



Public Health
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Bismarck-Burleigh Public Health

Septic System Safety

Flooding is the most common disaster in the U.S. and can cause a variety of problems to urban and rural communities. However, by utilizing these suggestions, you can learn how to stay safe before, during and after a flood.

SEPTIC SYSTEMS

According to the Environmental Protection Agency (EPA) about 25 percent of U.S. households rely on septic systems to treat and dispose of sanitary waste that includes wastewater from kitchens, clothes washing machines and bathrooms. Septic systems are primarily located in rural areas not served by sanitary sewers.

FLOODED SEPTIC SYSTEMS

If your household uses a typical septic system, floods can halt its ability to treat wastewater from your home, as there is no place for the wastewater to drain. Proper septic system performance relies on the soil's ability to treat and disperse wastewater.

SIGNS TO LOOK FOR

If your drain field is flooded you may notice these signs indicating your septic system is in distress:

- Drains in the house flow slowly.
- Toilets drain slowly and/or sound strange when flushed.
- Water may back up into floor drains in the basement.

BEFORE THE FLOOD

- Seal all possible points of excess flow to the system. If possible, seal the manhole and inspection ports to keep excess water out of the septic tank.
- If you have an electric pump for your septic system, turn off the pump at the circuit box before the area floods. If possible, remove the pump from the tank to prevent sediment damage. Don't forget to turn the pump back on before you use the system again.
- Waterproof all electrical connections to avoid electrical shock or damage to wiring, pumps and the electrical system.



DURING A MAJOR STORM

While the storm is in progress, eliminate all non-essential water use. That includes flushing toilets as little as possible. If the drain field becomes covered with water, do not use the system and avoid contact with standing water, as it may contain sewage.

AFTER THE STORM

Do not have the septic tank pumped. The septic tank is not the problem, and pumping it could cause the tank to float out of the ground, damaging the system. If you recently installed a septic system it may pop out of the ground on its own as the soil has not had time to settle and compact.

The best thing you can do is avoid using the system, allowing time for water to recede and the soil around the drain field to dry out. Ways to reduce water use include:

- Don't send basement sump pump water into the septic system.
- Reroute water from roof gutters away from the drain field.
- Don't use the dishwasher or garbage disposal.
- Reduce the number of showers or baths taken in the house. Consider one bath or shower every other day per person.
- Don't do laundry at home. Wash clothes at a laundromat, or other location, if possible.
- Check faucets, shower heads, toilets, sinks and any other water-using devices for leaks, and repair them as soon as possible.

Additional suggestions for flooded systems include:

- Plug all drains in the basement.
- Do not dig into the tank or drain field while the soil is wet or flooded. Avoid working around the drain field with heavy machinery while the soil is wet. These activity's will run the soil's ability to treat the effluent.
- The floating crust of fats and grease in the septic tank may lift up and block the outlet tee. If the system backs up into the house, check the tank's outlet for blockage.
- Avoid contact with any electrical devices that are part of the system until they are dry and clean.
- Have your onsite wastewater system professionally inspected and serviced if you suspect damage.
- Move snow away from the foundation of the house. If the ground is sloped 1 inch per foot away from the house, moving snow 3-5 feet from the house will reduce seepage. Avoid driving over any part of the system when moving snow.

SOURCE: EPA, National Environmental Services Center, ND Department of Health, CDC



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