REdI
Resuscitation EDucation Initiative

Metro North Health | Queensland Government



RASH:

Response to Anaphylaxis and Severe Hypersensitivity

ABOUT THIS GUIDE

How to use this guide

A practical reference for recognising and treating anaphylaxis in hospital. Read it straight through once, then keep it for the pages you will need in a hurry.

Anaphylaxis rewards a sequence you already know by the time you need it. This guide is built around one — recognise, respond, rescue, recover — and every chapter follows it in order. Chapter 5 compresses the whole sequence onto a single action card.

RECOGNITION › RESPONSE › RESCUE › RECOVERY › RAPID REVIEW

SCOPE AND CURRENCY

Written for clinical staff at Royal Brisbane and Women's Hospital and the Herston Campus. It reflects the **Australasian Society of Clinical Immunology and Allergy (ASCIA)** *Acute Management of Anaphylaxis* guideline of July 2026[1] and **Australian and New Zealand Committee on Resuscitation (ANZCOR)** Guideline 11.10 of July 2026[7]. Bracketed numbers point to the sources listed in Chapter 7.

Guidance and the range of available adrenaline devices both change. Where this guide, the current ASCIA guideline and your local Metro North procedure differ, **follow the local procedure**, and raise the discrepancy through your usual clinical governance route.

Who this is for

Medical, nursing and allied health staff, and students on clinical placement, who may be first on scene to an allergic reaction in a ward, clinic, procedural or imaging area. No prior allergy training is assumed. Doses are **adult** doses unless stated otherwise; paediatric and infant doses are given in Chapter 3. Emergency call details are those for RBWH and the Herston Campus — everything else applies wherever you work.

What this guide covers

By the last page you will have what you need to:

- **Recognise** anaphylaxis using the two diagnostic patterns, including the presentations that have no rash at all, and the signs specific to infants and young children.
- **Distinguish** anaphylaxis from its common mimics — asthma, panic, vasovagal episode, gastroenteritis and septic shock.
- **Respond** systematically using DRSABCD, place the correct emergency call, remove the trigger, position the patient safely and organise the scene.
- **Rescue** the patient with correctly dosed and correctly sited intramuscular adrenaline, and know when second-line therapies help and when they distract.
- **Select** the right adrenaline presentation or device and prepare it without a concentration error.
- **Escalate** appropriately when a reaction does not respond to repeated intramuscular adrenaline, and manage anaphylactic cardiac arrest.
- **Plan recovery** — observation period, disposition, discharge requirements, documentation and specialist referral.

Contents

1 Recognition

Epidemiology · triggers · mild and moderate reactions · the two diagnostic patterns · infants and young children · differential diagnosis · criteria for action

2 Response

Primary survey · emergency calls at RBWH · removing the trigger · managing the scene · positioning and initial actions

3 Rescue

IM adrenaline and doses by weight · formulations and preparation · autoinjectors and intranasal adrenaline · refractory anaphylaxis and IV adrenaline · second-line therapies · cardiac arrest

4 Recovery

Observation and biphasic reactions · disposition · adrenaline on discharge · discharge advice · follow-up, tryptase and referral

5 Rapid Review

The whole sequence on one page, plus the five ways it most often goes wrong

6 Self-test

Fifteen questions with answers and worked rationales

A Appendix A — Drug and dose quick reference

Adrenaline, fluids, second-line agents, devices and the numbers worth memorising

7 References & further reading

Numbered sources with URLs, the six national quality statements, further training and local contacts.

CHAPTER 1

Recognition

Anaphylaxis is a clinical diagnosis made at the bedside, under time pressure, usually without a test. Recognising it is the step most often missed.

Why this matters

12,179
Australian hospital admissions for anaphylaxis in 2019–20 — a 35% rise over five years[8]

27%
of reactions consistent with anaphylaxis were not given adrenaline across eight Australian emergency departments[8]

1 in 6
fatal episodes of anaphylaxis occur with no skin signs at all[1]

Anaphylaxis is not a rare curiosity confined to emergency departments. It happens on wards, in outpatient clinics, in imaging suites and in operating theatres, and in hospital it is very often triggered by something the health service itself has just administered. The rising admission numbers reflect both a real increase in allergic disease and better recognition. The care gap, though, is the number that should hold your attention: **more than a quarter of these patients did not receive the one treatment that reliably works.**

Common triggers

The commonest trigger depends on where you are standing. **In the community**, food and insect stings dominate. **In hospital**, medicines are the commonest cause — which is why so many in-patient reactions begin with something the health service has just given.

Category	Typical agents	Notes
Food	Tree nuts and seafood are the commonest adult triggers	Peanut, egg and cow's milk dominate in children. Cofactors such as exercise, alcohol or NSAIDs in the 6–8 hours before onset can convert a tolerated food into a reaction[1]
Insects	Hymenoptera — bees, wasps, ants	Jack jumper ant is a significant trigger in parts of Australia. Abdominal pain and vomiting are signs of *anaphylaxis*, not a mild reaction, in insect allergy[1]
Medicines	NSAIDs, antimicrobials	The dominant in-hospital trigger; also contrast media, neuromuscular blocking agents, chlorhexidine, latex, and colloid or blood products[9]

TWO FACTS THAT CATCH PEOPLE OUT

Reactions can occur on first known exposure. "They've had it before without a problem" does not exclude anaphylaxis — and neither does "they've never had this drug".

Reaction usually occurs within two hours of exposure in adults. Use that window to search actively for the trigger, but do not let a longer interval talk you out of the diagnosis.

Mild and moderate reactions

Not every allergic reaction is anaphylaxis. Mild and moderate reactions are limited to skin, mucosa and gut, and do *not* involve the airway, breathing or circulation:

- Rash, hives (red, raised, itchy bumps) or welts
- Swelling of the lips, eyes or face
- Itchy or tingling mouth
- Stomach pain, nausea or vomiting
- Skin and mucosal changes

THE WATCH POINT

A mild reaction is a reason to watch closely, not to relax. ASCIA is explicit that **signs of mild to moderate allergic reaction may not always occur before anaphylaxis**[1] — a patient can go from well to shocked without passing through this list at all. These same features appear in the criteria for action once they occur alongside respiratory, cardiovascular or gastrointestinal involvement.

Clinical features — the two diagnostic patterns

Anaphylaxis is recognised by one of two patterns[1]. You need only one of them.

Pattern 1 — skin plus another system

Acute onset illness with **typical skin features** (urticarial rash or erythema/flushing, and/or angioedema), **plus** involvement of respiratory and/or cardiovascular and/or persistent severe gastrointestinal symptoms.

Pattern 2 — no skin signs required

Any acute onset of **hypotension, bronchospasm or upper airway obstruction** where anaphylaxis is considered possible, *even if typical skin features are not present*.

DO NOT WAIT FOR A RASH

Skin features are absent in roughly one in six fatal episodes of anaphylaxis. The absence of urticaria is one of the main reasons anaphylaxis is missed or treated late. Pattern 2 exists precisely so that a patient with sudden unexplained hypotension or bronchospasm and no rash still gets adrenaline[1].

