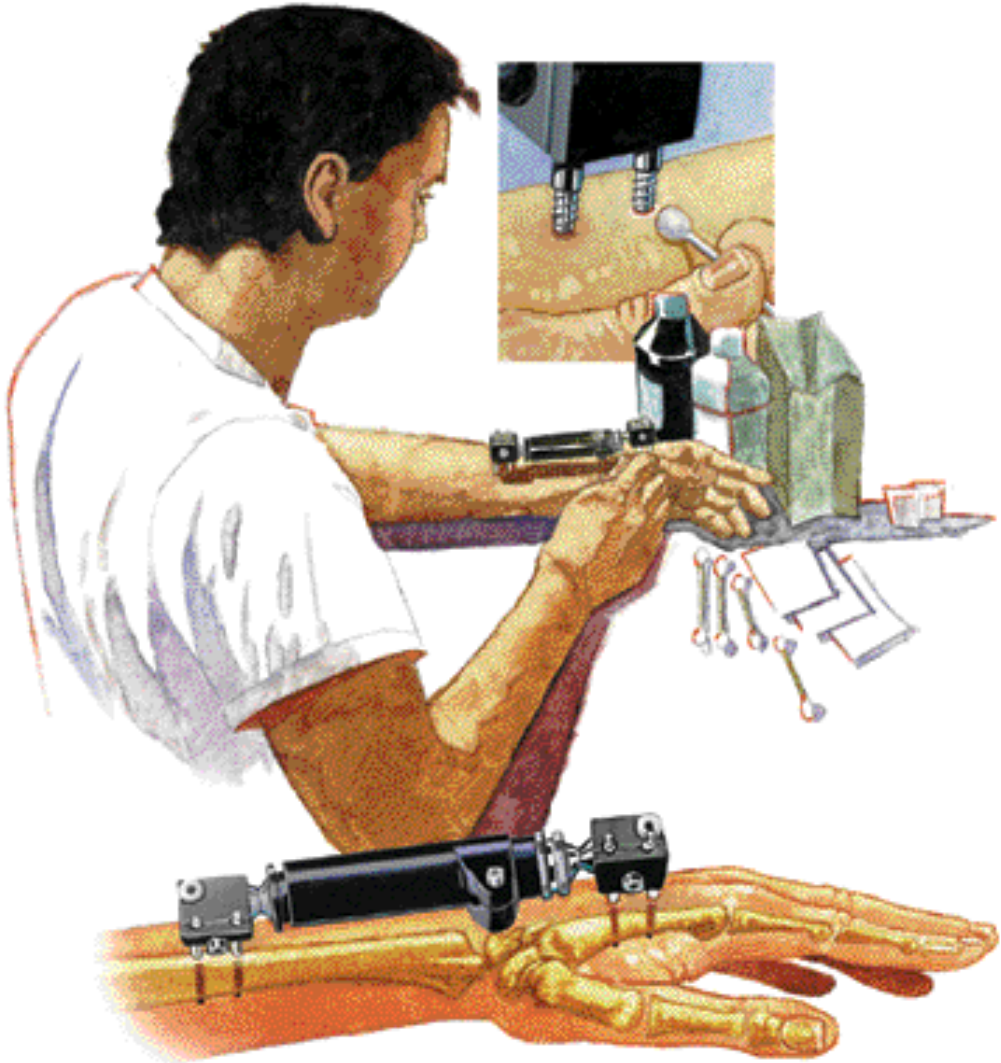


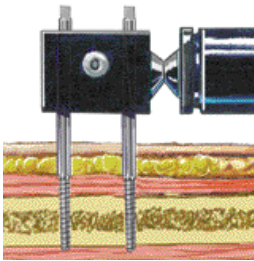
# Pin-Site Care



## What is External Fixation?

When a bone needs medical attention to correct a deformity or to treat a fracture, there are different treatment options a doctor will consider. Proper care of a broken bone should relieve pain and help ensure the bone will heal correctly. Your surgeon has assessed your treatment needs and has decided that external fixation is the best treatment for you.

External fixation, just as the name suggests, is a device worn outside the body. This device, which is called a *fixator*, is connected to the bone with bone screws (commonly called *pins*). The pins pass through the skin, and sometimes muscles, to connect



the external fixator to the bone. Two or more pins are placed on either side of the broken bone to hold the bone in place and to anchor the fixator securely. Sometimes wires are used with pins or instead of pins to secure the bone pieces.

Your surgeon uses the external fixator to place the broken bone in its correct position and alignment until bone healing occurs. This may take approximately six weeks for a simple fracture, and up to one year or longer for a more complicated procedure.

## Why is the Pin Site Important?

The area where the pin meets the skin is called the pin site. This opening, like any cut or nick in the skin, must be kept clean or there will be a risk of infection. Infection could cause the pin to loosen or require its removal. Using external fixation as a treatment to heal your fracture may help you return to your normal activities more quickly, but it is essential that you care for your pin sites correctly to help prevent infection and allow more comfortable healing.

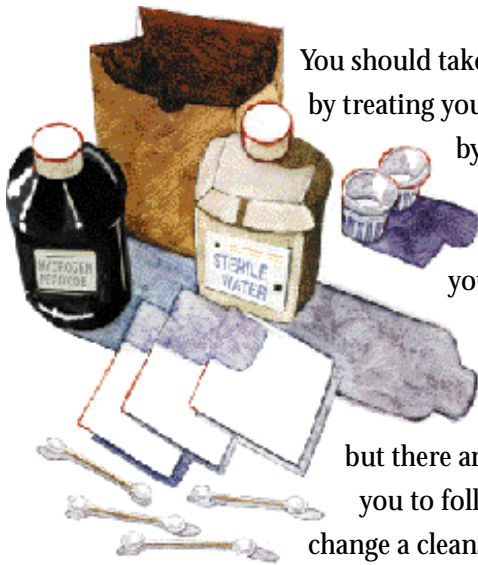
## What Do I Need to Do?

