

Types of Pollution

What is Pollution?

There are various types of pollution i.e. air, water, land, noise, industrial, soil, light, thermal etc. and they are categorized based on the region of the environment which they negatively impact, contributing to the multiple causes of pollution. Accordingly, each and every type of pollution has its own distinguishing causes and environmental effects. Understanding pollution and its various causes can help address the various concerns linked to environmental degradation and destruction, and the dangers it brings to human health.

Types of Pollution

There are several types of pollution, and while they may come from different sources and have different consequences, understanding the basics about pollution can help environmentally conscious individuals minimize their contribution to these dangers. In total, there are nine recognized sources of pollution in the modern world. These sources of pollution don't simply have a negative impact on the natural world, but they can have a measurable effect on the health of human beings as well.

Different Types of Pollution

Different Types of pollution are categorized based on the part of the environment which they affect or result which the particular **pollution** causes. Each of these types has its own distinctive causes and consequences. Categorized study of pollution helps to understand the basics in more detail and produce protocols for the specific types. Accordingly, the main **types of pollution** are:

- Water Pollution
- Air Pollution
- Soil Pollution
- Thermal Pollution
- Radioactive Pollution
- Noise Pollution
- Light Pollution

Let us observe these *types of pollution* in a more comprehensive way.

Water Pollution

As the name suggests, “**Water Pollution**” is the **type of pollution** that involves the contamination of various water bodies. Various aquatic creatures depend on these water bodies and its natural nutritious features to support its life.

What Causes Water Pollution?

- Industrial waste gets dumped into these water bodies. This causes a chemical imbalance in the water leading to death of the aquatic beings.
- Insecticides, pesticides and ripening chemicals that are used on plants run into the ground water system or nearby streams.
- Washing clothes near lakes and rivers causes detergents also causes a condition called “**Eutrophication**” which blocks sunlight from entering inside and reduces oxygen values in the water causing an inhabitable environment.
- ‘Oil Spills’ are caused when giant oil tankers and oil rigs which are present in the oceans are damaged by either natural or human errors cause a long-time damage to the ocean as oil is lighter than water and floats on water forming a layer blocking sunlight.
- Certain natural disasters like flash floods and hurricanes cause the intermixing of water with harmful substances on the land.

People can take certain preventable measures to stop water pollution like being more cautious of dumping contaminants onto the water. For the repair of the damage that has already been done, water treatment plants are being constructed with innovative techniques to clean the polluted water. But as always a certain part of the damage can be resolved therefore, it is better to prevent water pollution as water is basic need for the survival of man.

Air Pollution

The contamination of the air present in the atmosphere is known as “**Air pollution**”. Respiration is an important life process of all living things. We breathe in the air present in the atmosphere. Therefore if the air around us is contaminated with poisonous gases, it would have a fatal effect on us.

The air naturally comprises of 78% of nitrogen, 21% of oxygen, 0.9% of oxide gases and 0.1% of inert gases. When this balance is disturbed, it causes disruptions of severe proportions.

What Causes Air Pollution?

- Partially combusted exhaust gases released from internal combustion engines add poisonous gases into the atmosphere.
- Certain industries release some gases like sulphur dioxide and carbon monoxide which mix with the air and clouds and cause acid rains.
- Burning of discarded plastic, wood and rubber also release carcinogenic gases into the atmosphere.

Air pollution is very much fatal to living things as almost all living beings respire directly from the atmosphere without undergoing any treatment like water. Hence use of catalytic converters in vehicles, preventing the burning of used products, leaving vehicles running for lengthy periods of time during halts and such environment friendly actions.

Soil Pollution

Stripping soil of its natural fertility by using artificial chemicals like pesticides, insecticides, ripening agents etc. is known as “**Soil Pollution**”. Plants depend on the nitrogenous compounds present in the soil for their nutrition. Use of insecticides, pesticides and other artificial chemicals absorbs the nitrogen from the soil making it unfit for the growth for plants. Plants are responsible for holding the soil together firmly so, when the plants can’t grow the soil splits, leading to soil erosion.

Thermal Pollution

Rise in the temperature in the ecosystem due the release of excessive heat energy into the environment by artificial methods or natural disasters is called “**Thermal Pollution**”. Generally, manufacturing industries release a lot of heat energy which gets transferred to the air and water bodies. Even vehicles which have combustion engines release a lot of heat energy as they require high temperatures to function. Carbon dioxide has a property of blocking heat from exiting the atmosphere and so the heat coming in from the sun is trapped in the atmosphere.

Thermal pollution results in a temperature rise which is the main cause for the melting of the polar ice caps, which is in turn leading to a rise in the water levels. Thermal pollution has increased significantly since the eighteen hundreds resulting in a hotter earth.

Radioactive Pollution

Radioactive pollution occurs when ‘Radioactive’ metals disintegrate releasing dangerous beta rays which can cause cancer and other mutative diseases. These types of pollution can occur by either the dumping of radioactive waste from nuclear power plants into water bodies, damage of nuclear reactors leading to radioactive contamination that would last for many years and many more. In the Second World War, when the U.S.A attacked Hiroshima and Nagasaki of Japan, the atomic bomb left a radioactive footprint leading to highly mutative diseases. So, most of the people who survived the atomic bombing died eventually from cancers and mutations.

Causes of Radio Active Pollution

- Nuclear power plants(Ex:Neyveli,Kalpakkam)
- Nuclear Weapon(Ex:Missiles)
- Disposal of Nuclear Waste
- Uranium Mining

Effects of Radio Active Pollution

- The Diseases include blood in cough
- Ulcer
- Swelling of bone joints
- Cancer

- Lung Cancer
- Skin Cancer
- Bone Cancer
- Eye Problems

How to Prevent of Radio Active Pollution

- Avoid Constructing Nuclear Power Plants
- Avoid Using Nuclear Weapon
- Have Proper Treatment for Nuclear Waste
- Avoid mining for Uranium to a minimal

Noise Pollution:

There are different qualities of sounds. The sounds which are not pleasant to hear are called 'Noises'. So an excess of noise in the outdoors leads to "Noise Pollution". This can be experienced by too many vehicles honking at the roads, heavy machinery being operated in the open (for ex, a jackhammer), trains, clubs, over populated crowds and many more. Noise pollution is known to cause mental stress and depression. It can also cause damage to the ear drum which can cause deafness. **Noise pollution** has more of a psychological effect rather than a physical one.

Causes of Noise Pollution

- Traffic Noise
- Air craft Noise
- Noise from construction and civil engineering works.
- Noise from the Industries.
- Noise from other sources.

Effects of Noise Pollution

- Hearing Loss
- High Blood Pressure
- Stress
- Sleep Disturbance
- Color Blindness

Prevention of Noise Pollution

- Pleasant Home
- Bhagavan Baba says "Silent is God".
- We need to talk sweetly to others.
- Talk Less Work More.

- Sound affects our ears so loud noise should be avoided.

Light Pollution

Bright lighting in functions, big cities, etc. causes “**Light Pollution**”. Excessive light on the retina causes extreme discomfort in the eyes, especially in dim conditions like during night time. Bright lights strain the eyes and also give headaches and migraines. If we observe, light pollution, thermal pollution and noise pollution all are *types of pollution* that are caused by the different forms of energy.

Conclusion

Pollution in all its various forms causes immense damage covering all possible aspects that can be damaged. Therefore it is important to prevent all these forms to look forward to a greener cleaner and much more pleasant living experience.

References

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