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FUTURE OF GLOBAL HEALTH DURING TURBULENT TIMES

MICHAEL MERSON, MD

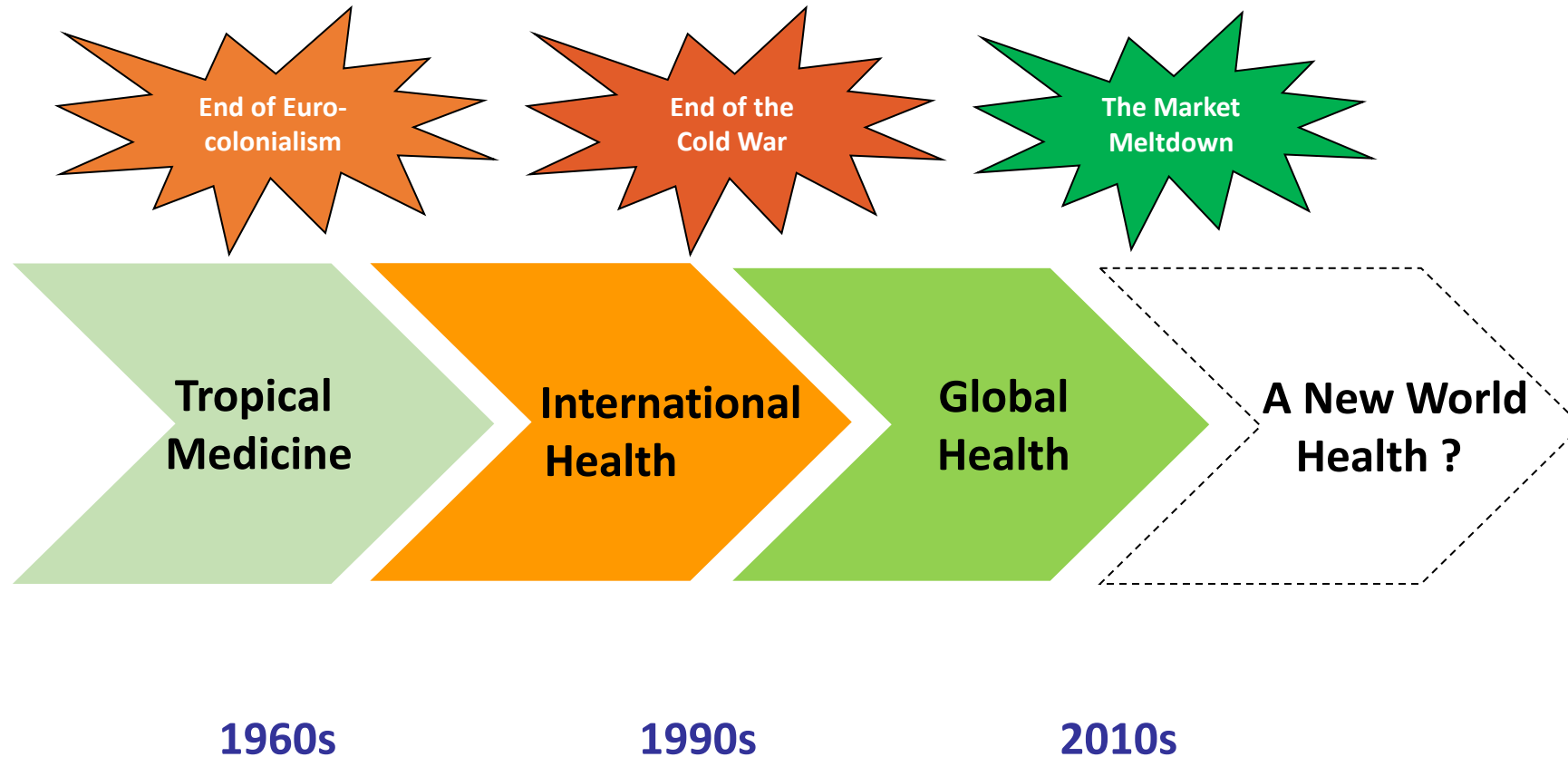
Wolfgang Joklik Professor Emeritus of Global Health

Duke Global Health Institute, Duke University

What is Global Health?

- Improve health and **achieve equity in health** for all people worldwide
- Emphasizes **transnational** health issues, determinants, and solutions
- Involves **many disciplines** within and beyond the health sciences and promotes **interdisciplinary** collaboration
- Is a synthesis of **population-based prevention** with individual-level **clinical care**

A Brief History of Global Health



1981: HIV/AIDS Worst Pandemic in Modern History



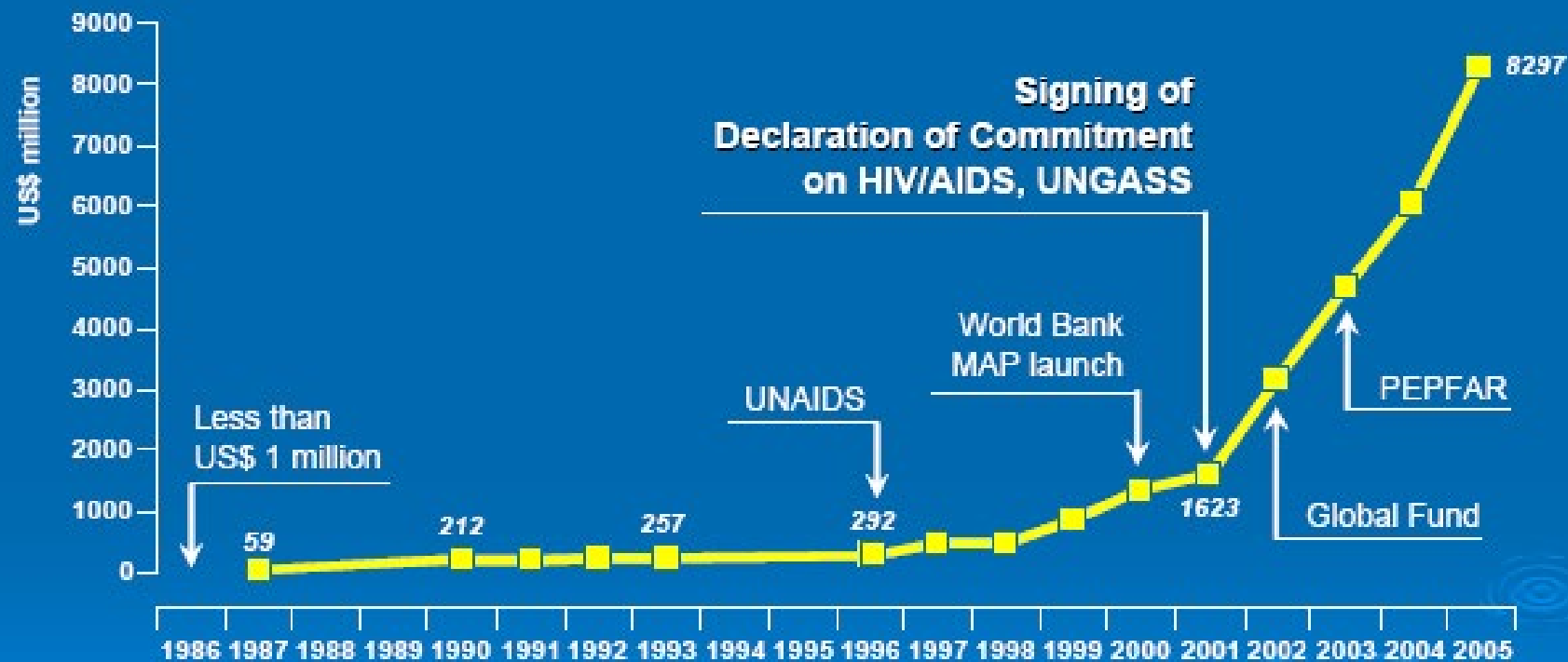
Antiretrovirals Have Saved Over 21 Million Lives Globally



How AIDS Helped to Create Global Health

- First global pandemic in almost 100 years
- Demanded a combination of treatment and prevention
- Generated global advocacy and activism
- Expanded Global Health governance
- Stimulated large increase in Development Assistance for Health

