

THE 2019 REPORT OF THE LANCET COUNTDOWN
ON HEALTH AND CLIMATE CHANGE

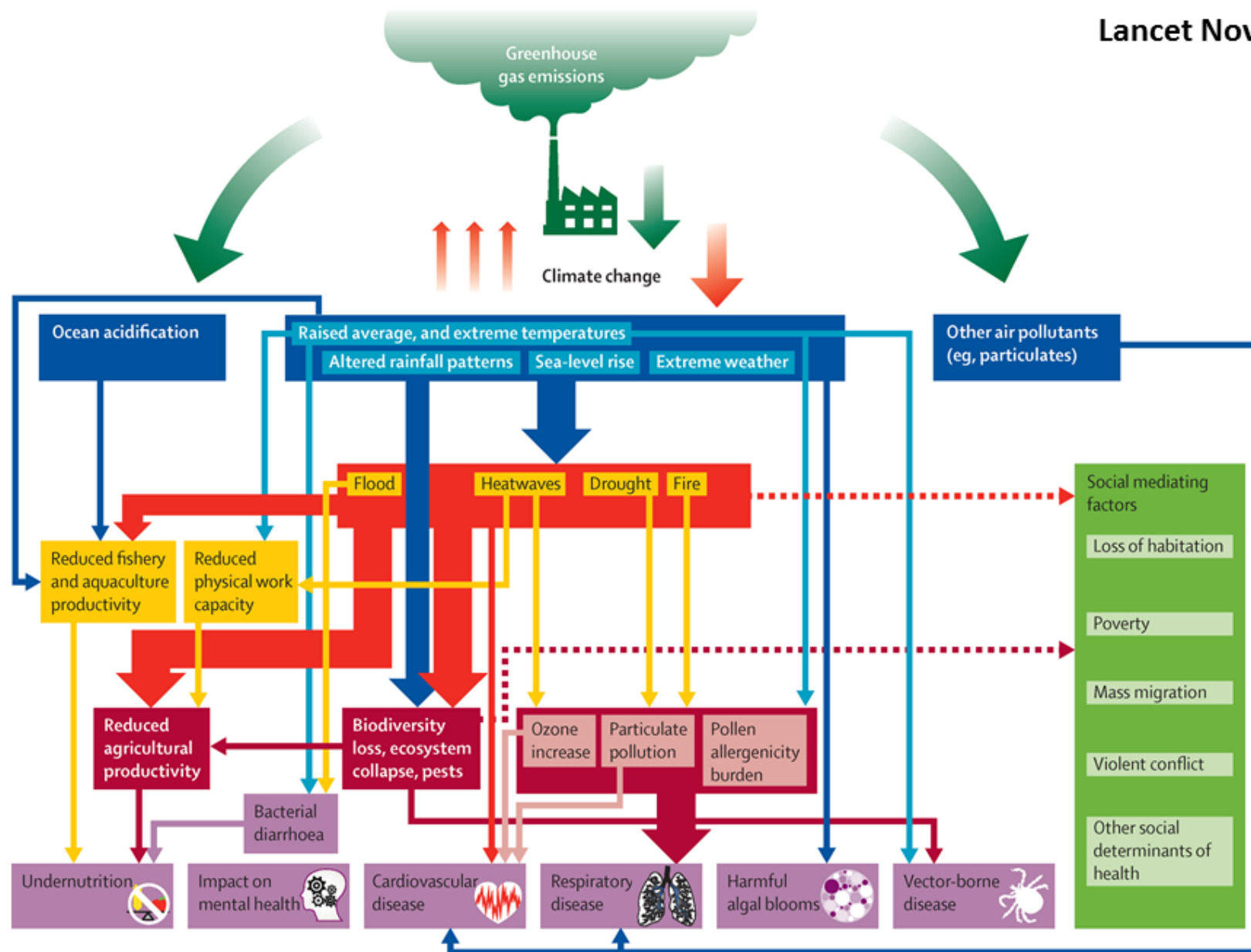
*“Ensuring that the health of a child born today
is not defined by a changing climate”*

AMLD AI&Climate Change// 27 January 2020
Slava Jankin @smych @LancetCountdown
Data Science Lab
Hertie School, Berlin



Health effects of global climate change

Lancet Nov 2015




Health, Climate Change & The Lancet



THE LANCET
June, 2015
www.thelancet.com

Health and climate change



"Tackling climate change could be the greatest global health opportunity of the 21st century."

A Commission by The Lancet

THE LANCET
November, 2015
www.thelancet.com



The Lancet Countdown: Tracking Progress on Health and Climate Change



A Review by The Lancet

THE LANCET
October, 2017
www.thelancet.com

The 2017 report of the Lancet Countdown: from 25 years of inaction to a global transformation for public health



A Review by The Lancet

THE LANCET
November, 2018
www.thelancet.com

The 2018 report of the Lancet Countdown on health and climate change



"The nature and scale of the response to climate change will be the determining factor in shaping the health of nations for centuries to come."



A Review by The Lancet

THE LANCET
November, 2019
www.thelancet.com

The 2019 report of the Lancet Countdown on health and climate change



"An unprecedented challenge demands an unprecedented response, and it will take the work of the 7.5 billion people currently alive to ensure that the health of a child born today is not defined by a changing climate."

