

## **Abrasions, Lacerations, and Punctures - Safe summer hiking reminders**

Though you may not have thought about this before, the largest organ of our body is the skin!

- Intact skin is our first line of defense in protecting us from infection.
- When warmer weather approaches, CHC hikers shed the multiple layers of clothing we've been wearing since the previous autumn; exposing our arms, legs, and heads to potential wounds and trauma if we fall.

As hikers, the three main skin injuries we are at risk for are: abrasions, lacerations and punctures.

**Abrasions** (scrapes) happen when the top, superficial layer of skin is scraped off. Though abrasions may encompass a large surface area of tissue damage; they are generally superficial and easily treated without medical intervention.

If you or a fellow hiker sustains an abrasion, the first thing to do is control the bleeding. Understand that a little bleeding is good and useful, as this helps remove bacteria from the wound itself.

Profuse or heavy bleeding is a red flag and needs to be controlled. This can be accomplished by holding firm pressure to the site with a clean cloth, handkerchief, gauze pad, or napkin/paper towel for 10-20 minutes. If the cloth being used becomes saturated with blood, do not remove it; but apply a new cloth, handkerchief or gauze over the first one. If possible, elevating the site above the level of the heart will reduce the amount of blood loss.

As soon as possible, cleansing the wound with mild soap and water, removing visible debris like dirt or grass, applying an antibiotic ointment such as Bactroban, bacitracin or neosporin, and covering with a bandage is advisable. Despite what Grandma may have told you as a child, cleansing a wound with hydrogen peroxide or rubbing alcohol is generally not recommended because these are cytotoxic, and can kill off the new healing cells .

**Lacerations** are trickier as they involve a cut into the skin which can have significant depth. On the surface, they may appear to have caused less trauma than an abrasion; but don't be fooled. Lacerations need to be closely monitored. As with abrasions, focus first on controlling the bleeding and cleaning the wound as best you can. (see above).

Go to the ER or urgent care if: 1) you cannot control the bleeding or if the wound continues to ooze blood after 4-6 hours; 2) the wound is deep enough that you cannot see the bottom; 3) the laceration is located on skin which is mobile, such as your fingers, elbows, neck and knees.

If not sutured, tension will cause these wounds to continually reopen, increasing your risk of infection.

Any laceration on your face should be evaluated promptly, for cosmetic reasons (this goes for men and women)!

Dirty and obviously contaminated wounds need to be evaluated by a medical professional, as some dirty wounds should not be sutured, but rather be allowed to heal from the inside out.

**Punctures** are narrow openings of the skin caused by a nail, tree branch or anything that deeply penetrates into the deeper tissue layers. These wounds are most likely to become infected (though they don't typically bleed much), because this trauma forces bacteria and debris deep into the tissue.

The relatively quick healing of puncture wounds creates an ideal internal space for bacteria to grow. Even worse, the risk of infection is greater if the object first penetrates the sole and foot bed of a shoe before entering the skin. Puncture wounds are very difficult to clean out and require medical intervention as soon as possible.

Other issues to consider:

- Know when you received your last tetanus booster. If you have a dirty wound, and it's been longer than 10 years, you may require a booster.
- Any hiker with a high-risk medical condition increasing their susceptibility to infection should contact their physician: this includes people with diabetes, cancer patients receiving chemotherapy, those taking steroids such as prednisone, people on kidney dialysis, or people living with HIV.
- Any hiker who is anticoagulated on blood thinners such as coumadin, warfarin, or lovenox should carry a ziplock baggie containing a stack of gauze sponges or other absorbent medium.

Signs and symptoms of wound infection (which may take several days to develop) include:

- Redness
- Warmth
- Increased Drainage
- Fever and Chills
- Tenderness
- Swelling
- Increased Pain

Let's have a great, safe summer on the trail!!

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