Total annual resources available for AIDS 1986–2005



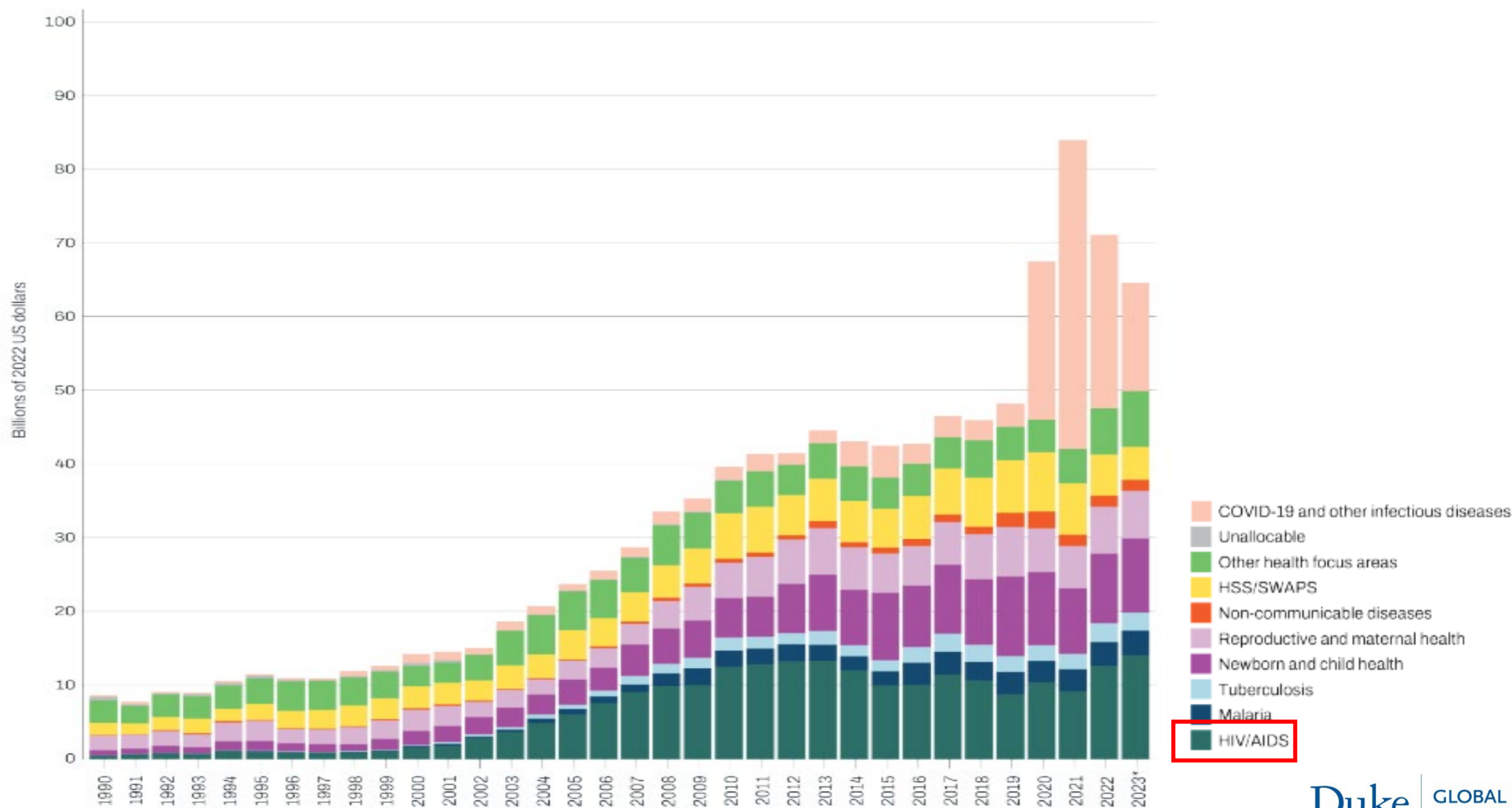
Notes: [1] 1986–2000 figures are for international funds only
[2] Domestic funds are included from 2001 onwards

[i] 1996–2005 data: Extracted from 2006 Report on the global AIDS epidemic (UNAIDS, 2006)

[ii] 1986–1993 data: AIDS in the World II. Edited by Jonathan Mann and Daniel J. M. Tarantola (1996)



