How to make your own dressings and bandages

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ou can stock your first-aid kit with home-made dressings, bandages, and binders that are every bit as effective as commercially prepared ones, and they will cost only a small fraction of the price of the store-bought supplies.

A *dressing*, sometimes called a *compress*, is the protective cover placed directly on a wound to assist in the control of bleeding, to absorb wound secretions, and to prevent additional bacteria from entering the wound. A dressing should be *sterile*—meaning completely free of all bacteria— before use.

A *bandage* is a piece or a strip of material which can be used to hold a wound dressing or a splint in place. Or it can be applied directly to a body part for support, for example, as a wrap for a sprained ankle. Depending on its use, a bandage may need to be sterile, or it may only need to be clean.

A *binder* is a broad bandage most commonly used to encircle and support the abdomen or chest. A binder usually only needs to be clean.



Diagram 1

Dressings

Materials to use. Good material for home-made dressings can be cut or torn from old cotton sheets, pillow cases, table cloths, cloth napkins, undershirts, thin towels, or even socks or handkerchiefs. I once found a bargain on a bolt-end of all-cotton cheese cloth, and I found it made excellent dressings. Material used for dressings should be all white so no dye can leak into the wound, and it must be all cotton, so it can be washed and sterilized and will absorb secretions.

Wash the material. Before cutting the material into dressing-size pieces, thoroughly wash it in clean, hot, soapy water with a little liquid bleach added. Do this even if the material is new or already clean. New material often has fillers in it which would be harsh on a wound, and any material that has lain for even a few days has dust trapped in its fibers and is difficult, if not impossible, to sterilize. Rinse at least two times to completely remove the soap. Do not use fabric softener in the rinse water. Hang outside on a line to dry in the sunshine. Sunshine will not completely sterilize, but it will kill many germs.

Cut into size. Most commercially prepared dressings come in one-, two-, or three-inch squares, but you can cut any size dressing you want. Because it is best to use a dressing large enough to extend an inch or more beyond the edge of the wound, I find we use more four-inch dressings than any other size. However, I try to keep a variety of sizes on hand. I have a few dressings as large as eight inches by ten inches, but thankfully, we seldom have had a need for one so large. Depending on the thickness of the material, make the dressing from one to four layers deep. When making more than a single layer dressing, stack the layers one on top of the other and cut through all thicknesses at once, so the edges will be even.

Sterilize the dressings. For immediate use, a dressing can be sterilized by ironing it for three minutes with a very hot iron. You can either slightly dampen the cloth, then iron it dry, or you can use a steam setting for one minute, then turn off the steam and iron the cloth dry for two minutes. Steam penetrates bacteria better than dry heat. Lift the dressing off the ironing board by the corners, being careful not to touch the center surface which will be placed next to the wound. Position the dressing over the wound without laying it down or letting it come into contact with anything else. Tape or bandage it securely into place.

There are two ways to sterilize dressings for storing: in the oven or in a pressure cooker. A pressure cooker is the most effective, because it uses steam under pressure. A pressure cooker is in reality a small *autoclave* (medical sterilizer), and works just like the big autoclaves hospitals use to sterilize supplies. For either method, wrap the freshly laundered and cut-tosize material in individual packets of aluminum foil using a "butcher wrap" or a "French fold" to tightly seal all edges.

To sterilize in the oven, place the wrapped dressings on the oven rack so they do not touch one another. This permits the hot air to circulate around the packages. Bake at 300°F for two hours. Check occasionally, especially after one hour to make sure the dressings do not begin to burn. To do this, use one package as a "check package": open that package, then reseal it and leave it in the oven. Because this package has been opened during the sterilization process, it will not be sterile and cannot be used as a sterile dressing, but it has served its purpose.

Remove packets with tongs and spread on a freshly washed cake rack to cool. Do not open packages. Store in plastic, resealable freezer bags. Stick a piece of masking tape on the bag and write the date of sterilization on the tape. If kept in a cool, dry place, these dressings should stay sterile for at least six months.

To sterilize in a four-quart pressure cooker, place the rack in the bottom of the cooker, add 11/2 cups of water, and stack the packets loosely on the rack. Do not fill the pan over three-quarters full. Cover and set the control at 15 lbs. pressure. When the control jiggles, reduce heat and start counting sterilizing time. Sterilize for 30 minutes, remove from heat, and let the pressure reduce normally. Remove packets with tongs and dry in a preheated 300°F oven for 30 minutes. Cool and store as directed for ovensterilized dressings. Dressings sterilized in a pressure cooker should stay sterile for about 9 to 12 months. To sterilize in a different size pressure cooker, follow the manufacturer's directions.

