

# WATER

## Water Information

Water is the liquid of life! In addition to drinking, we use water for recreation, commercial fishing, farming, transportation, cleaning, manufacturing, and power. We need water to live. Water makes up 83% of our blood, supports our cells, aids digestion, regulates temperature, transports wastes, and lubricates joints.

More than 3/4 of the world is covered with water, but only 1% of this supply can be used for drinking. The rest is salty or trapped as polar ice. Keeping drinking water safe, and using it wisely is essential to our life.

In the past waterborne disease were major killers. Today, these diseases have been all but wiped out in this country, thanks to improvements in water testing and treatment. But it takes work from your federal, and local governments, by implementation of laws, testing methods, monitoring procedures, enforcement, and public notification.

The Clinton County Health Department is responsible for enforcing NY State regulations to insure and protect our public water systems. In working with the NY State Health Department and Federal EPA, contamination levels have been established. These levels are used to regulate public water suppliers to make sure that they conform; making sure that the water you drink is safe.

## Water is Constantly Recycled

**Precipitation:** Water vapor condenses and falls to the earth as rain, sleet, hail or snow.

**Surface Runoff:** Some water runs across the earth into rivers, lakes and seas. (It may become contaminated along the way)

**Percolation:** Other water sinks deep into the earth (percolates), picking up minerals, bacteria, etc. People often think percolation filters harmful substances from water -- but it doesn't always.

**Ground Water:** Percolated water -- called "ground water" -- is stored in "aquifers," zones of porous rock, gravel or sand. This water moves very slowly. Once polluted, ground water is very difficult to clean.

**Discharge:** Eventually, ground water flows into the sea -- or onto the land as wetlands, springs, lakes and rivers.

**Transpiration:** Plants absorb water through their roots and "breathe" it back into the air as water vapor.

**Evaporation:** Surface water, warmed by the sun, also rises into the air as water vapor -- and the cycle begins again.

## Natural Water

Natural water is not necessarily pure. It may pick up other substances during its journey through air and earth. These substances (some harmless and some not) include:

Mineral and salts: such as fluoride, calcium, iron and nitrates.

Organic wastes: from animals, plants and people.

Gases: such as oxygen, ammonia and carbon dioxide

Dust: always present in the atmosphere.

Microbes: such as bacteria, viruses and parasites.

## New Sources of Contamination

Modern civilization has created new sources of contamination. These include:

Fertilizers and pesticides: carried in surface runoff from gardens and farms.

Trash: such as household chemicals, decaying matter, etc. in roadside litter and landfills.

Motor oil and "road salt": carried in runoff from roads and highways.

Sewage: from septic tanks, cesspools and leaking pipes.

Industrial wastes: from dump sites, disposal wells, etc.

Coal and metals: from active abandoned mines.

Plumbing: if water pipes contain lead or lead solder.

Gasoline and heating oil: from leaking storage tanks.

This is where the Clinton County Health Department comes in to enforce federal, state, and local regulations, and procedures to insure the water you drink from public water systems is safe.

## What About Private Wells?

Generally, "drilled" wells are considered the safest for home water supplies. Hand dug wells, springs or surface water bodies are usually not as safe as drilled wells.

## Can I Have My Private Well Water Tested?

Yes, (though not required by law) contact the Clinton County Health Department for information on how and when to have your water tested, if you have concerns about your private well.

## What Can I Do to Protect Our Drinking Water?

Be aware: of hazardous substance you may have in your home, and dispose of them properly. Maintain your septic system if you have one.

Be informed: about your local water supply system, what it's doing, and where your water comes from.

Test: Test water regularly if you have a private well. Contact your public works department to see the test results if you are on a municipal system.

Support: local, state and national efforts to protect drinking water.

## Conservation - Using Water Wisely

- > Take shorter showers
- > Install water-saving devices and appliances
- > Check for leaks, and repair them
- > Landscape with plants that don't require much water
- > Use water from a bucket when you wash your car, and save the hose for rinsing.
- > Replace old toilets (before 1992)

Is bottled water safer than water from public drinking supplies? Unless you've been officially told otherwise, water from a municipal system is probably just as safe as bottled water - and a lot less expensive.

What is "hard water"? It's water high in minerals - some of which are essential for health. However, laundry washed in hard water may not seem as clean. Water softeners may help, but because they add sodium, they should not be attached to water lines use for cooking or drinking.

Can home filters improve the taste of drinking water? Some can, partly because they remove the chlorine added during treatment. Another way to improve taste is to refrigerate tap water in a clean container. If you use filters, maintain them carefully - they can become breeding grounds for bacteria.

Contact Us

To receive more information or assistance about water, call or visit us at:

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