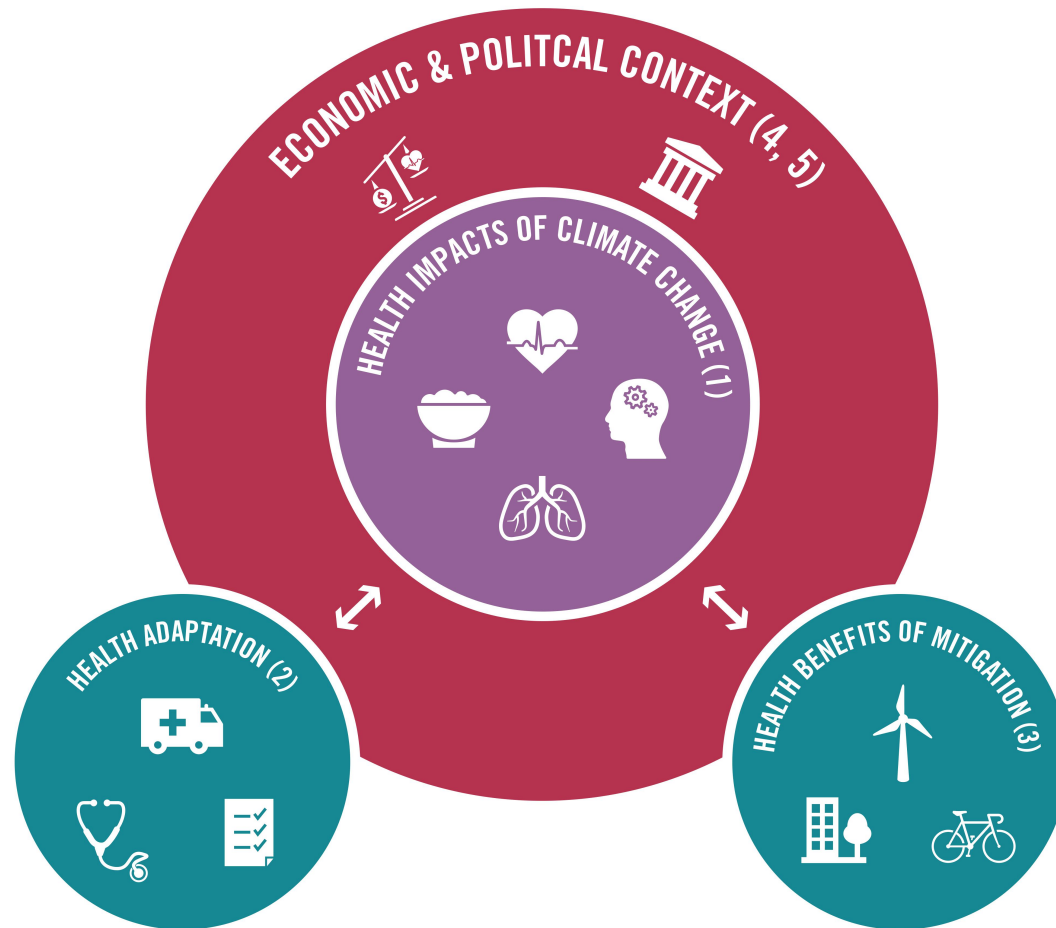


A Review by The Lancet

Lancet Countdown Partners



The Five Working Groups of the Lancet Countdown



2019 Indicators



Section	Indicator	
Climate Change Impacts, Exposures and Vulnerability	1.1.1: Vulnerability to extremes of heat	
	1.1.2: Health and exposure to warming	
	1.1.3: Exposure of vulnerable populations to heatwaves	
	1.1.4: Change in labour capacity	
	1.2.1: Wildfires	
	1.2.2: Flood and drought	
	1.2.3: Lethality of weather-related disasters	
	1.3: Global health trends in climate-sensitive diseases	
	1.4.1: Climate suitability for infectious disease transmission	
	1.4.2: Vulnerability to mosquito-borne diseases	
	1.5.1: Terrestrial food security and undernutrition	
	1.5.2: Marine food security and undernutrition	
	Adaptation, Planning, and Resilience for Health	2.1.1: National adaptation plans for health
		2.1.2: National assessments of climate change impacts, vulnerability, and adaptation for health
2.1.3: City-level climate change risk assessments		
2.2: Climate information services for health		
2.3.1: Detection, preparedness and response to health emergencies		
2.3.2: Air conditioning – benefits and harms		
2.4: Spending on adaptation for health and health-related activities		

2019 Indicators



Section	Indicator
Mitigation Actions and Health Co-Benefits	3.1.1: Carbon intensity of the energy system
	3.1.2: Coal phase-out
	3.1.3: Zero-carbon emission electricity
	3.2: Access and use of clean energy
	3.3.1: Exposure to air pollution in cities
	3.3.2: Premature mortality from ambient air pollution by sector
	3.4: Sustainable and healthy transport
	3.5: Food, agriculture, and health
3.6: Mitigation in the healthcare sector	
Economics and Finance	4.1: Economic losses due to climate-related extreme events
	4.2: Economic costs of air pollution
	4.3.1: Investment in new coal capacity
	4.3.2: Investments in zero-carbon energy and energy efficiency
	4.3.3: Employment in low-carbon and high-carbon industries
	4.3.4: Funds divested from fossil fuels
	4.4.1: Fossil fuel subsidies
	4.4.2: Coverage and strength of carbon pricing
Public and Political Engagement	5.1: Media coverage of health and climate change
	5.2: Individual engagement in health and climate change
	5.3: Engagement in health and climate change in the United Nations General Assembly
	5.4: Engagement in health and climate change in the corporate sector

Key Messages of the 2019 Report

"The life of every child born today will be profoundly affected by climate change...

Without accelerated intervention, this new era will come to define the health of people at every stage of their lives."





Key Messages of the 2019 Report

"A second path—which limits the global average temperature rise to “well below 2°C”—is possible, and would transform the health of a child born today for the better, right the way through their life.”

