



How to Apply First Aid without Bandages

Expert
Reviewed

Four Methods: [Assessing Vitals](#) [Preventing Infection](#) [Controlling Bleeding](#) [Immobilizing a Potential Fracture](#)

Most injuries happen as a result of an accidental or unexpected event. Most of us are unprepared with first aid kits at the ready. This leaves us in the predicament of having to treat our wound or injury with whatever is available until we can get to either the drug store to purchase bandages and other supplies or to a hospital in the case of a more serious trauma. In order to meet the primary tenets of basic first aid—stabilize vital functions, prevent infection, control bleeding, and immobilize any potential fractures—you'll have to "think outside the box" and use what you have on hand or can find in your nearby surroundings. You should also consider increasing your knowledge of first aid by signing up for CPR and first aid training with the Red Cross or American Heart Association.

Method
1

Assessing Vitals

1 Size up the scene. While you may be eager to help the injured person, you will be of no help if you, too, become injured. Before approaching the person, make sure there are no hazards, such as traffic, unstable structures, downed electrical lines, swift-moving water, violence, explosions or toxic gas exposure.^[1] If the hazards are still present and it is too dangerous for you to reach the person, call for help and keep yourself out of harm's way.^[2] If the hazard is not a threat to your safety, then you should approach the injured person.

- Another way you need to protect yourself is to wear any personal protective equipment you may have access to, such as gloves to protect you from bloodborne disease if the person is bleeding.^[3]

2 Obtain consent before providing care. You must attempt to get the injured person's consent before you can begin first aid. The person must give verbal consent or consent with a gesture. You should identify yourself, indicate your level of training, and ask the person if you may provide first aid.^[4]

- If the person is unconscious, confused, mentally impaired, seriously injured or seriously ill, then consent is implied and you may assist the person.^[5]
- If the injured person is a minor, you must obtain consent from his parent or guardian. If this person is not available and the situation is life-threatening then consent is implied and you may assist the child.^[6]
- If the person refuses aid, you must respect this. Even if the person is seriously injured and the situation is life-threatening, if he refuses care you cannot attempt first aid.^[7]

3 Evaluate vital functions. These include assessing the victim's ABCs: **A**irway, **B**reathing and **C**irculation. Lie the person on his back and put yourself close to his head and neck so you can better evaluate his vital functions.^[8]

- If the person is conscious, begin working but also talk with him to keep him calm and help slow his heart rate. If possible, try to keep the victim's eyes averted so he cannot see the wound.

4 Check the airway. If the person is unconscious and there is no possibility of neck or spine injury, place one hand on the person's forehead and another underneath his chin. Put gentle pressure on the forehead with one hand and gently tilt his chin up toward the sky with the other hand to open the airway. Make sure the person's airway remains open;^[9] check inside the mouth for obstructions.

- If the person is conscious, he may be able to indicate to you whether their airway is blocked.
- If you suspect a neck or spine injury, use the jaw-thrust method, in which you grab the patient's jaw on either side and pull it forward, opening the airway without compromising the neck or spine.

5 Assess breathing. *Look* for a rise in the chest area; *listen* for the sound of air coming in and out of the lungs; *feel* for air by hovering the side of your face just above the person's mouth.^{[10][11]}

- If your casualty is unconscious but breathing normally, he should be placed in the recovery position, on his side with the head tilted back and the hand further away from the ground under the head and the arm closet to the ground either bent or straight out. The leg further away from the ground (the top leg) should be bent for stability and to keep the victim from rolling forward. Do not put someone in the recovery position if you suspect he has a spinal injury. Monitor the person's breathing.^[12]
- Check for signs of a pulse. You do not need to measure the pulse, only detect it. You can quickly feel for a pulse by placing two fingers on the person's throat, in the hollow area just beside the windpipe.^[13] Apply gentle pressure.
- If the victim is not breathing, **do CPR**, or cardiopulmonary resuscitation. Note that the recommended method for performing CPR has changed in recent years; research suggests that compression-only CPR (no mouth-to-mouth breathing) is as effective as the traditional approach (which had included mouth-to-mouth breathing).^[14]
- To prepare for an emergency, it is strongly recommended you attend a CPR training class to learn the proper procedure to administer CPR and get some practice.
- Be aware that CPR is not pretty. The chest compressions often break ribs. Prepare yourself for this possibility.

6 Assess circulation. Look for signs of severe bleeding once the other vitals have been evaluated. Once you know the person is breathing, you can then move onto treating any open wounds by applying pressure and raising the affected area above heart level. See Part 3 on this.^[15]

- Watch for signs of shock. Keep the victim warm and comfortable. Both shock and loss of blood can cause the victim to suffer from lowered body temperature. Throw a blanket, coat, or some other warm item over the victim to keep him warm.^[16]
- Keep the victim as still as possible. Whether lying or sitting down, the person should be kept still and calm.

