

Water Storage

General – Store a minimum of 2 quarts per day, per person, for personal consumption. Store a minimum of 2 gallons per day, per person, to satisfy personal consumption, cooking, and sanitation needs. Locate stored water only where potential leakage will not damage your home or apartment. Protect stored water from light and heat.

Municipal Water Supply – Under normal conditions, water from a chlorinated municipal water supply will not need any further treatment and can be stored in clean (preferably sterile), food-grade containers. If the municipal water supply has been contaminated, the water must be treated before storage or consumption.

Commercially Packaged Water - Commercially bottled water in polyethylene terephthalate (“PETE”) plastic containers may be purchased and stored for emergency use. PETE containers are one-time use containers - do not refill them. Follow the container’s “best if used by” dates as a rotation guideline.

Self-Storage – Chlorinated municipal water can be stored safely under the following conditions:

- Use only food-grade containers made of PETE plastic or high-density polyethylene (“HDPE”) plastic. (HDPE #2, #4, and #5 are the safest for long-term storage.) 55 gallon drums are the most economical.
- Prepare a sanitizing solution by adding 1 teaspoon of liquid household chlorine bleach (5 to 6% sodium hypochlorite) to one quart of water. Use bleach without thickeners, scents, or additives.
- Clean, sanitize, and thoroughly rinse all containers prior to use.
- Do not use plastic milk jugs. They do not clean or seal well, and become brittle over time.
- Do not use containers previously used to store non-food products (such as cleaning solutions).
- Containers should be emptied and refilled at least once a year.

Short-Term Emergency Storage – In an emergency, when the municipal water supply may become unreliable, you should store as much water as possible, as quickly as possible. For drinking water, follow the guidelines above. For sanitation purposes only, water can be stored in non-sterile containers, such as bathtubs and sinks.

Water Filtration (Removes most particles, chemicals, and bacteria, but will not remove all viruses)

Personal Filters – Small, portable, hand-pumped filters, manufactured by Katadyn, are available for short-term personal use. They should filter to a minimum of 0.3 microns and be able to produce at least 200 gallons.

Family Filters – For larger scale water filtration, counter-top, gravity-fed filters can provide up to 4 gallons of water per day without pumping. Katadyn and Berkey manufacture quality counter-top filters.

Water Purification (Kills bacteria and viruses, but will not remove particles or chemicals)

Chemical - Non-chlorinated water should be treated with bleach. If the water is cloudy or has debris in it, run the water through a coffee filter first. Add 1/8 of a teaspoon (8 drops) of liquid household chlorine bleach (5 to 6% sodium hypochlorite, no scents or additives) for every gallon of water, ¼ cup per 55-gallon drum.

Ultra-Violet – Ultra-violet light within a certain frequency range will kill bacteria and viruses. Ultra-violet devices must have quartz lenses. Ultra-violet pens are available for small scale personal use.

Boiling - Boil water for at least one full minute at a full boil. Cool before using.

Distillation – water vapor can be collected in a cup hanging from an inverted lid over a heated pot, or by plastic sheeting in a makeshift solar still. Distilled water contains no particles, chemicals, bacteria, or viruses