

Why do we need buckets in our emergency kits? *Earthquakes!*

Earthquakes (and other disasters) cause severe damage to water, sewer and septic systems preventing our plumbed toilets from working properly. Earthquake activity in Jefferson County is 113% greater than the overall U.S. average. FEMA has determined that Washington State ranks second (behind only California) among states most susceptible to damaging earthquakes.

Recent earthquakes in New Zealand left 50,000 people without a functioning sewer system and unable to flush toilets for months. People adopted and relied on the twin-bucket toilets system during the emergency stage of the crisis.



Twin-Bucket Toilet System

Obsolete examples of emergency toilet substitutes include: plastic garbage bags and twist ties, or single-bucket camping toilet, or worse, trench or pit latrines. In contrast, a twin-bucket toilet system and not mixing urine and feces is a proven principle of ecological sanitation.

The Solution

Use the **Twin-Bucket Emergency Toilet!** It was adapted from the New Zealand disaster and works even for apartment dwellers. It's used following a disaster and not as normal practice.

The Twin-Bucket Toilet is:

- Simple to acquire
- Affordable (bucket, lids and a seat cost \$20 or less)
- Safe and manageable
- Compact (hygiene supplies in nested bucket keeps everything together)

Getting Everything Together

- Plastic buckets – 3.5 to 5 gallon size. Get 2 buckets to get started and add 1 more bucket per household member as needed. 
- Lids for each bucket that close tightly and one toilet seat designed to fit on a bucket.
- Keep toilet paper, soap, bottled water, disposable gloves, hand sanitizer, towels or wipes, disposable diapers, and carbon material in your sanitation kit. Hand sanitation is critical to maintaining your health
- Septic system users should decide if they are going to dump pee and poo in their septic tank (DO NOT add carbon material to poo bucket) OR store pee and poo and WAIT for DEM disposal instructions (add carbon to poo bucket). Carbon will damage the septic system. Septic system users may dispose of pee and poo in their own septic tank if they:
 - Can safely locate and remove the septic tank lid. Older tank lids may be concrete and too heavy to remove.
 - **Keep all children and pets away from open septic tank during dumping.**
 - **Secure the septic tank lid immediately after dumping pee and poo.**

The No-Mix Principle

When separating pee and poo, the twin-bucket toilet reduces disease risk and odor and makes the contents of each bucket easier to handle.

Urine has almost no health risk. With extra buckets and lids, you can store pee while waiting for disposal instructions or pour it in your septic tank.

The poo bucket contains most of the pathogens. Poo needs to be contained until it is treated but doesn't take up much space. Each of us produce only 4-10 oz daily. It takes approximately a week for 2 people to fill a 5 gallon bucket with poo and carbon material. With extra buckets and lids, you can store poo or dump it in your septic tank

Using the Twin-Bucket Toilet System

1. Mark the twin buckets “pee” and “poo” (or #1 and #2, or urine and feces, or yellow and brown)



2. Put buckets in a private space.
3. The seat can be moved from one to the other. After use, remove the seat from the bucket and cover with a lid that closes well.
4. Try not to mix pee and poo. This is important although it's understandable that there will be mistakes. The pee is the component that produces the bad smell when the two mix.
5. After using the pee bucket, you can put the toilet paper in the poo bucket.
6. After using the poo bucket:
 - Close tightly with lid for future dump in your septic tank OR
 - Add carbon material after each use for moisture and odor control. WAIT for public disposal instructions from DEM.

When the Septic System is Broken, What Do You Do?

Your **septic system** (waste pipes under your house and the tank) is at risk in an earthquake. All septic systems require a large quantity of water to move waste through the system. Some septic systems require electricity to run a pump. After an earthquake, do not assume your septic system is functional even if you have electricity and water. **DO NOT flush a toilet** until told it is OK. Have the necessary supplies on hand.

After a Disaster, DO ...

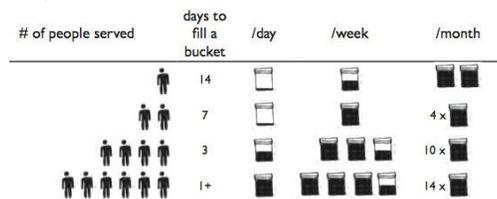
- **DO** seek disaster information: NIXLE alerts, FM KPTZ 91.9, KROH 91.1, or www.jeffcoec.org.
- **DO** follow all instructions for storage and disposal from fire, law, emergency management, and sanitation officials.
- **DO** use a Twin-Bucket Emergency Toilet and keep pee and poo separate for disease and odor control.
- **DO** store pee and poo in buckets (with lids that seal tightly).
- **DO** WAIT for disposal instructions from DEM or call a qualified professional to check your septic tank and waste lines.

After a Disaster, DO NOT ...

- **DO NOT flush a toilet** until your septic tank and waste lines are checked and functional.
- **DO NOT dig a pit privy.** With our seasonally saturated soils, disease organisms can easily contaminate neighboring properties.
- **DO NOT ADD CARBON MATERIAL** of any kind to your poo bucket if you are going to dump it in your own septic tank. Any carbon material may damage your septic system and require it to be pumped out later.
- **DO NOT** place baby or adult diapers, sanitary pads, or bagged pet waste in pee or poo buckets. Dispose of them in trash.

Alternative for Septic System Users

Septic system users may be unable to locate or remove a septic tank lid for pee and poo disposal. The alternative is to **WAIT** for public disposal instructions from DEM or local officials. Only use carbon material to cover poo if you plan to store and **WAIT** for disposal instructions from authorities. Carbon materials include: finely shredded paper, small pieces of torn newspaper, sawdust, wood chips, dried leaves, peat moss, forest litter, or coir fiber (a compact, light-weight coconut husk fiber found in most garden centers).



This chart assumes 2 large scoops of carbon cover and lots of toilet paper used with each addition. Bucket considered full at 4/5ths full.

Hygiene is Critical to Preserving Health

Hand washing is critical for food prep, eating, first aid, and the twin-bucket toilet area. Wash with foaming soap. It does not require water to lather up, generating a significant water savings. Use of hand sanitizers, disposable gloves and wipes help conserve your emergency water supply.

If You Care for Medically Fragile People

Consider having a bedside commode readily available. Having a bedside commode over the Twin-Bucket Emergency Toilet bucket will allow the injured or medically fragile to manage more safely.



SEPTIC SYSTEM

Twin-Bucket Emergency Toilet



When the ground shakes, septic and sewer lines break!

Flush toilets should not be used!

Have an Emergency Sanitation Plan before your SEPTIC SYSTEM breaks.



Department of Emergency Management (DEM)