Key Messages of the 2019 Report

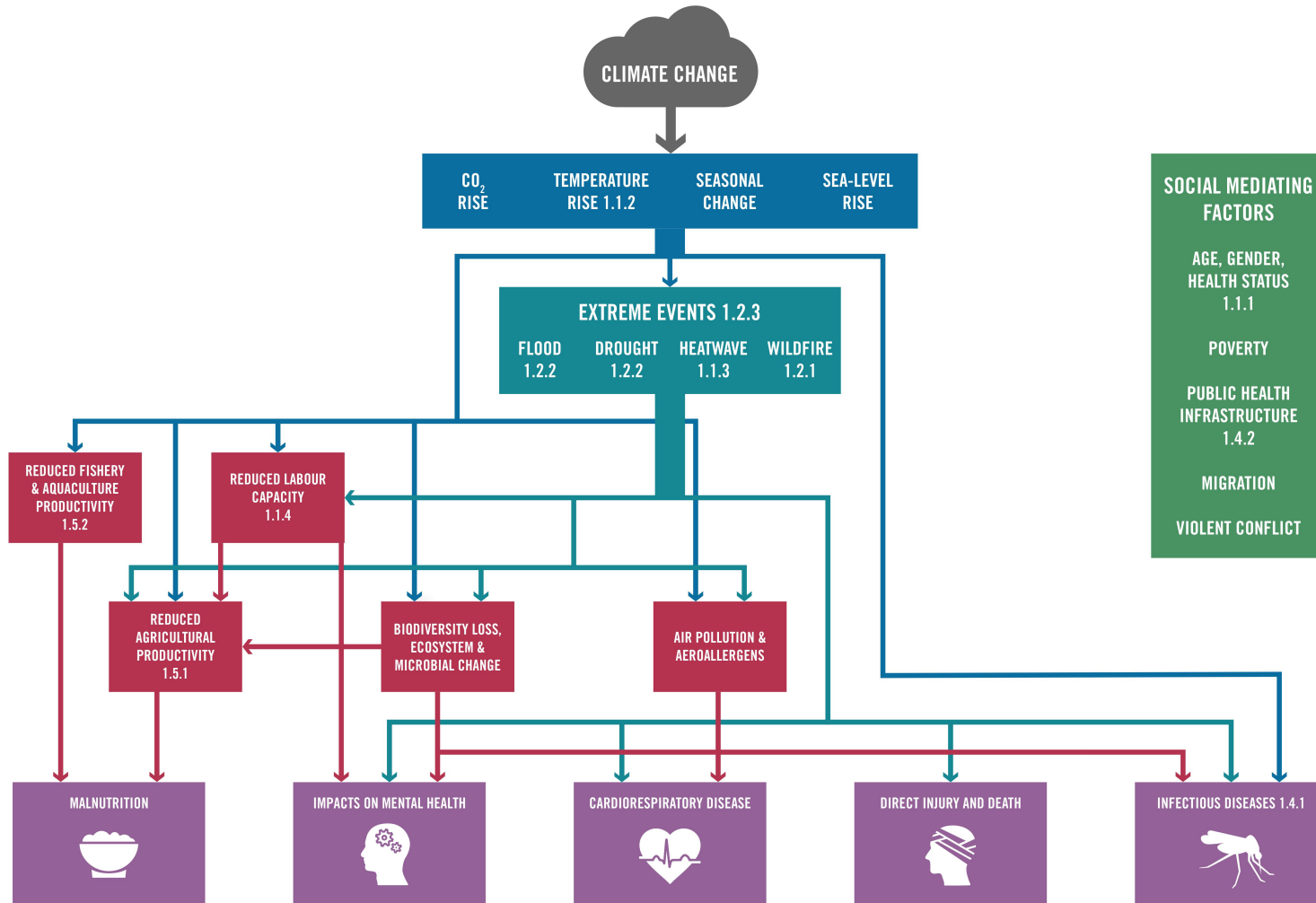
"An unprecedented challenge demands an unprecedented response.

It will take the work of the 7.5 billion people currently alive to ensure that the health of a child born today is not defined by a changing climate."





Climate Change Impacts, Exposures & Vulnerability



1.1 – Heat and Health: Vulnerability to Extremes of Heat; Exposure to Warming; Exposure of Heatwaves; Change in Labour Capacity

1.2 – Health and Extreme Weather Events: Wildfires; Flood and Drought; Lethality of Weather-Related disasters

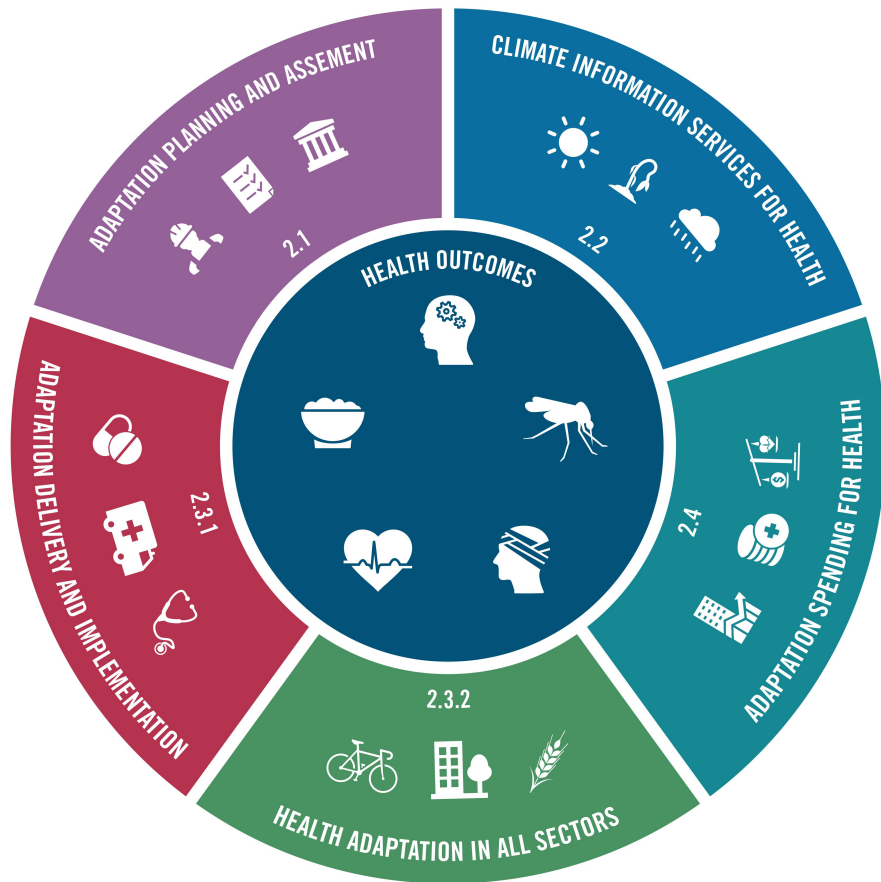
1.3 – Global Health Trends in Climate-Sensitive Diseases

1.4 – Climate-Sensitive Infectious Diseases: Suitability for Transmission; Vulnerability

1.5 – Food Security and Undernutrition: Terrestrial Food; Marine Food



Adaptation Planning & Resilience for Health



2.1 – Adaptation Planning and Assessment: National Adaptation Plans and Assessments for Health; City-Level Climate Change Risk Assessments

