, when the vaccine is given too high into the shoulder joint. This can cause shoulder pain and restricted range of movement. Diagnoses include bursitis, tendinitis and rotator cuff tears. Bursitis is the most commonly reported diagnosis on ultrasound. Symptoms often begin at the time of injection and can last from weeks to years.

Correct injection technique and positioning will avoid SIRVA.

1 Choose the correct size needle

Use an appropriate needle length to improve vaccine delivery and reduce pain.

Age or size of person	Needle type
Child or adult – note that the deltoid muscle is not recommended for vaccination of infants less than 12 months of age	22–25 gauge, 25 mm long
Very large or obese person	22–25 gauge, 38 mm long

2 Expose the entire upper arm

Injection too high



Injection too low

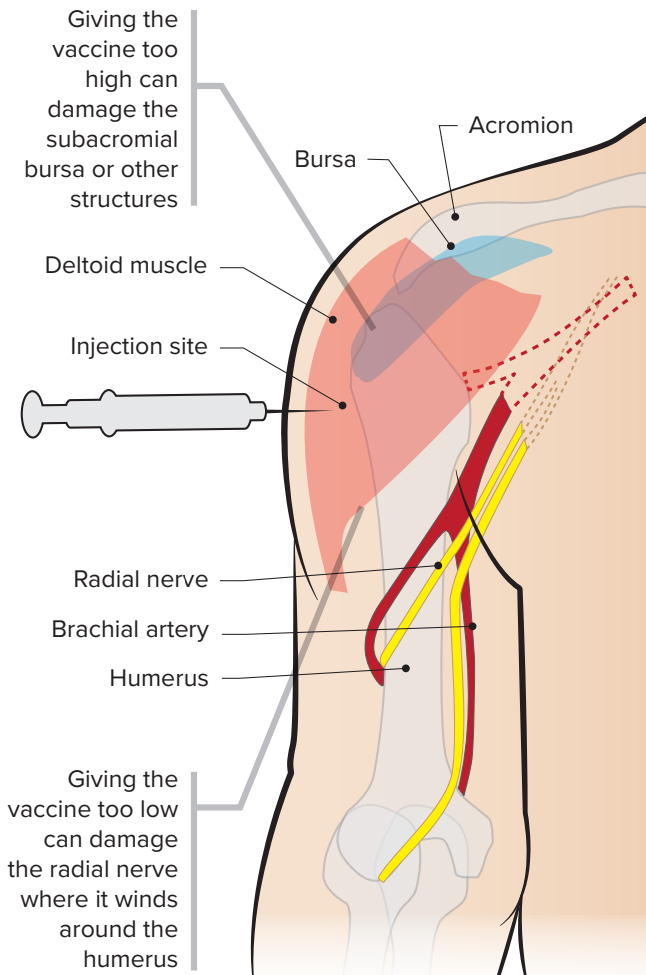


Correct site for injection

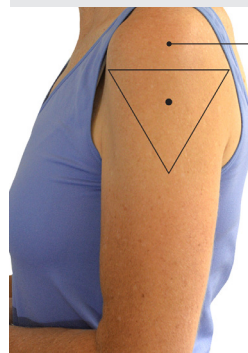




3 Find the correct injection site



Triangle method



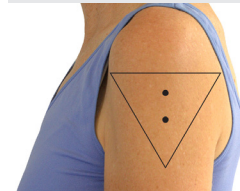
- ▶ Measure 2 finger widths down from the acromion process (the knobby top of the arm).
- ▶ Imagine an inverted triangle starting from this point (the width of the arm).
- ▶ The injection site is the centre of the triangle.

Fingertips method



- ▶ Place your index finger on the acromion process (the knobby top of the arm).
- ▶ Place your thumb at the bottom of the deltoid muscle (about halfway along the upper arm).
- ▶ The injection site is midway between these points.

Giving 2 vaccines into the deltoid muscle



- ▶ Leave 2.5 cm between injection sites.

4 Relax the muscle

Asking the patient to place their hand on their hip can help to relax the deltoid muscle.

5 Insert the needle at 90° to the skin, to the needle hub

6 Inject the vaccine

! Reporting SIRVA

If a vaccinee reports symptoms suggestive of SIRVA, advise them to see their general practitioner to discuss further assessment, investigation and management, as required.

Report all cases of SIRVA to the Therapeutic Goods Administration (TGA) and the state or territory health department:

- ▶ TGA: <https://aems.tga.gov.au>

- ▶ ACT – ACT Health Department: 02 6205 2300
- ▶ NSW: 1300 066 055 (to connect to your local public health unit)
- ▶ NT – NT Department of Health: 08 8922 8044
- ▶ Qld – Queensland Health: 07 3328 9888; or complete an AEFI initial report form on the [Queensland Health website](#)
- ▶ SA – SA Health: 1300 232 272
- ▶ Tas – report direct to the TGA: 1800 020 653
- ▶ Vic – SAEFVIC: 03 9345 4143; or the [AEFI-CAN website](#)
- ▶ WA – WAVSSS: 08 6456 0208; or the [AEFI-CAN website](#)