Development Assistance for Health by Focus Area



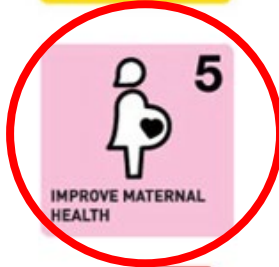
MDGs to SDGs

8 Goals 21 Targets 60 Indicators

2000



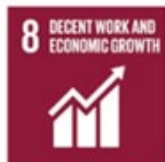
2015



17 Goals

169 Targets

304 Indicators



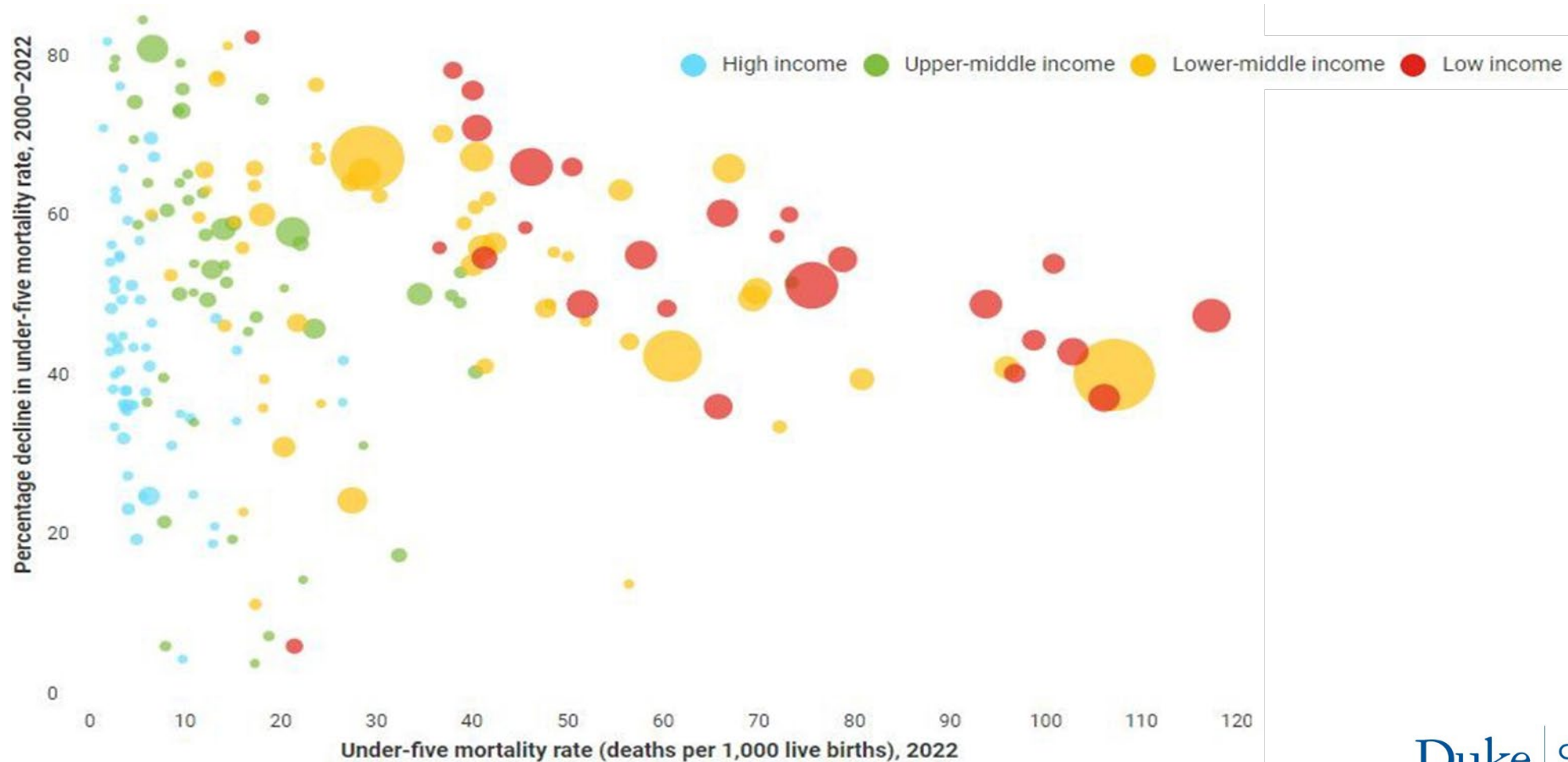
2015



2030

Reduction in Global Under-Five Mortality Rate

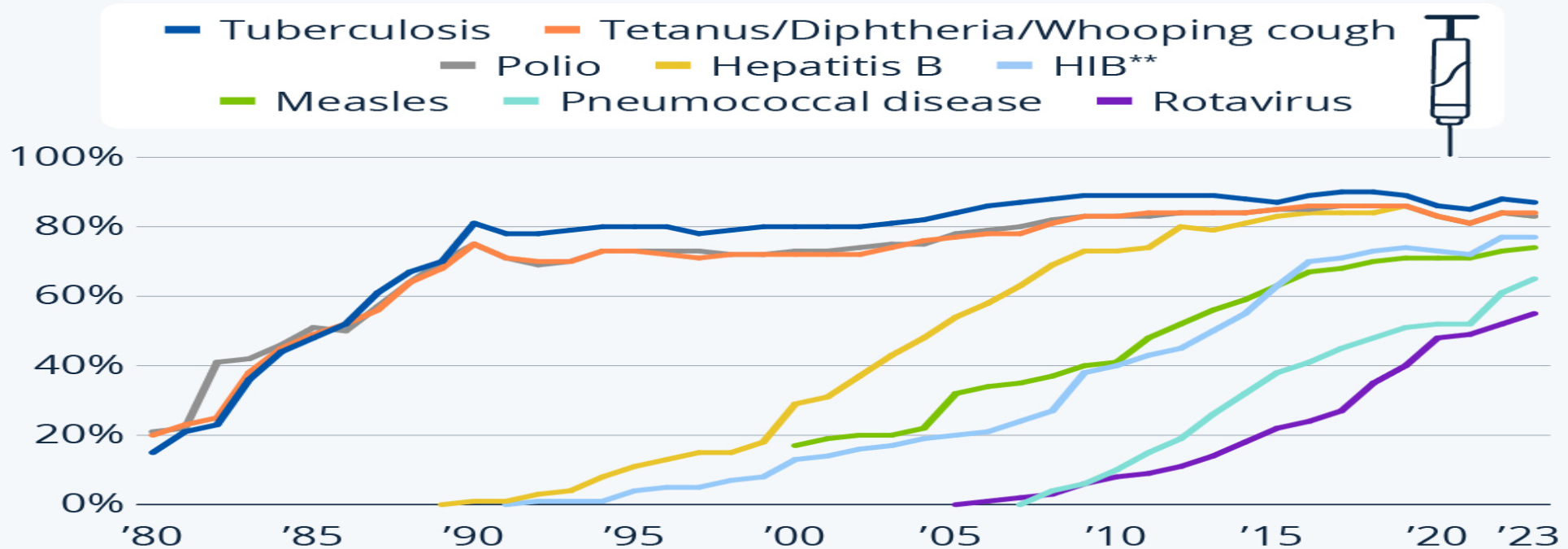
From 1990 to 2022, over 90 countries reduced their under-five mortality rates by at least two-thirds



WHO: Global Immunizations Saved 154 M+ lives

The Global Progress of Vaccines

Share of one-year-olds globally who have received a full set of immunizations for the following diseases (1980-2023)*



* at the nationally recommended age for measles ** Haemophilus influenzae type b
Source: WHO



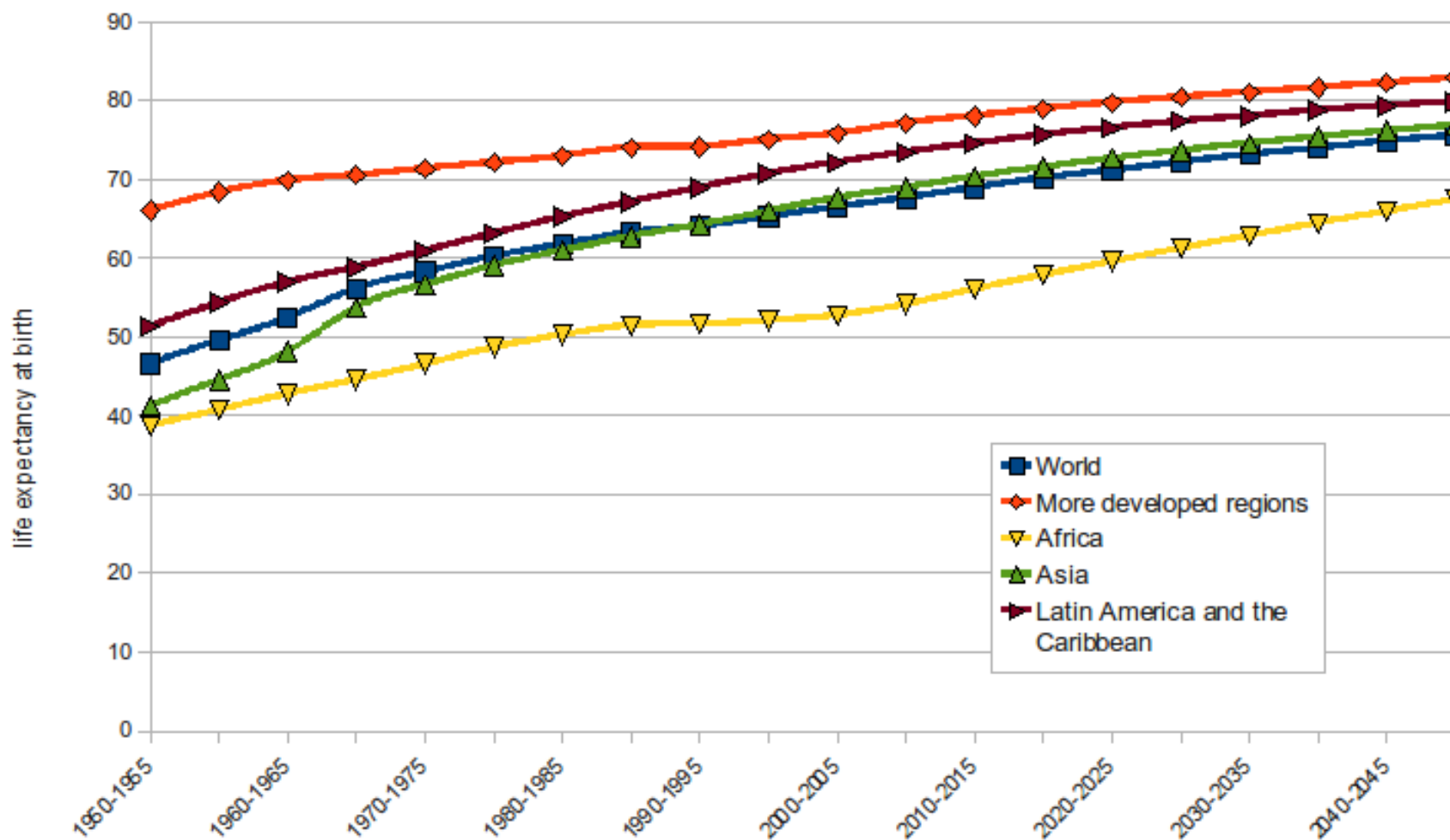
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Life Expectancy

Life Expectancy at Birth by Region, 1950-2050.

Source: UN World Population Prospects, 2008.



