

Treating Hand Injuries

By Melissa Ludwig, MD

Almost all of the structures in the hand are needed for full function and range of motion. The nerves, tendons, blood vessels, muscles and skin are densely arranged in a very particular way in order to have full function. An infection or injury to the hand can be a devastating injury because there is a very good chance that some function will be lost if tissues are destroyed or damaged. Puncture wounds, high-pressure hose injuries, burns, crush injuries and animal bites (including human bites) are some of the common and often severe injuries. When the wound becomes infected, the area often has to be opened to drain the infection and remove the injured or dead tissue. This can result in partial loss of function of the hand.

What to do when you injure your hand? Bring the injury to the attention of the Captain or medical officer on the vessel right away. Even if the injury seems trivial, it is best to let someone know so that the hand can be monitored. Immediately after the injury, you may be asked to wash the hand with soap and clean, running tap water for about five minutes. Regular bar or liquid soap and the agitation of running tap water do as good a job of cleansing a wound as many more expensive and fancy products. It is important to determine if a foreign body is present in the wound, for example a wood or metal splinter, fish bone, or piece of glass. A retained foreign body makes the chance of infection greater. Ideally the foreign body should be removed as soon as possible because it can become more difficult to remove the longer it stays in place. If burns are the cause of injury and blisters are present, leave the blister intact, at least in the initial stages. Intact skin tends to prevent secondary infection.

Most superficial hand injuries will heal without problem. Applying topical antibiotic ointment to the wound and a clean bandage twice daily is often recommended. Keystone Shipping vessels carry bacitracin ointment, item #10, in their medical supplies for this purpose. Oral antibiotics by mouth or injection, scrupulous wound care and close monitoring. Anytime the skin is broken due to a laceration, burn or puncture, the crewmember's tetanus status should be reviewed. Since most Keystone Shipping crew join the vessel with their immunizations up to date, only a very few tetanus immunizations should need to be given by a physician ashore.

It is important to report to the Captain or medical officer immediately any increasing redness, pain with movement, or swelling of the hand. Yellow or whitish drainage from the wound or collection under the skin as well as fever, chills and body aches can signal a worsening infection. Hand injuries are taken very seriously by emergency medicine physicians; you should take them seriously too.