

## Minutes of BDPNN meeting 17 Nov 2011

Norine Smith welcomed the large group of about 80 people to this meeting, and she introduced the staff members. A quick show of hands indicated that about 60% of tonight's visitors were newcomers. Norine reviewed the BDPNN's current status, with the plan to file incorporation in Jan 2012 and then start the IRS non-profit process.

Norine then introduced Barbara Morita from the Alameda Health Consortium. Barbara has a ton of experience with disaster medical response, such as Hurricane Katrina and the Haiti earthquake. If you are able, you should take a wilderness medical course to really learn all the details about how to respond to situations without professional medical help (such as we will experience during the Big One).

[side note: there is an organization called the National Outdoor Leadership School (NOLS) that teaches these wilderness medical courses. There is a course in Berkeley from 4-13 Jan 2012, but the class is already full. Go to this website if you are interested in taking one of these courses: <http://www.nols.edu/portal/wmi/courses/> ]

Remember that the overall rule for first aid in a disaster is: Doing your best to help the most people with the smallest amount of resources in the least amount of time. Because of this, CPR is really not an option unless the victim is your only patient and there is no one else to help. The chance of getting an ambulance/paramedic to help you, or a hospital to treat the person, is very slim after a disaster. You will have the most impact working on the people who have minutes to hours to live, if they are not helped. By providing the needed help, you will save lives. In fact, it is estimated that simple first aid would save 40% of the people who die in disasters. You should plan on being without professional rescue or medical personnel for the first 72 hours after a disaster. Also, about 85% of the rescues performed in disasters are done by non-professionals, in other words normal citizens without formal training. The Good Samaritan Laws protect individuals who are truly trying to help someone in need. The key is to stick with what you know. Don't try to do an emergency appendectomy on someone if you have no training, etc. Use the general rule of "do no harm."

So, with that in mind, Barbara covered the basics of how we can help the most people with the least amount of resources.

The #1 priority is to stop bleeding. This is the biggest killer. The best way to stop bleeding is direct pressure for as long as it takes. Sometimes you can stop the bleeding by squeezing the wounded area, but sometimes you need to press the wounded area against something else, such as the ground, using your body weight. Without letting off any pressure, you can use an additional person to find a pressure point upstream of the wound to try to slow down the blood flow to the wound. You may have to hold the pressure for 30 minutes to an hour until the bleeding finally stops. NEVER remove the bandages once you've placed them on the wound, because the clots are forming on the bandages, and you will make the wound bleed again. That means no peeking at the wound! Simply wrap the bandages over the wound with more bandages. It is not critical to use sterile bandages to stop bleeding. It is more important to stop the bleeding than to worry about infection right away. If you have tried everything to stop the bleeding and it's not working, you may have to use a tourniquet as a last resort to save the person's life. Remember that once you put a tourniquet on, you don't loosen it or take it off.

The #2 priority is shock. A person will go into shock when they have lost a lot of blood, or when they are in a lot of pain (such as from burns or a broken bone). A person can die from shock, if untreated. Try to get the victim to lie down to get more blood to their brain (use caution if the victim has a head injury). It is VERY important to place a blanket or something under them so they are not lying directly on the ground or the floor. The key is to keep them warm, but not too warm that they overheat. It's best if they lie on their side, with their head supported, and their legs are slightly tucked. They should look like they are sleeping. They should be comfortable above all else, so if they prefer lying on their back, then let them. Cover them with a warm blanket, if the air temperature is below 90 deg F.

If all you do is treat bleeding and shock, you can save a large percentage of the victims that normally die in disasters. Your focus should be on these two areas.

Infection is the #3 priority. Once the bleeding has been stopped for at least 30 minutes (or longer for a really serious wound) and the person is out of shock, you need to clean the wound. If at any time the bleeding gets really bad again, you must go back to step 1 and use direct pressure to stop the bleeding, then wait longer before trying to clean the wound again. First, slowly remove the loose bandages that are wrapping the wound. Once you get to the layers that have clots on them, you need to wet the bandages to soften the clots. Wait 10-20 minutes before trying to remove each layer slowly.

Once you get to the wound, clean the area as best as you can. DO NOT use hydrogen peroxide, alcohol, or iodine products directly on the wound. These will make things worse. Use clean water to wash away debris. One technique is to use bottled water with a soft cap. Use a needle or safety pin to puncture a small hole in the top of the cap, and then squirt the clean water onto the wound by squeezing the bottle. Redress the wound with clean bandages and wrap to hold in place. The wrap doesn't have to be clean because only the wound needs to have clean bandages touching it. The only recommended ointment is Polysporin.

The #4 priority is splinting broken bones and sprains. You are trying to stabilize the wounded area to reduce further damage and also to reduce pain to avoid shock. There are many sources of splint materials. SAM splints can be purchased online (such as Amazon.com). There is a product called "conformal splints" such as 3M Scotchcast (best size is 4x15), but you need training to use this material. You can also buy padded cardboard. Or you can use whatever you have handy, such as cardboard boxes that are cut to size, or several magazines, or newspapers. Another option is to use the neighboring body part as the splint, such as splinting 1 finger to its neighbor, or splinting 1 leg to the other one. Pad the area as best as you can, and watch that you don't put the bandages on too tight. If the bone is broken and sticking out, you have to splint the bone in its current position as best as you can.

The #5 priority is burns. There isn't much you can do for a burn, other than clean it as best as you can and try to reduce the pain to prevent shock. There are some burn gels that have some lidocaine in them, and this will help reduce the pain. Use clean gauze on the wound and do your best to avoid infection. However, burns are the most likely to become infected no matter what you do. Keep the burn clean and covered, and keep the person warm to treat for shock.

For puncture wounds where the object is still inside the wound, you should always leave the object in place because the object might be helping to stop the bleeding. Removing the object might cause more damage. Stabilize the object in place and wrap it as best as you can. However, in a very long term disaster with no professional medical care, you might have to consider removing the object. Make sure you discuss all the options before deciding to do this.

Protect yourself while you are working on injured people. Use gloves if you can, and goggles if you have them. If you don't have gloves, use whatever you can find, such as plastic bags or other plastic barriers so you don't touch the blood or bodily fluids directly. You are mainly trying to avoid infection by HIV/AIDS and Hepatitis B. You have to make your own choice about the risk you are willing to take to help others.

When you find an injured person, try to do a Head To Toe assessment on them. Start with their head and lightly feel everything while asking them if the area hurts. Quickly and methodically make your way to their toes. Giving them the attention will make them feel safe and cared for, and you can assess their injuries to give them proper care. Reducing their stress will reduce their chance for shock.

After you have treated someone that is not seriously injured, you can give that person something to do to help ease the emotional stress of the situation. They can talk to other patients, bring them water, help monitor the more seriously injured, etc. This will help them keep their mind off their own injuries and give them something useful to do as well to help the entire team effort.

The group then worked around the room to do hands-on training at the various stations. These included practicing how to wrap a wound and do direct pressure. Another station showed how to make the water bottle into a wound cleaning device and using it to clean some dirty pasta shells. Another station included the different ways to transport victims, including the "log-roll" onto the various carrying devices, such as the MegaMover 1500 and the Evacu-Aid. Here are a few websites to look at the different types available. Check other sites for better pricing:

<http://www.cpr-savers.com/Industrials/Cpr%20prod/stretchers.html>