

The different types of wounds and why their cause matters

Most people will have experienced a wound during their lifetime. A wound is any break in the skin and can range from a simple cut or graze from everyday life, to a deliberately created wound from surgery. Here, we explain the different causes of wounds and how they can influence the treatment needed.



Usually, the skin acts as a protective barrier against the outside world, however, when it is wounded, the barrier is broken and the body becomes at risk of infection. Micro-organisms present in the environment, such as bacteria, viruses and fungi, can enter through the wound. For this reason, if you have a wound, the ultimate goal is to heal

it to restore the skin's barrier. Factors such as what caused your wound and how old it is may influence how your wound is treated, so it is important to understand this.

How old is your wound?

You might hear your wound being referred to as acute or chronic by your healthcare professional. These terms

are used to describe how long your wound has been present.

Acute wounds

Acute wounds are wounds that are recent

wounds, under a couple of weeks old. An acute wound is often caused by an accident, for example:

- A burn or scald
- Cuts and grazes
- Animal bite, e.g. dog, cat or wild animal
- Stab wound.

They can also be caused during surgery or minor procedures. Most small acute wounds can be treated at home and will start to heal in a few days. Some wounds may need to be treated by a medical professional if they are more serious, for example, if they need stitches, strips or medical glue, or there is a risk of infection. In some cases a tetanus injection may be required, for example, if soil or manure containing bacteria gets into your wound.

It is recommended you see your healthcare professional if:

- Your wound has soil, pus or body fluids in it, or if it still dirty after cleaning it
- You were bitten by a person or a wild or stray animal
- Your wound is swollen, red and getting more painful or pus is coming out of it
- Your cut is larger than around 5cm (2 inches)

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- You have a cut and also feel generally unwell or have a high temperature¹.

It is recommended you go to the accident and emergency department if:

- You have a cut and cannot stop the bleeding
 - The blood comes out in spurts and is bright red and hard to control
 - You lose feeling near the wound or have trouble moving it
 - You have a bad cut on your face or the palm of your hand
 - The wound is very large or deep
 - There is something stuck in the cut, such as a shard of glass – do not try to take it out yourself¹.

Chronic wounds

A chronic wound is a wound that does not heal in the expected way, often taking around three months or more. Acute wounds may become chronic when the injured person has one or more underlying diseases or lifestyle factors that make it difficult for healing to take place.

Diabetes-related foot ulcer

For example, a diabetes-related foot ulcer can arise as a complication of diabetes. Diabetes is a condition that causes a person’s blood sugar level to become too high. If not managed well over time, this can eventually lead to poor blood supply and nerve damage, causing loss of sensation and circulation problems in the feet. A loss of sensation

can make it more likely that injury will occur and go undetected, while blood vessel issues can make wounds difficult to heal. Foot ulcers usually occur on the bottom of the foot, especially under the big toe, the ball of the foot and other bony areas. You can read more in the special diabetes-related foot ulcer edition of *In This Together*.

Venous leg ulcers

Venous leg ulcers arise when underlying problems with the veins in the leg cause a pooling of blood in the ankle area. Over time, this leads to high blood pressure in the vein, which eventually leads to skin changes, such as spider veins, varicose veins, a dark brown colour on the skin and skin breakdown, causing a wound. You can read more in the special venous leg ulcer edition of *In This Together*.

Pressure ulcers

Pressure ulcers (also known as bed sores) are caused when the skin and underlying tissues are damaged from prolonged exposure to pressure, shear and temperature changes, resulting in the development of a wound.

Treatment

Depending on the underlying cause, chronic wounds will need different approaches to treatment. For example, a pressure ulcer will need to be fully assessed by a healthcare professional to determine the cause. Treatment may include use of pressure-relieving devices. For people with a diabetes-related foot ulcer, the key to wound healing is good management of blood sugar levels in addition to wound care, and protection of the ulcer while it heals. Finally, people with venous leg ulcers will need to use compression therapy in the long-term to help prevent blood pooling in their lower leg, if their wound is to heal and also to reduce the chances of it coming back.

Every individual with a wound is different, with their own set of circumstances which can affect their ability to heal. If you have a chronic wound, it is important that you see a healthcare professional who can look into the cause of it, and make sure you receive the right treatment to improve your chances of healing. This applies no matter how long you have had your wound.

David Gray, Professor of Wound Healing, Birmingham City University, comments:



‘There are so many different types of wounds and their cause plays a big part in deciding how we treat them. For people with chronic wounds, it is important to address any underlying conditions which may have caused the wound, and which may prevent it from healing.’

How to tell if your wound is healing by its colours

If you have an open wound, any dying or dead tissue that is present needs to be removed to achieve healing. These tissues and healthy new growth have distinct colours making it possible to identify them, so you can see if your wound is making healing progress.



Black/yellow/grey tissue

Tissue (or dead skin) on the surface of a wound that is black (necrotic), yellow, brown or grey (slough) has lost its blood supply and is dead or dying. It may be loose or firmly attached, slimy or stringy. The consistency is determined by how much fluid it contains. Sometimes it can be very dry and hard.

The presence of this type of tissue can prevent wound healing, cause an unpleasant smell and may also be a focus for infection to start as it attracts bacteria. The dead tissue needs to be removed as soon as possible to let healing take place. This will need to be done by a healthcare professional so contact yours for advice.

Green tissue

Sometimes the dead tissue or fluid produced by a wound is tinged with a green



colour. This can indicate the presence of an infection, or a particular type of bacteria, *Pseudomonas aeruginosa*. Your wound may require a specific treatment to manage the bacteria, so contact your healthcare professional for advice.



Red tissue

Bright red, spongy, bumpy tissue in the wound is usually a sign of healthy, new tissue growth which fills the wound bed or any cavity from the bottom up. For this tissue type, the aim is to protect, cover and keep moist. This is best done with a dressing. Sometimes, however, if the tissue is a dusky red, and is delicate and bleeds easily, this can be a sign of an infection, so should be investigated further.



Pink tissue

Pink or pearly white tissue appears in the final stages of healing. It comes from the skin around the edge of a wound to cover the red tissue in the wound to complete healing. It is very delicate and needs protecting and leaving undisturbed for as long as possible to complete the healing process.

