

Sanitation in a Disaster

By Kathryn McMullin

Human waste is one of the deadliest substances on earth. Where sanitation is poor, death & disease are rampant.

Our current systems for disposing of waste can be affected by many situations. If we lose water, we lose sewer. If we lose power for an extended time, we also lose sewer. In an earthquake or landslide sewer lines can rupture. In each of these scenarios, our instincts might be to use a camp potty, an RV or even dig a pit latrine. These solutions are very dangerous if we don't know how to properly set up and dispose of the waste. They will bring animals, vermin and insects into our environment that spread disease.

In a situation where sewer lines are dry, the fumes that will be entering your home are toxic and flammable. It is important that you know how to prevent fumes and sewage from entering your home and that you know how to set up a bathroom system that will prevent illness.

To Prevent Noxious Gas & Sewage Back-Up in Your Home:

(Do this for all floor drains in your home, including non-tub shower drains)

- 1. Find the floor drains in your home.
- 2. Remove the Drain Cover.
- 3. Insert the Test Plug.

 If you don't have a Test Plug available, you can use a large squishy ball.

 Stick it in a tube sock, cover in grease and shove into the pipe.
- 4. Twist clockwise to tighten.
- 5. Keep all other sink and tub drains closed and secured.

To Convert Your Toilet to a Dry Potty:

(The toilet is a source for fumes and vermin to enter our home)

- 1. Turn off water.
- 2. Remove water from tank and dry.
- 3. Remove water from bowl and dry.
- 4. Sanitize entire toilet thoroughly.
- 5. Make your toilet airtight & water tight.

 To plug the hole place a racquetball in a tube sock and cover in Crisco.

 Shove the racquetball deep in the opening until tight. The sock is there in order to aid in removal.
- 6. Bag the bowl.



Supplies for a Potty Kit:

- ✓ 5 Gallon Bucket
- ✓ Potty Seat Lid
- ✓ 2 Gallon Bucket with lid
- √ Scoop
- ✓ Tube Socks
- √ Racquetballs
- √ Grease
- ✓ Disposable Gloves
- √ Face Masks

Additional Supplies Needed:

- √ Test Plugs
- ✓ Heavy Duty Plastic Bags
- ✓ Kitty Litter
- ✓ Hydrated Lime
 Store in a sealed container properly marked.



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TO CREATE A PROPER SANITATION SYSTEM IN YOUR BATHROOM:

Separate

- Use a separate bucket, seat and lid for urine or build a urinal.
- No bag needed
- Can empty urine in your yard
- Clean and dry the bucket each time you empty it.

Cover

- Once you have created a dry potty of your current toilet, bag the bowl and use this potty for solid waste.
- Keep a small bucket with kitty litter and a scoop in your bathroom. Each time you go, sprinkle the solid waste with kitty litter. (Kitty Litter helps the best with odor.)

Carry

- Always use disposable gloves when handling waste.
- Place the bag in a box before you carry it outside so that you don't have accidental spills in your home. Cleanliness is of the utmost importance.

Bury

- Do not bury it in your garden due to cross contamination.
- Bury it around bushes or trees, in a future garden.
- Dig a hole 2.5 3 feet deep.
- Empty the bag in the hole do not bury it inside of the bag, the waste will not decompose properly.
- Drop bag in on top of waste (do not put bag in with your normal trash).
- Cover with 1-2 inches of Kitty Litter, Peat Moss or dirt.
- Seal hole with board & multiple heavy bricks/objects.
- Keep layering until full.
- Add 2-3" Lime as Top Layer and mound with dirt to finish. Lime prevents animals from digging and helps with decomposition. Always wear a mask when working with lime.

If each of us solves this problem just for our own family, we'll still have a cross-contamination problem. This problem needs to be solved as a neighborhood and a community.

Talk to your friends and family to keep them safe.

To schedule this training for your group contact: Kathy McMullin kathymcmullin@utah.gov (385) 228-5297

If the Ground is Frozen:

Kitty Litter

- Use a large trash can with tight lid to store sealed bags.
- Let it freeze and bury properly when the ground thaws.