What You Should Know About Climate Change

Climate change threatens the health and welfare of American families.

Emissions of carbon pollution are causing the Earth to warm. Increased global temperatures, changes in precipitation, rising sea level, and changing weather patterns are the result. These changes have real impacts on our families, communities, and our country. Climate change will affect everyone, but the poor, young, old, or sick, as well as people who live on the coasts or other vulnerable areas, are especially at risk.

Climate change means serious impacts on...

...our health

Carbon pollution and hotter weather can lead to longer allergy seasons, an increase in heat stroke and heat-related deaths, and risks to people who suffer from chronic lung and heart diseases. Rising temperatures also lead to more smog, which can exacerbate asthma.

...the spread of disease

Warmer temperatures can expand the ranges of mosquitoes and ticks, as well as lengthen the season that they are active. These insects spread diseases such as Lyme disease and West Nile virus.

Is the Earth warming?

Yes. The 12 warmest years since the late 1800s have all come in the last 15 years. The last month in which the global temperature was below the 20th century average was February 1985. Arctic sea ice has shrunk to record-low levels in recent years.

...heat waves and droughts

Climate change increases the frequency and intensity of heat waves and droughts. Heat waves increase energy costs for households, lead to blackouts and brownouts, and threaten human health and safety. Droughts can drive up food prices, limit hydroelectricity supplies, and affect manufacturing operations that rely on water to run their businesses.

...wildfires

In 2012 alone, wildfires scorched more than nine million acres across eight states—an area more than two and a half times the size of the state of Connecticut. With climate change increasing the likelihood of hot, dry weather in many parts of the country, the risk of wildfires is expected to increase.

...storms

Scientists expect that hurricanes will become more intense, with higher wind speeds and heavier rains. In much of the country, more precipitation will fall in intense, short bursts such as blizzards and downpours, which can lead to flooding.

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...water

Climate change will affect the quality and security of our water supplies. Floods can overwhelm sewers and wastewater treatment facilities. Heavy rains can cause pollutants to enter stormwater systems, harming sensitive ecosystems such as wetlands and estuaries.

...rising seas

As water warms, it takes up more space, and as glaciers melt, they add water to the oceans. As a result, sea levels are projected to rise by 1 to 4 feet during this century. Storm surges from hurricanes and tropical storms, superimposed on higher seas, could cause severe damage to homes and infrastructure in coastal states.

...plants and wildlife

The changing climate affects the timing of bird migration, flowering dates, and the emergence of insects in spring. Many forests are being weakened by wildfires, insect infestations, drought, and disease outbreaks. Some species of plants and animals are shifting their ranges as the climate warms.

The time to act is now

Solutions are available to reduce the pollution that causes climate change, and to protect our communities from the impacts. Many families, communities, businesses, and states are already taking action to reduce carbon pollution and protect themselves and their property from the risks caused by climate change. People can take steps at home, on the road, and in our workplaces to reduce greenhouse gas emissions and the risks associated with climate change. Many of these steps can save money; some, such as walking or biking to work can even improve health.

EPA is taking common-sense action to reduce carbon pollution and promote a cleaner energy economy.

Key Terms

Climate change refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.

Greenhouse gases are gases that absorb infrared radiation in the atmosphere causing the earth to warm. The elevated levels of greenhouse gases seen in recent decades are largely due to human activities, especially the burning of fossil fuels.

Carbon pollution is shorthand for anthropogenic emissions of greenhouse gases, primarily carbon dioxide.

Learn more at www.epa.gov/climatechange

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