**CAP health & wellness handout: FIELD SANITATION**

**Water Purification**

All field water sources MUST be purified because you don't know what is upstream in your water source, in order to avoid acute gastrointestinal illness such as diarrhea or hepatitis.

**There are many effective ways to treat water to make it fit for human consumption**.

* When in the field we are often self-contained and do not have access to an external supply of drinkable water.
* Three methods to purify water in the field environment are presented.
* None of these methods remove chemical hazards.

**Chemical Purification**

* Chemical water disinfection tablets are easily available in outdoor and camping supply stores
* Chemical treatment does not remove sediment
  + Sediment and organic matter can be removed using a clean cloth diaper, towel, or paper coffee filter
* In all cases, follow the manufacturer's instructions in using these products

**Procedure for chemical disinfection of water**

* Fill water container with water
* Add purification tablets according to manufacturer's instructions
* Dirty or cold water requires additional tablets
* Replace the cap on the water container
* Wait five minutes
* Loosen cap and shake container spilling a small amount of water
  + This will disinfect the threads of the container and lid
* Apply the lid tightly
* Allow to sit 30 minutes
* Enjoy the water

**Mechanical filtration**

* Mechanical filters remove sediment and bacteria from water
* Used devices must not be permitted to freeze between uses
* Use various methods to force water through the filter membranes
  + Gravity
  + Pump
  + Suction
* In all cases, follow the manufacturer's instructions in using these products

**Boiling**

* Remove sediment and organic matter by filtration before boiling
* Water can be effectively disinfected by boiling
* Boil water for one minute
  + Start time when vigorous boiling occurs
* Above 5,000 feet boil water for three minutes
* To improve the "taste" of the water, pour it back and forth between two containers