September is National Preparedness Month; USU Extension Offers Water Storage Tips

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The average human body is made up of 65 percent water — an element essential for survival. Water helps blood flow and carries oxygen and nutrients to cells, flushes waste products from the body, cushions tissues and joints and is a critical component for digestion. Water is fundamental for daily life, and providing for water needs in the event of a disaster should be a number one priority.

September is National Preparedness Month, and according to Carolyn Washburn, Utah State University Extension associate professor, it is a great time for people to design a family preparedness plan. She said including water storage is imperative since regular sources of water may be interrupted or contaminated in the event of a disaster.

“Each person will need at least 1 gallon of water per day,” she said. “For home storage, include at least a 2-week supply of water for each person for drinking and sanitation. If you own a pet, be aware of how much it drinks each day and also include that amount in your storage.”

Washburn said water should be stored in food-grade containers such as glass jars (quart jars work well), metal or plastic containers. Five, 10 or 55-gallon containers specifically for water storage work best, however they should not be stored directly on dirt or concrete since they will absorb odors. Previously used juice and milk containers are not acceptable since food proteins are difficult to remove, and the grade of plastic is generally not adequate. Water bottles purchased in cases from the storework well for short-term storage.

“When you are filling water storage containers with tap water, you will not need to treat the water prior to storage since city water already provides a sanitation treatment,” she said.

Washburn said in the event of an emergency, water will need to be treated if it comes from a non-sterile source such as wells, rivers, rainwater, etc. There are several suggested treatment methods.

- Chemical treatment – Using concentrated, (6 percent) unscented chlorine bleach, add 8 drops per gallon (less than 1/8 tsp), or 2 drops per quart. Be aware that nearly all liquid chlorine bleach is now concentrated and that amounts required for treatment are LESS than in previous years when bleach was not concentrated (3 percent). After adding bleach, let the water stand for 30 minutes. For cloudy water, use 24 drops per 2 gallons (4 drops per quart). If water is still cloudy, repeat the dosage,and let stand another 15 minutes. If it is still cloudy at that point, it is not fit to drink and should be disposed. Water treated with chlorine should have a slight bleach odor. If it does not, repeat and wait another 15 minutes. The treated water can then be made palatable by pouring it between clean containers several times. Beware of expiration dates on bleach. If it is older than 4 months, it should not be used as a water purifying agent. Bleach will dissipate after 1 year.
- Heat treatment - boil water for 5 to 10 minutes. The water bath method for glass jars provides sterilization and indefinite shelf life. Fill clean, sterilized jars and boil in a water bath for 15-20 minutes.
- Other forms of water treatment are iodine, water purification tablets, distillation and filtration.

Washburn said that additional emergency sources of water may be potable water from pipes, water heaters, ice cube trays and beverages, but water from swimming pools, toilet tanks or waterbeds should not be used for drinking because of the chemicals added.

“When potable or drinkable water is properly disinfected and stored in ideal conditions, it should have an indefinite shelf life, however, to maintain the optimum quality, it is best if water is rotated every 6 months,” she said.

Water storage is the first important step in emergency preparedness. For further information and tips on

preparedness, visit the Utah Extension Disaster Education Network at extension.usu.edu/ueden.

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