

Module 8

Anaphylaxis



Learning Outcomes

Pupils will learn how to:

- recognise the signs and symptoms of **mild**, **moderate** and **severe** allergic reactions;
- respond to or treat these different types of allergic reaction; and
- use an adrenaline auto-injector (AAI).



Resources

- BBC Bitesize [Izzy and Ben's story](#) – living with anaphylactic allergies
- Video – [How to use a Jext](#)
- Activity Card 8a: Common Allergy Triggers
- Activity Card 8b: Anaphylaxis – What's the correct order? (Answer below)
- Skills Card 8: How to use an Adrenaline Auto-Injector (AAI)



Teaching Notes

- Help your pupils to say the word anaphylaxis phonetically: ana-fil-ax-is. Explain that this is the name for a severe and life-threatening allergic reaction.
- Ask your pupils if they know what might cause an allergic reaction. Discuss their answers.
- Explain to your pupils that someone could experience an allergic reaction if they encounter something they are allergic to, for example milk, eggs, nuts, shellfish, insect bites or stings, or latex products such as balloons or rubber gloves. Sometimes there is no obvious reason for a reaction.
- Explain that an allergic reaction can be **mild**, **moderate** or **severe**.
- Emphasise that a **severe** reaction is called **anaphylaxis**.
- Explain to pupils that people with known allergies usually have an Allergy Action Plan.
- Use the Activity Card 8a: Common Allergy Triggers to reinforce the most common causes of allergic reaction.

Explain to your pupils that an allergic reaction can be **mild**, **moderate** or **severe**. The casualty might have any of these symptoms:

- swollen face, lips or eyes;
- itchy or tingly mouth;
- hives or itchy skin;
- abdominal pain or vomiting;
- difficulty breathing; or
- sudden change in behaviour.

Explain to your pupils that in the case of **mild** or **moderate** allergic reactions, they should:

- stay with the casualty;
- give the casualty their allergy medication (if the casualty vomits, give the medication again);
- find the casualty's auto-injector in case it is needed; and
- contact the casualty's parents or emergency contact.

If the allergic reaction is **severe**, this is **anaphylaxis**. The casualty can become very ill, very quickly. You will need to give them **adrenaline** at once. Lie the casualty down and raise their legs. Use an auto-injector to administer a dose of adrenaline.

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With your pupils, watch the clip from BBC Bitesize Izzy and Ben's story: Living with anaphylactic allergies.

What is adrenaline?

Explain to pupils that:

- adrenaline is a hormone that does two important jobs for someone having an anaphylactic episode:
 - it **relaxes the muscles in the airways**, so it is easier to breathe; and
 - it causes **blood vessels to tighten**, so blood is re-directed towards the major muscle groups, for example the heart and lungs;
- if they suspect someone is experiencing a severe allergic reaction, they should look out for **ABC**:
 - **AIRWAY**: persistent cough, hoarse voice, swollen tongue or difficulty swallowing;
 - **BREATHING**: difficult or noisy breathing, wheezing or a persistent cough; and
 - **CONSCIOUSNESS**: persistent dizziness, becoming pale, floppy or suddenly sleepy, collapse or unconsciousness.
- Tell your pupils that the casualty needs adrenaline if any of the above symptoms are present. They can give this using an auto-injector such as an EpiPen. This is an injection device prefilled with adrenaline. They should give the injection into the outside of the upper thigh. They can do this through the casualty's clothes, if necessary, but it is important to avoid seams or bulky pockets. Anyone can use an adrenaline auto-injector on someone experiencing a severe allergic reaction.



Show your pupils how it to use an auto-injector and then encourage them to practise using the sample auto-injector pens.

Tell your pupils to follow these six steps:

1. **Lie the casualty flat and raise their legs** to help the blood flow to their heart and vital organs.
2. Use the **adrenaline auto-injector without delay**.
3. Call 999 or 112 and say this is an **emergency anaphylaxis** case. We use 999 in the UK. Elsewhere in Europe, the emergency number is 112. It connects the caller to the same service, so we can use either number. Remind your pupils that in the case of severe allergic reaction we need to act quickly.
4. Stay with the casualty until the ambulance arrives.
5. Start cardiopulmonary resuscitation (CPR) if there is no sign of life.
6. If there is no improvement after at least five minutes, use a second adrenaline auto-injector, if available, to inject adrenaline into the other leg.

Watch the Jext video with the class.

Ask your pupils, in pairs, to role-play lying the casualty flat, using the practice adrenaline auto-injector and calling an emergency ambulance. Encourage them to describe each action as they take it.

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Extension Ideas and Cross-Curricular Links

- **Learning for Life and Work (Home Economics – Food and Nutrition)**
Pupils could investigate foods that cause allergic reactions and make a poster to highlight the dangers of those foods. Discuss how all pupils in school can support those in their school community who are at risk, for example by not bringing trigger foods to school.
- **The Arts (Drama)**
Pupils could role-play a scenario such as a picnic or barbecue. One pupil could play a person having the severe allergic reaction, a second could play the helper and a third could be a bystander. A large floor space will be needed for role playing.

There is further information at www.jext.co.uk or www.epipen.co.uk.

The [Anaphylaxis UK](http://www.anaphylaxisuk.org) website has useful information about managing anaphylaxis, including sample Allergy Action Plan templates.