Severe reaction — what to watch for

ASCIA lists the following as signs of a severe allergic reaction. **Any one** of them is enough[1]:

- Difficult or noisy breathing
- Swelling of the tongue
- Swelling or tightness in the throat
- Wheeze or persistent cough
- Difficulty talking, or a hoarse voice
- Persistent dizziness or collapse
- Pale and floppy (young children)
- Abdominal pain or vomiting — for insect allergy

INFANTS AND YOUNG CHILDREN

Infants may not show the classic picture. ASCIA lists **drooling, irritability or clinginess, persistent crying, somnolence, hypotonia and mottled skin** as signs of anaphylaxis in this group[1]. Pallor and floppiness in a young child are severe signs.

Infants and young children should be **held lying flat**, or seated with legs outstretched on a carer's lap, to reduce agitation and respiratory distress — never upright or over a shoulder[1].

Differential diagnosis

Several conditions look like anaphylaxis at first glance. Each has a feature that should not fit — use it to check yourself, but never to delay treatment when the diagnosis is genuinely in doubt.

Mimic	What should *not* be there
Asthma	Should not cause shock or poor perfusion except in extremis — shock with asthma is a very late sign
Anxiety or panic	Should not cause hypoxia or shock
Vasovagal reaction	Should recover rapidly once the patient is laid supine
Gastroenteritis	Should not have skin or respiratory features
Septic shock	Is unlikely to have a sudden or acute onset

WORKING RULE

If you are hesitating between asthma and anaphylaxis in a patient who has been exposed to a possible trigger, give the adrenaline. ASCIA advises patients with both asthma and food allergy to **always give the adrenaline device first** when breathing difficulty is severe and sudden[1]. Intramuscular adrenaline treats severe bronchospasm as well; withholding it does not. **If in doubt, give adrenaline**[2].

Criteria for action

It helps to hold two lists in mind. The left-hand list puts you on alert and tells you to stay with the patient; the right-hand list commits you to treatment now.

Watch and reassess	Treat as anaphylaxis
▪ Swelling of lips, eyes or face	▪ Stridor or features of upper airway obstruction
▪ Itchy or tingling mouth	▪ Unexplained hypotension or bronchospasm
▪ Abdominal pain, nausea or vomiting	▪ Skin signs **plus** signs from another body system
▪ Skin and mucosal changes, especially hives	

CHAPTER 1 IN ONE LINE

Skin signs plus one other system — or sudden unexplained hypotension, bronchospasm or airway obstruction. Either one means treat.

CHAPTER 2

Response

What you do in the first sixty seconds: assess systematically, get help coming, stop the cause, position the patient safely, and turn a crowded bedside into an organised one.

Primary survey

Use **DRSABCD** to assess the collapsed patient — **D**anger, **R**esponse, **S**end for help, **A**irway, **B**reathing, **C**PR, **D**efibrillation. A systematic approach ensures life threats are prioritised, and it is deliberately the same sequence you use for any collapse: you do not need to have decided the diagnosis before you start. ANZCOR describes the same discipline as the ABCDE approach in the advanced life support setting[7].

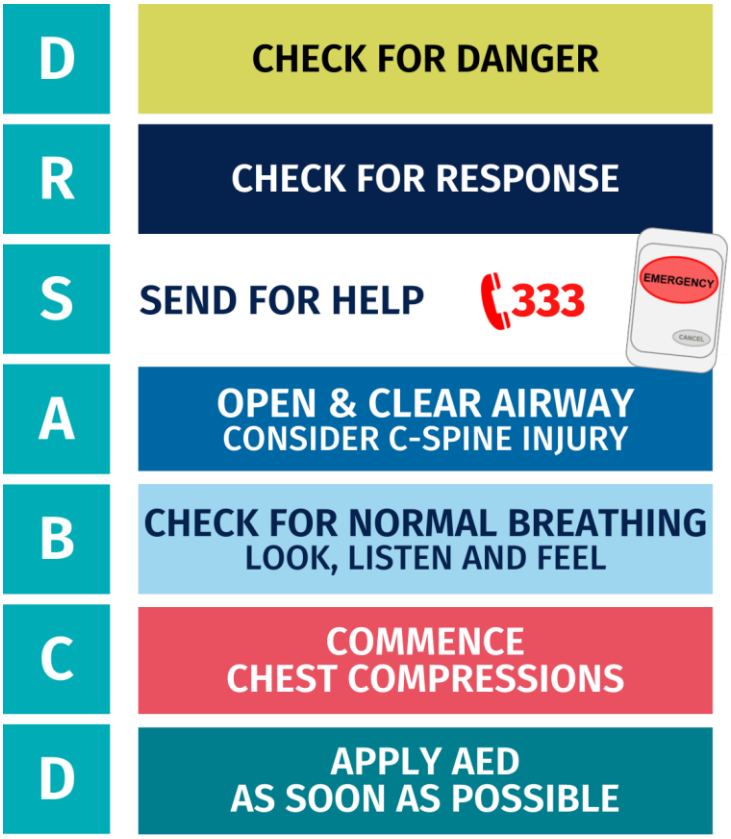


Figure 1. The DRSABCD primary survey, with the local emergency number (333) at the "send for help" step.

CRITICAL BRANCH POINT

If the patient is **unresponsive and not breathing normally**, activate the cardiac arrest response and begin CPR. Anaphylaxis that has progressed to arrest is managed as cardiac arrest first — see Chapter 3.

Send for help

Anaphylaxis is a two-person-minimum problem at best and a full-team problem at worst. Call early; you can always stand a team down.

How the call works at RBWH and the Herston Campus

- Pushing a **wall-mounted emergency button** summons local help.
- A team member **still needs to call switchboard on 333** (or 3646 1600 from a mobile or external line) to activate the emergency response team.
- The team you get depends on what you declare — so declare deliberately.

Declare	What responds
Medical Emergency	The medical registrar-led medical emergency response team (adult, paediatric, neonatal)
Airway Emergency	A specialist ICU response — adult patients only
Cardiac Arrest	Both teams respond (adult, maternal, paediatric, neonatal)



Figure 2. The emergency number and the three call types. What you declare decides which team comes.

LOCAL VARIATION

The call types and numbers above apply to RBWH and the Herston Campus. Emergency call arrangements are facility-specific — confirm the arrangements for your own workplace and know them before you need them. Outside hospital, ASCIA and ANZCOR both direct you to call an ambulance[16].

Remove the trigger

In hospital the trigger is frequently still connected to the patient. Removing it is one of the few interventions unique to anaphylaxis and it is easily forgotten in the rush to give adrenaline.

- Identify and remove the trigger if possible.
- Stop any infusions running — including any medicine given in the preceding two hours.
- If an infusion is suspect, **aspirate the cannula or port** so that no further allergen is inadvertently flushed into the patient.

> **TRIGGER REMOVAL OUTSIDE THE WARD**
>
> ASCIA's initial management flowchart adds: **flick out a visible insect sting** (do not squeeze it), **freeze a tick** and allow it to drop off rather than pulling it out, and stop any food and clear the immediate surroundings[2].
>
> Keep the ampoules, giving sets, packaging and bag — they are needed for later specialist review and for any incident investigation. Also note anything the patient ate, drank, took or did in the **6 to 8 hours** before onset; ASCIA's allergic reactions event record exists for exactly this[1].

Manage the scene

A resuscitation that is going badly usually looks like several people doing the same thing and nobody doing the rest. The first moments matter, and explicit role allocation prevents it.

