



“Impact of Climate Change on Human Health”



“Understanding Climate Change”



- Climate change denotes the persistent alteration of Earth's climate due to human-induced activities, primarily driven by the release of greenhouse gases such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O).
- These emissions trap heat in the atmosphere, leading to rising global temperatures. Contributing factors include deforestation, industrial processes, agriculture, and burning fossil fuels.
- The result is a gradual yet substantial increase in global temperatures, impacting ecosystems, weather patterns, sea levels, and the frequency of extreme weather events.



“Health Impacts of Climate Change”



- The rise in global temperatures fuels extreme weather events like heatwaves, hurricanes, droughts, and intense storms, disrupting ecosystems and endangering human settlements.
- Additionally, human activities causing climate change contribute to air pollution, leading to respiratory diseases like asthma and other respiratory issues.
- Changes in climate patterns also impact the spread of infectious diseases, affecting their transmission rates, geographic range, and prevalence, posing challenges to public health worldwide.



“Impact of Heatwaves on Health”



- Rising temperatures exacerbate heat-related illnesses such as heatstroke, dehydration, and heat exhaustion, especially in vulnerable populations like the elderly, infants, outdoor workers, and those with pre-existing health conditions.
- Regions experiencing higher temperatures, particularly areas with inadequate access to cooling infrastructure or in urban heat islands, face greater health risks from extreme heat, leading to increased hospitalizations and fatalities during heatwaves.



“Air Pollution and Respiratory Diseases”



- Poor air quality, often worsened by pollutants like particulate matter, ozone, and nitrogen dioxide, significantly impacts respiratory health, leading to conditions such as asthma, chronic obstructive pulmonary disease (COPD), bronchitis, and respiratory infections.
- Climate change contributes to increased air pollution through various means like intensified wildfires, higher temperatures fostering ozone formation, and altered weather patterns leading to stagnant air masses trapping pollutants.
- Health conditions aggravated by polluted air encompass cardiovascular diseases, respiratory issues, allergies, and compromised immune responses, amplifying the severity of these illnesses.



“Climate Change and Mental Health”



- Climate-related disasters can induce severe psychological distress, including anxiety, depression, and post-traumatic stress disorder (PTSD) among affected individuals.
- Experiencing extreme weather events such as hurricanes, floods, or wildfires can lead to feelings of helplessness, fear, grief, and loss, impacting mental health long after the immediate crisis has passed.
- Providing mental health support during and after these disasters is crucial, as it aids in addressing trauma, reducing psychological distress, and fostering resilience within affected communities, emphasizing the significance of psychological assistance as part of disaster relief efforts.



“Addressing Health Impacts of Climate Change”

- Adaptation strategies for healthcare systems involve enhancing resilience to climate impacts by implementing measures like improving infrastructure to withstand extreme weather events, developing early warning systems for health risks, and training healthcare professionals to manage climate-related health challenges effectively.
- Mitigation efforts play a pivotal role in minimizing climate change effects by reducing greenhouse gas emissions through renewable energy adoption, sustainable land use practices, and promoting energy efficiency. By mitigating climate change, we can limit its long-term consequences on health, ecosystems, and communities.
- Advocacy for policies supporting public health in a changing climate is crucial. This involves advocating for measures that prioritize clean air and water, climate-resilient infrastructure, access to healthcare services, and community-based initiatives aimed at reducing vulnerability to climate-related health risks. These policies help safeguard public health while addressing the impacts of a changing climate.





Thanks