

Clean WATER

Name:

Date:

In the United States our tap water comes from two places—water from lakes or rivers and water from underground wells. Most Americans have water piped to their homes from municipal water facilities. Water treatment plants clean the water and make it safe to drink before it arrives. Who cleans and supplies your drinking water? Contact the facility, or research online, to find out which contaminants are removed from your water. On the chart, put a check mark next to the materials that are removed.

Many poor areas around the world do not have water treatment systems. PUR packets can be used in homes in these areas to help make drinking water clean. PUR reduces many of the same contaminants from water that treatment plants do.

What Do Water Treatment Facilities Help Remove from the Water?

Water treatment facilities remove a wide range of dangerous impurities from water. Some of the most common contaminants are the following:

Solids/Contaminants	Fecal Matter (animal and human)	May contain bacteria, viruses, and parasites. These harmful germs can cause nausea, cramps, diarrhea, and other symptoms.
	Dirt/Turbidity	May contain pesticides, bacteria, or other harmful material that may impact health.
	Pesticides (such as DDT)	Seep into rivers, lakes, and other bodies of water from nearby farmland. These are sometimes used to kill mosquitoes that spread a deadly disease called malaria. Most people who die from malaria are young African children.
	Heavy metals (such as arsenic)	Occur naturally and, if present in a water source, they may cause health problems.
Viruses/Bacteria/Parasites	E. coli	Bacteria spread through animal and human fecal matter or waste. It causes diarrhea, nausea, cramps, and other symptoms.
	Giardia	A parasite spread through animal and human fecal matter or waste. It can cause diarrhea, cramps, and vomiting.
	Intestinal worms	Parasites spread through animal and human fecal matter or waste. They can cause diarrhea, weight loss, and itchy skin.
	Cholera	Bacterial infection that causes diarrhea, vomiting, and leg cramps. The disease can be deadly without treatment.
	Hepatitis A	Virus spread through fecal matter or waste. It causes weakness, nausea, and fever.

(Water Words

Arsenic: a poisonous element which is found naturally in some locations around the world—like Bangladesh

Bacteria: single-celled microorganisms, some of which can cause disease

Parasite: a living thing that lives in, with, or on another living thing

Pesticide: a substance used to repel or kill plants or animals that are considered to be harmful

Turbidity: particles of dirt or other material that cause water to appear cloudy

Virus: a microorganism smaller than bacteria, which cannot grow or reproduce apart from a living cell, and can cause disease in plants and animals

Think About It

Why is it essential that contaminants and germs be removed from water before we drink it? What will you do to help provide clean drinking water to people around the world who need it?

Log on to www.scholastic.com/safewater for additional activities.