

St John  
Ambulance



# Reference guide supplement

Updated guidance on first aid scenarios



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# Introduction

Following the latest first aid protocol changes we have created this reference guide supplement to make sure you are receiving the most up to date first aid information possible.

This guide includes protocol changes for topics covered on our first aid courses and can be used alongside the reference guide you received on your course to update some of the treatment protocols that have changed since we printed the original guide.

The protocol changes are highlighted in a yellow box like this.

Keep this guide handy and, if possible, always carry a first aid kit – or have one close to hand.

**For more first aid advice or to book further training courses, visit [sja.org.uk](https://www.sja.org.uk) or call 0344 770 4800\***

**St John Ambulance responds to health emergencies, supports communities, and saves lives.**

**Our clinical expertise and the skills of St John people make us unique. We are the nation's health and first aid charity, with a national presence, reach and scale.**

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\*Lines are open Mon-Fri 8.30am - 5.30pm

# Asthma

Asthma is a potentially life-threatening condition. It affects the air passages, which are the tubes that carry air into and away from the lungs. The air passages in someone with asthma are sensitive to particular irritants. These irritants, commonly known as triggers, include pollen, animal fur, feathers, exercise, smoke and house dust mites. Flu and colds can also affect asthma, which may be worse at night.

Once diagnosed with asthma, the person is given support to help them through their illness. This can include medication, breathing exercises and details of support groups, such as Asthma UK (see page 124 of the reference guide).

Medication is usually delivered by inhaler. There are two types of inhaler:

Reliever inhalers (usually blue or with a blue cap) are used immediately to relieve symptoms (see page 107 of the reference guide), Preventer inhalers (usually brown or with a brown cap) are used each day to help prevent asthma attacks, not for relief when an attack starts. Children may use a plastic diffuser or spacer fitted to their inhaler so they can breathe in the medication more effectively.

## Recognition

- Wheezing
- Coughing
- Distress and anxiety
- Grey-blue skin (cyanosis)
- Difficulty breathing
- Difficulty talking
- In a severe attack, the casualty may experience exhaustion, become unresponsive and stop breathing.

## Treatment

**The aim is to ease breathing and to get medical help, if necessary.**

1. Keep calm and reassure the casualty. **Get them to take a dose of their reliever inhaler**, using a spacer if they have one. This should relieve the asthma attack within a few minutes. Encourage the casualty to breathe slowly and deeply
2. **Let the casualty find a position that they find comfortable.** This is often sitting down, do not make them lie down
3. A mild attack should ease within a few minutes of them using their inhaler. **If it doesn't the casualty may take 1-2 puffs of their inhaler every 30-60 seconds for up to 10 puffs.** If they have a personal plan this should be followed and seek medical aid if necessary.
4. **Dial 999 or 112 for an ambulance if the attack is severe and one of the following occurs:**
  - The inhaler has no effect
  - They become exhausted
  - The casualty is getting worse
  - Breathlessness makes talking difficult
5. Monitor and record the casualty's vital signs until help arrives.

**If there is a delay of more than 15 minutes repeat taking 1-2 puffs every 30-60 seconds up to 10 puffs.**



# Bruising

## Treatment

1. Raise the injured limb and support it in a comfortable position
2. Use a cold compress to cool the area. Apply it firmly and keep it in place for at least 20 minutes.

# Burns

## Treatment

The aim is to cool the burn and to get medical help.

1. Do not touch the burned area
2. Leave in place any clothing stuck to the burn unless it is contaminated with chemicals
3. Leave any blisters intact
4. Hold the burn under cool or lukewarm running water for a **minimum of 20 minutes**, or until the pain eases
5. Remove any jewellery or other constrictions while cooling
6. Cover lengthways with a clean plastic bag, kitchen film or a sterile dressing
7. Dial **999 or 112 for an ambulance if they have:**
  - full thickness burns of any size
  - partial thickness burns larger than 1% (an area the size of the casualty's palm and fingers)
  - superficial burns larger than 5% of the body surface
  - burns on the hands, face, feet or genitals
  - burns with a mixed pattern and/or depth or that extend all around a limb



# Catastrophic bleeding

A bleed that is life threatening, possibly spurting and the usual protocol of pressure and a dressing are not likely to stem the flow. An ambulance (999/112) must be called as soon as possible for a catastrophic bleed.

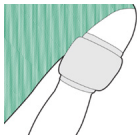
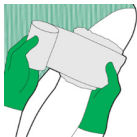
In these cases, you may need to stop the flow of blood using a Haemostatic dressing, tourniquet or improvise a tourniquet following the instruction of Ambulance control if you do not have a haemostatic dressing or tourniquet available.

Injuries requiring such treatment are most likely following a gun shot, stabbing, power tool accident or serious road traffic incident.

## Haemostatic dressings

A haemostatic dressing can be used on a catastrophic wound to the head, neck, chest or abdomen, there are some cautions but remember you will be on the phone to ambulance control so take their guidance.

