

# Climate Change and Health:

By

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# Outline

- What is health?
- What is climate change?
- Difference between global warming and Climate change.
- Causes of climate change and pathway
- Consequences of climate change
- Prevention and control of climate change

# What is Health?

- It is the complete state of physical, social, mental and spiritual well being not just absence of diseases or infirmity ( WHO)

# What is climate?

- Climate is the usual weather of a place.
- Weather can be different for different seasons.
- A place might be mostly warm and dry in the summer.
- The same place may be cool and wet in the winter.
- Different places can have different climates

# What is climate change?

- Climate change is a **change** in the **usual weather** found in a place.
- It could be a change in a place's usual temperature for a month or season.
- Climate change refers to changes in earth weather patterns.

# Climate Change, Global warming and green house Gases

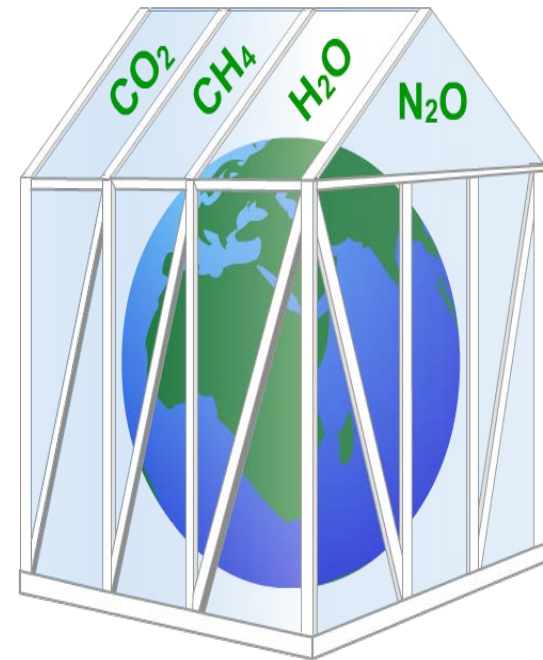
**Global warming** refers to the rise in average surface temperatures on Earth that causes changes in climate.

It is caused by a build-up of greenhouses gases, which leads to an increase in the Earth's temperature.

Climate change and global warming are used interchangeably...

Key greenhouses gases include:

- carbon dioxide
- Methane
- Water vapour
- Nitrous oxide



# Causes of Climate Change


# Natural and Human Activities

- Natural : Earthquakes, radon emissions
- Human activities :
  - Stationary sources: Industrial emissions , smoke from generators, manufacturing facilities e.t.c
  - Mobile sources: Automobiles/Vehicular emissions, Air craft, marine vessels
  - Domestic environment- Burning of fossil fuels- wood, coal e.t.c
  - Tobacco smoke
  - Oil refining and several industrial activities
  - Forest fires, bush burning, pipeline explosion, fire outbreaks
  - Deforestation



# Pathway to climate change


Release of Green house gases;  
CO<sub>2</sub>, Methane, Hydroflorocarbon  
e.t.c



Excess CO<sub>2</sub> in the air, traps heat and  
depletes ozone layer.



Direct rays from the sun, melting of  
glaciers and increase in sea levels



Global warming/Climate change

# Effects of climate change

- It can also cause a rise in sea level, leading to the loss of coastal land, a change in precipitation patterns, increased risks of droughts and floods, and threats to biodiversity.
- Climate change acts predominantly by exacerbating the existing, often enormous, health problems, especially in the poorer parts of the world

# Health effects of climate change

- Increase in level of Infectious diseases:
- An increase in temperature signifies an increase in mosquito populations, thus escalating the risk of malaria, dengue and other insect-borne infections globally most in particular developing countries/
- Changes in pattern of infectious diseases -  
Increase in water related diseases -  
diarrhoea, malaria, schistosomiasis e.t.c
- .

# Effects of climate change

- **Loss of agricultural productivity:** Alteration of rainfall pattern resulting in droughts, shortage of food and water supplies.
- **Asthma and other respiratory diseases.** Damages to lungs and other complications among asthmatic patients and others with chronic obstructive pulmonary diseases.

# Health effects cont'd

- Increased level and patterns of both man-made and natural airborne particles
- Rising sea level could cause population displacement with health consequences
- Worsening malnutrition-from more variable rainfalls leading to poor crop yields especially in countries where food security is already a problem
- Water scarcity – other water shortage diseases – trachoma, skin infections, etc.

- **Heat waves:** The most common health effect is hyperthermia or heatstroke that can be fatal if left untreated

# Prevention and control of Climate Change

- Health education : Individual/mass media on dangers of bush burning, waste burning, deforestation, benefits of tree planting e.t.c
- Creating enabling environment: Power supply, waste management, healthful housing, e.t.c
- Regulation and control of industrial operations
- Maintenance of green areas/belts to absorb pollutants:

# Prevention and control measures:

Reduction in consumption of fossil fuels such as coal and petroleum: Alternative energy sources:

- Use of bio-gas plants
- Use of nuclear power plants
- Use of unleaded petrol in automobiles
- Installation of pollution controlling devices in automobiles (catalytic converter) and industries (Electro Static Precipitators, Bag filters, Wet scrubbers etc)
- Enforcement of regulations.



# Personal tips:

- Reduce, Reuse, Recycle waste
- Using Less Heat and Air Conditioning
- Change to energy saving bulbs
- Drive less and drive smart
- Using Energy-Efficient Products
- Use Less Hot Water
- Plant a tree

Thank you