

WORST-CASE SCENARIO.

HOW TO TREAT A SEVERED LIMB

- 1** **Locate any individual bleeding arteries on the stump.**
The arteries will bleed in pulsating spurts.
- 2** **Pinch off the large arteries that are bleeding the most.**
The brachial artery in the arm and femoral artery in the leg carry blood into the limb, and are the major vessels you should find. Someone (the victim or another person) should continue pinching while you proceed to the next step.
- 3** **Apply a tourniquet.**
Choose a strip of material at least an inch wide and tie it around the stump as close to the end as possible so that the tourniquet will not fall off when it is tightened. Tie the tourniquet moderately tight but do not immediately cinch it as tight as possible or you may crush and destroy viable tissue. Tighten the tourniquet just enough to stop most of the remaining bleeding. Keep pinching the arteries.
- 4** **Tie off the ends of any blood vessels being pinched.**
Use fishing line, dental floss, or heavy thread (in that order of preference) along with a sewing needle if available to carefully tie off the arteries. Pass the line completely around the blood vessel being pinched, as

far up as possible. Tighten the first knot down hard, then place several securing knots on top of the first one. You may want to tie the vessel down in two places, in case one of the stitches comes apart later.

5 Clean the stump thoroughly.

Preventing infection is very important:

- Pick out foreign material lodged in the wound.
- Cut off crushed tissue remnants still attached to the stump. Use a sharp knife or scissors.
- Wash the wound, vigorously irrigating it with a stream of water.

6 Optional: Cauterize remaining bleeding sites.

Using an iron or piece of heated metal, identify the vessels that are still oozing blood. This is simpler during irrigation, when debris and clotted blood are washed away. Dab at each vessel lightly with cloth or gauze to allow yourself to see exactly where its end appears in the wound, then apply cauterization at that point. Do not worry about completely eliminating bleeding. If rapid bleeding is well controlled, oozing will be controllable once the dressings are applied.

7 Loosen the tourniquet.

As the pressure from the tourniquet decreases, you will be able to check your ties and ensure more ties (or cauterization) are not needed. If bleeding is just a moderate ooze, you have been successful and the tourniquet can be removed. To preserve tissue at the stump, do not leave a tourniquet applied for more than 90 minutes.

8 Dress the stump.

Coat the end of the stump with any type of available antibiotic ointment (examples include bacitracin, polymyxin, and mupirocin). Then tightly cover the end of the stump with clean cloth or gauze. Elastic strapping works well to hold the dressing onto the stump end. The tighter the dressing, the less the chance of sustained bleeding.

9 Elevate the stump end as high as possible to allow gravity to assist in slowing further bleeding.

10 Put an ice pack over the dressing.

11 Be prepared to apply and tighten a tourniquet again, should heavy bleeding resume.

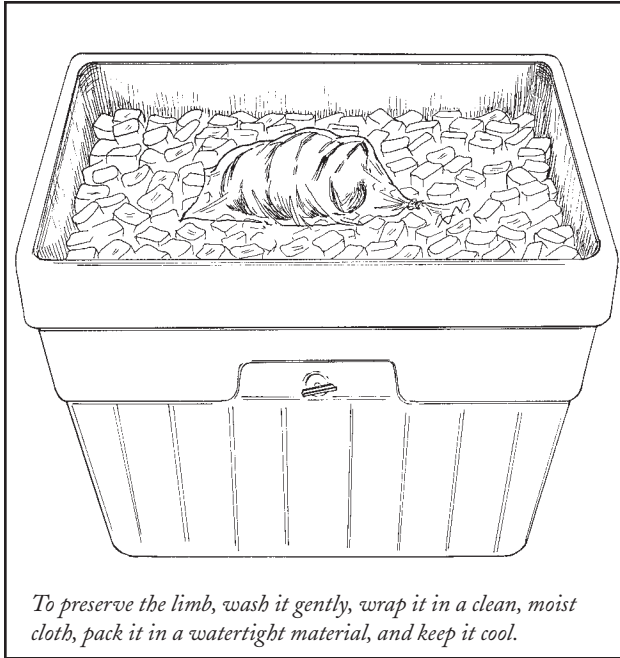
12 Treat pain and shock from blood loss.

Use any available pain medication to treat pain from the injury. To treat shock, give the victim animal meat or a liquid containing salt (such as chicken soup). These will help to restore plasma and hemoglobin.

HOW TO PRESERVE THE SEVERED LIMB

1 Gently wash the severed limb with water.

2 Wrap the limb in a moist, clean cloth.



To preserve the limb, wash it gently, wrap it in a clean, moist cloth, pack it in a watertight material, and keep it cool.

- 3** **Wrap the limb again in watertight material (such as a plastic bag).**
- 4** **Keep the limb cold.**
Do not freeze the limb. Freezing will destroy tissue. Use a cooler full of ice or a refrigerator.
- 5** **Get to a hospital immediately.**
A limb saved in this manner can remain viable for reattachment for up to six hours.

Be Aware

- Traumatic amputation of a limb is not necessarily a fatal injury. In order of severity, the immediate problems that you must deal with are rapid severe arterial bleeding; slower bleeding from cut veins; pain; and infection. Only severe bleeding carries an immediate, life-threatening risk, with the possibility of death in minutes.
- Submerging a severed limb in water may cause damage that could hinder its reattachment. You can, however, place it in a watertight container and then submerge that in a river or lake to keep the limb cool.