- Identify a leader and allocate roles out loud. Some areas keep **pre-printed role cards** — a lanyard or card per role, handed out as the team arrives — which removes the guesswork.
- Clear the working area — **360-degree access to the patient is essential**. Move the patient if necessary.
- Bring essential equipment, including resuscitation equipment, to the bedside.
- Use a **cognitive aid** — a flowchart or action card — to avoid errors and omissions.

> **ROLES TO ALLOCATE OUT LOUD**
>
> **Team Leader · Patient assessment · Interventions (IV access) · Medications · Scribe · Runner · Escort for the responding emergency team**
>
> Naming a role and a person — "Priya, you are on medications" — is faster and more reliable than assuming. The escort matters in complex clinical areas the responding team may not know — someone has to meet them and walk them in. The scribe matters more than it feels: the time of each adrenaline dose decides when to escalate, and sets the observation clock that governs discharge (Chapter 4).

Positioning and initial actions

- **Lay the person supine and elevate the legs.** If breathing is difficult they may sit upright, or sit with legs outstretched, if that helps — but **do not let them stand or mobilise**. Sudden deterioration and cardiac arrest have been known to occur in that setting.
- **Administer high-flow oxygen** unless contraindicated.
- **Apply cardiac monitoring and continuous pulse oximetry.**
- **Monitor blood pressure at least every five minutes.**

POSITIONING IS A TREATMENT, NOT A COURTESY

ASCIA is unambiguous: patients **must NOT walk or stand, even if they appear to have recovered**[1]. Deaths have occurred when patients in anaphylaxis stood up, sat up suddenly or walked to the toilet — the loss of venous return in a vasodilated, hypovolaemic circulation can be immediately fatal. Correct positioning is one of the six quality statements in the national *Acute Anaphylaxis Clinical Care Standard*, which is set out in full in Chapter 7[8].

Position by situation[12]

Situation	Position
Default	Lay flat, legs elevated
Breathing is difficult	Allow to sit with legs outstretched — not standing
Unconscious, or vomiting	Left lateral (recovery) position
Pregnant	Left lateral — avoids caval compression and improves venous return
Infant or young child	Held lying flat, or seated with legs outstretched on a carer's lap

CHAPTER 2 IN ONE LINE

DRSABCD · press the button and call 333 · stop the infusion · lay them flat · oxygen and monitoring · name the roles.

CHAPTER 3

Rescue

Adrenaline, given intramuscularly, early, and in the right concentration. Everything else in this chapter is secondary to that sentence.

General principles

- **IM adrenaline is the cornerstone of management** — and is given intramuscularly *even if IV access is already available*.
- High-flow oxygen and intravenous fluids are helpful.
- Lay supine and do not mobilise the patient.
- **Steroids and antihistamines have no role in immediate management.**

> **WHY ADRENALINE WORKS**
>
> Adrenaline reverses every limb of the problem at once: α1 vasoconstriction restores blood pressure and reduces mucosal oedema, β1 effects support cardiac output, and β2 effects relieve bronchospasm and reduce further mediator release from mast cells and basophils. No other drug does this. ASCIA states plainly that other medicines **should only be used as an adjunct, and not in place of adrenaline**[1]. Delay in giving it is the strongest modifiable predictor of a fatal outcome[10].

Intramuscular adrenaline

Adult dose: 500 micrograms (0.5 mg) IM

- First dose into the **vastus lateralis** (lateral thigh) — chosen for its large muscle bulk and established blood supply.
- Repeat **every five minutes** while indicated.
- Use a **different site** for each subsequent injection.

The lateral thigh gives faster, more reliable absorption than the deltoid or the subcutaneous route, and can be injected through clothing. The paediatric dose is **0.01 mg/kg of 1:1000, to a maximum of 0.5 mg** — which is 0.01 mL/kg of the 1:1000 solution[1]. In practice, work from the banded table below rather than the calculator: it gives volumes that can actually be drawn up under pressure[4].

Adrenaline 1:1000 IM doses by age and weight[4]. Where age and weight disagree, go by weight. The smallest volume given is 0.1 mL — do not attempt to draw less.

Age	Weight	Volume of 1:1000	Dose
Under 1 year	Under 7.5 kg	0.1 mL	100 micrograms
1–2 years	~7.5 kg	0.1 mL	100 micrograms
2–3 years	~15 kg	0.15 mL	150 micrograms
4–6 years	~20 kg	0.2 mL	200 micrograms
7–10 years	~30 kg	0.3 mL	300 micrograms

Age	Weight	Volume of 1:1000	Dose
10–12 years	~40 kg	0.4 mL	400 micrograms
Over 12 years and adults	Over 50 kg	**0.5 mL**	**500 micrograms**

Special situations

Situation	What changes
Pregnancy	Management is **the same as for a non-pregnant patient**, and adrenaline **must not be withheld** for fear of reducing placental perfusion. Position in the left lateral position[1].
Infants	In hospital, draw the weight-based ampoule dose from the table above. A 150 microgram **device** may be prescribed for an infant of 7.5–10 kg after a considered assessment — that is a deliberate over-dose, accepted because a device is safer than an ampoule in untrained hands[1]. Infants may stay pale despite one or more doses and this can resolve without further adrenaline; more than two doses may cause hypertension and tachycardia that is easily misread as ongoing compromise[1].
Beta blockade	The response to adrenaline may be blunted. Consider IV glucagon 1–2 mg for refractory shock — see second-line therapies.
Under anaesthesia	Skin signs are usually hidden and the first sign is often sudden hypotension or a rise in airway pressure. Follow the ANZAAG/ANZCA perioperative guideline[9].

A DIFFERENCE WORTH KNOWING

ASCIA gives further doses at **5 to 15 minute intervals** if the reaction is not responding[1]; ANZCOR says to repeat **after 5 minutes, or earlier**, if airway, breathing or circulation problems persist or worsen[67]. **Five minutes is the safe default** — it is easy to remember under pressure and it errs towards treating.

Adrenaline formulations — the concentration trap



Figure 3. The two adrenaline concentrations stocked in most clinical areas. Only the 1:1000 presentation on the left is suitable for intramuscular use.

Presentation	Concentration	Route	Why it matters
1:1000	1 mg in 1 mL	IM (and nebulised)	The adult IM dose is a manageable **0.5 mL**. This is the only presentation to use for IM adrenaline.

Presentation	Concentration	Route	Why it matters
1:10,000	1 mg in 10 mL	**IV only**	Intended for IV use in cardiac arrest. An IM dose would be 5 mL, and in a crisis a 1:10,000 syringe drawn up "for IM" is easily given IV by mistake.

> **NEVER USE 1:10,000 FOR AN IM DOSE**
>
> 1:10,000 ampoules and prefilled syringes are IV preparations. Using them to give an IM dose introduces both a volume problem and — more dangerously — the risk of inadvertent intravenous administration during a crisis. Bolus IV adrenaline can cause arrhythmia and other significant complications, including tissue ischaemia.