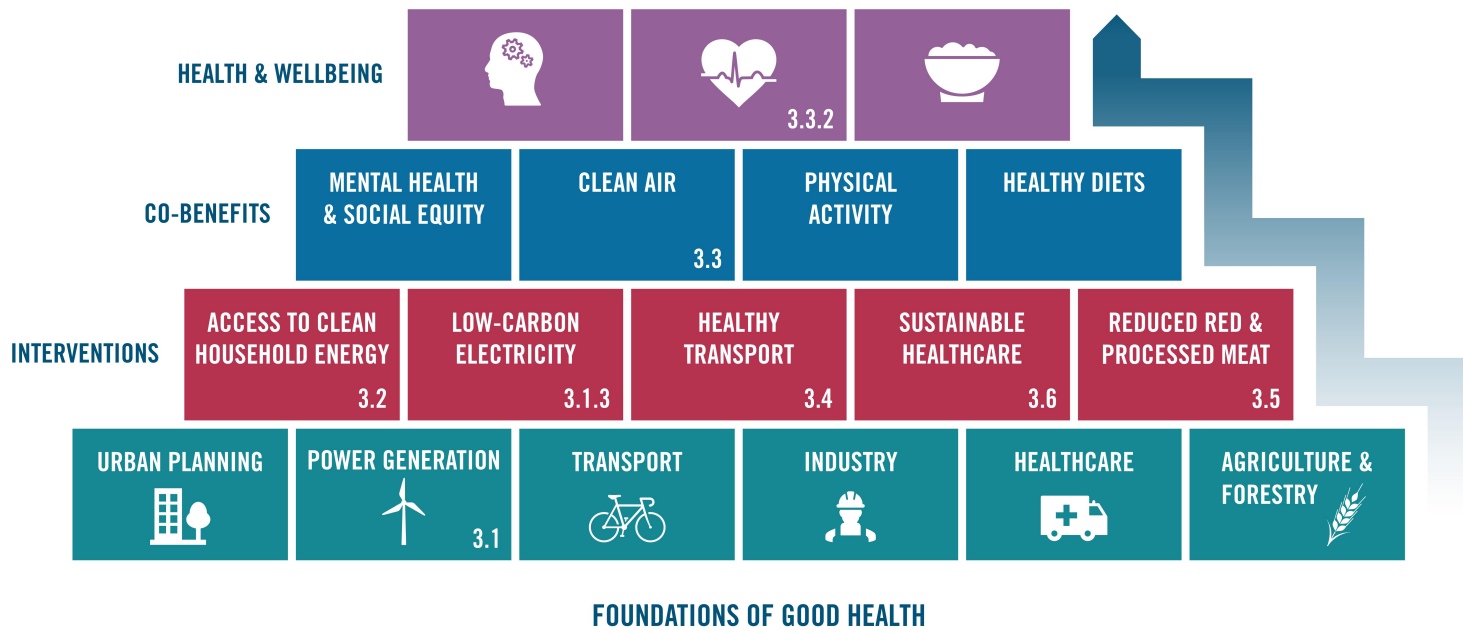
2.2 – Climate Information Services for Health

2.3 – Adaptation Delivery and Implementation: Detection, Preparedness and Response to Health Emergencies; Air Conditioning – Benefits and Harms

2.4 – Adaptation Spending for Health



Mitigation Actions & Health Co-Benefits



3.1 – Power Generation: Carbon Intensity of the Energy System; Coal Phase-Out; Zero-Carbon Emission Electricity

3.2 – Access and Use of Clean Energy

3.3 – Clean Air: Air Pollution in Cities; Premature Mortality from Ambient Air Pollution by Sector