- 1. Place the pad over the wound and hold tightly in place for a minimum of 5 minutes,** in some instances the dressing may need to be packed tightly into the wound.
- 2. Secure the dressing in place with the bandage, this may be attached or may be separate.** They often have Velcro strip to help you secure it tightly in place
- 3.** Recheck the dressing and monitor the casualty until the ambulance arrives





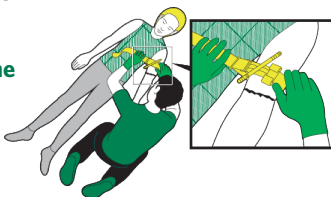
## Tourniquets

A Tourniquet should be used on catastrophic injury such as a limb amputation, a blast injury to a limb, power tool injury, a stabbing or a gunshot to a limb, they must only ever be used on a limb.

You should consider their use carefully as it is likely to be painful for the casualty and you should inform them that it will be painful, as with the haemostatic dressings if you are in any doubt you should ask the advice of the call handler. Once a tourniquet is applied it should not be loosened as the bleeding will start again.

- 1. Place the tourniquet around the limb close to and above the injury.**

If you can place it below the elbow or knee this is best. It should never be placed on a joint.



- 1. Pull the strap tight, you should not be able to get three fingers under the band once it is tight.** Wrap the tail of the strap around the limb.



- 2. Tighten the rod, by twisting it, until the bleeding stops and secure it in place using the rod clip.** If needed a second tourniquet can be applied alongside and above the first one.



- 3. Record the time** on the time tab (if available) and monitor your casualty until the ambulance arrives.

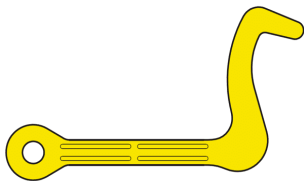


## Improvised Tourniquets

If you do not have a tourniquet, you can use items such as a triangular bandage, a scarf or tie and use a pen, a fork or a Tourni-Key (if you have one) for the rod. A belt pulled tight can also work.

You should consider their use carefully as it is likely to be painful for the casualty and you should inform them that it will be painful, as with the haemostatic dressings if you are in any doubt you should ask the advice of the call handler. Once a tourniquet is applied it should not be loosened as the bleeding will start again.

1. Ensure the casualty knows you are applying a tourniquet and that it will hurt when you tighten it
2. Wrap the material around the limb, cross over the ends
3. Tie in the rod/Tourni-Key with a knot
4. Twist the rod to stop the bleeding
5. Secure the rod or hold it in place.



Tourni-Key

# Chemical burns

If it is a chemical burn, cool the burn with cool or lukewarm running water until the ambulance arrives. Avoid splashing any contaminated water on yourself or the casualty and make sure the contaminated water will not become a danger. As you pour cold water over the burn, carefully remove any contaminated clothing. If the clothing is stuck to the skin, leave it in place and continue cooling while waiting for the ambulance.

## Chemical burn to the eye

### Treatment

**The aim is to flush any chemicals out of the eye and to get medical help.**

1. Ask the casualty to remove their contact lenses if they can
2. Irrigate the casualty's eye under cool or lukewarm running water for a minimum of 20 minutes. Make sure both sides of their eyelid are well rinsed
3. Ensure that water drains away from the face. Avoid splashing any contaminated water on yourself or the casualty
4. Dial 999 or 112 for an ambulance.



# Choking baby (infant)

## Recognition

- Unable to cry or make any noise
- Purple-red colour around the face and neck
- Difficulty in coughing or breathing
- Blueness to the lips.

## Treatment

**The aim is to clear the obstruction and to get medical help.**

1. Lay the infant face down on your thigh while supporting their head. Give the infant up to **five back blows**
2. Turn the infant over so they are lying on your other thigh, **along your arm with their head supported** and **check their mouth for obvious obstructions (do not sweep blindly with your finger)**. If choking persists go to step 3
3. **Give up to five chest thrusts**. Place two fingers on the breastbone, one finger's breadth below the nipple line, and push with a downwards motion. If you have cleared the object stop before you reach five
4. **Check the mouth**
5. If the obstruction still hasn't cleared **dial 999 or 112 for emergency help**. Take the infant with you if necessary. **Continue the cycles of back blows and chest thrusts** while waiting for help to arrive or the infant becomes unresponsive.



# Insect stings

## Treatment

**The aim is to relieve swelling and pain and arrange removal to hospital if necessary.**

1. Reassure the casualty.
2. **If the sting is visible, brush or scrape it off sideways** with the edge of a credit card or your fingernail, **as soon as possible**
3. **Raise the affected part and apply a cold compress** to minimise swelling
4. Keep the compress in place for **at least 20 minutes**
5. If pain and swelling persists tell the casualty to seek medical advice
6. **Monitor vital signs and watch for signs of an allergic reaction** (see pages 83–84 of the reference guide).

