

# → Air Pollution: Causes, effects and measures control it.

## Introduction:

"water and air, the two essential fluids on which all life depends, have become global garbage cans"

(Jacques-Yves Cousteau)

When the air gets polluted by dust, smoke, automobiles, mills and factories etc. is called air pollution. Air is an important part of our environment. There are many reasons which causes air pollution such as the use of pesticides in agriculture, burning of fossil fuels, industrial smoke, mining activities and domestic sources. Also there are effects of air pollution as due to

it many diseases come in society, global warming, acid rain, ozone layer depletion and as well effects on animals

### → causes of air pollution

1. use of pesticides in agriculture  
In modern world the use of insecticides, pesticides and fertilizers are very common. When they are utilized in agriculture and it created problems for the living things in the universe. As they get mixed with air so it causes air pollution which is very harmful for the universe. Hence, the aim of using insecticides, pesticides and fertilizers is to protect the plants from different disease

but it causes air pollution.

2. Burning of fossil fuels  
Burning of fossil fuels is one of the main causes of air pollution. Like the burning of coal, oil and other industrial fuels and also the smoke from vehicles such as buses, trucks, cars and trains etc. These are main things which caused air pollution. 8 million people died in 2018 from fossil fuel and 1 in 5 deaths worldwide from burning fossil fuels like coal and diesel. (Research from Harvard University)

Therefore, the burning of fossil fuels is a great peril to the world in the shape of air pollution.

### 3. Industrial Smoke

There are mills and factories in every corner of the world. These factories and mills produce large amount of harmful gases such as carbon monoxide, hydrocarbons and chemicals etc. These are released in the air, it causes air pollution and also degrading air's quality hence, Industrial Smoke has caused air pollution.

### 4. Mining Activities

There are many natural minerals below the earth which are extracted. There are large pieces of equipment are used in these mines, which release dust and chemical during the process, also disturb the

the health of the workers and people living the near by areas. Therefore, mining activities contribute in the disturbance of surroundings in the shape of an air pollution.

### 5 Domestic Sources.

#### Domestic

Sources like household cleaning products and paints also pollute air. As toxic chemicals which released in air and caused air pollution. Also smell from the newly painted walls, are the smell of the chemicals. They not only pollute the air but also of affects breathing. Hence, domestic sources heavily cause air pollution over all the globe.

## → Effects of Air Pollution

### 1. Diseases

Air pollution causes multiple diseases in plants and as well in human beings. It resulted in several respiratory disorders and heart diseases among humans. The cases of lung cancer increased and as well people suffered from pneumonia and asthma, also dizziness, drowsiness, and blurred-vision. Thus, air pollution effects many dangerous diseases around us.

### 2. Global Warming.

Air pollution is a great <sup>part</sup> and effects global warming very badly. Due to the emission of

greenhouse gases, there is an imbalance in the gaseous composition of the air; led to an increase in the temperature of the earth. In addition the result is the melting of glaciers, increase in sea levels and many areas are submerged under water. So it witnesses that air pollution has great impact of on global globe in the shape of global warming.

### 3. Acid Rain.

Acid rain is also the effect of air pollution. The burning of fossil fuels releases harmful gases such as nitrogen oxides and sulphur oxides in the air. Furthermore, the water droplets

combine with these pollutants become acidic and fall as acid rain, which damages human, animal and plant life. Hence, acid rain occurs due to the air pollution.

#### 4. Ozone Layer depletion.

Air pollution also affect ozone layer. The release of chlorofluorocarbons, halons, and hydrochlorofluorocarbons in the atmosphere is the major cause of depletion of the ozone layer. The depleting ozone layer does not prevent the harmful ultraviolet rays coming from the sun and causes skin diseases and eye problems. Therefore, the ozone layer depletion is the effect of air pollution.



### 5 Effects on Animals

Air pollution has great effect on ~~also~~ animals too; The air pollutants suspend on the water bodies and affect the aquatic life. Air pollution also compels the animals to leave their habitat and shift to a new place. Around the globe many animals leave their own places and move toward other places due to the air pollution. Therefore, it is a great danger for the lives of animals too.

### Measures to control air pollution.

a. Source control

In order to control

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air pollution some measures are essential to be taken such as using unleaded petrol, using fuels with low sulphur and ash content. Furthermore, encourage people to use ~~a~~ public transport, walk or use a cycle as opposed to private vehicles. Ensure that houses, schools, restaurants and playgrounds are not located on busy streets. Plant trees along busy streets as they remove particulates, carbon dioxide and absorb noise. Industries and waste disposal sites should be situated outside the city.

(b) Control measures in industrial centres

Emission rates should

be restricted to permissible levels by each and every industry. Incorporation of air pollution control equipment in design of plant layout must be mandatory. Furthermore continuous monitoring of the atmosphere should be carried out to know the emission levels. Hence, control measures in industrial control must be the priority.

### e. Avoid using vehicles

Avoiding using vehicles will control air pollution, specially avoid using vehicles for shorter distance. Public should prefer modes of transport - prevent pollution and conserve energy. Today world is disturbed by air pollution so it is

considered that due to vehicles on atmosphere is dirty. There fore avoiding vehicles is very important to control the level.

d use of clean energy resources

Now a days the world is going toward development in clean energy resources such as solar system which is very successful. So the use of solar, wind and geothermal energies reduce air pollution at a larger level. For the control of air pollution people have to prefer solar system which can control the air pollution.