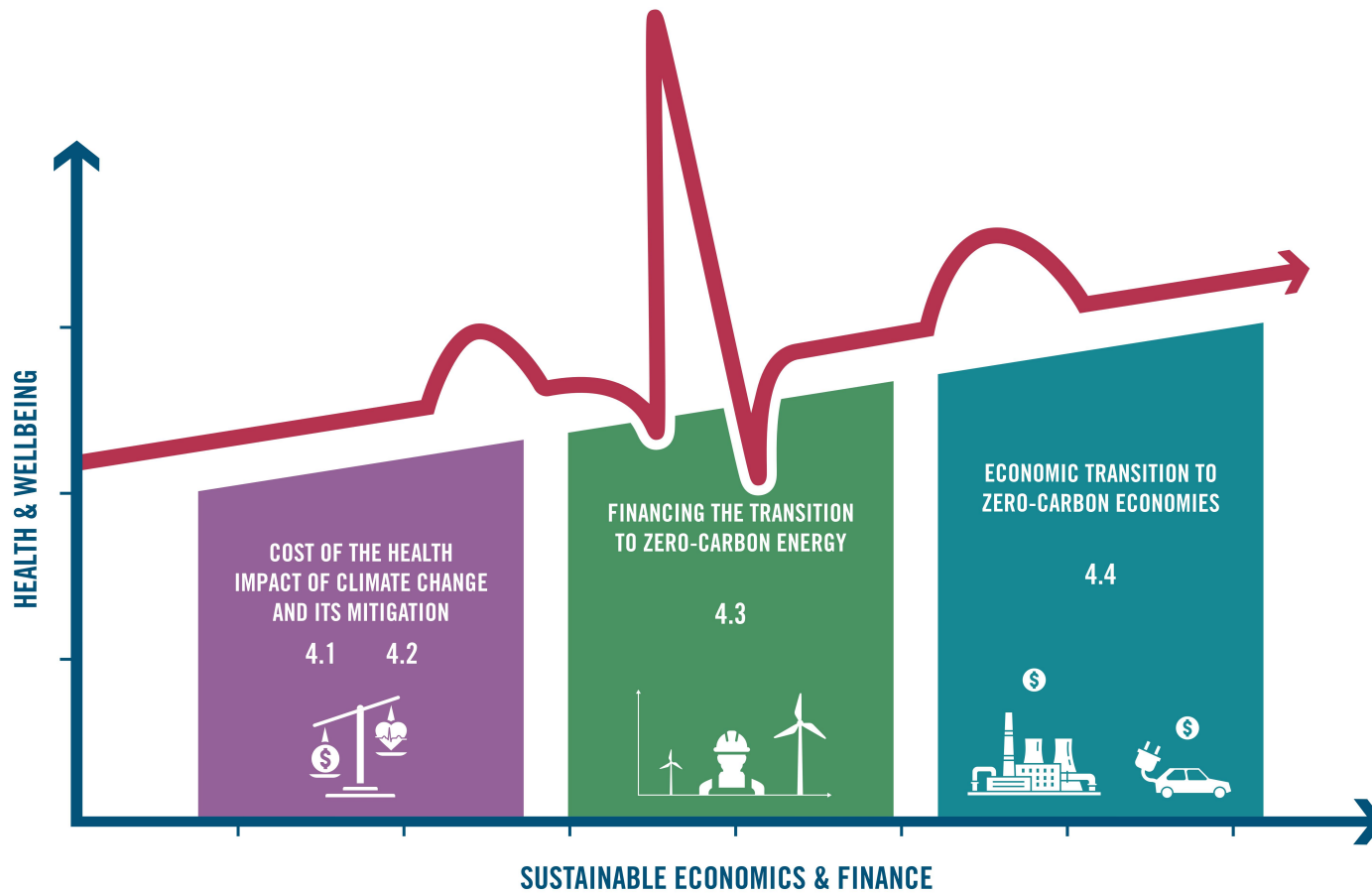
3.4 – Sustainable and Healthy Transport

3.5 – Food, Agriculture, and Health

3.6 – Mitigation in the Healthcare Sector



Economics and Finance



4.1 – Economic Losses due to Climate-Related Extreme Events

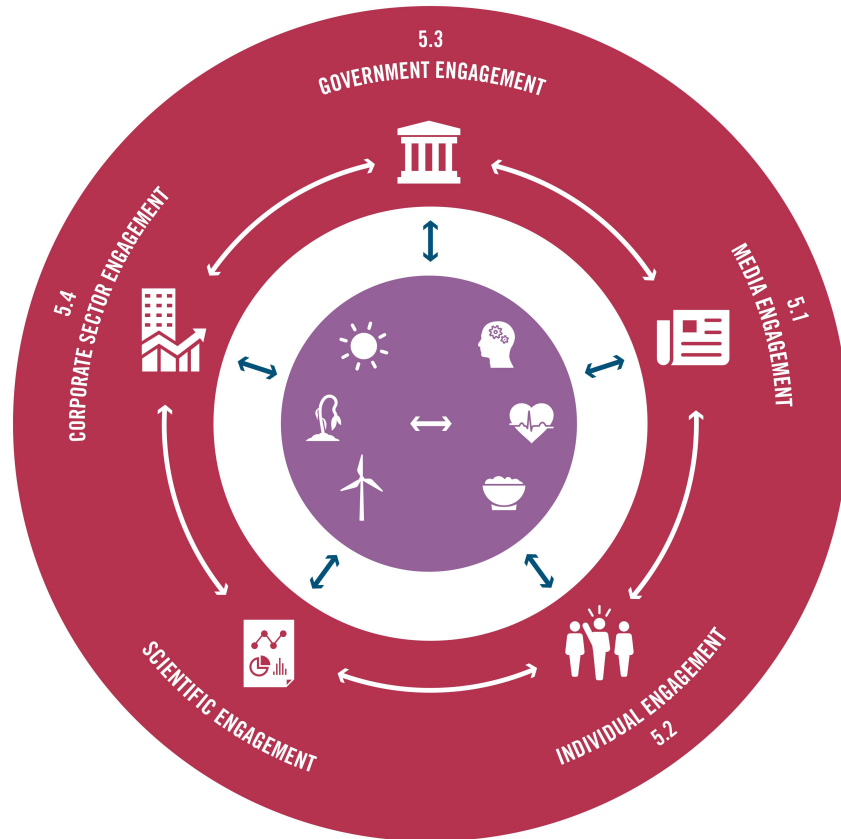
4.2 – Economic Costs of Air Pollution

4.3 – Financing the Transition to Zero-Carbon Energy: Investment in New Coal Capacity, Zero-Carbon Energy and Energy Efficiency; Employment in Low-carbon and High-carbon Industries; Funds Divested from Fossil Fuels

4.4 – Economic Transition to Zero-Carbon Economies: Fossil Fuel Subsidies; Coverage and Strength of Carbon Pricing, and Use of Revenues



Public and Political Engagement



5.1 – Media Coverage Of Health And Climate Change

5.2 – Individual Engagement in Health and Climate Change

5.3 – Engagement in Health and Climate Change in the United Nations General Assembly

5.4 – Engagement in Health and Climate Change in the Corporate Sector



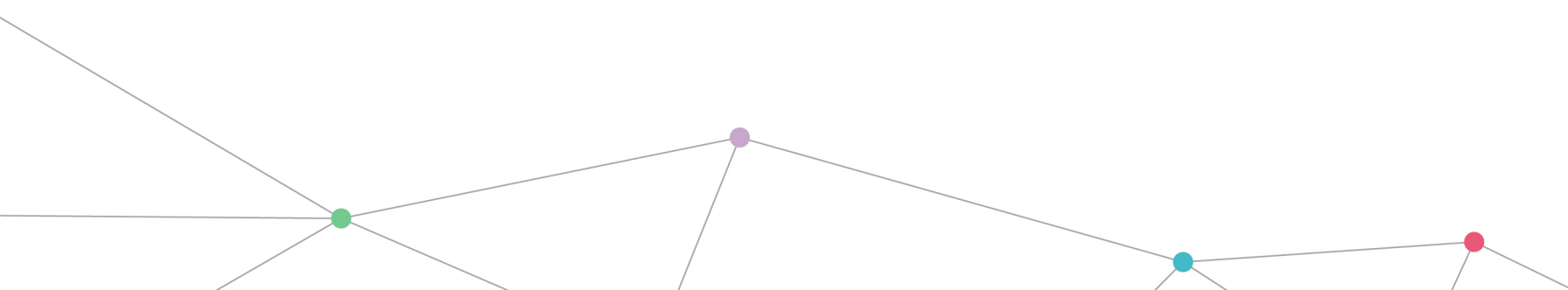
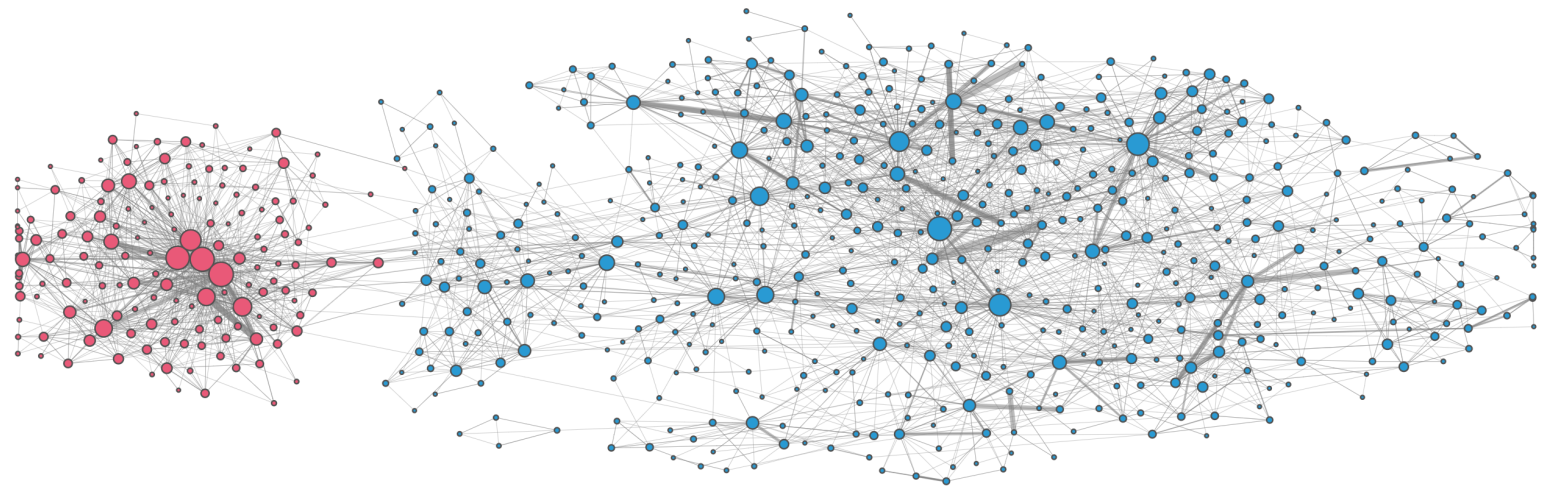
5.2: Individual Engagement in Health and Climate Change

