

## Persistent Climate Change Harms Your Lifestyle and Health: A Systematic Research

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### Abstract

Climate change is the biggest health threat facing humanity and health professionals around the world. Human health has always been influenced by climate and weather. As climate change is taking place, the risks to human lifestyles and their health are expected to increase. Climate change will potentially increase the frequency and strength of extreme events (such as floods, droughts and hurricanes) that threaten human health and safety. Climate change is a change in the world's weather system that occurs over decades. Most of the recent changes in our climate have been caused by human activities. These changes will have important consequences for our health, wellbeing and safety. The effects of climate change include increased air and ocean temperatures, changes in precipitation patterns, more frequent and increasingly severe extreme weather events, and sea level rise are included. Climate change can affect our health and wellbeing through extreme events, deteriorating air quality, changes in the spread of infectious diseases, the quality and quantity of food and water, and impacts on our mental health. Climate is influenced by things like generating electricity and heat, making goods, cutting down forests, using transportation, producing food, powering buildings, consuming too much clothing, electronics and plastics etc. If climate change is not controlled in time, then human life can take the form of a crisis in the coming times and human life on earth will become difficult.

**Keywords:** Climate; Effect; Risk; Lifestyle; Health; Causes; Control

### Introduction

Climate change is the single biggest health threat facing humanity, and health professionals worldwide are already responding to the health harms caused by this unfolding crisis [1]. Changes in ambient temperatures causes an imbalance between proper sleep and immune system function. This single-author study has the potential to expand research into indirect climate change effects on the human body. Human health has always been influenced by climate and weather. Changes in climate and climate variability, particularly changes in weather extremes, affect the environment that provides us with clean air, food, water, shelter, and security. Climate change, together with other natural and human-made health stressors, threatens human health and well-being in numerous ways [2]. World overwhelmed by an ongoing global health crisis, which has made little progress to protect its population from the simultaneously aggravated health impacts of climate change [3].

“No one has previously put together this notion that the ongoing climate crisis is contributing to sleep disturbance and that it's possibly contributing to the altered risk of infectious disease [4]. Health is more than the absence of disease. Health includes mental and physical well-being, and communities that fail to provide basic services and social support challenge both. As we think about the impacts of climate change on our communities, we need to identify and address the direct effects, as well as the indirect and chronic consequences for human health from damage to physical and social community infrastructure [5]. Health is the final common pathway of the natural systems we are part of, and climate instability is altering the patterns of disease and the quality of our air, food and water. The following case studies integrate the multiple dimensions of diseases whose range and prevalence are affected by climate. The studies are approached from the perspective of a disease or condition (for example, malaria and asthma) [6].

Some people are more vulnerable to the effects of climate change and health:

- Children are vulnerable for several reasons. For example, children are more susceptible to heat stress and dehydration and are

more sensitive to exposure to air pollution and smoke from bushfires. Their immune systems are not fully developed, putting them at increased risk of infections. They often need to rely on adults to keep them safe during emergencies and help them to recover afterwards.

- Pregnant women are at increased risk of heat stress during heat waves due to the physiological demands of pregnancy. They and their unborn babies are particularly sensitive to exposure to air pollution and smoke from bushfires.

- Older people and people with pre-existing medical conditions are more prone to dehydration, heat stress, infections and exacerbation of heart and lung disease.

- People living in rural and remote areas, Aboriginal and Torres Strait Islander people, people on low incomes and other vulnerable populations are also at increased risk, in part due to inequalities in underlying health outcomes and limited accessibility of healthcare and other services. People living in rural or remote communities or along the coast are also at risk from extreme events such as bushfires, droughts, storms and sea level rises [7].

### Causes of climate change

#### Generating power

Generating electricity and heat by burning fossil fuels causes a large chunk of global emissions. Most electricity is still generated by

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burning coal, oil, or gas, which produces carbon dioxide and nitrous oxide – powerful greenhouse gases that blanket the Earth and trap the sun’s heat. Globally, a bit more than a quarter of electricity comes from wind, solar and other renewable sources which, as opposed to fossil fuels, emit little to no greenhouse gases or pollutants into the air.

### Manufacturing goods

Manufacturing and industry produce emissions, mostly from burning fossil fuels to produce energy for making things like cement, iron, steel, electronics, plastics, clothes, and other goods. Mining and other industrial processes also release gases, as does the construction industry. Machines used in the manufacturing process often run on coal, oil, or gas; and some materials, like plastics, are made from chemicals sourced from fossil fuels. The manufacturing industry is one of the largest contributors to greenhouse gas emissions worldwide.