Preparing the IM dose

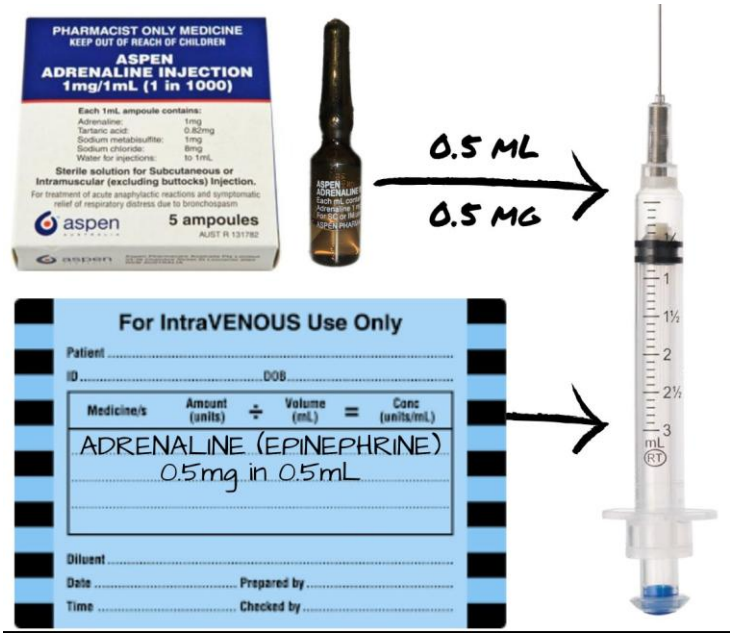


Figure 4. Drawing up 0.5 mL (0.5 mg) from a 1:1000 ampoule, and labelling the syringe. Label every syringe, every time — including in an emergency.

The patient's own autoinjector

Many patients at risk carry their own device, and using it is faster than finding an ampoule. A patient who has an adrenaline injector should have access to it during *all* healthcare encounters — that is a national quality statement (Chapter 7), not a local preference[8]. The **EpiPen** is the most commonly carried brand in Australia, with the **Anapen** the main alternative.



Figure 5. EpiPen — 300 microgram (adult) and EpiPen Jr 150 microgram.



Figure 6. Anapen — 500, 300 and Junior 150 microgram devices. Check the device table below for what is currently available.

Devices available in Australia and New Zealand[5]

Device	Dose	Weight band	How it is given
EpiPen Jr	150 mcg	7.5–20 kg	Remove blue safety release; push orange tip firmly into outer mid-thigh until it clicks; hold 3 seconds
EpiPen	300 mcg	Over 20 kg and adults	As above — clothing may be left on
Anapen Jr / Anapen	150 / 300 mcg	7.5–20 kg / over 20 kg	Remove black needle shield and grey cap; place at 90° to outer mid-thigh; press red button; hold 3 seconds
Anapen 500	500 mcg	Over 50 kg and adults	As above. Discontinued in Australia from July 2025[11]
Jext Jr / Jext	150 / 300 mcg	7.5–20 kg / over 20 kg	Remove yellow cap; push black tip into outer mid-thigh until it clicks; hold 3 seconds. Registered and available from 2026[11]
neffy	1 mg / 2 mg	15–30 kg (4 yrs+) / over 30 kg	Intranasal. Place the nozzle in one nostril until your fingers touch the nose, then press. Registered and available from 2026[11]

AFTER A DEVICE IS USED

Note the **time** it was given and hand the used device to the ambulance or treating team[5]. That time counts as a dose of adrenaline for the observation period in Chapter 4. Then follow the patient's Anaphylaxis Action Plan. A used device does not remove the need for the full assessment and treatment sequence in this guide.

ASCIA now also recognises an **intranasal** route (neffy), though **intramuscular remains the preferred route**[1].

AN AUTOINJECTOR RARELY GIVES A FULL ADULT DOSE

The only injector that ever delivered 500 micrograms — the adult emergency dose — was the Anapen 500, discontinued in Australia in July 2025[11]. Every injector in the table above delivers 150 or 300 micrograms. **Use the patient's device if it is the nearest adrenaline to hand**, then be ready to follow with an ampoule dose to make up the difference.

Devices also operate differently from one another, and there is a real risk of **self-injection** if the operator is unfamiliar with the device in front of them.

Weight bands and device instructions from the ASCIA *How to Use Adrenaline Devices* chart, 2026[5]. ASCIA hosts demonstration videos for these devices — see Chapter 7 — and it is worth watching the one your patients actually carry before you meet it in an emergency.

Refractory anaphylaxis and intravenous adrenaline

Anaphylaxis that does not respond to repeated intramuscular adrenaline is **refractory anaphylaxis**, and it needs a different plan — not a bigger push of the same drug.

Infusion — critical care only

Titrated IV adrenaline by infusion is recommended in critical care areas only, with **continuous monitoring**, and only after repeated IM doses have failed. An infusion pump or syringe driver **must** be used. IV adrenaline is given **only** by titrated continuous infusion.

Bolus — not recommended

Bolus IV adrenaline is **not recommended** except in cardiac arrest. It can cause arrhythmia and tissue ischaemia.

IV adrenaline is not "stronger" adrenaline — it is the same drug with a far narrower margin for error. The repeated IM route reaches an effective dose safely; the IV bolus route reaches a toxic one easily.

	What to do
When to escalate	ASCIA and ANZCOR define refractory anaphylaxis as **no improvement in respiratory or cardiovascular symptoms despite two doses of IM adrenaline**[3][7]. At that point, stop expecting the next IM dose to work and change the plan.
Infusion recipe	Mix **1 mL of 1:1000 adrenaline in 100 mL of 0.9% sodium chloride**, commence at **0.5 mL/kg/hour** and titrate to response. In a non-tertiary centre, 1 mL of 1:1000 in 1000 mL at 5 mL/kg/hour[3]. A pump or syringe driver is mandatory.
IV bolus	Not recommended outside cardiac arrest. In specialist settings only, an IV bolus commencing at **10–20 micrograms**, escalating by doubling, may be used[7].
Also do	Call senior emergency, intensive care or anaesthetic help. Give large volumes of IV crystalloid. Consider additional vasopressors — noradrenaline, vasopressin or metaraminol[7].

ESCALATE THE ENVIRONMENT, NOT JUST THE DOSE

Refractory anaphylaxis means calling senior emergency, intensive care or anaesthetic help and moving the patient somewhere that can provide advanced cardiopulmonary support[3]. Large volumes of IV crystalloid are frequently needed, and additional vasopressors (noradrenaline, vasopressin, metaraminol) may be required[7].

Second-line therapies

These support the circulation and the airway. None substitutes for adrenaline, and none should delay it — they are commenced **after** IM adrenaline has been given and are never used in isolation.

Give alongside adrenaline

- Oxygen, if not already given
- Large-bore IV access — 14 or 16 gauge cannula if possible (intraosseous if IV fails[2])
- IV fluid bolus of **10–20 mL/kg** crystalloid — 0.9% sodium chloride or compound sodium lactate — repeated for refractory hypotension or shock[2]

Large volumes are frequently needed: anaphylaxis causes profound vasodilation and capillary leak, so a patient can be several litres down within minutes[7].

Consider, for specific problems

Agent	Dose	Indication
Nebulised adrenaline	5 mg (5 mL of 1:1000)	Persistent upper airway obstruction or stridor[1]
Nebulised salbutamol	5 mg, or 8–12 puffs of 100 mcg via spacer	Persistent wheeze or bronchospasm despite IM adrenaline[1]
IV glucagon	1–2 mg	Refractory shock, especially in patients on long-term beta blockers

TWO NOTES ON THE SECOND-LINE LIST

Bronchodilators must not be used as first-line medication for anaphylaxis — they do not prevent or relieve upper airway obstruction, hypotension or shock[1].