United Nations (UN) Health-Related Organizations

- **World Health Organization (WHO)**
- **World Bank (WB)**
- **UN Children's Fund (UNICEF)**
- UN Population Fund (UNFPA)
- UN Program on HIV/AIDS (UNAIDS)
- UN Development Program (UNDP)
- UN Educational, Scientific and Cultural Organization (UNESCO)
- Food and Agriculture Organization (FAO)
- World Food Program (WFP)
- UN High Commissioner for Refugees (UNHCR)
- International Labor Organization (ILO)
- UN Environment Program (UNEP)
- UN Nations Office on Drugs and Crime (UNODC)
- World Trade Organization (WTO)
- UN Women

Source: K. Lee et al 1996, *British Medical Journal*, 312, pp 302-312

Global Health Initiatives



POLIO GLOBAL
ERADICATION
INITIATIVE



Key Foundations and US NGOs Supporting Global Health

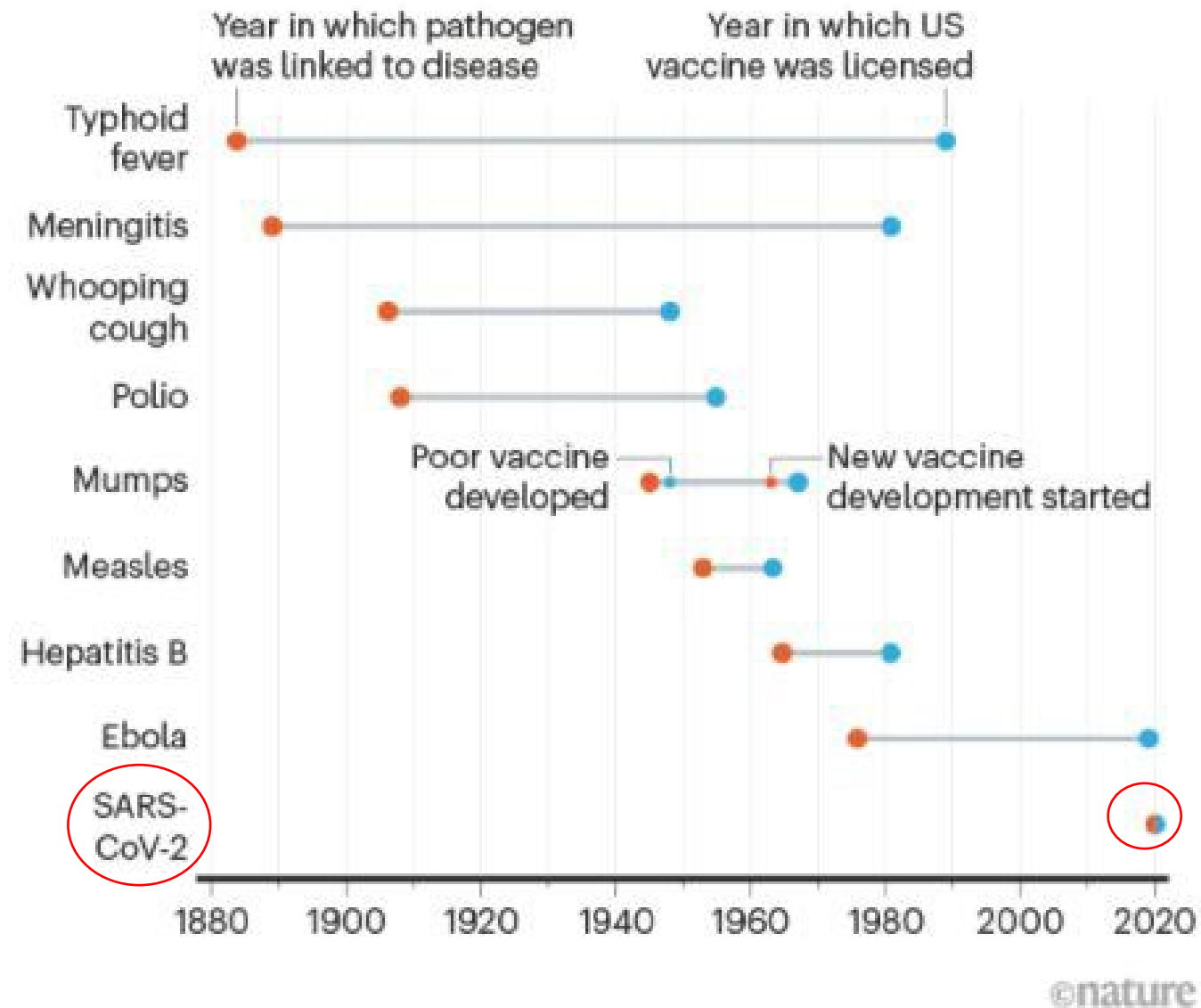
- **Bill and Melinda Gates**
- **Pivotal Philanthropies**
- **Yield Giving**
- Carlos Slim
- Bloomberg Philanthropies
- Rockefeller
- Mastercard
- William and Flora Hewlett
- Children's Investment Fund
- Susan Thompson Buffett
- Oak Foundation
- John D. and Catherine T. MacArthur
- Omidyar Network
- UN Foundation
- Wellcome Trust
- FHI 360
- Management Sciences for Health
- Jhpiego
- Population Services International
- RTI International
- PATH
- JSI
- Pathfinder International
- IntraHealth
- World Vision
- Save the Children
- CARE
- Partners in Health
- Feed the Children
- Catholic Relief Services

Examples of Private Sector Involvement in Health

Model	Company	Description
Public-Private Partnership	Merck & Company	AIDS care and treatment in Botswana
Corporate Social Responsibility	ExxonMobil Foundation	Malaria control programs in 20 African countries
Training	Becton Dickinson	Blood safety in East Africa

VACCINE INNOVATION

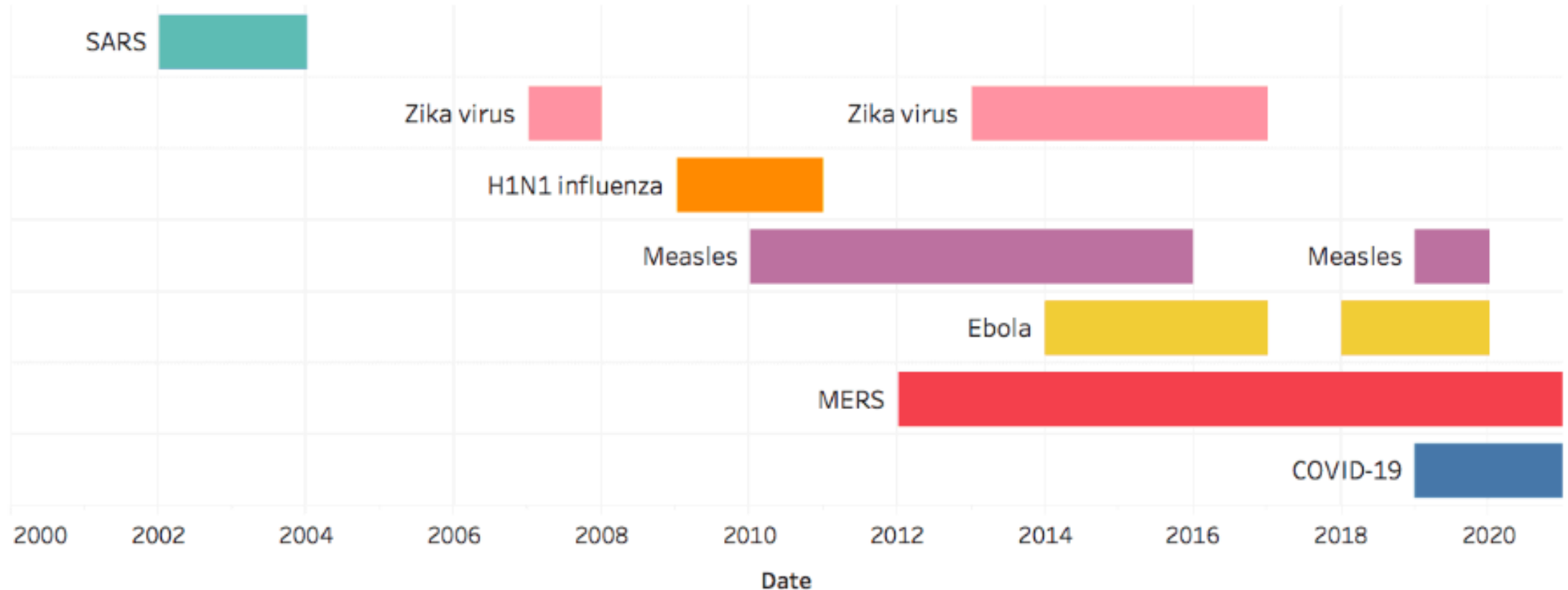
Most vaccines take years to develop, but scientists created multiple vaccines for SARS-CoV-2 within a year.



