

## **BELL FIRST AID TRAINING**

#### Introduction

Sepsis is a rare but serious complication of an infection.

Without quick treatment, sepsis can lead to multiple organ failure and death.

Sepsis symptoms in children under five

## Go straight to A&E or call 999 if your child

- looks mottled, bluish or pale
- is very lethargic or difficult to wake
- feels abnormally cold to touch
- is breathing very fast
- has a rash that does not fade when you press it
- has a fit or convulsion

# Get medical advice urgently from NHS 111

If your child has any of the symptoms listed below, is getting worse or is sicker than you'd expect (even if their temperature falls), trust your instincts and seek medical advice urgently from NHS 111.

#### **Temperature**

- temperature over 38C in babies under three months
- temperature over 39C in babies aged three to six months
- any high temperature in a child who cannot be encouraged to show interest in anything
- low temperature (below 36C check three times in a 10-minute period)

## **Breathing**

- finding it much harder to breathe than normal looks like hard work
- making "grunting" noises with every breath
- can't say more than a few words at once (for older children who normally talk)
- breathing that obviously "pauses"

### Toilet/nappies

• not had a wee or wet nappy for 12 hours

### **Eating and drinking**

- new baby under one month old with no interest in feeding
- not drinking for more than eight hours (when awake)
- bile-stained (green), bloody or black vomit/sick

## **Activity and body**

- soft spot on a baby's head is bulging
- eyes look "sunken"
- child cannot be encouraged to show interest in anything
- baby is floppy
- weak, "whining" or continuous crying in a younger child
- older child who's confused
- not responding or very irritable
- stiff neck, especially when trying to look up and down

If your child has any of these symptoms, is getting worse or is sicker than you'd expect (even if their temperature falls), trust your instincts and seek medical advice urgently from NHS 111.

Sepsis symptoms in older children and adults

Early symptoms of sepsis may include:

- a high temperature (fever) or low body temperature
- chills and shivering
- a fast heartbeat
- fast breathing

In some cases, symptoms of more severe sepsis or *septic shock* (when your blood pressure drops to a dangerously low level) develop soon after.

These can include:

- feeling dizzy or faint
- a change in mental state such as confusion or disorientation
- diarrhoea
- nausea and vomiting
- slurred speech
- severe muscle pain
- severe breathlessness
- less urine production than normal for example, not urinating for a day
- cold, clammy and pale or mottled skin
- loss of consciousness

## When to get medical help

Seek medical advice urgently from NHS 111 if you've recently had an infection or injury and you have possible early signs of sepsis.

If sepsis is suspected, you'll usually be referred to hospital for further diagnosis and treatment.

Severe sepsis and septic shock are medical emergencies. If you think you or someone in your care has one of these conditions, go straight to A&E or call 999 or 112

## Tests to diagnose sepsis

Sepsis is often diagnosed based on simple measurements such as your temperature, heart rate and breathing rate. You may need to give a **blood test**.

Other tests can help determine the type of infection, where it's located and which body functions have been affected. These include:

- urine or stool samples
- a wound culture where a small sample of tissue, skin or fluid is taken from the affected area for testing
- respiratory secretion testing taking a sample of saliva, phlegm or mucus
- blood pressure tests
- imaging studies such as an X-ray, ultrasound scan or computerised tomography (CT) scan

## Treatments for sepsis

If sepsis is detected early and hasn't affected vital organs yet, it may be possible to treat the infection at home with antibiotics. Most people who have sepsis detected at this stage make a full recovery.

Almost all people with severe sepsis and septic shock require admission to hospital. Some people may require admission to an intensive care unit (ICU).

Because of problems with vital organs, people with severe sepsis are likely to be very ill and the condition can be fatal.

However, sepsis is treatable if it is identified and treated quickly, and in most cases leads to a full recovery with no lasting problems.

Read more about treating sepsis.

#### Recovering from sepsis

Some people make a full recovery fairly quickly. The amount of time it takes to fully recover from sepsis varies, depending on:

- the severity of the sepsis
- the person's overall health
- how much time was spent in hospital
- whether treatment was needed in an ICU

Some people experience long-term physical and/or psychological problems during their recovery period, such as:

- feeling lethargic or excessively tired
- muscle weakness
- swollen limbs or joint pain
- chest pain or breathlessness

These long-term problems are known as post-sepsis syndrome. Not everyone experiences these problems.

Read more about recovering from sepsis on the UK Sepsis Trust website.

#### Who's at risk?

There are around 123,000 cases of sepsis a year in England. Around 37,000 people die every year as a result of the condition.

Anyone can develop sepsis after an injury or minor infection, although some people are more vulnerable.

People most at risk of sepsis include those:

- with a medical condition or receiving medical treatment that weakens their immune system
- who are already in hospital with a serious illness
- who are very young or very old
- who have just had surgery or who have wounds or injuries as a result of an accident

Read more about the causes of sepsis.

### Sepsis, septicaemia and blood poisoning

Although sepsis is often referred to as blood poisoning or septicaemia, these terms refer to the invasion of bacteria into the bloodstream.

Sepsis can affect multiple organs or the entire body, even without blood poisoning or septicaemia.

Sepsis can also be caused by viral or fungal infections, although bacterial infections are by far the most common causes.