

Water pollution assignment



**ASSIGN
BUSTER**

Water pollution is the contamination of water bodies such as lakes, rivers, oceans and beaches. This occurs when large factories dump their waste products into the water. Water has the ability to carry many pathogens and bacteria. Because of this, water is responsible for many deaths and illnesses. This fact was discovered a long time ago when many people fell sick, and after tests, it was realized this was because of the drinking water. People, even back in the ancient times, would suddenly become ill and not know why. All the water they drank was contaminated with innumerable germs. Water pollution has not gotten any better.

In reality, it has become much worse, and has progressed into an extremely serious situation. Some say that water pollution is not a problem, and that it doesn't threaten or even affect human life on earth. It is said that the earth will just absorb all of the pollution, and we will no longer have to worry about it. Pollution does not just disappear. However, the toxins in the water are absorbed, but they don't go away. An offshoot of this is acid rain, which will be explained later. The more contamination the earth sucks up, it will only increase global warming because the viruses will only live in the earth's crust and filter through the air.

Water pollution is a problem, and it's been a problem for a long time. Back in the ancient times, water purification was strongly advised, and many cultures all around the world took part in it. Suggestions for methods to treat water first came up in 2000 BC. In 500 BC, Egyptians used the principle of coagulation. Coagulation removes dirt and other fragments in the water. Alum and other chemicals are added to water to attract the dirt particles. The dirt then becomes heavy enough to sink to the bottom and is easily

cleaned out. The next major step in water purification started in 300 BC when Rome built the first aqueducts.

The Romans created aqueducts to bring water from far away into large cities and towns. In order to keep the towns clean, waste water was released into nearby bodies of water. Although the future for water treatment was looking hopeful, beginning in 500 AD, or the Dark Ages, there became a lack of scientific breakthroughs and experiments. Roman empires destroyed most of the aqueducts and Europe saw a dramatic change in their water supply and sewage systems. The poor sanitation caused epidemics throughout medieval towns in Europe.

People quickly found out that water transmitted several diseases. The most common diseases discovered were cholera, dysentery, typhoid fever and diarrhea. Due to the lack of water sanitation, these pathogens spread rapidly to different countries and cities. In the late 20th century, the biological hazards transmitted by water emerged in the post modern Western world. Today, roughly 10,000 people die every day caused by lack of safe water and adequate sanitation. Approximately 16 million people come down with Typhoid fever each year, and about 600,000 of them die.

Typhoid fever is an infection that causes diarrhea and a rash, most commonly due to a type of bacteria called *Salmonella typhoid*, which is carried in water. Cholera is another sickness people have been catching from dirty water. This is an infection of the small intestine that causes a large amount of watery diarrhea. It is estimated that between 42,000 and 142,000 people die of cholera each year. Other diseases like dysentery, polio,

and hepatitis can also be transmitted and carried in water. Dysentery, which is an infection of the intestines, infects 140 million people a year. About a 23rd of those with the sickness die.

Polio is not the most common disease people get through unsafe drinking water, however many people still can get it. Poliomyelitis is a viral disease that can affect nerves and can lead to partial or full paralysis, and 20,000 people have been paralyzed and about 1,000 people die in the United States from this bacteria each year. One out of every three people have been infected with hepatitis B, that's roughly two billion people. Hepatitis is swelling and inflammation of the liver. The term is often used to refer to a viral infection of the liver, and 400 million people have become chronically ill and can no longer be cured.

These diseases, and other waterborne pathogens, contribute to 60% of early childhood deaths. However, these illnesses don't only affect humans, but animals too. Many chemical pollutants enter water sources from runoff from agricultural fields, and metals can wash into water during mining operations. Once the toxins are in bodies of water, animals willingly consume them, because they don't understand the danger of it. Soon doing this, they become boomeranging up the food chain. The toxin becomes concentrated in the tissues of organisms and is then carried in offspring and other organisms at the top of the food chain.

This worldwide problem has been responsible for the millions of deaths of people, plants and animals. Not only does water pollution cause animals and humans to become excessively ill, it has the ability to destroy many animal

habitats, and cause irreplaceable damage to ecosystems. Due to lack of control, large industries dump different types of wastes into streams and rivers. Pollutants cause aquatic life difficulties breathing. Once the toxins are in the water, the animals that drink from the river, lake etc. , are in danger of serious sickness.

Water pollution can easily contribute to the extinction of certain species. Because of these careless acts of disposal, many animals suffer. However, it notes ourselves and the animals that we should be worried about. Water pollution is the main contributor to acid rain and other environmental problems such as increased algal blooms. Algal blooms are a powdery surface covering certain fresh fruits, leaves or even the stems. A rapid growth of this in water causes a colored scum on the surface, which can be very deadly for the aquatic life undid earnest.

There are many ways that cause acid rain also, which is an extremely serious and fatal result of water pollution. Many people contribute to it without even knowing. Acid rain hinders plant growth and damages soil on a major scale. The burning of fossil fuels releases compounds that interact with the water in the air, creating modified version of the raindrop. Once the moisture from the water is absorbed into the air and clouds, all of the toxins from the water go with it. Although this is considered a result of water pollution, things like heat and the oil industries factor into the pollution.

Agricultural runoff, mining waste, paved roads and all of the industrial activity have a hand in contaminating the water. Waste from large corporations can make its way to the water through rainwater drainage,

melting snow and running rivers. Paved roads give the toxins help in finding the way to a water source. The oil industry is though OTF as the root to all polluting problems. Drilling, moving, laying pipeline, and shipping opens the possibility of water pollution. The main contribution the oil industry has on population are the accidental oil spills, especially like the ones that happened near the Gulf Coast.

So many things can lead to water pollution, and if it doesn't stop now, the earth and we who live on it, will begin to suffer. Over time, if the pollution of the water keeps getting worse, we will see a significant decrease of clean water. Without that, there won't be access to safe drinking water, which will have uncertain and/or fatal results. Another problem that could affect the humans, and the animals of the world, is poison. People and animals such as bears rely on fish for food. If the water is contaminated then the toxins from the water will be inside of the fish.

When the animals and humans eat the fish for food, they consume the poison in the fish and become very ill. Not only will the life on earth become poisoned and sick, the marine life, obviously, will suffer the most and we will see an extinction in most species in the water. This can affect the food chain and change everything. Around 70% of industrial waste is dumped into the water bodies where they pollute the usable water supply. That means that most of the earth's water that we use for drinking, and that we swim in or shower with, has been contaminated with countless toxins.

Fourteen billion pounds of garbage, mostly plastic, is dumped into the ocean every year, and a large majority of it never gets cleaned out. Each year the garbage piles up and just keeps adding to the problem. In America, 40% of the rivers and 46% of the lakes are polluted and are considered unhealthy for swimming, fishing, or aquatic life. Such pollution is because of the industries and their excessive dumping, and the fact that two million tons of human waste is disposed in water everyday, from the poor sewer systems. As per U.S.

The EPA estimates, every year in the U.S., 1.2 trillion gallons of sewage from household, industries, and restaurants, is dumped into United States surface water. 80% of the water pollution is caused due to domestic sewage like through garbage on open ground and water bodies. Plastic waste being a major water pollutant, is causing huge destruction of marine life and is believed to be responsible for the deaths of more than 100,000 sea mammals, sea birds, and various types of fishes. The waste that ends up in the water contains bacteria, parasites, and viruses.