Some Current Global Health Priorities

- **Pandemic Preparedness**
- **Climate Change**
- **Non-communicable Diseases**
- **Global Mental Health**
- **World Hunger**
- **Strengthening Health Systems**

Major Emerging and Re-emerging Infectious Disease Outbreaks, 2002-2020



Adapted from: Peter Sands, et al; New England Journal of Medicine, March 31, 2016.

Data Source: World Health Organization

SARS, severe acute respiratory syndrome; MERS, Middle East respiratory syndrome

CDDEP

THE CENTER FOR
Disease Dynamics,
Economics & Policy

WASHINGTON DC • NEW DELHI

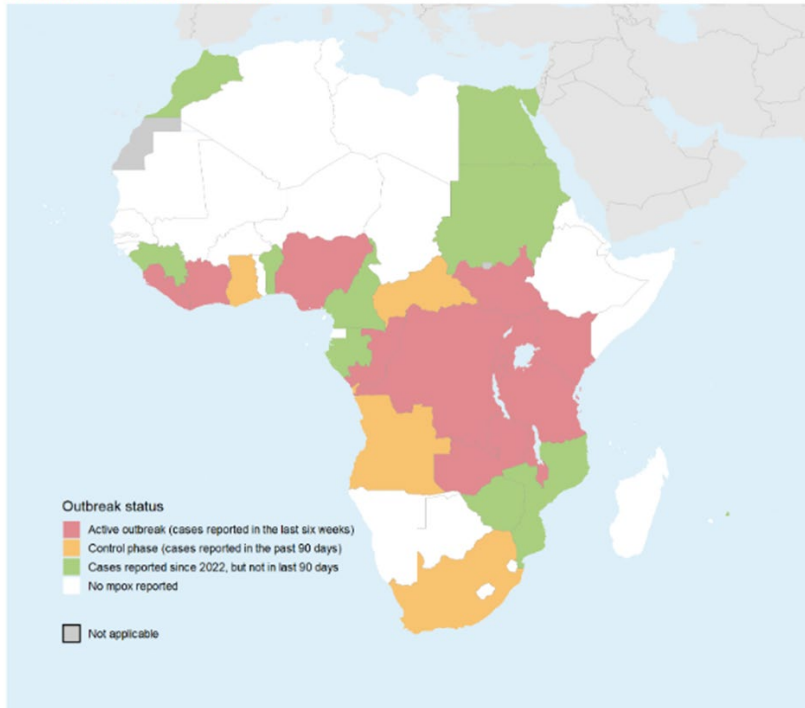
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Current Threats

Mpox in Africa (Jan 2022 – May 2025)

Mpox: countries affected in Africa
from 1 Jan 2022, as of 11 May 2025



25 000+ cases, **23** African countries, PHEIC

Avian Flu

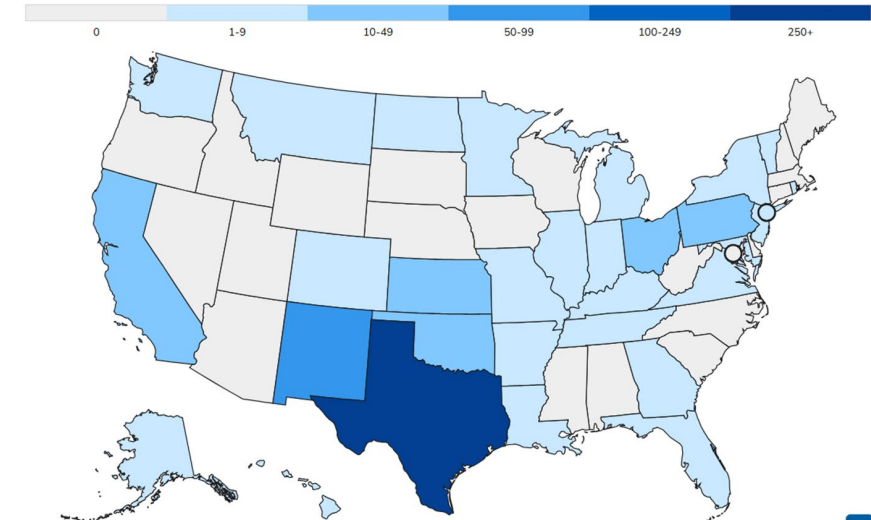
We are here →

↑
Increasing probability of impact to you (general population)

- H-to-H airborne (across countries)
- H-to-H spread (multiple clusters)
- Human-to-human spread (cluster)
- Sustained transmission in pigs
- Lots of sporadic human cases
- Sporadic human cases
- Sustained transmission in mammals
- Spillover to mammals
- Mass infections in poultry
- Mass infections in wild birds
- Baseline risk of a pandemic randomly occurring any year= 2%