7 Call for help. Once the person is stabilized, call for **emergency help** immediately. If the person is bleeding out , get someone else to call emergency services while you help the victim.^[17] For this to be effective, you must ask one person specifically to call emergency services. Do not shout this at a crowd of people — select one person and say, "You! Man in the Hawaiian shirt! Call 911!"

- If you are the only person around, use your phone to call for assistance. If you don't have a phone with you, look for a passersby or a place that may have a phone.

Method
2

Preventing Infection

1 Cleanse the wound. Cleanse and irrigate the wound with anything that you have available. Obviously potable water, also known as drinking water, is first choice because it is suitable for drinking and thus suitable for other human uses. If fresh water is unavailable, you can also use a carbonated beverage, such as cola. If you happen to have a small hand sanitizer available, cleanse the wound with this.^[18]

- Do not introduce anything that would increase the chances of infection such as juice, grease or milk. The same goes for scummy-looking pond or creek water sources. If you are near a beach, rinse in the ocean. Salty ocean water can act as a stand-in saline solution for your wound.

2 Flush out the wound. Flushing out the wound with a flowing water source that has some pressure to it is recommended as one of the best measures you can take to prevent infection.^[19]

- If fresh, potable water is available to you, try to running that over the wound for several minutes. You'll want to use about 2 liters of water, an amount roughly the size of a large soda bottle.

3 Pat the area dry. Find something that you can dry the wound with, such as a piece of cloth, towel or other soft material. Avoid using anything fluffy that could leave fragments in or get stuck to the wound.^[20]

4 Brush away debris from the wound. If you don't have any water or fluid available or if you're in a desert area, use a portion of your clothing to brush away any debris from the wound. Try to find the cleanest portion of your

shirt or pant leg to use.^[21]

Method
3

Controlling Bleeding

1 Inspect the wound. You want to get an idea of the how much blood loss you are dealing with. Immediately after cleaning the wound, inspect it for depth and any signs of damaged blood vessels, such as squirting or pulsatile blood flow. The average person has approximately eight liters of circulating blood; a loss of 10 percent of this blood volume can have serious consequences, including loss of consciousness and lack of blood supply to vital organs.^[22]

- Take this opportunity to evaluate for wound depth, as a wound of one centimeter or greater will usually require sutures once you can get some medical care.
- Do not remove an object if it is embedded in the wound. Leave it in the wound; it is helping to stem the blood flow. Removing the object will actually increase blood flow. Medical professionals will be better able to remove the object without damaging any internal organs or causing massive blood loss in the process.^[23]

2 Stop the bleeding. Since you don't have gauze or bandages, apply firm pressure on the wound with a clean and absorbent material, like a shirt, towel or sock. If the item becomes soaked with blood, don't remove it as this can disturb any blood clots that may be starting to form. Instead, place another piece of material on top of the soaked one and keep applying direct pressure.^[24]

- If there is an object is still in the wound, press firmly around it. Applying pressure to the wound will help to slow the flow of blood.^[25]
- If the wound is gaping and bleeding profusely, try stuffing the wound with a towel or blanket, or with tampons if they are available, and then applying pressure. Right now it is more important to stop the person from bleeding out than worry about possible infection.
- Some first aid training suggests using the edge of a credit card to "seal" the wound, an item that's handy because so many people have one on them. Not only does this stem blood flow, but it may also prevent lung collapse (by keeping air out of the wound) if the wound is in the chest.^[26]
- If the wound is bleeding profusely, apply pressure to the major artery leading to the area with your hand, while your other hand continues to apply pressure on the wound. These areas are called "pressure points". For example, to slow bleeding in the arm, press the inside of the arm just above the elbow or just below the armpit. If the wound is on the leg, press just behind the knee or in the groin.^[27]
- In certain situations, it may be necessary to use a **tourniquet**. A tourniquet should only be used on a limb and if the person is experiencing a life-threatening limb hemorrhage that is not controlled with the application of pressure or if there is a life-threatening injury to the limb, such as an amputated or mangled limb.^[28]

3 Reposition the victim so the wound is above the heart. This will help reduce blood loss. If the victim can sit, get him to move himself into an upright position; if not, then help the victim if possible.^[29]

- Make sure the patient doesn't walk. Walking, and especially running, can act like a second pump to the circulatory system and can cause as much trouble as the heart.