Bandages

Compress bandages. Also called rolled bandages, these bandages are most often used to hold a dressing in place. Because they come in close contact with a wound, they are usually sterilized. The most common sizes are one, two, or three inches wide and at least five feet long. The best material for a compress bandage is an old, soft, white sheet, but my cheese cloth worked well for this, too. Wash, cut, and roll, then sterilize as directed for dressings if a sterile bandage is needed. (Of course, the ironing method of sterilization would be impossible with a long rolled bandage.) For a clean bandage, simply store the rolled bandage in a plastic, resealable freezer bag.

Elastic bandages. On the market these are called "ace bandages," and





they are very expensive. Old stretch jeans make good elastic bandages. You can cut any width you want from a pants leg and sew the strips together. To make a smooth bandage, sew the strips together with a bias seam: with right sides together, overlap two strips at right angles and sew diagonally across the corner on the wrong side. Trim away the excess corner. (See Diagram 1.) These bandages are usually used for support, such as wrapping a sprained ankle or holding a splint in place, and they do not need to be sterilized.

Tube bandages. A tube bandage is used on a hard to bandage, bendable part of the body such as an elbow, a knee, or a hand. A leg from a pair of support panty hose makes a good tube bandage. You can cut the length you need. To bandage a hand, draw the tube over the hand and cut small holes for the fingers to stick through. As a rule, tube bandages only need to be clean.

The triangular bandage. This is the all purpose bandage and is one of the best first-aid items to carry at all times. It is so versatile, I always carry one with me. I may start outside to work around the homestead with this folded in a pocket, or I may tie it around my head as a scarf, or if the weather is warm, I may tie it around my waist where it is easily accessible. A boy scout wears it as a neckerchief. Because this is essentially an emergency bandage, it need be only clean, not sterilized.

A good triangular bandage can be made from any good, strong cotton material. This bandage is worth the cost of a length of new material. The best shape is an isosceles triangle having a base of 55 inches and the sides 40 inches long. If this is too big for the purpose needed, it can easily be folded or rolled to make a smaller bandage. Hem all edges to make it long-lasting.

A triangular bandage can be quickly folded and tied around a wound to stop bleeding, or it can be tied and used with a stick to make a tourniquet. It can be rolled to tie a splint in place, or used as a leash to restrain an excited dog, or as an emergency belt. It makes a good sling for an injured arm.

The bandage can be used to strain liquids, or soaked in water to cool an overheated person. It makes an adequate towel. If a cold wind suddenly blows up, it makes a good head scarf or a shawl. I once made an emergency diaper out of my triangular bandage when this grandma and her two year old grandson were on a hike and he had an "accident." He was somewhat embarrassed, but he finished our hike with a warm, dry body.

Binders

The broad chest binder. Although not so commonly used as a support for cracked ribs as it once was, the chest binder is still used to keep chest dressings in place and to apply pressure to the breasts, as when drying up breast milk after the birth of a baby. Good material for a chest binder is soft flannel or an old, soft, sheet blanket.

Make a rectangle wide enough to reach from just below the collar bones to the patient's waist. Make it long enough to encircle the patient and have an overlap of six inches on each end. The ends can be doubled under and pulled snugly across the patient and pinned with large safety pins. Position the safety pins horizontally so the patient can bend easily.

The scultetus (skul-*te*-tus) **binder.** This is a many-tailed abdominal binder which was first used by the German surgeon Johann Scultetus, who lived from 1595 to 1645. This binder has been used for so many years because it fits the contours of the body and it is effective. It is often used to support the abdomen after surgery. It can be used as a gentle back brace.

Because it needs to be sturdy to give good support, good material for the body of a scultetus binder is a twill or jeans material lined with soft cotton flannel. Stitch the flannel to the twill with a + and X design. (See Diagram 2.) A common size is 12 inches wide and 15 inches long. A very tall patient might need a longer binder. From 6 to 12 tails are attached to each side of the body of the binder. Most tails are about 2 inches wide and 18 inches long. They are most comfortable when they are made of soft flannel. Hem the sides of the tails to make a longer lasting binder.

The patient is positioned with his back on the body of the binder and the tails are pulled firm and crossed over the abdomen, *starting at the lower end*, alternating from side to side and overlapping like roof shingles. The last tail is pinned to the side of the binder. The pin is placed horizontally so the patient can bend easily. When the scultetus binder is used on the abdomen, it is started well down on the hips at the level of the tail bone and the upper tails come only to the patient's waist. A patient cannot apply this binder to himself.

May you have a well-stocked firstaid kit. May you never have to use your supplies. Δ