- 13,025** wild birds
- 1,053** dairy herds
- 169,296,749** poultry

Map of Measles in 2025

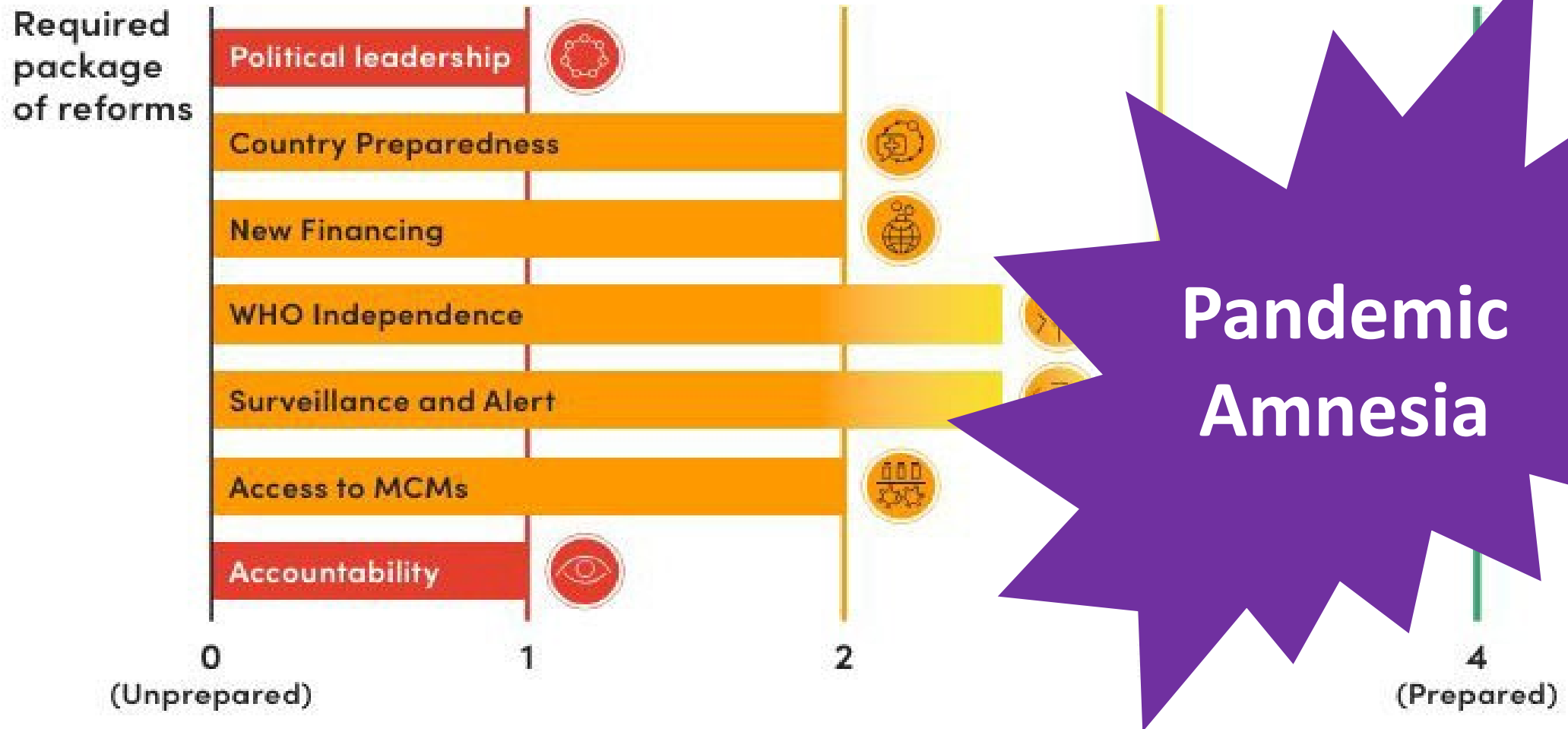


Total Cases in 2025: 1,024
As of May 15, 2025

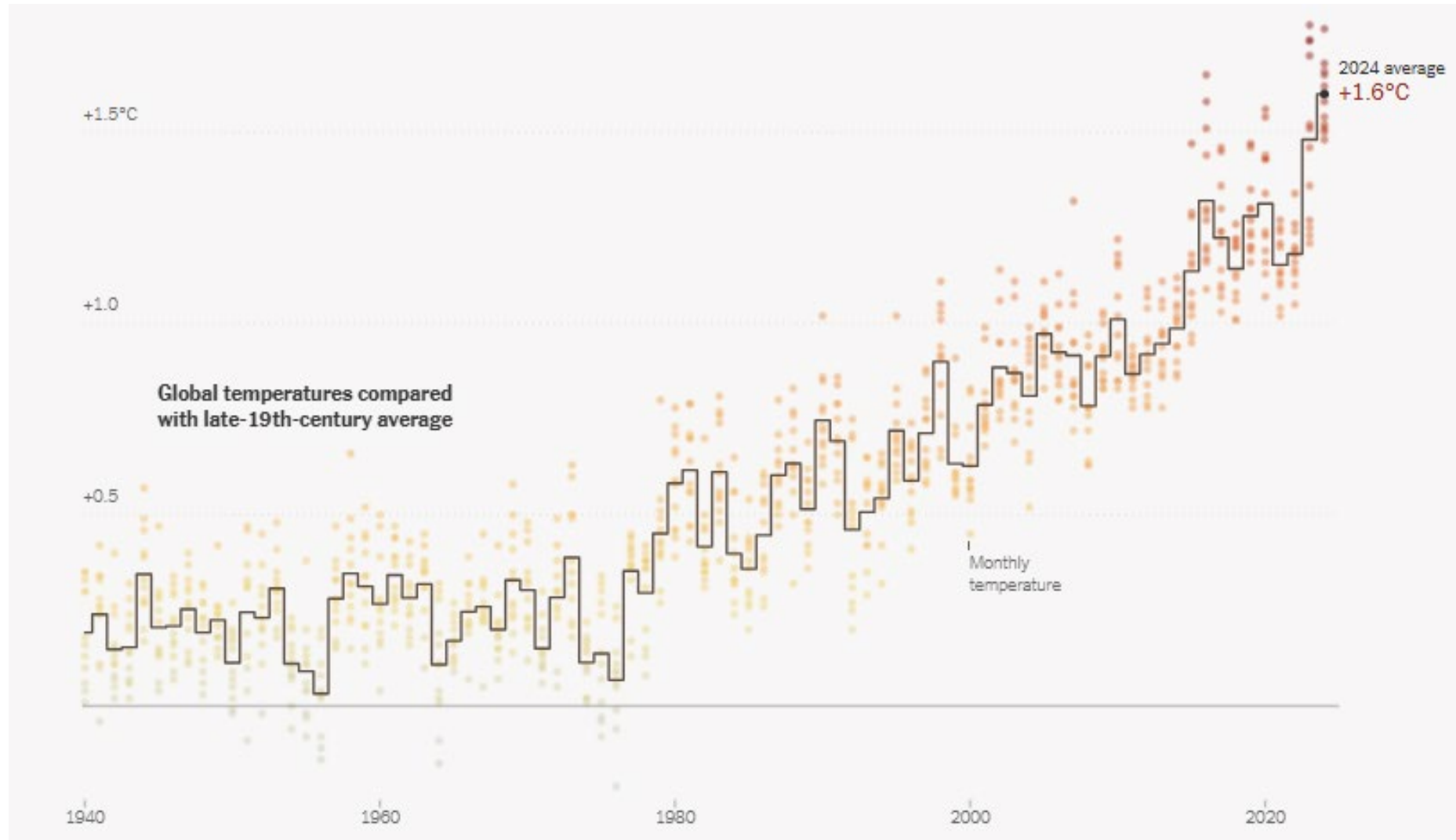
What Next?



The World is Not Ready for a New Pandemic Threat



Climate Change: How Are We Doing?



