Personal protective equipment (PPE) – added section

PPE section added which includes a labelled image of a first aider wearing 'level 2 PPE' face mask, eye protection and disposable apron. The casualty should also wear a face mask where appropriate.

Greater emphasis has been placed on advising to call 999/112 on a speaker-phone so that CPR can be started while simultaneously talking to the ambulance call handler.

Cardiopulmonary resuscitation (CPR)

Call 999/112 and send for a defibrillator (AED):

- Ask a helper to call or activate the speaker function on your phone so that you can start CPR while talking to the ambulance call handler.

Cardiopulmonary resuscitation (CPR)

Additional advice added when you have to give CPR but are unable to move the casualty off a bed:

Remove the pillows and kneel on the bed next to the casualty to give CPR (this helps to compress the mattress with your own weight). Increase your overall compression depth to compensate for the mattress compression.
Hygiene during resuscitation

Clarification that a face shield/pocket mask will not fully protect from Covid-19.

- If possible use a protective barrier such as a ‘face shield’ or ‘pocket mask’, however, this will not fully protect you from COVID-19.

Choking

Small change to choking recognition text:
- suspect choking if someone is suddenly unable to speak, particularly if eating
- if choking is mild, the casualty will be able to speak, cough and breathe

Advice amended from shout for help to:
Shout for someone to call 999/112, or call on a speaker-phone if you can do this as the same time as giving treatment.
Received chest thrusts now added to reasons to seek immediate medical attention after treatment.

AVPU

Pain changed to ‘pressure’ to better reflect appropriate actions of a first aider.

Localises Pressure
The casualty is able to localise where pressure stimulus is being applied.

Responds to (but does not localise) Pressure
The casualty responds to pressure stimulus, but is unable to localise it.

Recovery position

Additional advice update: The recovery position is intended for an unresponsive, uninjured casualty who is breathing normally and does NOT need CPR.
Recovery position – injured casualty

Updated advice: For an injured unconscious casualty, keep them still and continually monitor Airway and Breathing. Only use the recovery position if the airway is at risk, (e.g. fluids in the airway, or you have to leave them to get help and therefore cannot continually monitor breathing).

Anaphylaxis – minor updates

Recognition: A rapid onset and rapid progression – becoming very ill, very quickly.
Treatment: The dose of adrenaline can be repeated after 5 minute intervals if there is no improvement or symptoms return.

Asthma treatment – minor updates

• The casualty should take one puff of their reliever inhaler (usually blue) every 30 – 60 seconds for up to 10 puffs. Use a spacer device if available.
• Call 999/112 for emergency help if they feel worse at any point or if they don’t feel better after 10 puffs.
• The 10 puff inhaler routine can be repeated after a few minutes if the ambulance hasn’t arrived yet.

Stroke recognition

Other red flag symptoms added to aid recognition of other stroke symptoms that may not be identified with the FAST test.

Other red flag symptoms:
• Balance: sudden loss of balance, trouble walking, dizziness or loss of coordination.
• Eyes: sudden vision loss, double vision or partial loss of vision in one or both eyes.
• Sudden severe headache, nausea or vomiting.
Control of bleeding – updated information

- **Pressure** – ‘you may need to press into the wound.’
- If a dressing gets saturated with blood, take it off and make sure you are applying direct pressure to the exact point of bleeding. Only re-dress it when the bleeding is controlled.

Wound packing

- Emphasis that wound packing is for ‘life-threatening’ bleeding.
- Additional emphasis on using improvised wound packing if necessary.
- Abdomen removed from sites amiable to wound packing.
- Added text: **DO NOT** try to pack a chest wound.

Tourniquets – updated section

- Emphasis that tourniquets are for ‘life-threatening’ bleeding from an arm or leg that cannot be controlled by applying manual pressure.
- Place the tourniquet 5–7cm above the wound but not over a joint.
- **DO NOT** release a tourniquet. Only a healthcare professional can do this.

Knocked out tooth – updated section

**Knocked out ‘adult’ tooth**

- Handle the tooth at the tip, not the root.
- If possible re-implant the tooth back in its socket. Ask the casualty to bite on a clean swab to hold the tooth in place.
- If the tooth is visibly dirty, it can be rinsed under a tap for a maximum of 10 seconds.
- If re-implanting the tooth is not possible wrap it in cling film or store it in cow’s milk.
- Arrange urgent transfer to a dentist.
**Sprains and Strains update**

Maximum time for ice application changed to 20 minutes.

**Spinal injury**

**Treatment** – Emphasis change to allow a conscious casualty to protect their own neck and allow them to exit a vehicle if needed and they are able.

- Keep the casualty in the position you find them unless they are in danger. If necessary (and they are able) it’s okay to allow a casualty to get themselves out of a vehicle.
- Tell the casualty to keep their head still, explaining that you are concerned about a broken neck. If needed, help them to do this.

**Recovery position** – Increased emphasis on the need to keep an unconscious breathing casualty still and only use the recovery position if the airway is at risk.

- Hold the head still. Keep the head and neck in line with the upper body.
- Keep the casualty warm and still. Continually monitor breathing until help arrives. Only move them if they are in danger.
- If there is an airway emergency (e.g. the casualty is unresponsive, on their back and there are fluids in the airway), you may need to turn the casualty onto their side.

