The impact of climate change on insects to reproduce, the spread of infectious diseases, and expand their habitats

Author: Mr Said Abdelrhman

Submission ID: 728

Format: CPS Paper

Reference Number: 728

Brief Description

For more than 20 years, researchers
have been investigating the implications of the observed and projected changes
in weather and climate for the magnitude and pattern of adverse climate-sensitive
health outcomes.

Mild winters, early springs, and warmer temperatures are
giving mosquitoes and ticks more time to reproduce, spread diseases, and expand
their habitats throughout the United States such as Lyme disease, West Nile
virus disease, and Valley fever.

These are just some of the infectious diseases
that are on the rise and spreading to new areas of the United States between
2004 and 2018, the number of reported illnesses from mosquito, tick, and flea
bites more than doubled, with more than 760,000 cases reported in the United
States.

Nine new germs spread by mosquitoes and ticks were discovered or
introduced into the United States during this period.

This paper has three
aims.

First, it conceptualizes the potential direct and indirect health effects
of climate change and provides an overview of factors that exacerbate the
health effects of climate change.

Second, it summarizes the literature on the relationship
between infectious disease and climate change.

Finally, it examines the impact of
climate change on the spreading of the West Nile virus outbreak in the US in
1999.

Two major findings emerge from this paper.

Climate change is shown to
cause and exacerbate multiple diseases, and the most adverse health impact on the
spreading of more infectious diseases.

hot summer set the stage for an outbreak
of West Nile virus disease in the United States, resulting in illnesses and deaths
among the population throughout the United States.

Keywords: health impacts; infectious diseases, West Nile
virus

Abstract

For more than 20 years, researchers have been investigating the implications of the observed and projected changes in weather and climate for the magnitude and pattern of adverse climate-sensitive health outcomes. Mild winters, early springs, and warmer temperatures are giving mosquitoes and ticks more time to reproduce, spread diseases, and expand their habitats throughout the United States such as Lyme disease, West Nile virus disease, and Valley fever. These are just some of the infectious diseases that are on the rise and spreading to new areas of the United States between 2004 and 2018, the number of reported illnesses from mosquito, tick, and flea bites more than doubled, with more than 760,000 cases reported in the United States. Nine new germs spread by mosquitoes and ticks were discovered or introduced into the United States during this period. This paper has three aims. First, it conceptualizes

the potential direct and indirect health effects of climate change and provides an overview of factors that exacerbate the health effects of climate change. Second, it summarizes the literature on the relationship between infectious disease and climate change. Finally, it examines the impact of climate change on the spreading of the West Nile virus outbreak in the US in 1999. Two major findings emerge from this paper. Climate change is shown to cause and exacerbate multiple diseases, and the most adverse health impact on the spreading of more infectious diseases. hot summer set the stage for an outbreak of West Nile virus disease in the United States, resulting in illnesses and deaths among the population throughout the United States. Keywords: health impacts; infectious diseases, West Nile virus