Glucagon acts through a non-adrenergic pathway, which is why it can restore inotropy when beta blockade is blunting the response to adrenaline. It is retained in local and perioperative guidance[9] but does not appear in the 2026 ASCIA refractory flowchart[3] — check your local procedure before relying on it.

Steroids and antihistamines

NEITHER IS EMERGENCY TREATMENT

Corticosteroids and antihistamines do not treat airway obstruction, bronchospasm or shock. Their real hazard is not what they do but what they displace — time and attention that should be going to adrenaline. **Administration of adrenaline must not be delayed.**

	May help	Dose, if used	Practical points
Corticosteroids	Persistent wheeze or itch; may reduce the chance of a rebound or biphasic reaction	Prednisolone 1 mg/kg (max 50 mg) oral, or hydrocortisone 5 mg/kg (max 200 mg) IV, or dexamethasone 8 mg IV[1]	Onset of action is slow. ASCIA: the benefit of corticosteroids in anaphylaxis is **unproven** and they must not replace adrenaline[1]. ANZCOR allows them as an adjunct in refractory shock or bronchospasm[7].
Antihistamines	Itch, flushing, urticaria, nasal and eye symptoms — once anaphylaxis has been treated	Loratadine or cetirizine 10–20 mg oral	Non-sedating agents only. **Do not use injectable promethazine** — it has been associated with significant adverse events, and can worsen hypotension and cause muscle necrosis[1]. Sedating antihistamines can also mimic the symptoms of anaphylaxis[1].

Cardiac arrest

IF OUTPUT IS LOST

- Activate the cardiac arrest response — dial 333 and declare cardiac arrest.
- Use standard Advanced Life Support: **high-quality CPR and early defibrillation**.
- Give **adrenaline 1 mg IV, repeated every four minutes** (every two cycles).
- Give a rapid IV fluid bolus of at least **20 mL/kg** and repeat as needed.

In arrest the IM route is no longer reliable — without a circulation an intramuscular dose will not be absorbed. This is the one situation in which IV bolus adrenaline is correct, and the dose and interval are the standard ALS ones, not the anaphylaxis ones.

WHAT ANZCOR ADDS FOR ANAPHYLACTIC ARREST [7]

Follow the ALS protocol with **early tracheal intubation if the expertise is available** — airway oedema makes later intubation progressively harder — and give **large volumes of intravenous fluid**.

Where bronchospasm is severe, ventilate with a **slow respiratory rate (under 10 breaths per minute) and low tidal volumes** to avoid dynamic hyperinflation.

Additional vasopressors (noradrenaline, vasopressin, metaraminol) may be considered. **Prolonged resuscitation may be necessary, and extracorporeal CPR (ECPR) may be considered** where it is available — these are often young patients with a single reversible cause.

CHAPTER 3 IN ONE LINE

0.5 mg of 1:1000 adrenaline, IM, lateral thigh, every five minutes. Everything else waits.

CHAPTER 4

Recovery

The episode is not over when the patient looks better. Observation, disposition, prescribing, education and referral are all part of the treatment.

Observation period

If recovery is rapid

- **Observe for at least four hours after adrenaline is given.**
- Document observations **at least hourly**.
- Some patients should still be admitted for overnight observation.

The clock starts from the **last** dose of adrenaline, not the first, and not from arrival[8]. This is where an accurate scribe record earns its keep.

BIPHASIC REACTIONS — THE REASON FOR THE FOUR HOURS

ASCIA defines a biphasic or recurrent reaction as a **delayed recurrence of anaphylaxis without re-exposure to the trigger, after the initial episode has resolved**. These are estimated to occur within 48 hours in **3 to 20%** of initial anaphylaxis episodes[1].

WHO NEEDS OVERNIGHT OBSERVATION [1]

ASCIA **strongly recommends** overnight observation for patients with severe or refractory anaphylaxis; a history of severe, refractory or biphasic reactions; concomitant illness (severe asthma, a history of arrhythmia, systemic mastocytosis or other mast cell disorders); those who live alone or remote from medical care; and those presenting late in the evening.

Disposition

- Stable patients can usually go to a **short stay or acute medical ward**.
- Continuous cardiac monitoring is **no longer routinely recommended**.
- Patients who received **three or more doses of adrenaline** should be observed in a high dependency environment.

Three or more doses is a useful marker of a reaction that did not respond as expected. Those patients are the most likely to deteriorate again, and are also the ones who may require a titrated infusion — which itself mandates a critical care environment.

READ THIS ALONGSIDE THE REFRACTORY THRESHOLD

Escalation and disposition use different dose counts, and they are not in conflict. You treat a reaction as **refractory after two** unsuccessful IM doses[37] — that is when you call for senior help and prepare an infusion. **Three or more** doses is a marker for where the patient is nursed afterwards. A patient escalated at two doses still needs a critical care environment, whatever the final dose count. Use the count as a floor, not a gate.

Adrenaline prescription on discharge

A patient who has received adrenaline for anaphylaxis must be discharged with:

- an **Anaphylaxis Action Plan**
- an **adrenaline autoinjector**, if there is a risk of re-exposure

WHAT AN ANAPHYLAXIS ACTION PLAN IS

A single-page, patient-specific emergency plan published by ASCIA and completed by the treating clinician. It names the patient's allergens, lists the signs of a mild and a severe reaction, states which device to use and when, and tells the patient and their carers exactly what to do and who to call. Blank plans and a personal event record for documenting future reactions are free from the ASCIA website (Chapter 7)[1].

This is a requirement of the *Acute Anaphylaxis Clinical Care Standard*[8], not a local preference. The device should be **prescribed and, where possible, dispensed before discharge** — not on a script to be filled later — and the patient and their carers must be trained in its use[1]. A device the patient has never handled is not protection.

MAKE THE TRAINING REAL

Use a **trainer device** and have the patient demonstrate back to you: remove the safety cap, firm pressure to the outer mid-thigh, hold for three seconds, then call an ambulance and say "anaphylaxis"[5].

Give them an **Anaphylaxis Action Plan** and teach them to use it as the guide for any future reaction. If the patient has asthma as well as food allergy, train them to **always give the adrenaline device first** when breathing difficulty is severe and sudden[1].

Discharge advice

Cover all five points, and document that you did:

- Signs and symptoms of anaphylaxis
- Advice about triggers and avoidance strategies
- Education on autoinjector use, if one has been supplied
- A follow-up plan — GP review, with or without clinical immunology review
- **Document the allergy in the clinical notes**, and in My Health Record where appropriate

DOCUMENTATION IS A CLINICAL INTERVENTION

An undocumented allergy is the mechanism by which the same patient is re-exposed to the same drug on their next admission. Record the agent, the route, the timing, what happened and what was given — not just the word "allergy" against a drug name.

Follow-up, tryptase and referral

- **ASCIA recommends that ALL patients who present with anaphylaxis are referred to a clinical immunology/allergy specialist**[1].
- A **serum tryptase** taken within four hours may help the reviewing specialist where the diagnosis is unclear or ambiguous.
- Advise the patient to record any future reaction using the **ASCIA allergic reactions event record**, noting everything in the 6–8 hours before onset[1].

Specialist review exists to confirm the cause, teach avoidance, review and update the action plan, and start allergen immunotherapy where that is available[1]. Tryptase is not a bedside test and never gates treatment — a normal result does not exclude anaphylaxis. Its value is retrospective: an acute level, ideally paired with a later baseline sample once the patient has recovered, helps the immunologist confirm mast cell activation. Take it when you can, but never before adrenaline.

