

# HOW TO ENSURE YOUR DRINKING WATER IS SAFE

## MAINTENANCE OF YOUR WASTEWATER SYSTEM

**Note: Never enter a treatment system as it may release poisonous gasses that can kill in minutes.**

- Have the system serviced in accordance with manufacturer's instructions, and pumped out regularly by a permitted waste collector.
- Exclude grease, excessive bleach or chemicals, food, disposable items (e.g. nappies) and rainwater from your system.
- Ensure all manhole covers are secure.
- Make sure to keep all records of servicing and de-sludging

## HAVE YOUR DRINKING WATER SUPPLY TESTED

- **Remember that contamination will not always change the taste, smell or colour of your water.**
- Have your well or private water supply tested, particularly after heavy rain, to ensure your drinking water is safe.
- It is advisable to have well water tested at least once a year for bacterial contamination and at least once every three years for chemical contamination.
- If you wish to get advice on getting your well water tested, contact your local authority or HSE Environmental Health Officer.
- Make sure to keep all records of well-testing.

## FURTHER INFO

- Always ensure if having works carried out to your system as a result of an inspection or otherwise that a reputable and competent contractor is used.
- Your septic tank or other DWWTS may be selected for inspection by your local authority. You can find out more information about this from the leaflet entitled "What to Expect from a Septic Tank Inspection" (available from your local authority or [www.protectourwater.ie](http://www.protectourwater.ie)).
- For information on how to correctly maintain and operate your DWWTS see the leaflet entitled "What You Need to Know About Your Septic Tank" (available from your local authority or [www.protectourwater.ie](http://www.protectourwater.ie)).
- For more information about any of the issues in these leaflets contact your local authority or [www.epa.ie](http://www.epa.ie).



IS YOUR  
WELL  
AT RISK  
FROM  
YOUR  
SEPTIC  
TANK?

## THE VALUE OF WATER

- Clean and safe water is essential to good health, economic prosperity and the welfare of the environment.
- We drink water and need it to grow our food, we use it in our homes for cooking and cleaning.
- Our quality of life is linked to an abundance of clean, uncontaminated water.



## THE RISK

- About one-third of all houses (500,000) in Ireland rely on a domestic wastewater treatment system (DWWTS) to collect, treat and discharge their wastewater. Septic tanks are one type of DWWTS.
- When not designed or operated properly, domestic septic tanks are in danger of contaminating our domestic wells or water sources.
- Contaminated water from septic tanks can carry pathogens (bacteria/germs/bugs) and harmful chemicals that can cause serious illness and damage to the environment.
- DWWTSs are not the only ways that domestic wells or water sources can be contaminated. Other possible sources of contamination include:
  - Manure/slurry
  - Faeces from farm animals/pets
  - Fertilizers, pesticides and sheep dips
  - Run-off from industrial premises, workshops or mines/quarries
  - Lead pipe work

## SOURCES OF CONTAMINATION

- There are a number of pollutants in domestic waste water that can cause problems for health and the environment.
- **Private well water supplies are at particular risk, as they depend on good quality water coming directly from the ground.**



### MICROBIAL PATHOGENS (BACTERIA/GERMS)

- Domestic wastewater contains human waste products, including human faeces. The discharge from the DWWTS may contain disease-causing bacteria, viruses and/or parasites such as:
  - *Verocytotoxigenic E. coli (VTEC)*: A nasty type of *E. coli* that can cause a potentially very serious form of gastrointestinal infection of the bowel in humans.
  - *Cryptosporidium*: A parasite found in human and animal faeces. It is a particular threat to people whose immune system is weakened by other illnesses (such as cancer) or by particular medications.
- Those particularly vulnerable to infectious diseases caused by contaminated drinking water, include the elderly, the very young, pregnant women, sick people, and visitors or guests who may have less immunity to the various pathogens that can be found in the water.

### CHEMICAL CONTAMINATION

- Flushing household chemicals, petrol, oil, pesticides, herbicides, antifreeze, paint etc. into your septic tank may contaminate your drinking water supply or damage the environment.
- Phosphorus: Domestic sources of phosphorus are human waste, laundry detergents and cleaning products. Excess phosphorus causes algal blooms in lakes and kills fish in rivers.
- Nitrogen: Domestic sources of nitrogen are human waste, food preparation, hygiene washings, and cleaning products. Nitrogen-rich water can have a detrimental effect on freshwater aquatic life, and may give rise to other health concerns.



### WASTEWATER SLUDGE

- Solid material (sludge) settles and builds up within the DWWTS settlement tanks.
- Sludge from a DWWTS contains a significant number of pathogens and nutrients – it is critical that it is managed effectively so that the Sludge doesn't pose a risk to human health and the environment.
- Domestic waste water sludge must be removed from the tank periodically by a permitted waste collector.