

## Sanitation Notes

### main areas of concern:

medical  
morgue  
food preparation  
showers  
toilets  
waste disposal

.05 solution of regular (non-scented, not dry) bleach - 5 capfuls (10 Tablespoons) to 5 gallons of water

### basic supplies for mass sanitation: (per 100 expected occupants with injuries - this includes victims and workers)

1000	linear feet (8 or 10 feet wide) 4 mil black plastic
1000	linear feet (8 or 10 feet wide) 4 mil clear plastic
200	lawn size heavy duty garbage bags with ties
50 lbs.	quick lime - store in original paper sacks up off the floor (OK to freeze)
300 gallons	water
6	large quantity water filters
2 gallons	anti-bacterial hand soap
5 gallons	isopropyl (rubbing) alcohol
4 gallons	regular liquid bleach
500	dust masks
10 - 12	gas masks with extra cartridges (M-95 preferred)
200	surgical masks
500 pair	latex gloves - S, M, L, & XL sizes
10 pair	rubber gloves for those allergic to latex
10	body bags
2-4	shovels
10-15	five gallon buckets with tight fitting lids
12	large wash basins to act a sinks
6	port-a-potties
8	bottles of Pine-Sol or equivalent for the stench in the port-a-potties - several boxes Borax works great also.
300	heavy duty garbage can liners for port-a-potties
100	gallon size zip lock bags for storage of personal effects for deceased
50 rolls	paper towels
300'	3/4" PVC piping and connections and glue to make temporary showers and curtain walls for toilets

Gas masks or at least surgical masks should be issued to everyone dealing with the deceased and/or sanitation after the first 12 hours.

In the absence of running hot water a triple sink should be set up for hand and instrument sanitation for medical. Set up separate triple sinks for hand and instruments. All instruments that can be sterilized by boil should be done as such. Otherwise use the triple sink method. All large debris should be rinsed off before using the triple sink. The first sink is regular hot water to be used with antibacterial soap. The second sink is hot rinse. The third is extra hot sanitizer with the .05 solution of bleach mentioned above. If you are using more than 5 gallons sanitizer up the mix so the .05 solution is maintained. If you have a thermometer your water should stay above 110 degrees or extremely hot to the hands if you don't have a thermometer. If you don't have a hot water heater to provide you with this level temperature a stove (gas or otherwise) should be procured to be able to heat the water. Washing facilities need to be placed by all food preparation, medical and toilet facilities.

In setting up multiple toilet facilities. To maintain sanitary conditions and privacy plastic curtains should be set up between toilets. Shower curtains or 4 mils black plastic works great. A triple sink should be set up out side each bank of toilets. Flush toilets should be procured whenever possible but 5 gallon buckets with tight fitting lids and liners will do. Toilet facilities should be located minimum 100 feet from any medical, morgue, food preparation, or sleeping facilities. When people are done doing their duty in the toilet encourage them to sprinkle a little Pine-Sol or Borax in their port-a-potty to help keep down the stench.

Not high priority but necessary, within 2 hours shower facilities need to be set up for the cleansing of victims' wounds and later for showering of victims and workers. It is best to keep victim and worker shower facilities separate for psychological reasons.

Waste disposal should be buried in well marked areas at least 20 feet away from any water source and 8 feet away from any residential foundation or garden area. Water sources include, rivers, streams, canals, wells, lakes, ponds, etc. All waste, especially human waste, should be buried at least 18 inches deep. Dogs can sniff through up to 16 inches of dirt and will dig up human waste. Although they generally will not eat human waste like they do their own after they dig it up, rodents will do the rest of the damage in spreading disease.

In medical areas all surfaces should be sterilized with alcohol and/or bleach whenever possible. All food preparation surfaces as well should be sterilized before food preparation is started.

Using lime to spread on bodies and waste after you bury them will help with the decomposition process and help keep down disease.

*A lot of this may seem redundant and useless under normal circumstances BUT a disaster is not a normal circumstance and extra precautions are a necessity.*