



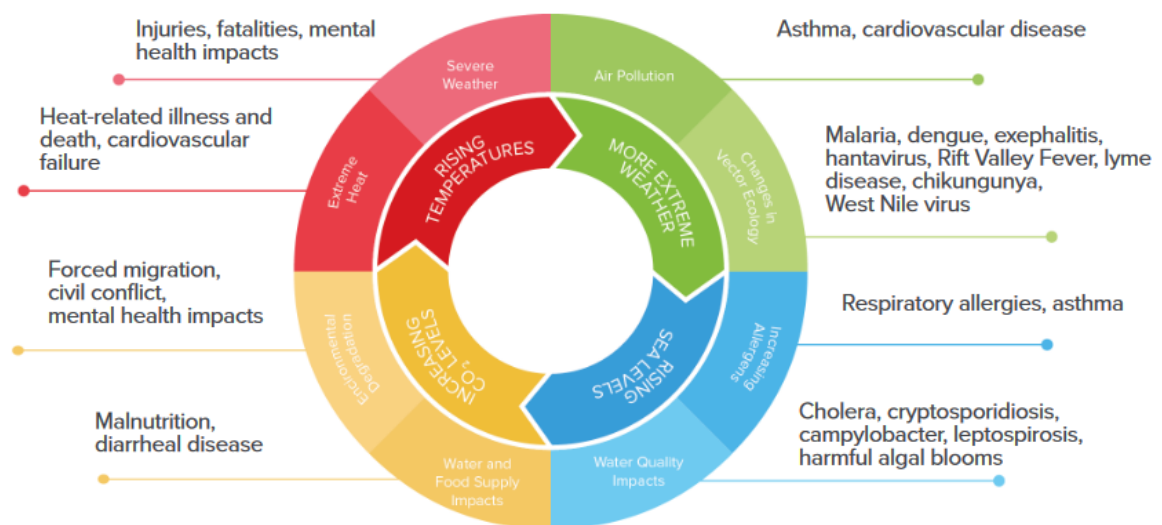
# Do No Harm: Carbon Emissions

May 2023

## Climate Change is a Public Health Crisis

It is not new information that climate change is affecting our world today. But it may come as a shock that climate change is the “biggest global health threat of the 21st century”, according to The Lancet.

A few of the leading environmental consequences of climate change include rising temperatures, extreme weather, rising sea levels, and increasing CO<sub>2</sub> levels. All these consequences can impact the health and well-being of individuals worldwide. As seen in the figure below, these consequences from climate change impact public health and can cause major health issues (Health Care Without Harm – Arup).



In response to these arising health problems, healthcare facilities will be at the frontline tackling the effects of climate change on human health. In addition, the global healthcare industry will be compiling costs and resources as climate change events grow in number.

## Is the Health Care Sector a Large Contributor to Greenhouse Gases?

While healthcare systems are treating those that have been impacted by climate change, have healthcare facilities stopped to assess their own carbon footprint and its contribution to climate change? Not until recently. Over the last few years, two studies have found that the U.S.’s healthcare emissions have reached 9.8% of the national total (Health Care Without Harm – Arup).

In global standards, a study done by World Bank in 2017, stated that the global healthcare sector was responsible for emitting 5% of the total carbon emissions in 2011 (Health Care Without Harm – Arup). The system that is devoted to healing illnesses produces greenhouse gases while providing care, services, treatments, and technological tests. In comparison to industries that burn fossil fuels directly into the ecosystem, such as coal-fired power plants, healthcare facilities produce carbon emissions in other ways like energy consumption, product manufacturing, use and disposal of products, and transportation.

And because the healthcare system was never seen as a direct contributor to greenhouse gases, there was not a lot of awareness of this sector's emissions until recently.

So, what can the healthcare industry do to reduce its carbon footprint while still providing medical treatment worldwide?

### **How Health Care Facilities Can Reduce their Carbon Footprint?**

Healthcare facilities around the world have opportunities to mitigate their carbon emissions and they can start by acting on those opportunities. There are two categories that define opportunities a facility can take to mitigate its carbon footprint; those are direct and indirect. Direct opportunities are those that have a direct impact on reducing their own carbon footprint, while indirect opportunities are opportunities that can influence things or others to reduce their footprint (Future Healthcare Journal - National Library of Medicine). An example of a direct opportunity to reduce carbon emissions is energy efficiency. For instance, by implementing motion-censored lighting, a space can significantly reduce the amount of energy that goes into lighting a facility at all hours, therefore reducing the amount of energy needed from a power facility. An example of an indirect opportunity that can influence the outcome of carbon emission release is purchasing power. For instance, purchasing from local suppliers can reduce emissions from transporting supplies (Future Healthcare Journal - National Library of Medicine). There are various types of direct and indirect opportunities that can be taken to reduce a healthcare facility's carbon emissions, but it is up to the facility to act on those opportunities.

For healthcare facilities that are looking to enact a more in-depth plan to drastically reduce emissions, a great resource is the Health Care Climate Council's, 'Climate Action: A Playbook for Hospitals'. This playbook conveys how current healthcare facilities are enacting and enforcing climate policies by following a three-pillar approach:

1. **Mitigation:** reduce the carbon footprint from operations and implement low-carbon healthcare delivery
  2. **Resilience:** Prepare its facilities for climate impacts and help build community health and climate resilience.
  3. **Leadership:** Use the trusted voice and purchasing power of the sector to support the transition to climate-smart policies and a low-carbon economy.
-

---

April 2023

These are just a few of the many processes and resources that healthcare facilities can utilize to reduce their impact on climate change. Now is a crucial time for the healthcare industry to take action.

**What can WHEA members do?**

As WHEA members we can support healthcare facilities by doing a Green House Gas Emissions Inventory. Having a baseline will assist any organization in helping achieve the next step. Start small, set a goal and tell your story. It is important to share success stories to empower and encourage others to move forward.

## Resources

“A Commission on Climate Change”. The Lancet. vol. 373 no. 9676, May 2009. P1659.  
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)60922-3/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)60922-3/fulltext)

“Climate Action: A Playbook for Hospitals.” Healthcare Climate Council. Oct. 2017.  
<https://climatecouncil.noharm.org/>

Health Care Without Harm & Arup. “Health Care’s Climate Footprint.”  
Climate Health Care Series, Green Paper Number One. September 2019.  
[https://noharm-global.org/sites/default/files/documents-files/5961/HealthCaresClimateFootprint\\_092319.pdf](https://noharm-global.org/sites/default/files/documents-files/5961/HealthCaresClimateFootprint_092319.pdf)

Tomson C. Reducing the carbon footprint of hospital-based care. Future Hosp J. Feb. 2015;  
2(1):57-62. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6465872/>

---