POINT PATIENTS TO REAL SUPPORT

ASCIA directs patients and carers to **Allergy & Anaphylaxis Australia** (allergyfacts.org.au) and, in New Zealand, **Allergy New Zealand** (allergy.org.nz)[1].

CHAPTER 4 IN ONE LINE

Four hours from the last dose · Action Plan and autoinjector before they leave · document the allergy · refer everyone.

CHAPTER 5

Rapid Review

The whole sequence condensed to an action card. If you read nothing else before a shift, read this page.

Recognise

Acute onset illness with **skin signs and another body system** — or acute onset of **unexplained hypotension, bronchospasm or upper airway obstruction** where anaphylaxis is possible.

Respond

- Perform the primary survey (DRSABCD).
- Call for help — press the button, then call 333 and declare the right emergency.
- Remove the trigger if known; stop and aspirate suspect infusions.
- Manage the scene. Clear 360-degree space. Allocate roles.
- Lay the patient supine. Give oxygen. Apply monitoring.

Rescue

- Give **0.5 mg IM adrenaline** (1:1000) into the lateral thigh.
- Establish large-bore IV access. Give oxygen if not already done.
- Commence IV fluid bolus (20 mL/kg). Repeat as needed.
- Repeat **0.5 mg IM adrenaline every five minutes** if indicated.
- No improvement after **two** doses — treat as refractory anaphylaxis[37]. Get senior help and a critical care environment for a titrated infusion.
- Consider second-line therapies, but **do not delay IM adrenaline**.

Recovery

- Monitor for at least four hours after the last dose of adrenaline.
- Give an Anaphylaxis Action Plan on discharge.
- Document the allergy in the clinical notes and My Health Record.
- If re-exposure is possible, prescribe and supply an autoinjector, and train them in it.
- Refer all episodes of anaphylaxis for specialist review.

Five ways this goes wrong

The error	The correction
Waiting for a rash before treating	Skin features are absent in 1 in 6 fatal episodes; Pattern 2 needs no rash at all
Giving an antihistamine or steroid first	Neither treats airway, breathing or circulation — and both delay adrenaline
Drawing IM adrenaline from a 1:10,000 ampoule	Only 1:1000 (1 mg in 1 mL) is used for IM doses
Letting the patient sit up or walk	Keep supine with legs elevated; sudden deterioration and arrest can occur
Discharging without a plan or a device	Action Plan, autoinjector, education, documentation and referral

CHAPTER 6

Self-test

Fifteen questions covering the whole sequence. The worked rationales follow, and are the more useful half — several explain why a tempting answer is wrong.

1 True or false: anaphylaxis or severe allergic reaction rarely presents without skin signs such as an urticarial rash.

- **A** True
- **B** False

2 Which of the following interventions should *not* be performed in the initial management of anaphylaxis?

- **A** IM adrenaline (0.5 mg)
- **B** High-flow oxygen
- **C** Lay patient supine
- **D** Large-bore IV access
- **E** IV fluid bolus (20 mL/kg)
- **F** Antihistamines

3 True or false: adrenaline 1:10,000 (1 mg/10 mL) ampoules or prefilled syringes can be used to give an IM dose if required.

- **A** True
- **B** False

4 If a patient in anaphylaxis progresses to cardiac arrest, adrenaline should be given:

- **A** 0.5 mg adrenaline IM, repeated every five minutes
- **B** 0.5 mg adrenaline IV, repeated every three minutes
- **C** 1 mg adrenaline IV, repeated every four minutes
- **D** 5 mg adrenaline IV, repeated every five minutes

5 A patient on the ward develops sudden hypotension and audible wheeze fifteen minutes into an intravenous antibiotic infusion. There is no rash. What is the single most important immediate action?

A Send a serum tryptase before giving any treatment

B Stop the infusion and give 0.5 mg IM adrenaline into the lateral thigh

C Give a salbutamol nebuliser and reassess in five minutes

D Give IV hydrocortisone 200 mg and a non-sedating antihistamine

6 Which single site is recommended for the first dose of intramuscular adrenaline, and why?

A Deltoid — most accessible in a seated patient

B Vastus lateralis — large muscle bulk with an established blood supply

C Gluteal — largest muscle mass available

D Subcutaneous abdominal tissue — least painful route

7 A patient remains hypotensive after two doses of IM adrenaline five minutes apart. According to current ASCIA and ANZCOR guidance, what does this represent and what is the next step?

A A normal response — continue IM dosing and reassess in fifteen minutes

B Refractory anaphylaxis — call for senior help and prepare a titrated IV adrenaline infusion in a critical care area

C Treatment failure — give a 1 mg IV adrenaline bolus

D Probable septic shock — start antibiotics and take blood cultures

8 A patient with refractory shock takes a beta blocker. Which additional agent may be useful, and at what dose?

A IV glucagon 1–2 mg

B IV promethazine 25 mg

C Nebulised salbutamol 5 mg

D Oral prednisolone 50 mg

9 **A patient received two doses of IM adrenaline. The first was at 14:10 and the second at 14:15. They are now well at 15:00. What is the earliest reasonable time for discharge, assuming everything else is satisfactory?**

A 18:10 — four hours from the first dose

B 18:15 — four hours from the last dose

C 19:00 — four hours from full recovery

D Immediately, as the patient is now asymptomatic

10 **Which two items must a patient who has received adrenaline for anaphylaxis have before leaving the facility, where there is a risk of re-exposure?**

A A tryptase result and a discharge summary

B An Anaphylaxis Action Plan and an adrenaline autoinjector

C A course of oral steroids and a non-sedating antihistamine

D A MedicAlert bracelet and an immunology appointment date

11 **Which feature would make you doubt a diagnosis of septic shock and favour anaphylaxis?**

A Hypotension unresponsive to a first fluid bolus

B Sudden onset minutes after a drug was administered

C Tachycardia and warm peripheries

D A raised lactate

12 **Which statement about serum tryptase in suspected anaphylaxis is correct?**

A A normal tryptase excludes anaphylaxis

B It should be taken before adrenaline to avoid a falsely elevated result

C Taken within four hours, it may help the reviewing specialist if the diagnosis is uncertain

D It is the definitive bedside test for anaphylaxis

13 **A woman at 30 weeks' gestation develops anaphylaxis after an intravenous antibiotic. Which statement is correct?**

A Adrenaline should be withheld because of the risk to placental perfusion

B The dose is halved in pregnancy

C Management is the same as for a non-pregnant patient, and she should be positioned in the left lateral position

D She should be sat fully upright to relieve diaphragmatic splinting

14 **An adult visitor collapses with stridor after eating. The only adrenaline immediately available is her own EpiPen (300 micrograms). What should you do?**

A Wait for an ampoule so the full 500 microgram adult dose can be given

B Give the EpiPen now, recognising that it may deliver less than the intended dose, and be ready to follow with an ampoule dose

C Give two EpiPens simultaneously into the same thigh

D Give the EpiPen intravenously for faster onset

15 **Which of these is a recognised sign of anaphylaxis in an infant that would not appear on a standard adult symptom list?**

A Urticarial rash

B Persistent crying, hypotonia and mottled skin

C Wheeze

D Hypotension

CHECKING YOUR ANSWERS

Each rationale names the chapter the question came from, so anything you get wrong points straight at the page worth re-reading.

