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# Why Do Septic Systems Malfunction?

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A properly functioning septic system removes pollutants from wastewater, and with proper usage and maintenance, the system should work for decades, protecting public health and the environment. However, when a septic system malfunctions or fails, contamination can occur.

Obvious signs that a septic system may not be operating properly include soft, smelly spots in the yard and sewage backing up into the home. Other failures are not always apparent, however, and can result in untreated wastewater contaminating streams, ditches, or groundwater. In these cases, the property owner may not even be aware their system is creating a public health concern.

## Malfunction or Failure?

Systems that are not functioning properly can either be malfunctioning or failing. Malfunctioning systems are those that were properly designed and installed but are not operating as designed. Issues with malfunctioning systems can usually be easily resolved to bring the system back into compliance. A failed system is one that was not properly designed and/or installed, has been used improperly, or has reached its maximum lifetime. Failing systems require major renovation or replacement to be brought back into compliance.

## System Malfunction

A system usually malfunctions because it is either not being used properly or has not been properly maintained.

To prevent system malfunction,

- **Avoid excess water use**
  - Don't use more water than the system was designed to use
  - Space out water-using activities such as laundry and showers
  - Promptly fix water leaks
- **Be careful when changing landscaping**
  - Ensure that excess water from sources outside the home is not entering the system
  - Don't drive or pave over the system

- **Install risers and inspection ports**
  - Install small inspection ports at the end of each lateral line to check for ponding
  - Install risers over the septic tank to enable easy inspection and septic tank pumping
- **Get regular professional inspections**
  - An annual quick inspection of the lateral lines can reveal problems. If ponding is present, check for excess water use or changes in drainage of rainwater on the lot
  - Check septic tanks for damage, clean filters and pump when needed

## System Failure

Complete system failure can occur because:

- The system was sited on unsuitable soil
- An error was made when installing the system
- The system may have exceeded its design life

Most failures can be avoided at the time of construction. The soil, which is the most important portion of any septic system, must be carefully considered and protected during and after construction.

To avoid system failure,

- **Hire a trained soil evaluator**
- **Install the system when the soil is dry.**
  - Construction in wet soil can result in soil compaction and smearing that reduces the ability of the soil to absorb and treat wastewater
- **Do not pipe sewage to the ditch or storm sewer**
  - This practice will only move untreated sewage to Ohio's streams and lakes.

System failure is a difficult situation that may require a property owner to make major modifications to a system or to install an entirely new system. Work with your local health department to determine your options.