American Red Cross

Fact Sheet: Post-Disaster Water Treatment

Many people have asked the Red Cross for information and suggestions on treating water after disaster strikes. The following information is provided to address those questions.

In addition to having a bad odor, and taste, water from questionable sources may be contaminated by a variety of microorganisms, including bacteria and parasites that cause diseases such as dysentery, cholera, typhoid, and hepatitis. All water of uncertain purity should be treated before use. To treat water, follow these steps:

1. Filter the water using a piece of cloth or coffee filter to remove solid particles.

2. Bring it to a rolling boil for about one full minute.

3. Let it cool at least 30 minutes. Water must be cool or the chlorine treatment described below will be useless.

4. Add 16 drop of liquid chlorine bleach per gallon of water, or 8 drops per 2-liter bottle of water. Stir to mix. Sodium hypochlorite of the concentration of 5.25% to 6% should be the only active ingredient in the bleach. There should not be any added soap or fragrances. A major bleach manufacturer has also added Sodium Hydroxide as an active ingredient, which they state does not pose a health risk for water treatment.

5. Let stand 30 minutes.

6. If it smells of chlorine. You can use it. If it does not smell of chlorine, add 16 more drop of chlorine bleach per gallon of water (or 8 drops per 2-liter bottle of water), let stand 30 minutes, and smell it again. If it smells of chlorine, you can use it. If it does not smell of chlorine, discard it and find another source of water.

<u>Past information that has changed and is no longer recommended</u>

1. The only agent to use to treat water should be liquid household bleach. Other chemicals, such as iodine or products sold in camping or surplus stores for water treatment that do not contain 5.25% hypochlorite as the only active ingredient, *are not recommended and should not be used.*

2. The only accepted measurement of chlorine (or water treatment agents) is the drop. A drop is specifically measurable. Other measures such as "capful" or "scant teaspoon" are not uniformly measurable, and are not to be used.

3. There is no difference between treatment of potentially contaminated water that is cloudy or clear.

If local public health department information differs from this advice, the local information should prevail. For more information, contact your local Red Cross chapter and ask for a copy of the brochure entitled, "Food and Water in an Emergency" (A5055).