Headline Finding:

Individuals typically seek information about either health OR climate change.

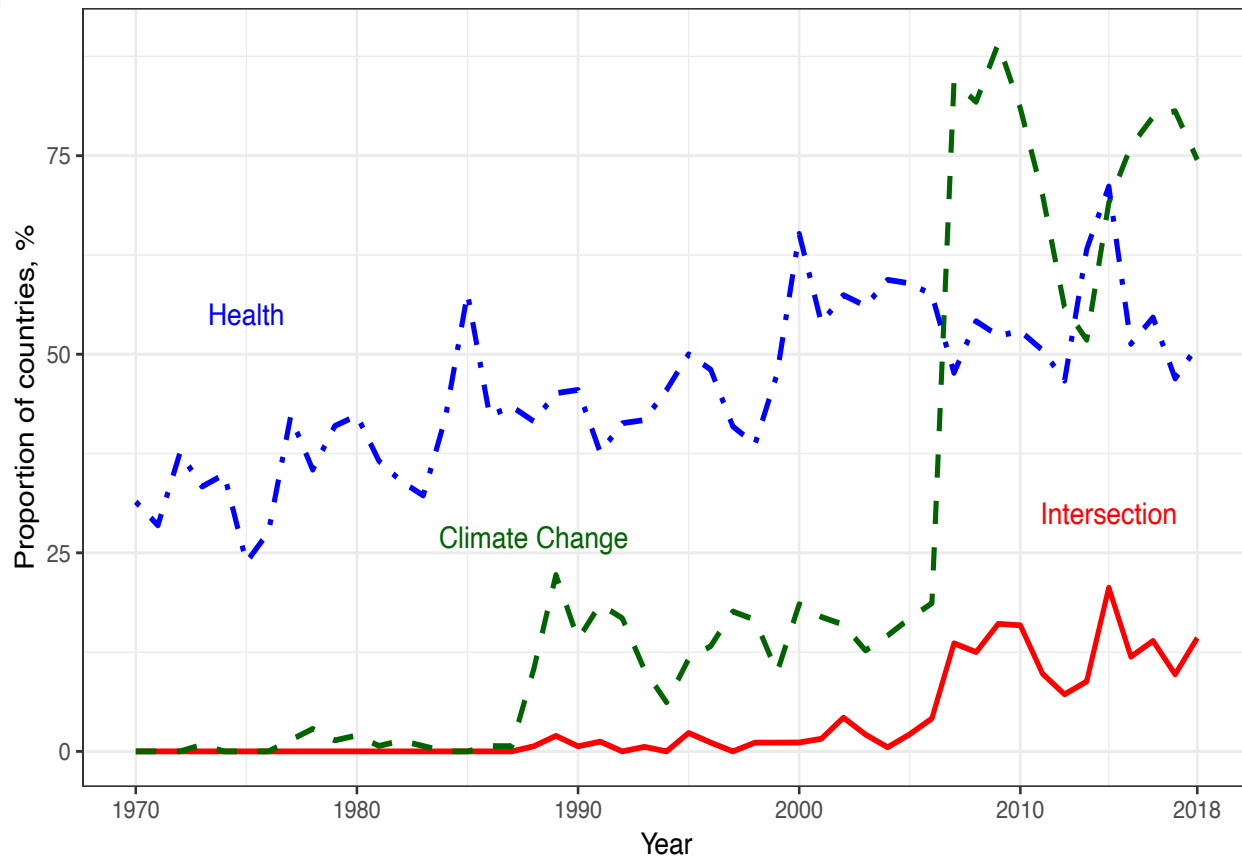
Where they seek information across these areas, it is primarily driven by an initial interest in health-related content.

■ Health-related articles ■ Climate change-related articles





5.3: Government Engagement in Health and Climate Change



Headline Finding:

National leaders are increasingly drawing attention to health and climate change at the UN General Debate.

This trend has been led by Small Island Developing States, who comprised of 36% of the total countries referencing health and climate change in 2018.



5.3: Government Engagement in Health and Climate Change



JB/12

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46

The meeting was suspended at 11.25 a.m. and resumed at 11.50 a.m.

ADDRESS BY MR. GEORGE BUSH, PRESIDENT OF THE UNITED STATES OF AMERICA

The PRESIDENT: The Assembly will now hear an address by the President of the United States of America.

Mr. George Bush, President of the United States of America, was escorted into the General Assembly Hall.

The PRESIDENT: On behalf of the General Assembly I have the honour to welcome to the United Nations the President of the United States of America, His Excellency Mr. George Bush, and to invite him to address the General Assembly.

President BUSH: I am honoured to address the General Assembly today at the beginning of its forty-fourth session. I should like to congratulate Joseph Garba of Nigeria, a distinguished diplomat, on his election as President of this session of the General Assembly, and I wish him success in his presidency.

I feel a great personal pleasure on this occasion, for this is a homecoming

UN General Debate Corpus

- All speeches from 1970 to 2018 (and counting).
- United Nations Dag Hammarskjold Library: English version.
- 8,093 statements.
- UN membership: 70 (1970) and 193 (2018).
- On average 123 sentences, 945 unique forms, and 3,248 individual words each.
- <https://github.com/sjankin/UnitedNations>



5.3: Government Engagement in Health and Climate Change

“Speeches at the General Debate are interesting because they flesh out national policies; what states think. It is the one place where states can speak their mind – it reflects the issues that states consider to be most important. In this way, the speeches in the General Debate are unique... The [GD] speeches are one of the least coordinated parts of the [EU’s] UN activities.”

