

How to Make Bed-Sheet Bandages

Serious wounds should be treated by trained medical personnel whenever possible. Commercially available sterile bandages are the most desirable materials for covering wounds.

However, medical emergencies can occur when professional medical help and supplies are not available. The following instructions will help you prepare and store clean and affordable bandaging supplies that you can use or that you can offer to experienced medical people in your neighborhood during a serious emergency.

Prepare the sheets

1. Gather old bed sheets—cotton, cotton blend, flannel, white, color, print, flat, fitted, etc. Sometimes they can be found at thrift stores. Light-colored sheets make it easier to see bleeding.
2. Wash the bed sheets in hot water with bleach. Dry the sheets, but do not use fabric softener.
3. Cut or tear the sheets into strips the length of the sheet. A triage pack could contain:
 - (4) 36" x 36" triangle bandages
 - (2) 2" wide strips
 - (4) 3" wide strips
 - (6) 4" wide stripsor any combination of sizes you desire.
4. Roll the bandages.

"Sterilize" the sheets

Keep in mind that it is not possible to completely sterilize sheets in a home environment. Bed-sheet bandages are typically used to hold sterile gauze pads in place. Because the sheet strips don't touch the wound, they only need to be clean—not sterile. The following methods will yield varying degrees of cleanliness, but they will be sufficient for a serious emergency situation when regular medical care is not available.

1. Microwave
 - a. CERT (Community Emergency Response Team) training recommends:
 1. Place the bandages in a re-sealable bag.
 2. Place the open bag in a microwave and microwave for 10 seconds.
 3. Seal the bag, label the bag with the date, and store in a first aid kit or cool, dark place.
 - b. The CDC has reported that some studies have indicated that microwaving dry materials for as little as 1 minute can kill most bacteria. However, other studies have indicated that water must be present for sterilization.
 - c. University of Florida engineering researchers have released a study showing that microwaving wet cloth at high power for 2 minutes kills almost all pathogens. This is problematic for sterilizing bandages because of the difficulties posed by drying the bandages without contaminating them.

2. Oven

The CDC recognizes dry-heat sterilization as effective. A convection oven provides even airflow and heat distribution, but a regular oven with heating coils on the bottom will also work.

1. Preheat the oven to 340 for sterilization in one hour, or 320 for sterilization in two hours. Wait 20 minutes to make sure the oven is preheated.
2. Tightly wrap the bandages in foil.
3. Place the bandage packages on an oven rack, allowing space between the packages for air to flow freely. Keep the packages away from the oven walls.
4. When the packages have finished baking, turn off the oven and leave the packages inside the oven to cool. DO NOT OPEN the foil when the bandages are hot or the exposure to oxygen will cause them to blacken like char cloth.
5. When the bandage packages have cooled, place them into a re-sealable bag and label.

3. Pressure cooker

A pressure cooker can be used like an autoclave.

1. Tightly wrap the bandages in foil.
2. Fill a four-quart pressure cooker with 1½ cups of water.
3. Place a rack in the pressure cooker and place the foil-wrapped bandages on the rack until it is ¾ full.
4. Process at 15 lbs. pressure for 30 minutes.
5. Allow the pressure cooker to cool.
6. Place the bandage packages on a baking pan and bake at 300 for 30-45 min.
7. Allow packages to cool. Place the cooled packages into a re-sealable bag and label.

4. Ironing

Ironing a bandage might be helpful for immediate use, but it would be difficult to transfer an ironed bandage into a storage bag without contaminating it.

a. Iron a bandage on the steam setting for about 1½ minutes, then switch to the dry setting for 3 minutes.

OR

b. Wet the bandage and use the dry setting for 3 minutes.

Use the bandages

1. Follow standard first aid practices for cleaning a wound and applying antibacterial ointment.
2. Apply a commercially available sterile gauze pad to the wound.
3. Use the bed-sheet bandages to cover the gauze pad and hold it in place.
4. Use the triangle bandages for slings, ankle wraps, or head wraps.