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### Cutting down forests

Cutting down forests to create farms or pastures, or for other reasons, causes emissions, since trees, when they are cut, release the carbon they have been storing. Each year approximately 12 million hectares of forest are destroyed. Since forests absorb carbon dioxide, destroying them also limits nature’s ability to keep emissions out of the atmosphere. Deforestation, together with agriculture and other land use changes, is responsible for roughly a quarter of global greenhouse gas emissions.

### Using transportation

Most cars, trucks, ships, and planes run on fossil fuels. That makes transportation a major contributor of greenhouse gases, especially carbon-dioxide emissions. Road vehicles account for the largest part, due to the combustion of petroleum-based products, like gasoline, in internal combustion engines. But emissions from ships and planes continue to grow. Transport accounts for nearly one quarter of global energy-related carbon-dioxide emissions. And trends point to a significant increase in energy use for transport over the coming years.

### Producing food

Producing food causes emissions of carbon dioxide, methane, and other greenhouse gases in various ways, including through deforestation and clearing of land for agriculture and grazing, digestion by cows and sheep, the production and use of fertilizers and manure

for growing crops, and the use of energy to run farm equipment or fishing boats, usually with fossil fuels. All this makes food production a major contributor to climate change. And greenhouse gas emissions also come from packaging and distributing food.

### Powering buildings

Globally, residential and commercial buildings consume over half of all electricity. As they continue to draw on coal, oil, and natural gas for heating and cooling, they emit significant quantities of greenhouse gas emissions. Growing energy demand for heating and cooling, with rising air-conditioner ownership, as well as increased electricity consumption for lighting, appliances, and connected devices, has contributed to a rise in energy-related carbon-dioxide emissions from buildings in recent years.

### Consuming too much

Your home and use of power, how you move around, what you eat and how much you throw away all contribute to greenhouse gas emissions. So does the consumption of goods such as clothing, electronics, and plastics. A large chunk of global greenhouse gas emissions are linked to private households. Our lifestyles have a profound impact on our planet. The wealthiest bear the greatest responsibility: the richest 1 per cent of the global population combined account for more greenhouse gas emissions than the poorest 50 per cent [8] (Chart 1).

### Effect of climate change

#### Hotter temperatures

As greenhouse gas concentrations rise, so does the global surface temperature. The last decade, 2011-2020, is the warmest on record. Since the 1980s, each decade has been warmer than the previous one. Nearly all land areas are seeing more hot days and heat waves. Higher temperatures increase heat-related illnesses and make working outdoors more difficult. Wildfires start more easily and spread more rapidly when conditions are hotter. Temperatures in the Arctic have warmed at least twice as fast as the global average.

#### More severe storms

Destructive storms have become more intense and more frequent in many regions. As temperatures rise, more moisture evaporates, which

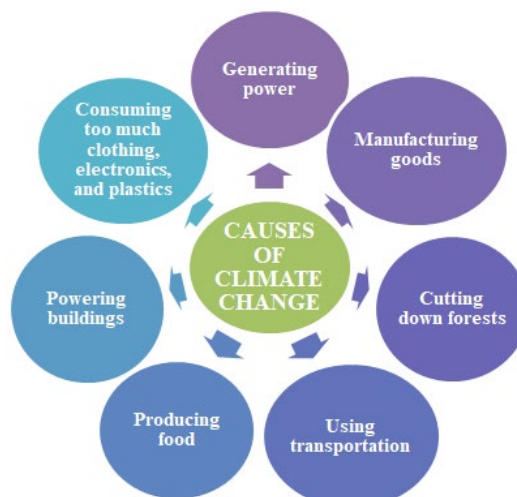


Chart 1: Causes of climate change.

exacerbates extreme rainfall and flooding, causing more destructive storms. The frequency and extent of tropical storms is also affected by the warming ocean. Cyclones, hurricanes, and typhoons feed on warm waters at the ocean surface. Such storms often destroy homes and communities, causing deaths and huge economic losses.

### Increased drought

Climate change is changing water availability, making it scarcer in more regions. Global warming exacerbates water shortages in already water-stressed regions and is leading to an increased risk of agricultural droughts affecting crops, and ecological droughts increasing the vulnerability of ecosystems. Droughts can also stir destructive sand and dust storms that can move billions of tons of sand across continents. Deserts are expanding, reducing land for growing food. Many people now face the threat of not having enough water on a regular basis.