# Sepsis

## What it is:

Sepsis (also known as blood poisoning) is the immune system's overreaction to an infection or injury. Normally our immune system fights infection – but sometimes, for reasons we don't yet understand, it attacks our body's own organs and tissues. If not treated immediately, sepsis can result in organ failure and death. Yet with early diagnosis, it can be treated with antibiotics.<sup>1</sup>

## What to look for:

### In a child

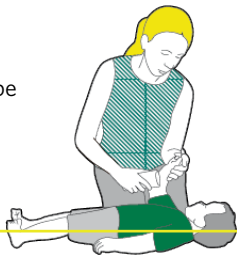
- Rapid breathing
- The child is very lethargic or difficult to rouse
- Feels abnormally cold to touch
- A rash that does not fade when pressed
- Seizures
- No recent wet nappies/ not passing urine
- Mottled blue or pale skin

### In under 5's

- Is not feeding
- Repeated vomiting

## Treatment

1. Call 999/112 for urgent help, ask could it be sepsis?
2. Monitor and reassure the child until help arrives



<sup>1</sup> The UK Sepsis Trust [www.sepsistrust.org/about/about-sepsis](http://www.sepsistrust.org/about/about-sepsis)

## **In an adult**

Seek medical help urgently if you (or another adult) develop any of these signs:

- **S**lurred speech or confusion
- **E**xtrême shivering or muscle pain
- **P**assing no urine (in a day)
- **S**evere breathlessness
- **I**t feels like you're going to die
- **S**kin mottled or discoloured.

# Severe bleeding

## Treatment

**The aim is to control the bleeding, get medical help and treat for shock**

1. Control the bleeding by **applying direct pressure to the wound**
2. **Dial 999 or 112** for the emergency services
3. **Apply an appropriate dressing firmly to control the bleeding** and minimise the risk of infection. It should not be so tight that it restricts the casualty's circulation
4. **Treat for shock by lying the casualty down with their feet raised** (see page 13 of this supplement). If possible, lay the casualty on a blanket or some other item to insulate them from the cold ground. If the casualty has a head injury, lay them down and slightly raise their head and shoulders
5. If blood comes through the dressing, remove the dressing and reapply direct pressure over the wound with a new dressing or pad to control the bleeding.
6. **Secure the dressing with the bandage** once the bleeding is controlled, tie the knot over the pad to help maintain pressure





7. It may be that the call handler instructs you how to improvise a tourniquet to control life-threatening bleeding if you are not trained or do not have a tourniquet in your first aid kit, using items such as a triangular bandage, belt or tie
8. Monitor the casualty's breathing and level of response while waiting for the emergency services to arrive.



# Shock

## Treatment

The aim is to treat any obvious causes of shock, to improve blood supply to the brain and to get medical help.

1. **Treat any possible causes of shock first**, like serious burns or bleeding (see pages 7 and 12 of this supplement)



2. **Lay the casualty down on a blanket.** Constantly reassure them

3. **Raise and support their legs** to improve blood supply. **If the leg is bleeding and the casualty is comfortable you can raise both legs, if there is a suspected fracture to the pelvis, hip or either leg, both legs should stay down**



4. **Dial 999 or 112 for an ambulance**



5. **Loosen tight clothing** at the neck, chest and waist

6. **Keep the casualty warm and reassure them. Do not let them eat or drink.** If the casualty is obviously pregnant lean her to her left side to prevent the baby restricting blood flow back to the heart



7. Monitor the casualty's breathing and level of response until the emergency services arrive (see page 38 of the reference guide). Be prepared to perform CPR (see pages 45–48 of the reference guide).

# Sprains and strains

## Treatment

**The aim is to reduce pain and swelling and to get medical help, if necessary.**

Sprains and strains should be treated initially by following the **RICE** procedure.

1. **R**est the injured part
2. Apply a cold compress or an **I**ce pack for **20 minutes**
3. **C**omfortable support in an **E**levated position, if possible. Advise the casualty to get medical advice, if necessary.



# Using an auto-injector

1. Arm the auto-injector by taking it from the hard case and removing the safety cap
2. Help the casualty to administer the auto-injector into the middle of their outer thigh. Firmly push the tip against their outer thigh until it clicks (it can be delivered through clothing)
3. **Hold in place for 3 seconds or as instructed on the auto-injector.**
4. **Repeated doses can be given at 5 minute intervals** if there is no improvement, symptoms return and the casualty carries a second auto-injector
5. Give any used auto-injectors to the emergency services as proof of administration.

Advise the casualty to get a new auto-injector as soon as possible.

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**To book further training on a St John Ambulance first aid, mental health first aid or health and safety course:**

Call **0344 770 4800\***

Visit **[sja.org.uk](https://www.sja.org.uk)**

\*Lines are open Mon-Fri 8.30am - 5.30pm

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