

WATER PURIFICATION METHODS

- **BOILING:** reliable way to purify water especially for newborns.

Kept boiled water in sterilized, sealed containers in the refrigerator up to 3 days, 24hrs at room temperature out of direct sunlight. Babies can drink treated, not yet boiled, water from 4 months on.

- **IODINE:** solution, tablets or crystals. This is an effective and convenient method.

Iodine has the ability to kill many but not all viruses and bacteria. Easy to use, iodine takes about thirty minutes before you can drink the treated water. Not suitable for pregnant women. Also has an aftertaste. Once the appropriate drops, tablets or crystals are placed into the water in the container, shake the container and hold the bottle upside down with the lid slightly unscrewed to let the iodine flow into the threads of the cap. Do not use too much at a time. Iodine can be poisonous if misused. **How Does Iodine Purify Water?** Kills the bacteria in water by disrupting the ionic balance within the pathogenic cells. It replaces the chemicals necessary for the bacteria or virus to thrive with iodide ions.

- **CHLORINE:** drops kill bacteria in water.

Chlorine bleach is an inexpensive and easy way to kill bacteria found in water. 30 minutes are required for the chlorine to neutralize micro-organisms before drinking the treated water. Do not use more than the recommended amount of chlorine bleach at the time of treatment. Bleach can be harmful when misapplied.

- **REVERSE OSMOSIS SYSTEMS:** remove contaminants from water.

Remember to add any essential minerals removed in the reverse osmosis process back into your water.

- **WATER FILTERS:** remove some organics, bacteria & micro-organisms from water.

Carbon iodine filters can remove chemicals & odors from water while the inner iodine coated screen also kills viruses. Treated water can be consumed immediately afterwards & should have no bad taste. Water filters are more costly than iodine or chlorine & may require manual pumping. Also, you will need to clean &/or replace filters at appropriate intervals for maximum efficiency & performance.

- **ULTRAVIOLET LIGHT:** easy to use, ultraviolet kills bacteria.

Swish the flashlight sized light around in the water for a few minutes so the bacteria can be killed. Batteries are required. Solid particles, organics, etc. are not filtered out.

INSTRUCTIONS:

- **IODINE:** Liquid 2% Tincture of Iodine will kill most bacteria & viruses: add 5 drops per quart when the water is clear. Add 10 drops per quart when the water is cloudy. The solution will be ready for use in one hour. (Princeton University) Use 1100 drops (1.86 oz) 2% iodine for 55gal clear water.
- **CHLORINE:** Three tablespoons (3) will disinfect 55 gallons of water. 1 tsp / 5gal water.