### A warming, rising ocean

The ocean soaks up most of the heat from global warming. The rate at which the ocean is warming strongly increased over the past two decades, across all depths of the ocean. As the ocean warms, its volume increases since water expands as it gets warmer. Melting ice sheets also cause sea levels to rise, threatening coastal and island communities. In addition, the ocean absorbs carbon dioxide, keeping it from the atmosphere. But more carbon dioxide makes the ocean more acidic, which endangers marine life and coral reefs.

### Loss of species

Climate change poses risks to the survival of species on land and in the ocean. These risks increase as temperatures climb. Exacerbated by climate change, the world is losing species at a rate 1,000 times greater than at any other time in recorded human history. One million species are at risk of becoming extinct within the next few decades. Forest fires, extreme weather, and invasive pests and diseases are among many threats related to climate change. Some species will be able to relocate and survive, but others will not.

### Not enough food

Changes in the climate and increases in extreme weather events are among the reasons behind a global rise in hunger and poor nutrition. Fisheries, crops, and livestock may be destroyed or become less productive. With the ocean becoming more acidic, marine resources that feed billions of people are at risk. Changes in snow and ice cover in many Arctic regions have disrupted food supplies from herding, hunting, and fishing. Heat stress can diminish water and grasslands for grazing, causing declining crop yields and affecting livestock.

### More health risks

Climate change is the single biggest health threat facing humanity. Climate impacts are already harming health, through air pollution, disease, extreme weather events, forced displacement, pressures on mental health, and increased hunger and poor nutrition in places where people cannot grow or find sufficient food. Every year, environmental factors take the lives of around 13 million people. Changing weather patterns are expanding diseases, and extreme weather events increase deaths and make it difficult for health care systems to keep up.

### Poverty and displacement

Climate change increases the factors that put and keep people in poverty. Floods may sweep away urban slums, destroying homes and livelihoods. Heat can make it difficult to work in outdoor jobs. Water

scarcity may affect crops. Over the past decade (2010–2019), weather-related events displaced an estimated 23.1 million people on average each year, leaving many more vulnerable to poverty. Most refugees come from countries that are most vulnerable and least ready to adapt to the impacts of climate change [8] (Chart 2).



Chart 2: Effect of climate change.

## Method and Material

We conducted this research paper by observing the different types of reviews, as well as conducting and evaluating literature review papers.

## Result

We found this result in our research that facing climate change can be a difficult challenge in the coming days of human life. Climate change is the result of human negligence man himself has invited change on the earth, whose effect is now visible. Climate change will be the biggest health threat facing humanity and health professionals around the world. Human health will always be affected by climate and weather. As climate change is taking place, the risks to human lifestyles and their health will increase. Climate change will potentially increase the frequency and strength of extreme events (such as floods, droughts and hurricanes) that threaten human health and safety. Climate change is a change in the world's weather system that occurs over decades. Most of the recent changes in our climate have been caused by human activities. These changes will have important consequences for our health, wellbeing and safety. The effects of climate change include increased air and ocean temperatures, changes in precipitation patterns, more frequent and increasingly severe extreme weather events, and sea level rise. Changes in circulation will affect our health and well-being through changes in the quality and quantity of food and water, and effects on our mental health. Climate is being affected by things like generating electricity and heat, making goods, cutting down forests, using transportation, producing food, powering buildings, consuming too much clothing, electronics and plastics. If climate change is not controlled in time, then human life can take the form of a crisis in the coming times and human life on earth will become difficult.

## Conclusion

We have concluded in our research that in the coming days of human life, it can be a difficult challenge to face climate change. Climate change may be the biggest health threat facing humanity and health professionals around the world. Human health can always be affected by climate and weather. As climate change is taking place, the risks to human lifestyles and their health may increase. Climate change can potentially increase the frequency and strength of extreme events (such as floods, droughts and hurricanes) that threaten human health and safety. Climate change is a change in the world's weather system that occurs over decades. Most of the recent changes in our climate have been caused by human activities. These changes can have important consequences for our health, wellbeing and safety. The effects of climate change include increased air and ocean temperatures, changes in precipitation patterns, more frequent and increasingly severe extreme weather events, and sea level rise. Changes in circulation can affect our health and well-being through changes in the quality and quantity of food and water, and effects on our mental health. Climate is being affected by things like generating electricity and heat, making goods, cutting down forests, using transportation, producing food, powering buildings, consuming too much clothing, electronics and plastics. If climate change is not controlled in time, then human life may take the form of a crisis in the coming times and human life on earth may become difficult.

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## Ethical Approval

Ethical approval was not required for this letter. All data used is publicly accessible.

## Declaration of Competing Interest

All authors are, do not report any conflicts of interest in the writing of this letter.

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