



# CLIMATE CHANGE AND HEALTH SUPPLY CHAINS

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RHSC SSWG Meeting

January 31, 2023

# Outline

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- Introduction
- Health supply chains
- Climate change impacts on health supply chains
- Health supply chain contributions to climate change
- Opportunities to act

# Why discuss health supply chains & climate change now?

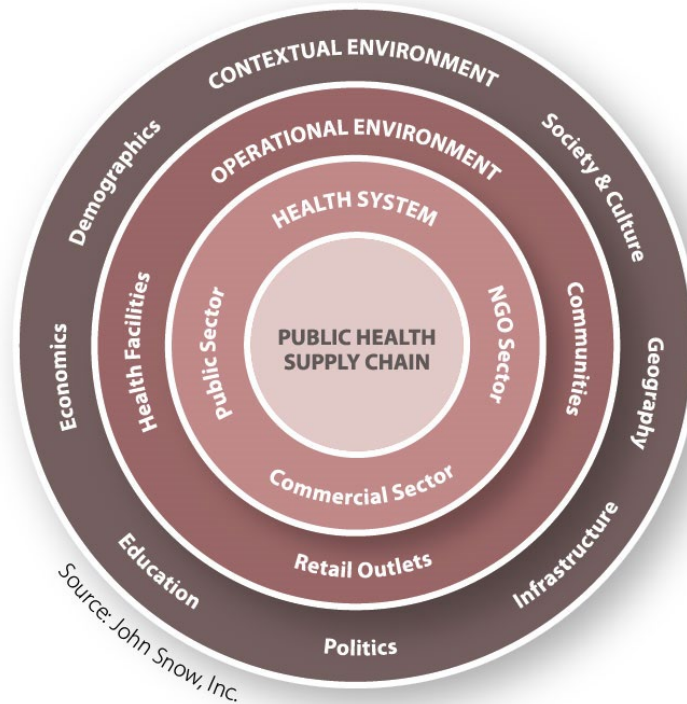
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- Climate change is disrupting supply chains
- Supply chains contribute to climate change through greenhouse gas emissions and waste generated

# Health supply chains operate within a broad environment

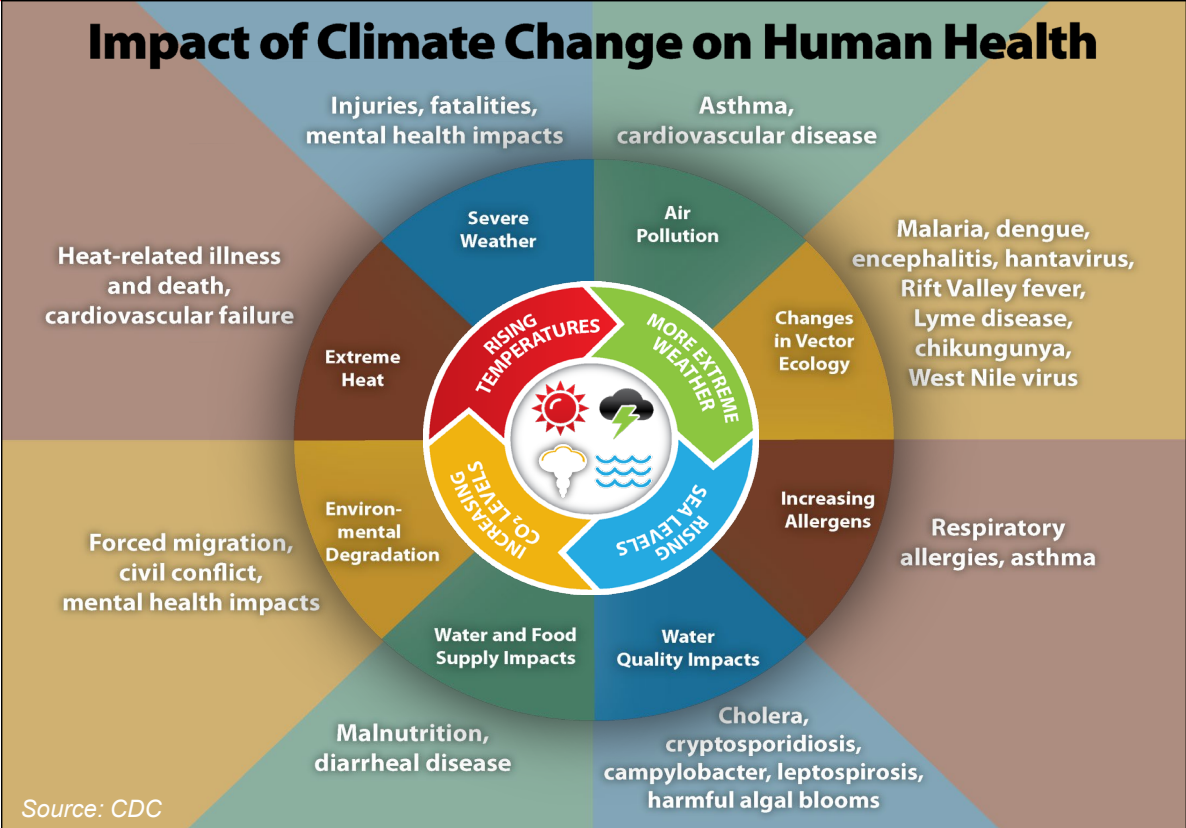
## Health supply chains...

- Are nested within a country's health system, and its operational and contextual environments
- Are critical: "No product, no program."
- Understanding the context surrounding the supply chain enables a better understanding of risks and opportunities



# Climate change is impacting supply chains

- The operational and contextual environments in which health supply chains operate are being impacted by climate change
- Shifting disease burdens change supply/demand dynamics
- Climate-related disasters disrupt supply chains



# Examples of climate change impacts

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- Shifting disease burdens are changing supply/demand dynamics
  - Hotter and wetter climates are changing vector borne disease patterns. In 2022, The Lancet reported that malaria is increasing in highland areas in Africa, Asia and the Americas, and that periods of transmission are growing longer.
  - Increasingly severe and frequent flooding is leading to rising waterborne disease burdens. The BMJ recently reported that the mortality rate from cholera in Malawi and Haiti tripled in 2022.
- Climate-related disasters disrupt supply chains
  - April 2022: the Port of Durban shut due to flooding, impacting shipments to SA and neighboring countries that import the majority of their medical commodities.
  - August 2022: water levels in the Rhine river, a major European transport artery, dropped so low due to drought that vessels reduced their carrying capacity by 25%. This had had knock-on effects throughout global supply chains.

# Health supply chain contributions to climate change

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- Healthcare's climate footprint is 4.4% of global net GHG emissions – meaning if the health sector were a country, it would be the fifth largest emitter in the world.
- 71% of those emissions are linked with the supply chain, including the production, transport and disposal of pharmaceuticals and medical devices.

# Opportunities to act

- Adapt supply chains to increase resilience
  - Supply planning, capacity strengthening, and network design and optimization must take into account shifting disease burdens, and increasingly frequent and severe climate-related disasters
- Mitigate the impacts of supply chains
  - Measure and reduce GHG emissions and waste from supply chain activities
  - Institute sustainable procurement practices throughout the chain





# Thank you

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