

When Sewers are Broken or Leaking What Do You Do?

Even if you have running water & electricity in your home, it's difficult to know if the sewer lines may be broken under your home, in the street, or down the line to the treatment plant.

After a disaster **DO NOT FLUSH A TOILET** until given the OK by local officials. Acquire your necessary supplies before the disaster.

After a Disaster, DO...

- DO seek information from your community emergency manager
- DO follow all instructions for storage & disposal from fire, law, emergency management and sanitation officials
- DO use a Twin-Bucket Emergency Toilet and keep the pee and poo separate for disease & odor control
- DO add carbon materials: [finely shredded paper, sawdust, wood chips, dried leaves, peat moss] [1-2 scoops with each poo] to your poo bucket for moisture & odor control.
- DO store the pee and poo in separate buckets & WAIT for disposal instructions from authorities
- One person will fill a 5-gal bucket with poo and 2 scoops of carbon mulch [for each poo] in 2 weeks
- Two persons will fill 5-gal bucket in 1 week

AFTER A DISASTER: DO NOT:

- Do not flush a toilet or dispose of pee and poo, until told it's OK, by your local emergency officials.
- Do not dig a pit toilet. Seasonally saturated soils & disease organisms in poo can easily contaminate our water supply.
- Do not place baby or adult diapers, sanitary pads, or bagged pet waste in pee or poo buckets. Dispose of them in the trash.

Hygiene is Critical to Preserving Health

- Hand-washing is critical for food prep, eating, first-aid, & the twin-bucket toilet area.
- Wash with water-conserving foaming soap.
- Use hand sanitizers, disposable gloves & wipes to help conserve your emergency water supply.

If you Care for Medically Fragile Persons

- Consider having a bedside commode readily available and over the Twin-Bucket Emergency Toilet.
- The Twin-Bucket bedside commode allows injured or medically fragile persons to manage safely.



Twin-Bucket Emergency Toilet

for Mason County Sewer Systems

When the ground shakes: water, septic & sewer lines break! Flush toilets should not be used!

Prevent disease & keep your drinking water clean



by keeping the

Pee

&

Poo

SEPARATED



& out of
our ground water



Have an Emergency Sanitation Plan before the sewer system breaks.

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

Earthquakes [& other disasters] cause severe damage to water, sewer & septic systems, preventing our plumbed toilets from working properly. Earthquake activity in the Pacific NW is greater than overall US average.

Recent earthquakes in New Zealand left 50,000 people without a functioning sewer system. They were unable to use flush toilets for months. They adopted the twin-bucket toilet system during the emergency stage of the crisis. **Not mixing urine [pee] and poo reduces odor and is superior to camping toilets, trench or pit latrines.** The twin-bucket emergency toilet adapted from New Zealand even works for apartment dwellers. In Mason county it is used following a disaster to prevent contamination of our surface and drinking water supply.



Credits & Much Thanks

Jefferson County Dept. Emergency Management
Public Hygiene Lets Us Stay Human [PHLUSH]
Portland Bureau of Emergency Management
A Sewer Catastrophe Companion
New Zealand Permaculture Emergency.
Response Network
Brochure prepared by Mason County Department
of Emergency Management,
Questions: 360-427-7535

Twin-Bucket Toilet is:

- **Simple: to acquire, it's safe & manageable**
- **Affordable: [buckets, lids & seat cost \$20 or less]**
- **Compact: [Hygiene supplies in nested bucket] keeps everything together**

Getting Everything Together:

- **Two 3.5 to 5 gal plastic buckets / for 1 or 2 persons. Add 1 more bucket for each additional family member as needed.**
- **Close fitting lids for each bucket and toilet seat that is 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.
- Keep a bag of dry carbon material near toilet: finely shredded paper, sawdust, wood chips, dried leaves, peat moss, forest litter, coir-coconut fiber husks found in garden centers.
- Carbon can't be put in septic systems - this is to cover poo for moisture and odor control while waiting for disposal instructions.
- **In Mason county add a roll of garbage bags to line the poo bucket to facilitate transfer of poo later.**
- **Always check with local government before disposing poo or pee.**
- **Listen to KMAS 1030AM or 103.3FM**

The No-Mix Principle

By separating poo & pee there is reduced risk of disease & odor. The contents of each bucket are easier to handle.

Urine [pee] from healthy individuals, has almost no health risk. With extra buckets & lids, you can store pee effectively waiting for disposal instructions.

The poo bucket contains most of the pathogens. Poo needs to be contained until it is treated. It takes approximately a week for 2 people to fill a 5 gallon bucket with poo and carbon material

Using the Twin-Bucket System

1. **Mark the twin buckets "pee" & "poo"**
2. **Put buckets in a private space with carbon covering material and scoop nearby**
3. **The toilet seat can be moved from one bucket to the other. Try not to mix pee and poo. The pee is the component that produces the bad smell when the two mix.**
4. **After using pee bucket, you can put toilet paper in the poo bucket**
5. **After using the poo bucket, add carbon material to cover poo and reduce moisture and odor**
6. **After use, remove seat from the buckets & cover with a snug fitting lid.**