

Water Purification & Storage Guide (Quick Manual)

1. Daily Water Needs

- **Minimum per person:** 1 gallon/day (drinking + minimal hygiene)
- **Preparedness target:** 2 gallons/day
- **3-day supply:** 3–6 gallons
- **14-day supply:** 14–28 gallons

Scaling: Multiply totals by number of people.

2. Purifying Water (Indoor & Outdoor Sources)

A. Boiling (Most Reliable)

- Bring water to a **rolling boil for 1 minute** (3 minutes above 6,500 ft).
- Cool naturally; store covered.

B. Filtration

Use a filter rated for **0.1–0.2 microns** for bacteria/protozoa.

- Examples: pump filters, squeeze filters, gravity bags, countertop filters.
- **Note:** Most portable filters do **not** remove viruses; pair with chemical treatment if needed.

C. Chemical Treatment

Chlorine (unscented household bleach):

- Clear water: **8 drops per gallon**
- Cloudy water: **16 drops per gallon**
- Wait **30 minutes** before drinking.

Iodine:

- Follow tablet instructions (typically 30–60 minutes).
- Not recommended for long-term use or for pregnant individuals.

D. UV Purification

- Handheld UV purifiers treat 0.5–1 liter at a time.
- Works best with clear water.

E. Combined Method (Best for Outdoor Sources)

Filter → then chemical or UV.

3. On-Person Water Preparedness

- Carry **1 bottle** (16–32 oz).
- Include **one compact filter** (straw or squeeze type).
- Add **chemical tablets** for backup.
- Optional: collapsible bottle for extra capacity.

4. Home Water Storage

A. Short-Term Storage

- Use **store-bought bottled water** or **clean food-grade containers**.
- Keep in a cool, dark place.
- Rotate every **6–12 months**.

B. Long-Term Storage

- Use **5–7 gallon jugs, stackable containers**, or **55-gallon drums**.
- Sanitize containers before filling (1 tsp bleach per quart of water, shake, rinse).
- Fill with tap water (already chlorinated).
- Label with **date filled**.
- Rotate every **12–18 months**.

C. Large Storage Options

- 55-gallon drum = **27–55 days** for one person
- Two drums = **~2 months** for two people

- Add a **manual pump** for dispensing.

5. Emergency Water Sources at Home

- Water heater (30–50 gallons)
- Toilet tank (not bowl; avoid if chemical cleaners used)
- Ice cubes
- Canned foods (vegetables, fruit)
- Rainwater (must be filtered + purified)

6. Scaling for More People

- Multiply daily needs by number of individuals.
- Add **extra filtration capacity** (larger gravity filter or multiple units).
- Increase chemical treatment supplies proportionally.
- Store water in **multiple containers** rather than one large one for easier rotation and portability.

7. Quick Safety Notes

- Never drink water with **fuel, chemicals, or heavy metals** — purification won't fix it.
- If water is cloudy: **filter first**, then treat.
- Store chemicals and filters in a cool, dry place.
- Replace filters according to manufacturer lifespan.