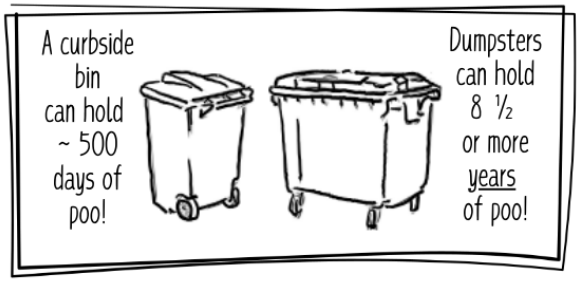
WHAT TO DO WITH PEE & POO

PEE is **HEAVY**, BUT NOT DANGEROUS
Lug pee containers away from people. Pour on unpaved ground. Do not pour down drains, or near bodies of water.

POO is **DANGEROUS**, BUT COMPACT
Without sewers and processing plants, we can't "dispose of" poo. We have to store it where critters like rats can't get to it – until there is a disposal solution. We have to contain those poo germs, to prevent dysentery.

When the poo bucket bag liner is one-half to two-thirds full, tie it off, and store securely.



Good storage options are dumpsters, and roll carts for trash and recycling. Typical 64-gallon roll carts hold 500 person-days of bagged poo! Dumpsters hold 2 to 40 cubic yards – one cubic yard equals 1600 person-days of bagged poo.

-- FOR MORE ON DISASTER SANITATION --

PHLUSH : Why Emergency Sanitation?

www.PHLUSH.org/emergency-sanitation/

WHO WE ARE

PHLUSH (Public Hygiene Lets Us Stay Human) is an all-volunteer sanitation advocacy group founded in Portland, Oregon. PHLUSH is a member of the World Toilet Organization and a partner in the Sustainable Sanitation Alliance.

We are grateful to the New Zealand Permaculture Emergency Response Network for the practical elegance of their design.

We are indebted to Molly Danielsson and Mathew Lippincott of MDML for their expertise, and permission to use illustrations from their Sewer Catastrophe Companion.

PHLUSH
Public Hygiene Lets Us Stay Human

sustainable sanitation alliance

World Toilet Organization

GET IN TOUCH!

PHLUSH.org

Board@phlush.org

@PortlandPHLUSH

Facebook.com/groups/PHLUSH

PHLUSH / 100 N. Howard St. / Suite R
Spokane WA 99201

THE TWIN BUCKET EMERGENCY TOILET:

A PORTABLE HOUSEHOLD TOILET FOR EMERGENCY KITS

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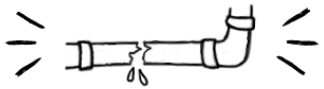
Https://www.phlush.org

WHY WE NEED EMERGENCY TOILETS

Major disasters often break water and sewer pipes. Strong earthquakes shatter underground pipes. Hurricanes pull up trees whose roots have entwined water and sewer mains. Floods and wildfires force evacuation to safer locations, which may not have adequate sanitation.



Sanitation is a necessity, not an amenity. It protects us from microbes that normally live in the human gut, but cause dysentery – severe and potentially deadly diarrhea – if they escape into the environment. It can take many months, even years, to rebuild pipes and processing plants. Survivors will need alternative sanitation systems in the meantime.

WHY IT WORKS: THE SCIENCE OF POO AND PEE

Keeping pee and poo separated makes disposal easier and safer. That's because, by volume, people make 10 times more pee than poo. Pee is generally not dangerous, but is mostly water, so it's heavy. Poo is dangerous, full of infectious germs, but by itself it is compact and lightweight.

Worried about smell? Pee and poo stink worse when mixed together. Separately, they don't smell much. Covering poo with dry materials reduces smell and keeps flies from landing on it. Flies and unwashed hands are the main ways that poo bacteria make people sick.

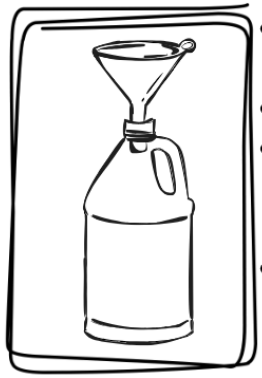
The most lethal bacteria in poo are "anaerobes," meaning 'no air' – because oxygen kills them! So don't cover the poo bucket with an airtight lid. You want air flow over the poo – BUT NOT FLIES!

HOW TO MAKE IT

FOR PEOPLE:

- Privacy
- Shelter
- Toilet paper
- Handwashing setup (see next page)

FOR PEE:



- 1 plastic bucket, 5 gal., labeled PEE
- 1 toilet seat
- 1 bucket lid that fits tightly, for carrying
- Optional: Urinal; Made from a gallon jug and a funnel

FOR POO:

- 1 plastic bucket, 5 gal., labeled POO
- 1 toilet seat
- Plastic liner bags, 7-15 gal, min 0.9 mil thick ("trash compactor bags")
- Dry covering material with container & scoop (e.g., wood chips, shredded paper, dry soil)

- Parts nest together as a portable kit.
- Buckets can be free: Ask restaurants, caterers, and grocers.
- Try to get lids with the buckets.

HOW TO USE IT

Want to Pee?

Sit on the PEE bucket and go. Toilet paper goes in the POO bucket.

Want to Poop?

Sit on the POO bucket and go. Toilet paper goes in the POO bucket.
Cover poop *completely* with dry covering material from container next to bucket, so flies can't reach it and transport poo germs.

Both Pee and Poo?

Sit on the POO bucket. If you can easily move to the PEE bucket to pee, do so. If not sure, stay on the POO bucket for both. Cover poop completely with dry covering material kept in a container next to bucket, so flies can't reach it and transport poo germs.

WASH THOSE HANDS!

Easy-Build Handwashing Station, With Videos. Less them $5, 15 mins.

www.instructables.com/Easy-Build-Handwashing-Station-With-Videos/