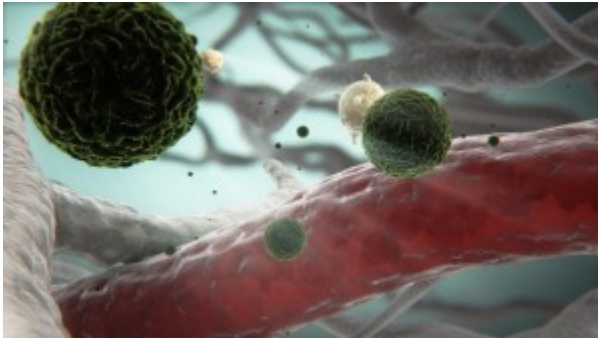


# STUDY ON HUMAN HEALTH AND CLIMATE CHANGE

## The link between human health and climate change



Climate change makes us sick both physically and mentally. We often hear about the [economic costs](#) associated with climate change, however, the physical and mental toll is often overlooked. Research reveals that the adverse impacts of climate change can have serious implications for people's physical and emotional well being.

In 2012, it was reported that climate change was already killing [400,000 people each year](#). The IPCC WGII AR5 report published in 2013 has a [chapter](#) (pdf) that specifically deals with the health issues associated with climate change. Although the impacts of climate change on mental health are just beginning to be explored, the initial research suggests that it causes a wide range of psychological disturbances.

### Physical health

While the situation is expected to get far worse, climate change is already a threat to public health. As explained in a recent [report from Medact](#), a group of health professionals dedicated to global issues around conflict:

*"[G]lobal warming is already having a significant negative impact on human health; it threatens to be an overwhelming danger in the coming decades."*

Extreme weather events associated with climate change are known to kill and injure people. More than ten years ago a 2003 heat wave claimed 20,000 lives across Europe. In the US, we have seen how hurricanes and tornados can be life threatening. Hurricane Katrina alone claimed 1,833 lives

and injured thousands of others. As these extreme weather events increase, so too will the human toll.

As revealed by PhD epidemiology candidate, [Geordan Shannon](#), other manifestations of climate change are far more insidious. This includes microbial proliferation linked to warmer temperatures which lead to more enteric infections. Salmonella food poisoning and cholera outbreaks are expected to increase due to the combination of flooding and warmer coastal waters. Climate change also plays a role in insect-borne infectious diseases like malaria, dengue, Japanese encephalitis, chikungunya and West Nile virus, lymphatic filariasis, plague, tick-borne encephalitis, Lyme disease, rickettsioses, and schistosomiasis.

Climate induced hunger due to inadequate food stocks is another climate corollary that is expected to take a devastating toll. Oxfam International predicts that the number of people in poorer countries suffering from famine will increase by 20 percent in 2050.

The precursors to climate change also have a devastating impact. Fossil fuel extraction poisons the air, ground and water. This is particularly true of tar sands oil. After decades of health complaints, a [2014 report](#) by Alberta's Energy Regulator (AER) formally linked emissions from tar sands oil production with serious health impacts in the Peace River region.

The UNFCCC estimated the health costs of climate change to be \$5 billion. However, a follow up report in 2009 suggested that the actual costs are probably much higher, as the UNFCCC estimate excluded developed nations and assessed only malaria, diarrhea and malnutrition. The real cost of the global disease burden associated with climate change is likely to be twice the amount indicated by the UNFCCC. The World Bank report stated that pro-climate policies would prevent 94,000 deaths a year due to air pollution alone.

## Mental health

Researchers are beginning to publish reports that detail the ways in which climate change is also injurious to people's mental health. The physical impacts of climate change closely interact with emotional factors. The American Psychological Association and ecoAmerica released a [report](#) that specifically focuses on the psychological impacts of climate change.

An impressive [body of research](#) illustrates that global warming increases social tensions and contributes to [forced migrations](#) (according to some estimates there could be as many as [200](#)

[million](#) environmental refugees by 2050). These types of issues augur immense stress and the link between stress, anxiety and depression has been widely documented. Such stress is triggered by corollaries of climate change like extreme weather.

Climate change has even been linked to suicide. According to a study published in the journal [Proceedings of the National Academy of Sciences](#), drought has been linked to increasing rates of suicide. Researchers found that there was a 15 percent increase in suicides in men ages 30 to 49 in areas of rural Australia struck by drought. Research in India has borne out a similar relationship between drought and suicide.

As reported in a [Grist article](#), Psychiatric epidemiologist, Helen Berry of the University of Canberra has documented increased levels of distress and despair in people suffering from the effects of climate change.

*"When you think about what climate change does, it basically increases the risk of weather-related disasters of one sort or another," she said. "What happens from a psychological point of view is people get knocked down. Whenever people are knocked down, they have to get up again and start over. And the more that happens, the more difficult it is to keep getting up."*

Berry has shown how extreme weather events can cause depression in farmers. "They become very withdrawn," she said. "Here they are with something they can't control around them, and things are going backwards, and it becomes a health issue."

In response to his investigations on impact of open pit mining, Glenn Albrecht, a professor of environmental studies at the University of Newcastle coined the term *solastalgia*. The term means, "the homesickness when you're still at home and your home environment is changing around you in ways that you find negative, and that you have very little power over."

While mental and physical health are determined by a wide range of factors, research shows that there is a relationship between climate change and human health. Deliterious environmental impacts are expected to worsen as the planet warms. This means that climate change will increasingly undermine both physical and mental health.

Source : <http://globalwarmingisreal.com/2014/08/21/human-health-and-climate-change/>