

Human Health and Climate Change

For me, Covid-19 has highlighted the question about the relationship between disease and climate change. The answer is not as straight forward as I thought. Other factors are involved, but climate change seems hover in the background. Unfortunately, we treat each emergent condition or disease as if it were an entity divorced from larger influences.

GENERAL

1. Climate change and infectious diseases.

Types of modeling used to indicate future relationship between the two. General discussion

<https://www.who.int/globalchange/climate/en/chapter6.pdf>

2. Food Security

Short essay about food production and climate change.

https://www.cdc.gov/climateandhealth/effects/food_security.htm

3. Wildfires

Short essay about wildfires and its effects, especially on the respiratory system.

<https://www.cdc.gov/climateandhealth/effects/wildfires.htm>

4. CDC's building resilience against climate effects (BRACE) framework

Sequential steps for local communities to follow in order to develop a strategy to meet the health effects of climate change.

<https://www.cdc.gov/climateandhealth/BRACE.htm>

5. Climate change is shifting the course of infectious diseases

Julie Kirkwood // Date: AUG.1.2018

Clinical Laboratory News

Have policymakers learned the right lessons from recent pandemics?

<https://www.aacc.org/publications/cln/articles/2018/august/climate-change-is-shifting-the-course-of-infectious-diseases>

6. Nearly half of the US population is breathing dirty air

[Jonathan Hahn](#) | Apr 21 2020

Sierra Club Magazine

Pollution makes millions more susceptible to health impacts, including COVID-19

<https://www.sierraclub.org/sierra/nearly-half-us-population-breathing-dirty-air-american-lung-association-state-of-the-air>

7. Climate change is already killing us.

[Tedros Adhanom Ghebreyesus](#) September 23, 2019

Foreign Affairs Magazine

How our warmer and wetter planet is getting sicker and deadlier by the day.

<https://www.foreignaffairs.com/articles/2019-09-23/climate-change-already-killing-us>

8. The Baffling Nexus of Climate Change and Health

Dylan Walsh, September 6, 2012 1:28 pm,

NYT

Climate change is the driver behind extreme weather conditions (wildfires, hurricanes) and health challenges (water pollution, vector

diseases). <https://green.blogs.nytimes.com/2012/09/06/the-baffling-nexus-of-climate-change-and-health/?searchResultPosition=5>

CLIMATE CHANGE AND DISEASE

1. How climate change is contributing to skyrocketing rates of infectious disease.

Abraham Lustgarten, May 7, 2020

[ProPublica](#),

“ . . . that it’s human behavior driving the rise in disease ”

https://forhumanliberation.blogspot.com/2020/05/3362-how-climate-change-is-contributing.html?fbclid=IwAR0clalv28YDIHpZIDvmJoacQ7CUuzhtcVC-9ogAZqR6_M1FV1D1mUTGB6I

2. Impacts of biodiversity on the emergence and transmission of infectious diseases.

Felicia Keesing, Lisa K. Belden, Peter Daszak *et al.*

Nature, [Published: 01 December 2010](#)

“Current unprecedented declines in biodiversity reduce the ability of ecological communities to provide many fundamental ecosystem services. Here we evaluate evidence that reduced biodiversity affects the transmission of infectious diseases of humans, other animals and plants. . . . Overall, despite many remaining questions, current evidence indicates that preserving intact ecosystems and their endemic biodiversity should generally reduce the prevalence of infectious diseases.”

<https://www.nature.com/articles/nature09575#Tab1>

3. Climate change and infectious diseases.

[Arthur Wyns](#), April 9, 2020

Scientific American

“It isn’t making COVID-19 worse than the pandemic otherwise would have been—but we can’t say the same for malaria, dengue and other illnesses”

<https://blogs.scientificamerican.com/observations/climate-change-and-infectious-diseases/>



4. Map shows how climate change will affect health across US.

Sara G. Miller March 15, 2017

<https://www.livescience.com/58270-climate-change-health-effects-united-states.html>

5. Climate change: an enduring challenge for vector-borne disease prevention and control.

Joacim Rocklöv & Robert Dubrow

Nature Immunology volume 21, pages 479–48 (2020)

Discusses both climate change and non-climate factors in changes in vector-borne diseases. Suggests, at least in the short run, that non-climate factors may be more important.

<https://www.nature.com/articles/s41590-020-0648-y>

6. Cascading risks of waterborne diseases from climate change.

Jan C. Semenza

Nature Immunology volume 21, pages 484–487 (2020)

“Climate change can trigger a sequence of events of significant magnitude with consequences for waterborne diseases. Heavy rainfall, flooding and hot weather are associated with waterborne diseases, but early warning systems could intercept these cascading risks.” [I didn’t have access to the full article.]

<https://www.nature.com/articles/s41590-020-0631-7>

7. Scientists’ warning to humanity: microorganisms and climate change. [A consensus statement]

Ricardo Cavicchioli, William J. Ripple, *et al.*

Nature Reviews Microbiology volume 17, pages 569–586 (2019)

Article discusses the marine, microbial biome as well as the terrestrial, microbial biome and the impact and repercussions of climate change.

<https://www.nature.com/articles/s41579-019-0222-5>

8. Lyme: climate change is a tick’s best friend--

Pfeiffer’s “Lyme” sounds the alarm on a climate-driven epidemic.

Jonathan Hahn

Sierra Club Magazine, Jun 26 2018

<https://www.sierraclub.org/sierra/climate-change-tick-s-best-friend-lyme-disease>

