

New Report Examines Impacts of Climate Change on Human Health



Discussions of climate change typically focus on its impact on the environment in general, such as the melting of glaciers, increase in drought conditions, etc. But climate change may impact the health of not only plants and animals but also humans.

A new report from the US Global Change Research Program looks at the impacts of climate change on human health now and possible impacts in the future. Climate change can affect human health in two main ways:

- ' By changing the severity or frequency of health problems that are already affected by climate or weather factors; and
- ' By creating unprecedented or unanticipated health problems or health threats in places where they haven't previously occurred.

Some of these impacts are relevant to employers as to their duty to protect the health of their workers. In fact, the report states that, in general, certain occupations have a greater risk of exposure to climate impacts, most notably people working outdoors or performing duties that expose them to extreme weather, such as emergency responders, utility repair crews, farm workers, transportation workers, construction workers and other outdoor laborers.

For example, the report notes that increasing concentrations of GHGs lead to an increase of both average and extreme temperatures, which is expected to lead to an increase in deaths and illness from heat and a potential decrease in deaths from cold.

Days that are hotter than the average seasonal temperature in the summer or colder than the average seasonal temperature in the winter compromise the body's ability to regulate its temperature and can induce direct or indirect health complications. Loss of internal temperature control can result in a cascade of illnesses, including heat cramps, heat exhaustion, heatstroke, and hyperthermia in the presence of extreme heat, and hypothermia and frostbite in the presence of extreme cold.

In addition, elevated temperatures can increase levels of air pollution, including ground-level ozone, resulting in increased worker exposure and subsequent risk of respiratory illness.

Other climate-related health threats for outdoor workers include:

- Increased waterborne and foodborne pathogens
- Increased duration of aeroallergen exposure with longer pollen seasons
- Expanded habitat ranges of disease-carrying vectors that may influence the risk of human exposure to diseases such as West Nile virus or Lyme disease.