

OPEN WOUNDS

Everyone is likely to experience an injury leading to an open skin wound at some point in their lives. Luckily, most wounds, cuts and scrapes for instance, are minor and can usually be treated at home. Likewise, all wounds result in some level of scarring, but the appearance of scars is impacted by the healing phase and how you care for your wounds.^{1a}

SIGNS AND PHASES OF WOUND HEALING

When an injury occurs, your body naturally goes into overlapping healing phases known as Hemostasis, Inflammation, Proliferation, and Maturation. Simply put:

Phase 1: HEMOSTASIS is the process of the wound closing by blood clotting, occurring at the point of injury as your body acts to stop the bleeding.^{2a}

Phase 2: INFLAMMATION, which is often marked by swelling, redness and heat at the wound site, continues to control the bleeding and prevent infection right after injury.^{2b}

Phase 3: PROLIFERATION involves the formation of new tissue, usually pink or red in colour, as the new skin starts to build.^{2c}

Phase 4: MATURATION is when new skin becomes stronger – often marked by stretching or puckering around the wound, when the new tissue takes hold and the wound becomes fully closed.^{2d}



Acute versus chronic wounds

How your wound heals largely depends on whether it is

acute or chronic. It is widely accepted that any wound that goes through the phases of healing within 4 weeks is an acute wound³. A wound that fails to heal within 4 weeks is chronic.

However, there are major differences between the two that can only be distinguished by taking a closer look at the wound at a cellular level.⁴ How your wound heals depends on wound type, severity and wound care treatment.

FACTORS THAT MAY DELAY CHRONIC WOUND HEALING:

- **Age** – if you are over 60
- **Wound characteristics** such as size and shape
- **Infection** – when pathogens such as bacteria enter the wound site
- **Chronic diseases** such as diabetes or diseases that affect the circulatory system
- **Poor nutrition** particularly in a chronically ill or elderly patient
- **Dehydration** – a lack of moisture at the wound's surface
- **Poor blood circulation** – blood is critical for transporting nutrients to tissue for wound healing
- **Excessive edema** (fluid retention causing body tissues to swell), which results in poorer blood circulation to the injured area
- **Reinjured wounds** can delay and can even stop wound healing
- **Lifestyle choices** such as smoking and too much alcohol⁵

WHEN TREATING MINOR WOUNDS :

- Then, to prevent infection, remove all dirt and debris by rinsing the wound gently with cool, clean water⁷
- If the wound is bleeding, take a clean absorbent material such as a washcloth, towel or bandage and apply pressure until the bleeding stops^{6b}
- Apply petroleum jelly or wound spray for faster healing^{8a}
- Depending on the nature of the wound, cover it with a sterile bandage to help prevent the wound from reopening, and keep it covered until it heals^{6c}
- Change the bandage once day or if it becomes wet or dirty^{8b}
- First wash your hands with soap and water⁶





When to seek medical care

Even though most wounds are minor and treatable at home, you should seek immediate medical care if:

- Your wound bleeds excessively
- Does not stop bleeding after immediate pressure
- Becomes infected
- Is deeper than half an inch
- You have a fever
- A lump in your armpit or groin^{9c}



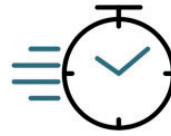
The most common complication is risk of infection so take care to monitor your wound for signs of increased drainage, warmth or swelling, pus or a foul odour.^{9b} Whether your wound is minor or more serious it is important to take quick action.^{9c}

Fix Wound Spray is a 100% natural, non-irritating formula that supports wound healing. As it comes in a handy low-pressure spray, application is simple and painless. Fix Wound Healing Spray can be used on almost any open or closed wounds such as:

- Abrasions (scrapes)
- Puncture (small hole)^{9a}
- Lacerations (torn skin / cuts)
- Incisions
- Burns
- Diabetic ulcers
- Bed sores (decubitus ulcers)

Promote faster wound healing

Leads to faster than expected new tissue formation, even in deep wounds where bone is exposed.¹⁰



Protect wounds while they heal

Helps to keep wounds free from infection and lowers the chance that a dressing will stick to a wound.¹¹⁻¹⁴



Reduce pain and simplify dressing changes

Associated with reduced pain, including pain due to burns efficient dressing changes and less need for wound cleansing.¹⁰⁻¹⁴



Please note: this is an education information leaflet only and should not be used for diagnosis. For more information on Open Wounds, consult your healthcare professional.

References: **1.** Focus: Scar. Interview with Mischa Wiegand, MD (specialist surgeon and specialist for hand surgery). Available at: <http://www.wound.ch/wp-content/uploads/2018/05/Scar-support.pdf>. Accessed October 2018. **2.** Wound Source. The Four Stages of Wound Healing. Available at: <https://www.woundsource.com/blog/four-stages-wound-healing>. Accessed 1 February 2019. **3.** Strive Medical. Acute Wounds vs. Chronic Wounds. Available at: <https://strivemedical.com/blog/acute-wounds-vs-chronic-wounds/>. Accessed 1 February 2019. **4.** Wound Educators. Acute vs Chronic Wounds: A closer look inside the wound. Available at: <https://woundeducators.com/acute-versus-chronic-wounds-a-closer-look-inside-the-wound/>. Accessed 1 February 2019. **5.** Wound Source. Factors Affecting Wound Healing in Chronic Wounds. Available at: <https://www.woundsource.com/blog/factors-affecting-wound-healing-in-chronic-wounds>. Accessed 1 February 2019. **6.** American Academy of Dermatology. How to treat minor cuts. Available at: <https://www.aad.org/public/skin-hair-nails/injured-skin/minor-cuts>. Accessed 1 February 2019. **7.** Better Health Channel. Wounds – how to care for them. Available at: <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/wounds-how-to-care-for-them>. Accessed 1 February 2019. **8.** Mayo Clinic. Cuts and scrapes: First Aid. Available at: <https://www.mayoclinic.org/first-aid/first-aid-cuts/basics/art-20056711>. Accessed 1 February 2019. **9.** Open Wound. Available at: <https://www.healthline.com/health/open-wound>. Accessed 1 February 2019. **10.** Lauchli S, et al. Hospital Healthcare; 2012: 1-3. Lauchli S, et al. Forschende Komplementarmedizin 2014; 21: 88-93. Lauchli S, et al. Journal of Wound Care 2012; 21(5): 228-233. Mainetti S and Carnevali F. Journal of Wound Care 2013; 22(12): 681-689. Eggenberger K, et al. Audit 2012: 1-19.

