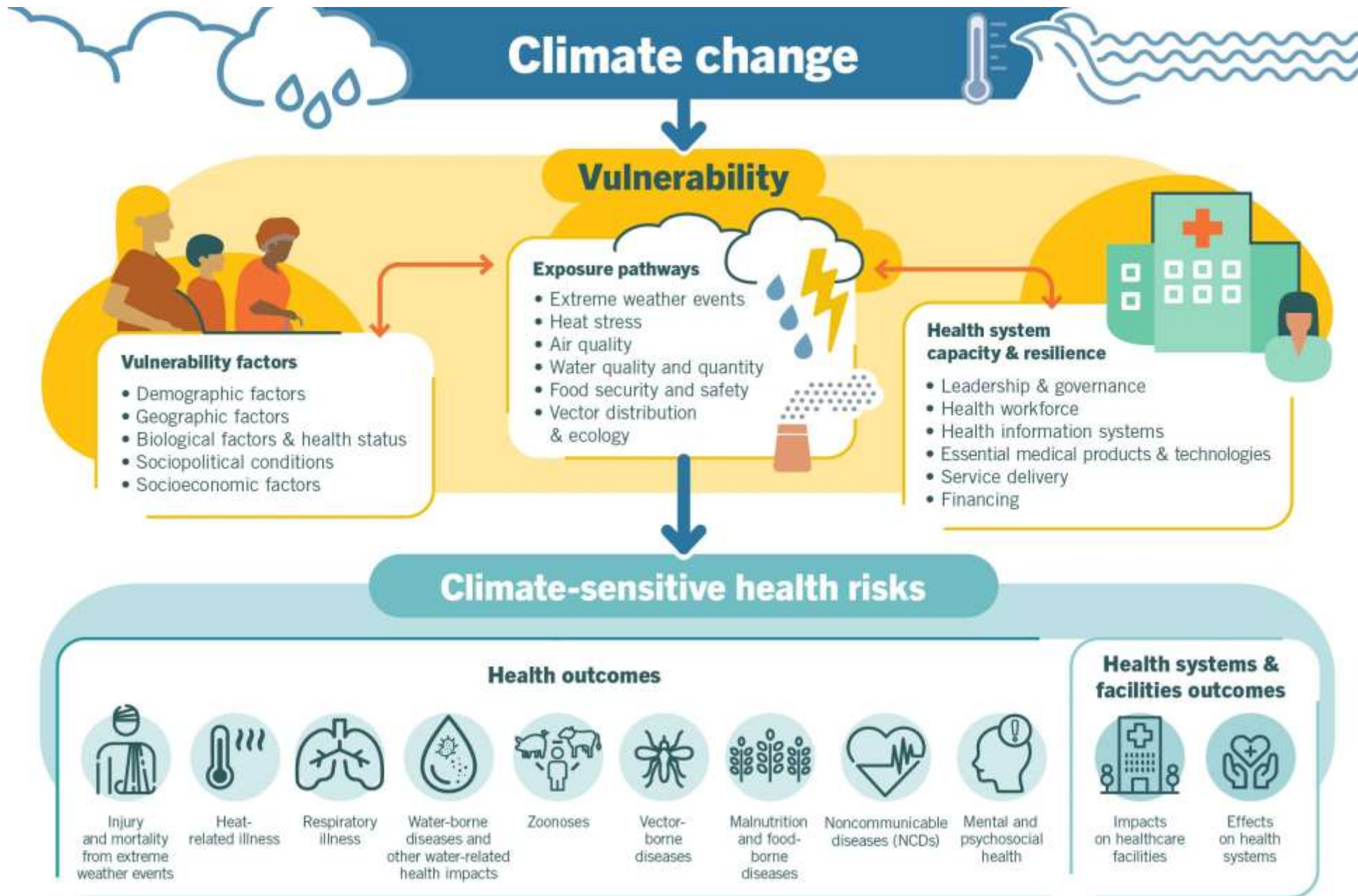




Climate and Health in CAREC

29 May 2024 | Almaty, Kazakhstan





Impact of Climate Change on Health



WHO calls climate the
**“Biggest health threat
of the 21st century and
beyond”**



**5.6 billion people
affected and \$1.5
trillion lost due to
climate change in past
30 years**



**\$ 2-4 billion direct
damage costs* per
year to health by 2030**



**Only 0.5% of
multilateral climate
funding is allocated to
projects that explicitly
address human health.**

*Direct damages refer to the physical or structural impact caused by the climate change such as the destruction of infrastructure caused by the force of high winds, flooding or ground shaking

Source: World Health Organization: WHO. (2023, October 12). *Climate change*. <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

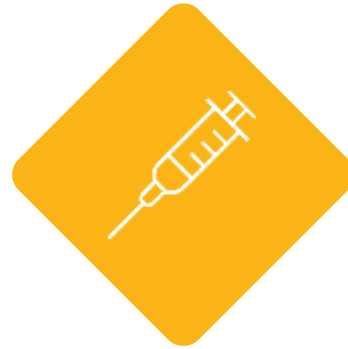
Health Sectors Contribution to Climate Change



The healthcare sector would be the **5th largest emitter on the planet**, if it was a country



Healthcare climate footprint equivalent to annual **GHG emissions from 514 coal-fired power plants**



Healthcare produces **5.9 million tons of medical waste per year**



Supply chain contribute to 71% of the health sector's carbon footprint



Health sector emissions to triple by 2050 reaching 6 gigatons per year in case of inaction

Key Climate and Health Issues in the CAREC Region

Heat Stress

- Heatwaves that will increase heat stress and heat related morbidity and mortality, including non-communicable diseases
- Without effective adaptation measures taken, annual heat-related mortality in the Central Asian region might rise by 139% by 2030 and 301% by 2050. (1)

Vector distribution

- Emergence of novel infectious diseases (e.g. COVID-19), rising occurrences of zoonotic diseases and spill-overs and an encroachment of infectious disease vectors into previously unaffected geographic locations and altitudes. Risk that some diseases might be reintroduced after having successfully been eradicated (e.g. Malaria).

Food Security and Safety

- Various impacts on food systems through water scarcity, droughts, melting glaciers, desertification can lead to declines in agricultural productivity, resulting in increased malnutrition and climate change migration.

Extreme Weather events

- Climate change threatens health security by increasing the frequency, length, and intensity of public health emergencies, or by creating compound disasters with severe and widespread adverse effects. Climate change has also been identified as a multiplier, which can exacerbate existing threats to human health and inequities that result in more severe consequences for vulnerable populations.

(1) Honda Y, Kondo M, McGregor G, Kim H, Guo Y-L, Hijioka Y, Yoshikawa M, Oka K, Takano S, Hales S (2014) Heat-related mortality risk model for climate change impact projection. Environ Health Prev Med 19:56–63

Strategic Framework



PILLAR 1

Leadership and human resource capacity

Knowledge exchange on health and climate change

Integration of climate change and health security into prevention, preparedness response plans e.g., in NAPHS

Governance structure with legal and regulatory framework (national focal points on health and climate change in all sectors)

Develop workforce capacity on climate change and health

PILLAR 2

Technical preparedness (Surveillance and Labs)

Develop country capacities on sex-disaggregated climate-related disease and risk surveillance and assessment on health and climate change.

Develop database on sex-disaggregated climate change-related health outcomes

Research gender-differentiated effects of climate change on health

PILLAR 3

Access to Supplies and Surge Capacity

PILLAR 4

Vulnerable population groups and border health

Community-level awareness and resilience on climate and health

Low carbon and climate resilient and low carbon health facilities in border areas

Climate Change and Health Actions