

Cleaning and Disinfecting Water Cisterns After Floods and Heavy Rains

Floods and heavy rains can wash large amounts of debris and contaminants into cisterns and rain catchment systems and make water unsafe to drink. When cisterns come in contact with floodwater, you should assume that your drinking water is contaminated.

Once water is restored or you have the ability to refill your cistern, clean and disinfect it.

Cleaning

When you can replace the cistern water with safe water, follow these instructions to clean your cistern.

1. Clean the catchment area (for example, rooftop and gutters) and remove all debris.
2. Remove all debris and water from the cistern.
3. Scrub the inside with a stiff brush and a solution of 1 cup (about 0.25 liter) of unscented liquid household bleach (5%-8.25%) mixed with 10 gallons (about 38 liters) of water.
4. Rinse cistern with clean, safe water, then drain.
5. Refill the cistern with clean, safe water.



Disinfecting

After cleaning your cistern, follow these instructions to thoroughly disinfect your cistern and household plumbing.

1. If the cistern is connected to any water treatment systems (e.g., water filter or softener), close valves to those units and follow manufacturer recommendations to disinfect those systems separately.
2. Add 3 cups (about 0.75 liters) of 5%-8.25% unscented liquid household bleach for every 100 gallons (about 380 liters) of water in the holding cistern.
3. If the cistern is connected to interior plumbing, open each faucet and run the water until you smell chlorine (bleach).
4. Turn off all faucets and allow the solution to remain in the cistern and plumbing for at least 12 hours. Do NOT drink, bathe, or cook with this water.
5. Drain all water from the cistern.
6. Refill the cistern with safe drinking water.
7. Open each faucet and run the water until you do not smell chlorine (bleach).
8. Add 1 tablespoon of 5%-8.25% unscented liquid household bleach for every 100 gallons of water in your cistern to prevent microbial growth.

Amount of Bleach (5%-8.25%) to Add for Cistern Disinfection

Cistern Size	¼ Tank	½ Tank	¾ Tank	Full Tank
200 gallons	1.5 cups	3 cups	4.5 cups	6 cups
450 gallons	3.5 cups	7 cups	10.5 cups	13.5 cups
600 gallons	4.5 cups	9 cups	13.5 cups	18 cups
1,000 gallons	7.5 cups	15 cups	22.5 cups	30 cups

For more information on maintaining your cistern, contact your local health department or a water treatment specialist or visit www.cdc.gov/healthywater/emergency/drinking/disinfection-cisterns.html.