*Keep the head and neck in line with the spine whilst you turn the casualty*

**Body Temperature**

Advice on using a mercury thermometer removed and topic replaced with advice on recognising infection in relation to high body temperature.

**Recognising infection**

Modern, easy to use thermometers are now available, such as disposable strips that are placed on the forehead or thermometers that read a temperature from the ear. In the absence of exposure to excessive heat, a high temperature could be an indicator that a casualty has an infection.
Heat stroke – updated section

Heat stroke occurs when the core body temperature exceeds 40°C. It is an urgent medical emergency and can lead to severe organ damage and death if the core temperature is not reduced promptly.

The condition often follows prolonged exercise (such as long-distance running) or prolonged exposure to heat (such as being in the sun all day).

Those with impaired heat regulation (such as children and the elderly) are also susceptible in hot weather.

First aid providers at events where heat stroke is likely should have effective cooling facilities immediately available.

Recognition

- Elevated body temperature.
- Confusion, agitation, disorientation.
- Seizures.
- Throbbing headache.
- Lowered levels of response leading to unconsciousness.
- Nausea, vomiting.
- Flushed, hot, dry skin (no sweating).

Treatment

- Remove the casualty from the heat source.
- Call 999/112 for emergency help.
- Cool the casualty rapidly, using fastest method available. The fastest methods, in approximate order, are:
  1. Whole body immersion from the neck down in cold water (1–26°C).
  2. A cold shower (or garden hose).
  3. Large bags of ice placed on neck, armpits and groin.

Other cooling methods if these aren’t possible include iced sheets or towels, cooling vests or fanning. A specialised ice ‘Tarpaulin Assisted Cooling Method’ (TACO) can be used with training.
# Sepsis and meningitis

Improved layout of recognition table *(ticks added to the meningitis column for the sepsis signs to further clarify that these may occur if meningitis leads to sepsis).*

## Recognition of meningitis and sepsis

<table>
<thead>
<tr>
<th>Recognition feature</th>
<th>Cause/comment</th>
<th>Meningitis</th>
<th>Sepsis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Earlier Signs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial source of infection</td>
<td>Spreads from a localised infection e.g. a chest infection, infected cut or meningitis</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>High temperature <em>(fever)</em></td>
<td>The brain raises the body thermostat to try fight the infection</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Chills/shivering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low temperature</td>
<td>Less commonly the body temperature can become very low</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rapid heartbeat/fast pulse</td>
<td>To try maintain blood pressure</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fast breathing</td>
<td>In response to impaired respiration</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Severe Sepsis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe difficulty in breathing</td>
<td>Damaged blood flow in the lungs</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pale, mottled skin</td>
<td>Reduced blood flow to the skin</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Blue tinges to skin <em>(cyanosis)</em></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Confused, agitated or delirious</td>
<td>Reduced blood flow to the brain</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Slurred speech</td>
<td>Pressure on the brain with meningitis</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dizzy or faint</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sleepy, vacant or difficult to wake</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cold hands and feet</td>
<td>Reduced blood flow to the limbs</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pain in limbs or joints</td>
<td>Blockages in blood flow to the limbs</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rash <em>(anywhere on the body)</em> may start like pin pricks. Does not fade when squashed with a glass tumbler</td>
<td>Damaged capillaries bleeding under the skin</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Other signs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach pain, diarrhoea</td>
<td>Reduced blood flow to the intestines <em>(but may be due to a tummy infection)</em></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Nausea, vomiting</td>
<td>Common with many infections</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Meningitis</strong></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Severe headache</td>
<td>Swelling of the linings surrounding the brain</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Dislike of bright lights</td>
<td>In babies the soft spot on the head may become tense or bulging</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Stiff neck <em>(less common in young children)</em></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Seizures</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

*Symptoms in red are less common with minor illness, giving a stronger clue to sepsis (or meningitis).*

*With meningitis, these are signs that the infection has spread into the bloodstream, causing sepsis.*
Age definition for resuscitation – updated section

Resuscitation age definitions:

<table>
<thead>
<tr>
<th>Age</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby or infant</td>
<td>Under 1 year</td>
</tr>
<tr>
<td>Child</td>
<td>1 to 18 years*</td>
</tr>
<tr>
<td>Adult</td>
<td>Beyond 18 years*</td>
</tr>
</tbody>
</table>

*If age is in doubt, it’s okay to follow the child sequence.

COVID-19 CPR adaptations – added section

1. Check for further danger and wear your PPE if available.

2. At arms length, check for response by gently shaking the shoulders and shout loudly.

3. At arms length, check for normal breathing for no longer than 10 seconds. You can place your hand on the abdomen, just below the ribs to check for movement.
   - **DO NOT** place your face near the casualty’s mouth.
   - **DO NOT** tip the head back to open the airway.

4. Call 999 or 112 and send for a defibrillator if available.

5. Unresponsive and not breathing normally? Place some material over the casualty’s mouth and nose (e.g. tea towel), then give continuous chest compressions at a rate of about 2 per second and 5–6cm deep. Press ‘hard and fast’.

6. As soon as a defibrillator arrives, switch it on and follow the instructions. This is completely safe to use even with COVID-19.