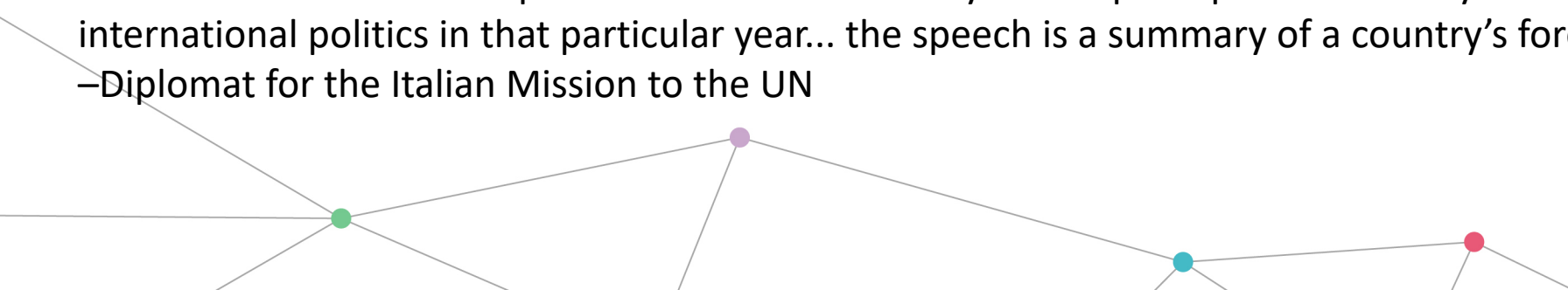
–Deputy Head of Finnish Mission to the UN

“coordination for the General Debate does not happen; governments do not want other states looking over their speeches ... these speeches are the most sovereign thing that a country does as a member of the UN.”

–Spokesperson for the German Mission to the UN

“the General Debate is important because it officially sums up the position of Italy on the most important things in international politics in that particular year... the speech is a summary of a country’s foreign policy in a given year.”

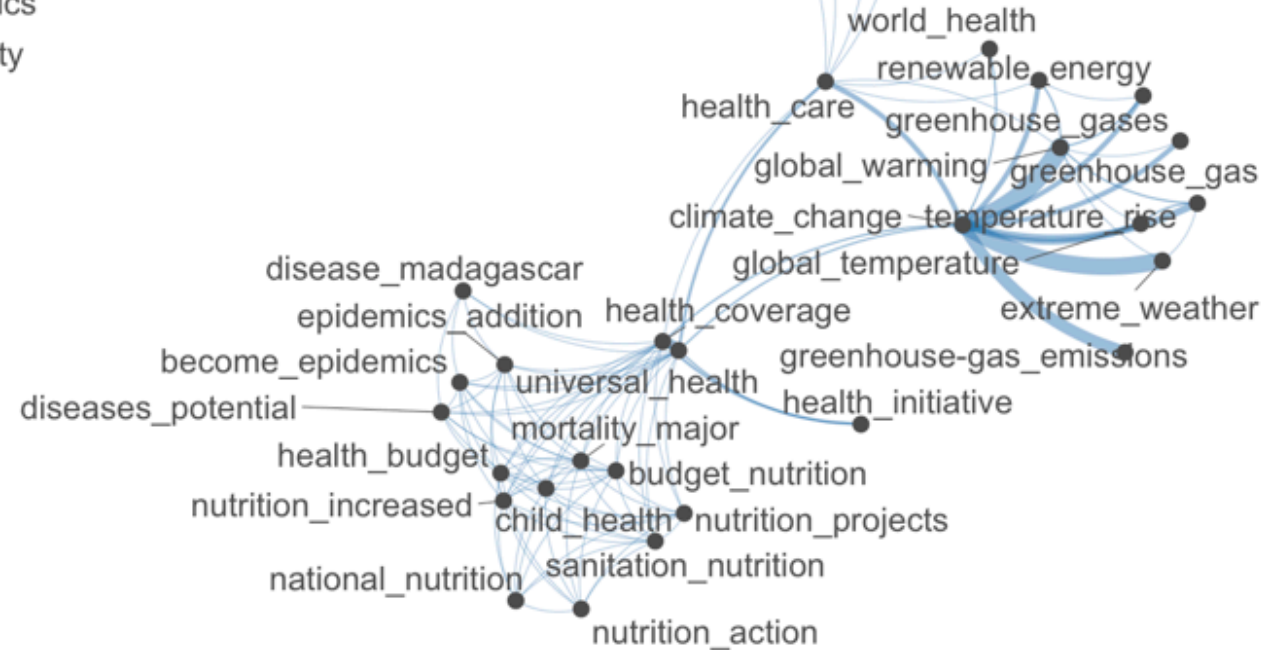
–Diplomat for the Italian Mission to the UN





5.3: Government Engagement in Health and Climate Change

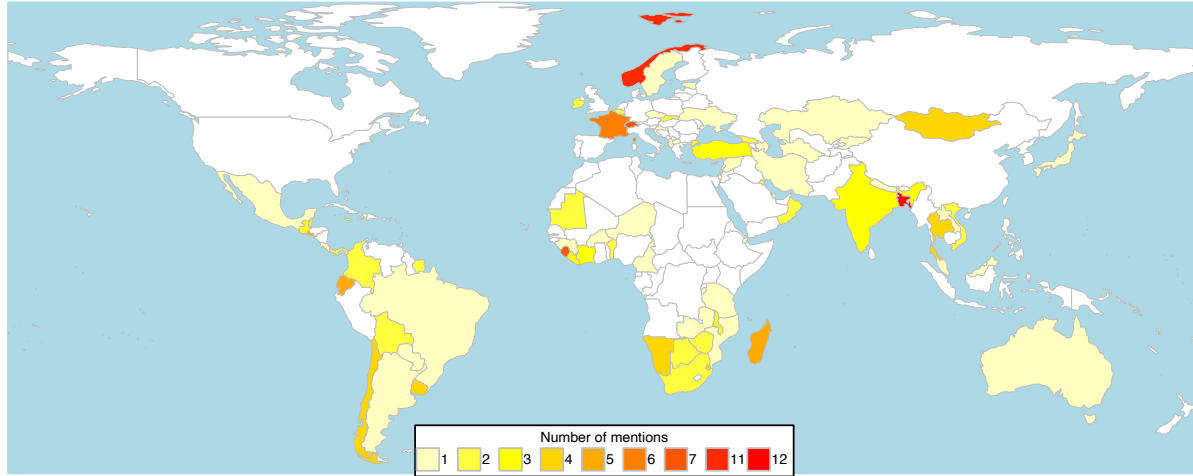
Health terms	Climate change terms
•malaria	•climate change
•diarrhoea	•global warming
•infection	•green house
•disease	•temperature
•sars	•extreme weather
•measles	•global environmental change
•pneumonia	•climate variability
•epidemic	•greenhouse
•pandemic	•low carbon
•public health	•ghge
•health care	•renewable energy
•epidemiology	•carbon emission
•healthcare	•co2 emission
•health	•climate pollutant
•mortality	
•morbidity	
•nutrition	
•illness	
•infectious	
•ncd	
•non-communicable disease	
•noncommunicable disease	
•communicable disease	
•air pollution	
•nutrition	
•malnutrition	
•mental disorder	
•stunting	



