Researching Topic #6-- SOCIETAL IMPACTS – HEALTH and ILLNESS
[last revised 3/11/2021]

This prompt offers two kinds of help:

-- A brief overview of the kinds of questions you might wish to explore as you study how climate change is likely to affect the food supply;
-- A suggested strategy for how to search the literature as you prepare to write your paper.

OVERVIEW – CLIMATE IMPACTS ON HEALTH and ILLNESS

The literature describes a number of ways climate change can impact human health:

-- Changes in local climate (temperatures, rainfall) can extend the ranges of certain disease vectors (mosquitoes, for example)
-- Falling supplies of food → hunger, malnutrition → vulnerability to diseases
-- Increasing exposure to contaminated water (water that carries bacteria and/or various toxic substances) can increase the incidence of disease

What, then, does the literature predict about the possible health impacts of climate change?

Downstream impacts of worsening health:

-- Would worsening public health exacerbate social inequality? (It is generally true that the economically poorest in any society also have more illness and shorter lifespan.)
-- increased costs of medical care
-- loss of productivity, loss of aggregate economic vitality (those who are ill may be less productive at work or may not be able to work at all)

SUGGESTED STRATEGY FOR SEARCHING THE LITERATURE

I recommend the following sequence for searching the literature:

1 Start with a search of the most recent **reports from top scientific bodies and government agencies**;
2 Search **academic articles** using Google Scholar (scholar.google.com);
3 Do a **more general search** using Google or another search engine;
4 Search the **best newspapers** and **reputable climate websites**.
(NOTE that I do not suggest using Wikipedia.)

1 Search the most recent **reports from top scientific bodies and government agencies**

(NOTE: There are many excellent reports one can consult. You will find a lot of repetition, so you do not need to consult every source. Here I start with a handful of the most recent reports, followed by a more complete list.)

These publications should, in most cases, supply you with all you need:

IPCC's most recent full set of reports:
https://www.ipcc.ch/report/ar5/
EPA: https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-society_.html
U.S. Global Change Research Program:
https://science2017.globalchange.gov/ (the science)
https://nca2018.globalchange.gov/ (the impacts)
American Meteorological Society:
www.ametsoc.net/sotc2017/StateoftheClimate2017_lowres.pdf

A more complete list of best scientific and governmental sources:

International
Intergovernmental Panel on Climate Change
United Nations Environmental Programme (UNEP)
World Meteorological Organization

Agencies of the U.S. federal government
Environmental Protection Agency (EPA)
National Oceanographic and Atmospheric Administration (NOAA)
National Aeronautics and Space Administration (NASA)
U.S. Global Change Research Program

Scientific bodies – U.S.
National Academic of Sciences
Climate Change at the National Academies (climatechange@nas.edu)
National Science Foundation

Other professional bodies – American Meteorological Society

2 Search **academic articles** using Google Scholar (scholar.google.com)

(NOTE: Narrow and focus your search by using several phrases in quotes – such as "climate change". For example, if you are searching for how climate change will increase the frequency of extreme weather events, don't just enter "climate change," search, instead for" "climate change" AND "extreme weather events")

Search terms to use (you may certainly choose others):

"climate change" AND x, where x can be:

Health
Illness
Disease vectors OR insects
Health AND flooding
Health AND drought
Health AND extreme heat
Health AND extreme weather
Health AND wildfire

(NOTE: For some citations you find on Google Scholar, you can directly download the PDF. For other citations, you may be able to find and download PDFs if your University library offers on line access to academic journals.)

3 Do a **more general search** using Google or another search engine

Use the same search terms to do a general search on Google or another search engine. This will bring up information more recent than you find on scholar.google.com (it takes several years for research to be published in academic journals).

4 Search the **best newspapers** and **reputable climate websites**

New York Times, Washington Post, The Guardian

On line sources

Climate Central
GRIST
Society of Environmental Journalists
The Daily Climate
Climate Nexus
InsideClimate News
DeSmogBlog
Skepticalscience.com
Yale 350

(NOTE about on line sources: You will run into a lot of denialist disinformation on the internet, on websites, on blogs, on youtube. FYI, skepticalscience.com has a

comprehensive list of denialist talking points (and refutations of those talking points). See, for example: https://www.skepticalscience.com/argument.php)

Finally, here are some good citations to help you get started:

Nick Watts, *et al*, "The *Lancet* Countdown on health and climate change: from 25 years of inaction to a global transformation for public health," *Lancet,* Volume 391, Issue 10120, pp. 581-630, February 10, 2018.

-- PDF available from szasz@ucsc.edu

Betts and Sawyer, "Modeling the Health Risks of Climate Change: Workshop Summary," National Academy of Sciences.

-- PDF can be downloaded from: www.nap.edu/catalogue.php?record_id=21705

Committee to Review the Draft Interagency Report on the Impacts of Climate Change on Human Health in the United States, *et al*, "Review of the Draft Interagency Report on the Impacts of Climate Change on Human Health in the United States,"

-- PDF can be downloaded from: www.nap.edu/21787

"Record rains are sending untreated sewage into U.S. cities,"
https://grist.org/article/record-rains-are-sending-untreated-sewage-into-u-s-cities/

"Drinking Water Woes Complicate Matthew Cleanup,"
https://www.northcarolinahealthnews.org/2016/10/14/drinking-water-woes-complicate-matthew-cleanup/

Major health impact study published late in 2018:

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32594-7/fulltext

Some new good sources, added in the 2021 revision:

Climate change is already having impacts on health

https://www.scientificamerican.com/article/climate-change-is-having-a-major-impact-on-global-health/

https://www.theguardian.com/environment/2019/jun/03/climate-crisis-seriously-damaging-human-health-report-finds

December 2020 Lancet report on health impacts

https://www.nytimes.com/2020/12/02/climate/climate-change-health-risks.html

https://www.thelancet.com/article/S0140-6736(20)32290-X/fulltext

Climate change will cause increase in death

https://thehill.com/policy/energy-environment/510726-us-could-avoid-45m-early-deaths-by-fighting-climate-change-study

https://www.futurity.org/climate-change-deaths-rising-temperatures-2416662-2/

2019 health impact articles *New England Journal of Medicine*

Andy Haines, M.D. and Kristie Ebi, M.P.H., Ph.D., "The Imperative for Climate Action to Protect Health," *New England Journal of Medicine*, 380:263-273, January 17, 2019.

Caren G. Solomon, M.D., M.P.H. and Regina C. LaRocque, M.D., M.P.H., "Climate Change — A Health Emergency," *New England Journal of Medicine*, 380:209-211, January 17, 2019.

Calls for action

https://grist.org/article/dozens-of-public-health-groups-call-for-urgent-climate-change-action/?utm_medium=email&utm_source=newsletter&utm_campaign=daily

https://climatehealthaction.org/cta/climate-health-equity-policy/

Did climate change help cause the pandemic?

https://www.cbsnews.com/news/climate-change-coronavirus-bats-study/