California Wildfires

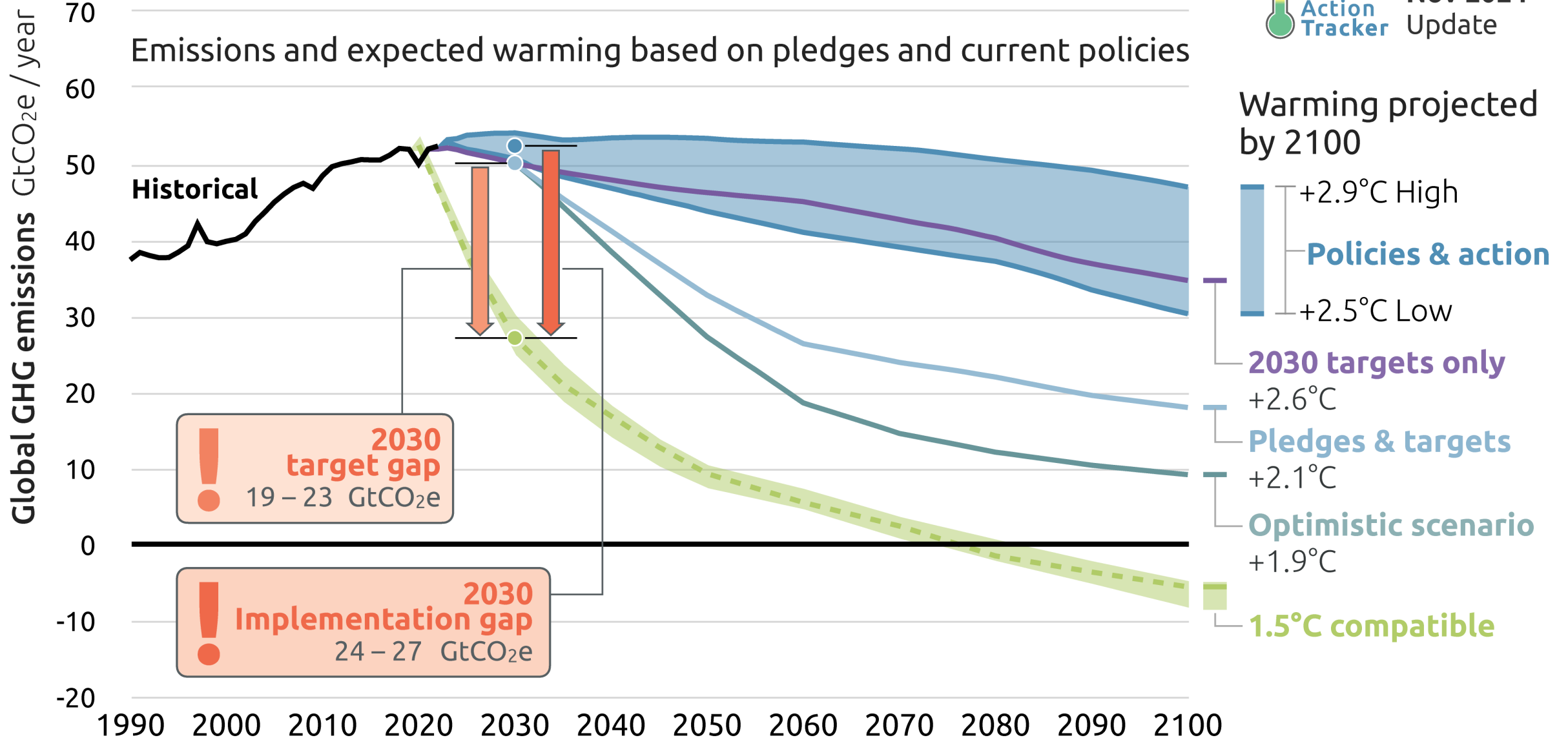


EMISSIONS PATHWAYS TO 2100



Nov 2024
Update

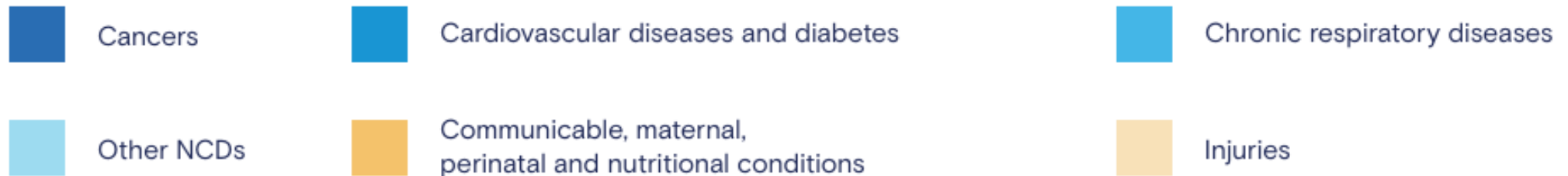
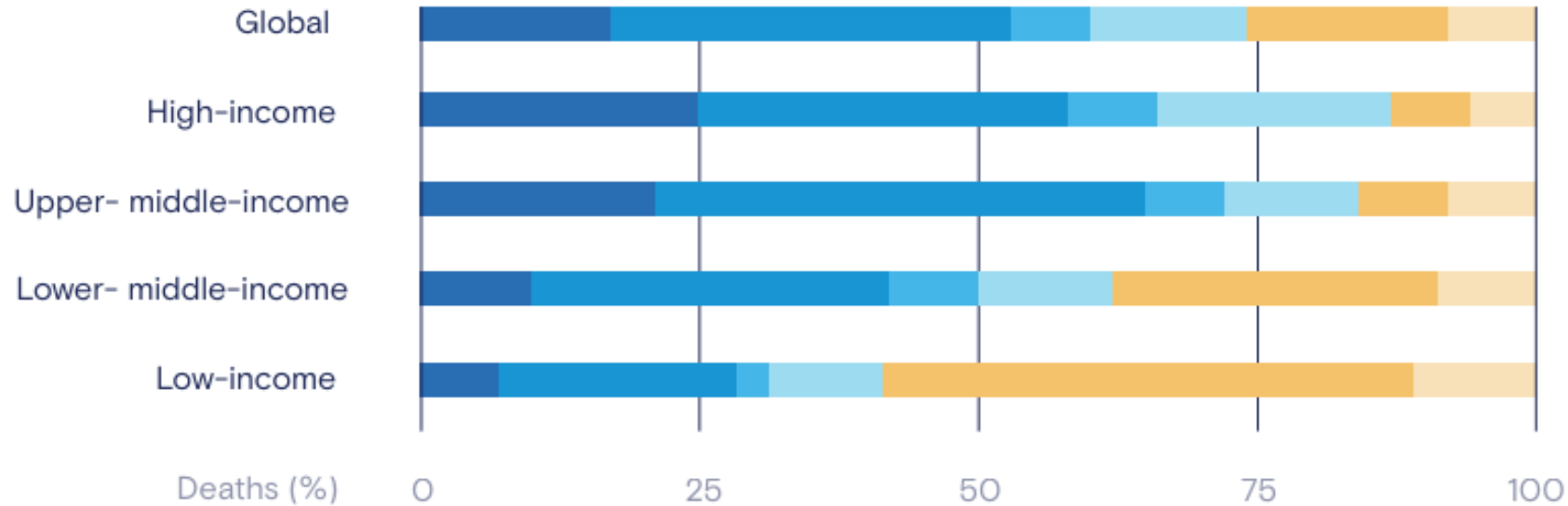
Emissions and expected warming by 2100 based on pledges and current policies



China building Two-Thirds of World's Wind and Solar Panels in World



NCDs are Leading Cause of Death






By 2035, **more than 1 in 2 adults** will be living with overweight or obesity.

World Obesity Atlas 2024

Read the full report at www.worldobesityday.org.

#WorldObesityDay





COVID-19 pandemic
triggers 25% increase in
prevalence of anxiety and
depression worldwide

Loneliness and Dementia



DEMENTIA IN SINGAPORE

KEY STATISTICS



Alzheimer's disease is the most common form of dementia, making up **7 in 10 cases** of dementia.



1 in 11 older people aged 60 and above has dementia*

Proportion of people who are diagnosed with dementia but **do not receive treatment** for it.

51.5%



*Based on 2023 Well-Being of the Singapore Elderly (WISE) study led by the Institute of Mental Health.

Innovations to Scale Up Mental Health Interventions

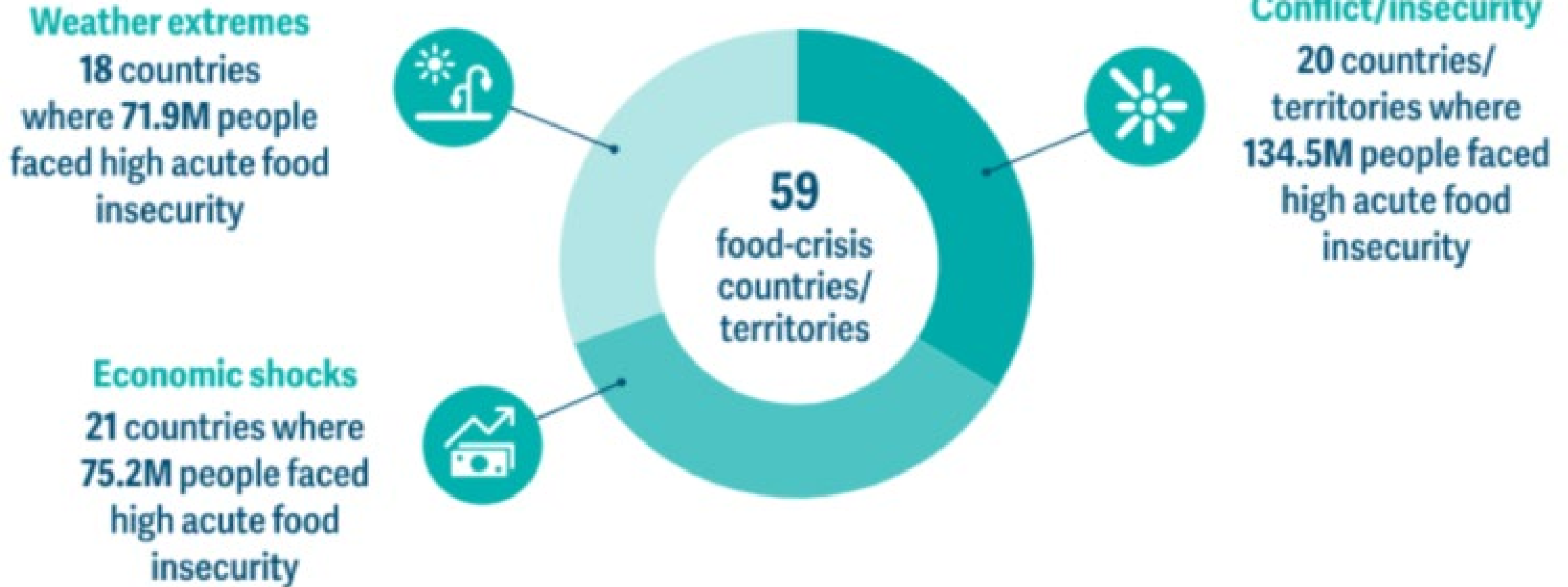
- **Task-sharing** to non-specialized workers
- **Coordination** between non-specialized workers and specialist care providers
- Adoption of **digital platforms**
- Implementation of **community-based interventions**