SELF-TEST

Answers & rationales

Worth reading even where you answered correctly — several explain why the wrong answer is the tempting one. Cross references point back to the relevant chapter.

1. False. Skin features are absent in roughly one in six fatal episodes of anaphylaxis, and ASCIA's second diagnostic pattern — sudden unexplained hypotension, bronchospasm or upper airway obstruction — exists precisely so that these patients are still treated[1]. Waiting for urticaria is one of the commonest reasons adrenaline is given late. *(Chapter 1 — clinical features)*

2. F — antihistamines. IM adrenaline, IV access and fluid bolus, patient positioning and oxygen administration are all life-saving. Antihistamines have no role in the emergency management of anaphylaxis and can distract from or delay IM adrenaline and other life-saving treatments. Promethazine can worsen hypotension and should not be given. *(Chapter 3 — steroids and antihistamines)*

3. False. Only 1:1000 (1 mg/1 mL) ampoules should be used for IM dosing. Other presentations are designed for IV use and may be inadvertently given IV in a crisis. *(Chapter 3 — adrenaline formulations)*

4. C — 1 mg adrenaline IV, repeated every four minutes. Once the patient is in arrest, IM doses are unlikely to be absorbed. IV adrenaline is given at 1 mg every four minutes — every two cycles — as part of standard Advanced Life Support. *(Chapter 3 — cardiac arrest)*

5. B. This is the second diagnostic pattern — acute onset of unexplained hypotension and bronchospasm, with a plausible trigger running into the vein. The absence of a rash is not reassuring. Stopping the infusion and giving IM adrenaline are simultaneous priorities; tryptase and nebulisers come afterwards, and steroids and antihistamines (D) treat none of the airway, breathing or circulation problems in front of you. *(Chapters 1 and 2)*

6. B — vastus lateralis. The lateral thigh has large muscle bulk and an established blood supply, giving faster and more reliable absorption than the deltoid or the subcutaneous route, and it can be injected through clothing. Use a different site for each subsequent dose. *(Chapter 3 — IM adrenaline)*

7. B — refractory anaphylaxis. ANZCOR and ASCIA define this as no improvement in respiratory or cardiovascular symptoms despite **two** doses of IM adrenaline[37]. The response is senior help, a critical care environment and a titrated infusion. Continuing to wait (A) wastes the window; a 1 mg IV bolus (C) risks arrhythmia and tissue ischaemia and is reserved for cardiac arrest; and while septic shock (D) shares the warm, fluid-refractory picture, it does not come on over minutes. *(Chapter 3 — refractory anaphylaxis)*

8. A — IV glucagon 1–2 mg. Glucagon acts through a non-adrenergic pathway and can restore inotropy when beta blockade is blunting the response to adrenaline. Injectable promethazine (B) is specifically to be avoided, and neither salbutamol (C) nor prednisolone (D) treats shock. *(Chapter 3 — second-line therapies)*

9. B — 18:15. The observation period runs for at least four hours from the **last** dose of adrenaline[8]. This is a minimum: a patient with a severe or refractory reaction, previous biphasic reaction, significant comorbidity, late evening presentation, or who lives remotely or alone may warrant overnight observation regardless[1]. *(Chapter 4 — observation period)*

10. B. An Anaphylaxis Action Plan and, where re-exposure is possible, an adrenaline autoinjector supplied before discharge — with education for the patient and their carers on how to use it. Documentation of the allergy and referral for specialist review are also required, but the two physical items the patient must leave with are the plan and the device. *(Chapter 4 — adrenaline prescription)*

11. B. Septic shock is unlikely to have a sudden or acute onset. Warm peripheries, tachycardia, fluid-refractory hypotension and a raised lactate are all common to both. Onset over minutes, temporally linked to an exposure, points to anaphylaxis. *(Chapter 1 — differential diagnosis)*

12. C. A serum tryptase taken within four hours may be helpful for the reviewing specialist if the diagnosis is uncertain. It is not a bedside test, a normal result does not exclude anaphylaxis, and it must never delay adrenaline. *(Chapter 4 — follow-up)*

13. C. ASCIA states that management of anaphylaxis in pregnancy is the same as for non-pregnant patients, and that adrenaline **should not be withheld** for fear of reducing placental perfusion. The left lateral position reduces caval compression by the gravid uterus and improves venous return[1]. *(Chapter 3 — special situations; Chapter 2 — positioning)*

14. B. Use the adrenaline that is closest to the patient. An EpiPen delivers 300 micrograms, less than the 500 microgram adult emergency dose, so give it now and be ready to follow with an ampoule dose. Never give an autoinjector intravenously, and never delay while looking for the "right" preparation. *(Chapter 3 — the patient's own autoinjector)*

15. B. ASCIA lists drooling, irritability or clinginess, persistent crying, somnolence, hypotonia and mottled skin as signs of anaphylaxis in infants[1]. The other three appear on any adult list. *(Chapter 1 — infants and young children)*

APPENDIX A

Drug and dose quick reference

Every dose in this guide, gathered in one place. Adult doses unless a weight or age is given.

Adrenaline

Indication	Dose	Route and notes
Anaphylaxis — adult	500 micrograms (0.5 mg) = **0.5 mL of 1:1000**	IM, vastus lateralis. Repeat every 5 minutes while indicated; new site each dose. Give IM even when IV access is already in place[1]
Anaphylaxis — child	**0.01 mg/kg** to a maximum of 0.5 mg = 0.01 mL/kg of 1:1000	IM, vastus lateralis. See the banded table in Chapter 3 for the volume by age and weight[4]
Refractory — infusion	**1 mL of 1:1000 in 100 mL** 0.9% NaCl, at **0.5 mL/kg/hour**	IV, titrated to response, pump or syringe driver mandatory, critical care with continuous monitoring. Non-tertiary alternative: 1 mL of 1:1000 in 1000 mL at 5 mL/kg/hour[3]
Refractory — IV bolus	**10–20 micrograms**, escalating by doubling	Specialist settings only. Not recommended outside cardiac arrest[7]
Cardiac arrest	**1 mg IV**, repeated every 4 minutes (every 2 cycles)	Standard ALS dosing. IM is not absorbed without a circulation
Upper airway obstruction	**5 mg nebulised** = 5 mL of 1:1000	Adjunct only — never in place of IM adrenaline[1]

THE ERROR THAT KILLS

1:1000 = 1 mg in 1 mL — this is the IM preparation. 1:10,000 (1 mg in 10 mL) is an intravenous preparation and must never be used to give an IM dose.