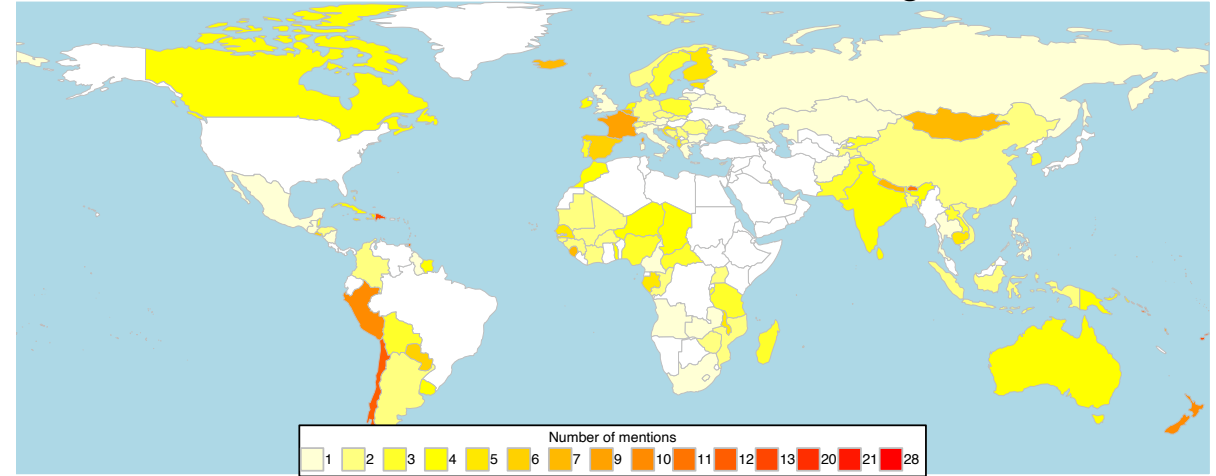


5.3: Government Engagement in Health and Climate Change

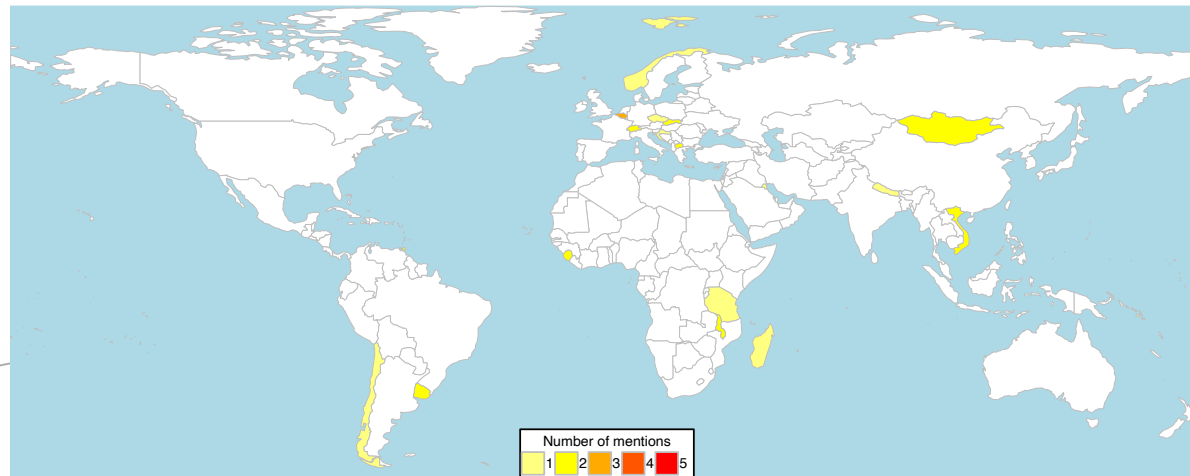
2018 UN General Debate: Health



2018 UN General Debate: Climate Change



2018 UN General Debate: Intersection



The New Interactive Data Platform

The screenshot displays the LANCET COUNTDOWN website interface. At the top, a navigation bar includes the site logo, a menu with links for Home, 2019 Report, News & Events, Resources, About, Contact, and Press, a search function, and social media icons for Facebook and Twitter. A prominent teal button labeled "EXPLORE OUR DATA" with a right-pointing arrow is also present.

Below the navigation bar is an "OVERVIEW" section featuring five colored boxes with icons and text:

- CLIMATE CHANGE IMPACTS, EXPOSURES AND VULNERABILITY** (light blue box with a heart rate icon)
- ADAPTATION, PLANNING, AND RESILIENCE FOR HEALTH** (pink box with a plus sign icon)
- MITIGATION ACTIONS AND HEALTH CO-BENEFITS** (light purple box with a caduceus icon)
- ECONOMICS AND FINANCE** (light green box with a dollar sign icon)
- PUBLIC AND POLITICAL ENGAGEMENT** (light blue box with a hand icon)

The main content area is titled "THE FIVE WORKING GROUPS OF THE LANCET COUNTDOWN" and features a central diagram. The diagram consists of a large central purple circle labeled "HEALTH IMPACTS OF CLIMATE CHANGE (1)" containing icons for a heart, a bowl, a brain, and lungs. This central circle is surrounded by three smaller teal circles: "HEALTH ADAPTATION (2)" (with icons for an ambulance, stethoscope, and checklist), "HEALTH BENEFITS OF MITIGATION (3)" (with icons for a wind turbine, factory, and bicycle), and "ECONOMIC & POLITICAL CONTEXT (4, 5)" (with icons for a scale and a classical building). Double-headed arrows connect the central circle to each of the three surrounding circles, indicating their interrelated nature.

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"An unprecedented challenge demands an unprecedented response.

It will take the work of the 7.5 billion people currently alive to ensure that the health of a child born today is not defined by a changing climate."



Thank you

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@LancetCountdown

THE LANCET