You should take an active role in your recovery by treating your external fixator with care and by maintaining clean, dry pin sites.

Starting with the first day your fixator is applied, and until the day your fixator is removed, your pin sites will need to be cleaned in a simple and painless manner. Instructions on pin-site care may vary slightly, but there are commonly accepted guidelines for you to follow. Your surgeon may choose to change a cleansing solution or cleansing regimen,

but generally you will use the following supplies:

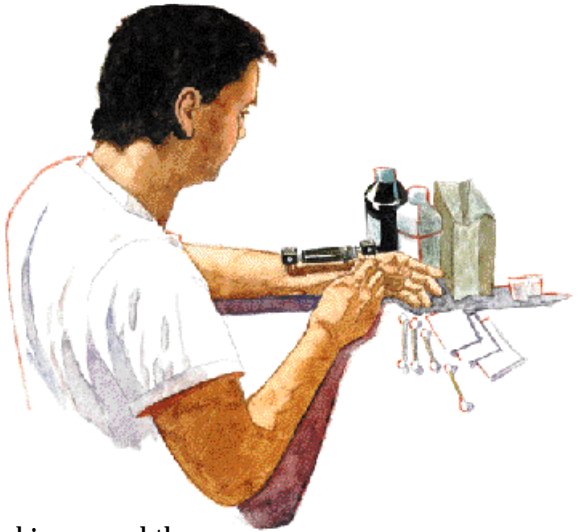
- Cleansing Solution: Sterile Water
- Disposable Cups to Hold Cleansing Solution
- Sterile Gauze Dressing: 2"x 2" and 4"x 4"
- Sterile Cotton Swabs
- Bag for Waste Disposal



## Here's How:

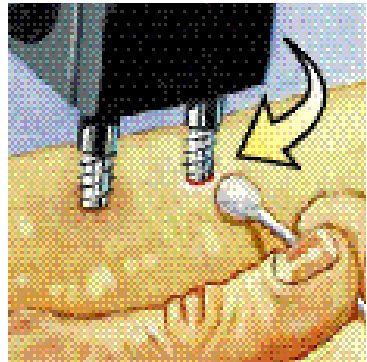
Follow this procedure two times a day:

**Step 1.** Wash your hands thoroughly, including between fingers and the back of each hand. Hand washing is the single most important factor in preventing infection. Use a paper towel to dry your hands and dispose of it after use.



**Step 2.** Gently massage the skin around the pins with your fingertips to bring drainage to the surface so that it may be cleaned away.

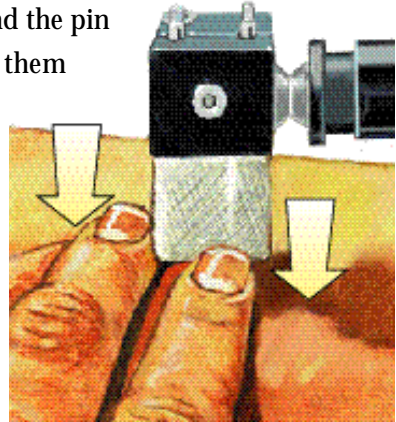
**Step 3.** Saturate a sterile cotton swab with the cleansing solution selected by your surgeon. Gently apply the solution directly to one pin site at a time. Swab in a circular motion, always moving away from the pin. Remove any crust which may have formed. Change cotton swabs as



often as necessary. After all the drainage is removed, dry the pin site with a new cotton swab. Start with a new sterile cotton swab for each pin site.

**Step 4.** Clean the entire length of the pin with a 2x2 gauze. Use a new piece of gauze for each pin.

**Step 5.** Wrap sterile gauze loosely around the pin site. If there are raw edges of gauze, roll them inside so that no loose filaments get into your pin sites. Placing your fingers over gauze, gently press down on the skin around the pin site. After the first few days, when the pin sites are dry, gauze should not be used. Instead, the pin sites should be left uncovered and exposed to the air.



**Step 6.** You must also take care of your external fixator. The entire device should be cleaned using 4x4 gauze and cotton swabs.

**Step 7.** Place the materials used for cleaning into a bag for disposal. At the end of each session, wash your hands.

### **In the Shower**

After you have worn your fixator for ten days, and if allowed by your surgeon, you may shower while wearing your fixator. While in the shower, gently clean your external fixator. Afterwards, dry the fixator thoroughly with a clean towel. Continue to clean your pin sites in the manner described above.

## How Will I Know if I Get an Infection?

Even with excellent pin-site care, there is a chance that pin sites may become infected or cause complications. It is possible that you might see one or more of the following symptoms of infection:

- Redness at the pin site
- Swelling at the pin site
- Thick or colored discharge from the pin site
- Loosening or movement of the pin
- Persistent pain or soreness at the pin site

If you experience any of these conditions, you should contact your surgeon's office immediately.

If your surgeon has prescribed antibiotics to ward off possible infection, be sure to take them as prescribed until all the medication is used. Remember to clean your pin sites twice daily even if you are taking an antibiotic.

*Produced in consultation with René Esser, M.D.*

*This patient education brochure is not intended as a substitute for professional care.*