Fluids and second-line agents

Agent	Dose	Indication
IV crystalloid	**20 mL/kg** bolus, repeated as needed (ASCIA states 10–20 mL/kg)	0.9% sodium chloride or compound sodium lactate. Large volumes are often needed in refractory shock[27]
Nebulised salbutamol	**5 mg** nebulised, or 8–12 puffs of 100 mcg via spacer	Persistent wheeze or bronchospasm despite IM adrenaline. Never first-line[1]
IV glucagon	**1–2 mg**	Refractory shock, especially on long-term beta blockers. Check local procedure[9]
Corticosteroid	Prednisolone **1 mg/kg** (max 50 mg) oral, or hydrocortisone **5 mg/kg** (max 200 mg) IV, or dexamethasone **8 mg** IV	Persistent wheeze or itch only. Slow onset; benefit unproven; must not replace adrenaline[1]
Antihistamine	Loratadine or cetirizine **10–20 mg** oral	Itch, flushing or urticaria once anaphylaxis is treated. **Never injectable promethazine**[1]

Adrenaline devices

Device	Dose	Weight band
EpiPen Jr	150 micrograms	7.5–20 kg
EpiPen	300 micrograms	Over 20 kg and adults
Anapen Jr / Anapen	150 / 300 micrograms	7.5–20 kg / over 20 kg
Jext Jr / Jext	150 / 300 micrograms	7.5–20 kg / over 20 kg
neffy (intranasal)	1 mg / 2 mg	15–30 kg, from 4 years / over 30 kg

No autoinjector currently available in Australia delivers the full 500 microgram adult dose[11]. Use the patient's device if it is the nearest adrenaline, then follow with an ampoule dose. Intramuscular remains the preferred route[1].

Numbers to remember

5 minutes	Interval between repeat IM doses
2 doses	No improvement after this many — refractory anaphylaxis[37]
4 hours	Minimum observation after the **last** dose of adrenaline[8]
3+ doses	Consider high dependency observation
4 hours	Window for a serum tryptase, if the diagnosis is uncertain
2 hours	Usual interval between exposure and onset in adults
333	Emergency call at RBWH and the Herston Campus (3646 1600 external)

CHAPTER 7

References & further reading

Numbered sources for the clinical content in this guide, and where to go next for training, printable bedside aids and patient resources.

Sources

1. **Australasian Society of Clinical Immunology and Allergy (ASCIA).** *ASCIA Guidelines — Acute Management of Anaphylaxis. July 2026.* allergy.org.au/images/ASCIA_HP_Guidelines_Acute_Management_Anaphylaxis_July_2026.pdf — The primary Australasian source for recognition, adrenaline dosing, adjuncts, special situations, observation and discharge.

2. **ASCIA.** *Initial Anaphylaxis Management Flowchart. 2026.* allergy.org.au/images/ASCIA_HP_Initial_Anaphylaxis_Management_Flowchart_2026.pdf — A printable bedside cognitive aid — trigger removal, positioning, supportive care and the escalation trigger.

3. **ASCIA.** *Refractory Anaphylaxis Management Flowchart. 2026.* allergy.org.au/images/ASCIA_HP_Refractory_Anaphylaxis_Management_Flowchart_2026_v2.pdf — Carries the IV adrenaline infusion recipe and the two-dose refractory threshold.

4. **ASCIA.** *Adrenaline (Epinephrine) Doses for Anaphylaxis. 2026.* allergy.org.au/images/ASCIA_HP_Adrenaline_Doses_Anaphylaxis_2026.pdf — Source of the weight-based dose table in Chapter 3.

5. **ASCIA.** *How to Use Adrenaline Devices. 2026.* allergy.org.au/images/ASCIA_How_to_use_adrenaline_devices_2026_4_red.pdf — Step-by-step instructions and weight bands for EpiPen, Anapen, Jext and neffy.

6. **Australian and New Zealand Committee on Resuscitation (ANZCOR).** *Guideline 9.2.7 — First Aid Management of Anaphylaxis.* anzcor.org — Guideline 9.2.7 — First-aid recognition, positioning ("lay flat; do not stand or walk"), autoinjector dosing and the five-minute repeat.

7. **ANZCOR.** *Guideline 11.10 — Resuscitation in Special Circumstances. July 2026.* anzcor.org — Guideline 11.10 — Refractory anaphylaxis, IV adrenaline, and the management of anaphylactic cardiac arrest including intubation, fluids, vasopressors and ECPR.

8. **Australian Commission on Safety and Quality in Health Care.** *Acute Anaphylaxis Clinical Care Standard. Sydney: ACSQHC; November 2021.* safetyandquality.gov.au — Acute Anaphylaxis Clinical Care Standard — The six national quality statements, the admission figures in Chapter 1, and the discharge requirements in Chapter 4.

9. **Australian and New Zealand Anaesthetic Allergy Group / ANZCA.** *Perioperative Anaphylaxis Management Guidelines. 2022.* media.anzaag.com/2022/11/22130651/Anaphylaxis-Mx-Guideline-2022.pdf — Anaphylaxis under anaesthesia, including perioperative triggers and glucagon. See also ANZCA PG69 (2025) on perioperative hypersensitivity reactions.

10. **Australian Prescriber.** *Anaphylaxis: emergency management for health professionals.* australianprescriber.tg.org.au — Concise clinical update on emergency management for health professionals.

11. **ASCIA.** *Adrenaline (Epinephrine) Devices — availability in Australia and New Zealand. Information update, January 2026.* allergy.org.au/members/adrenaline-device-availability — Current device availability, including the discontinuation of Anapen 500 and the registration of Jext and neffy.

The six national quality statements

The *Acute Anaphylaxis Clinical Care Standard*[8] defines the care every patient should receive. Each maps directly onto a section of this guide.

QS	Statement	Where in this guide
1	Prompt recognition of anaphylaxis	Chapter 1
2	Immediate injection of intramuscular adrenaline, before any other treatment including asthma medicines	Chapter 3

QS	Statement	Where in this guide
3	Correct patient positioning — laid flat, or sitting with legs extended if breathing is difficult	Chapter 2
4	Access to a personal adrenaline injector in all healthcare settings	Chapter 3
5	Observation for at least 4 hours after the last dose of adrenaline, or overnight as appropriate	Chapter 4
6	Discharge management and documentation	Chapter 4

Further reading and training

ASCIA — Action Plans for Anaphylaxis
Blank Anaphylaxis Action Plans to complete and give on discharge, in device-specific and generic versions, plus the allergic reactions event record for patients.
https://www.allergy.org.au/hp/anaphylaxis/ascia-action-plan-for-anaphylaxis

ASCIA — Acute Management of Anaphylaxis Guidelines
The full guideline set for health professionals.
https://www.allergy.org.au/hp/papers/acute-management-of-anaphylaxis-guidelines

ASCIA — How to give an adrenaline injector
Device demonstration videos for EpiPen, Anapen and Jext. Watch the one your patient actually carries.
https://www.allergy.org.au/hp/anaphylaxis/how-to-give-injector

ASCIA — Health professional e-training
Free accredited anaphylaxis e-training courses.
https://www.allergy.org.au/hp/hp-e-training

ANZAAG — Anaphylaxis Management Guideline 2022
Perioperative anaphylaxis, including the immediate management cards.
https://media.anzaag.com/2022/11/22130651/Anaphylaxis-Mx-Guideline-2022.pdf

Australian Prescriber — Anaphylaxis: emergency management for health professionals
Concise clinical update.
https://australianprescriber.tg.org.au/articles/anaphylaxis-emergency-management-for-health-professionals-update-1.html

Local contacts

RBWH & HERSTON CAMPUS

Emergency: press the wall-mounted emergency button, then call switchboard on **333** — or **3646 1600** from a mobile or external line — and declare a Medical Emergency, Airway Emergency or Cardiac Arrest.

Resuscitation education, including anaphylaxis: the REdI Resource Educators, **redi@health.qld.gov.au**.

RASH — Response to Anaphylaxis & Severe Hypersensitivity
Learning Guide · September 2026 · REdI, Metro North Health
For education only — always follow your current local clinical procedure.