4 Cover the dressing. Since you don't have gauze or bandages, use a piece of your clothing (shirt, coat, socks, etc.) or other material (from a tent, raft, etc.) to cover the wound once the bleeding slows or stops. Alternately, you can also use plant life to cover the wound to stop any bleeding. Look for plants that have leaves large enough to cover the wound. Depending on the regional flora and fauna, you may even find some plants or leaves with medicinal purpose, such as the Comfrey or Ki plants.^[30]

- Avoid using tissue paper or toilet tissue as these are quite fragile and may actually contaminate your wound with fragments and debris. Any fabric that absorbs the blood effectively can be used to apply pressure.
- Do not lift or remove the dressing as this will disrupt clot formation and re-start the bleeding. If the dressing becomes soaked with blood, add more cloth material on top of it.
- For a chest wound, be careful. Cover the wound with something like kitchen foil, a plastic bag or cling-film and only cover three sides of the wound and leave one un-taped or bandaged down. Air needs to be able to escape from one side of the bandage to prevent it from entering the pleural cavity in the chest. If air enters the pleural cavity, the lungs can collapse.

5 Fasten the dressing in place. Use string, tape, rope, or torn strips of clothing to tie the dressing in place. Do not tie so tightly that blood flow to the affected area is cut off.

- If you don't have any materials to fasten the dressing in place, simply continue to apply pressure. This will help the blood clot.^[31]

Method
4

Immobilizing a Potential Fracture

1 Be cautious about moving anyone. Only move someone if there is imminent danger, such as a fire, car accident, or other potential surrounding hazards. If there has been a fall and the person is having neck pain or cannot move his legs or arms, do not move him at all. For a suspected spinal cord injury, leave the patient until emergency services arrive with backboards and cervical collars. Immobilize them in the position in which you find them and call for emergency help immediately.^[32]

- Any movement could cause paralysis, so providing reassurance to the person while you await help is the best course of action.^[33]
- For other fractures, such as an arm or limb, only provide first aid if emergency medical treatment is not expected soon because moving and tending to the fracture can do more harm than good. However, if treatment in a medical facility is not immediately available, you can help to stabilize the bone and relieve the pain using the following guidelines.

2 Create a sling. If the affected limb is an upper extremity, like arm, you can create a ready-made shoulder sling easily with your shirt or sweatshirt. Carefully maneuver the uninjured arm out of the sleeve while keeping the shirt around your neck. Pull the fabric up where your elbow is bent at 90 degrees and rest your elbow in the lip of the uplifted shirt. This will safely immobilize any fracture in your shoulder, elbow, forearm, and wrist.

- You can also cut a more traditional sling out of your shirt or other fabric, like a pillowcase if you have scissors or the cutting utensils. Cut the cloth into a big square (about 40 inches square) and then fold the square diagonally into a triangle. One end of the sling should go under your arm and over the shoulder. The other end should go over the other shoulder. Tie the two ends together behind the neck.^[34]
- A sling will not only provide significant pain relief but also keep bone fragments from moving around.

3 Splint a broken arm or leg to give it support. Do not try to realign the bone.^[35] To make a splint you can use material you have on hand or can find nearby. Look for rigid material to make the splint, such as a board, stick, rolled up newspaper, and so on.^[36]

- Extend the splint to beyond the joint above and below the break. For instance, if the lower leg is broken, the splint should go above the knee and lower than the ankle.^[37]
- A cardboard box makes an excellent device to immobilize a lower extremity, like a leg. You will have to fashion it by tearing or cutting the sides, to fit the affected area. You want to place the box flush with the ground and slide it under the leg, encircling the leg with the cardboard. Secure the cardboard with tape, rope or torn cloth strips from what you are wearing. Be sure to fold an edge of the box at the bottom to support the ankle joint so that it is not freely, flopping this can be extremely painful. Do not attempt to maneuver the extremity, leave it in the position of most comfort to the victim.

4 Pad the splint. Use clothing, towels, blankets, pillows or anything else that is soft that you have with you. Secure the splint to the area. You can use a belt, rope, shoelaces, anything that is handy that will keep the splint in place. Be careful when you apply the splint not to cause further injury to the body. Pad the splint well so it doesn't add pressure to the injured area but only immobilizes it.^[38]

5 Minimize swelling. If ice is available, such as from an ice chest or an ice pack, apply to the area to minimize swelling. In a pinch, you could really use anything cold, such as cold cans of soda.^[39]

Tips

- Always call for help if you can. While waiting for emergency assistance, continue to monitor the ABCs: airway, breathing, and circulation.^[40]

Warnings

- This article is not a substitute for professional medical advice, emergency treatment, or formal first-aid training.

Sources and Citations

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