World Hunger

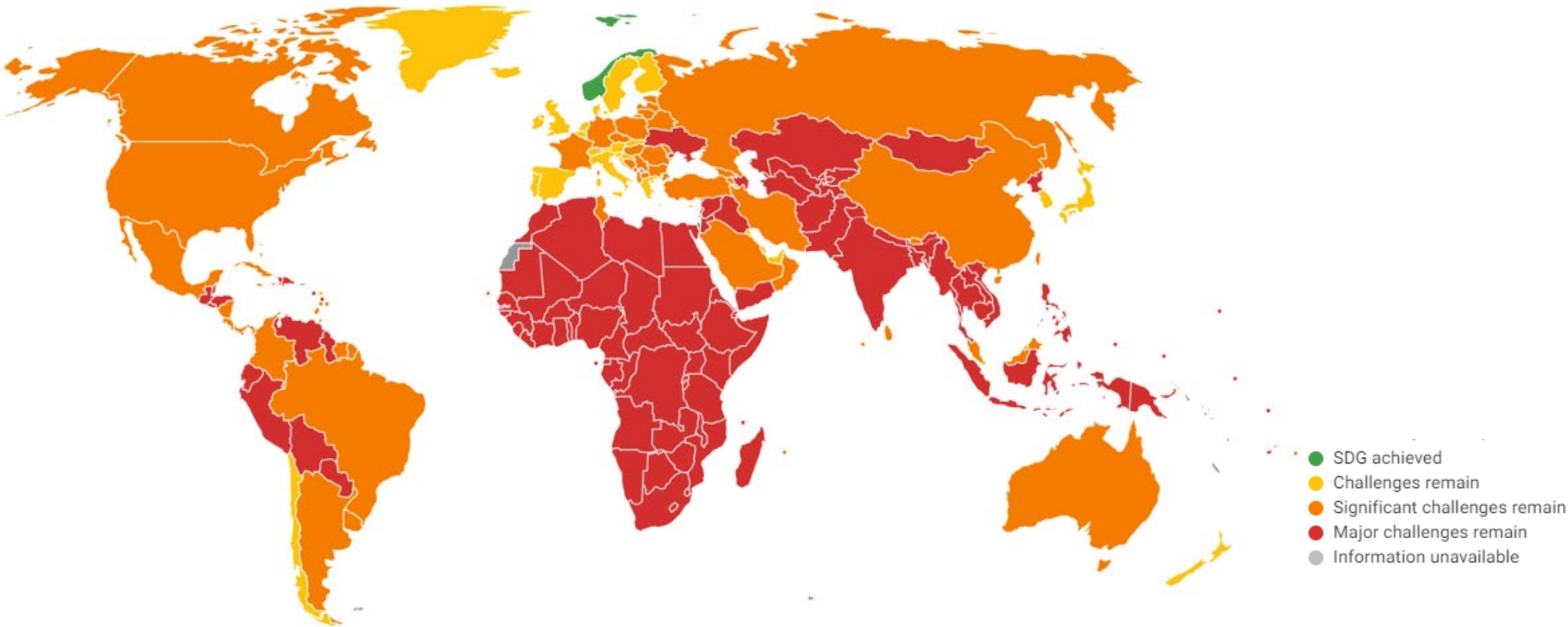
More than enough food is produced to feed the global population—but:

- **1 in 10 people suffer from hunger around the world**
- **Half of all child deaths worldwide are from hunger and related causes**
- **3.1 billion people cannot afford a health diet**

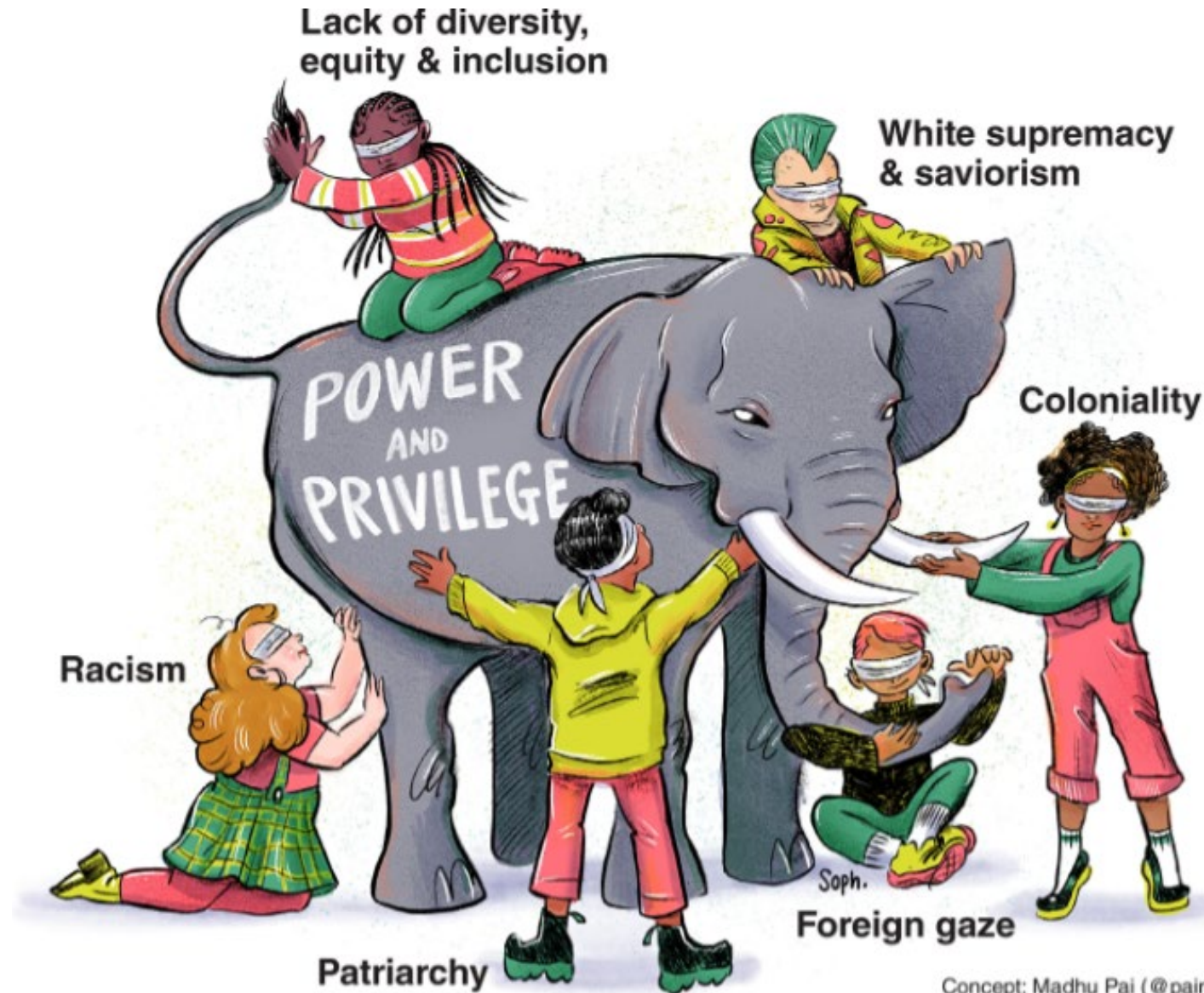
Primary Drivers of Acute Food Insecurity



Performance in Achieving SDG 3: Good Health and Wellbeing



Decolonization: Addressing Power Asymmetries in Global Health



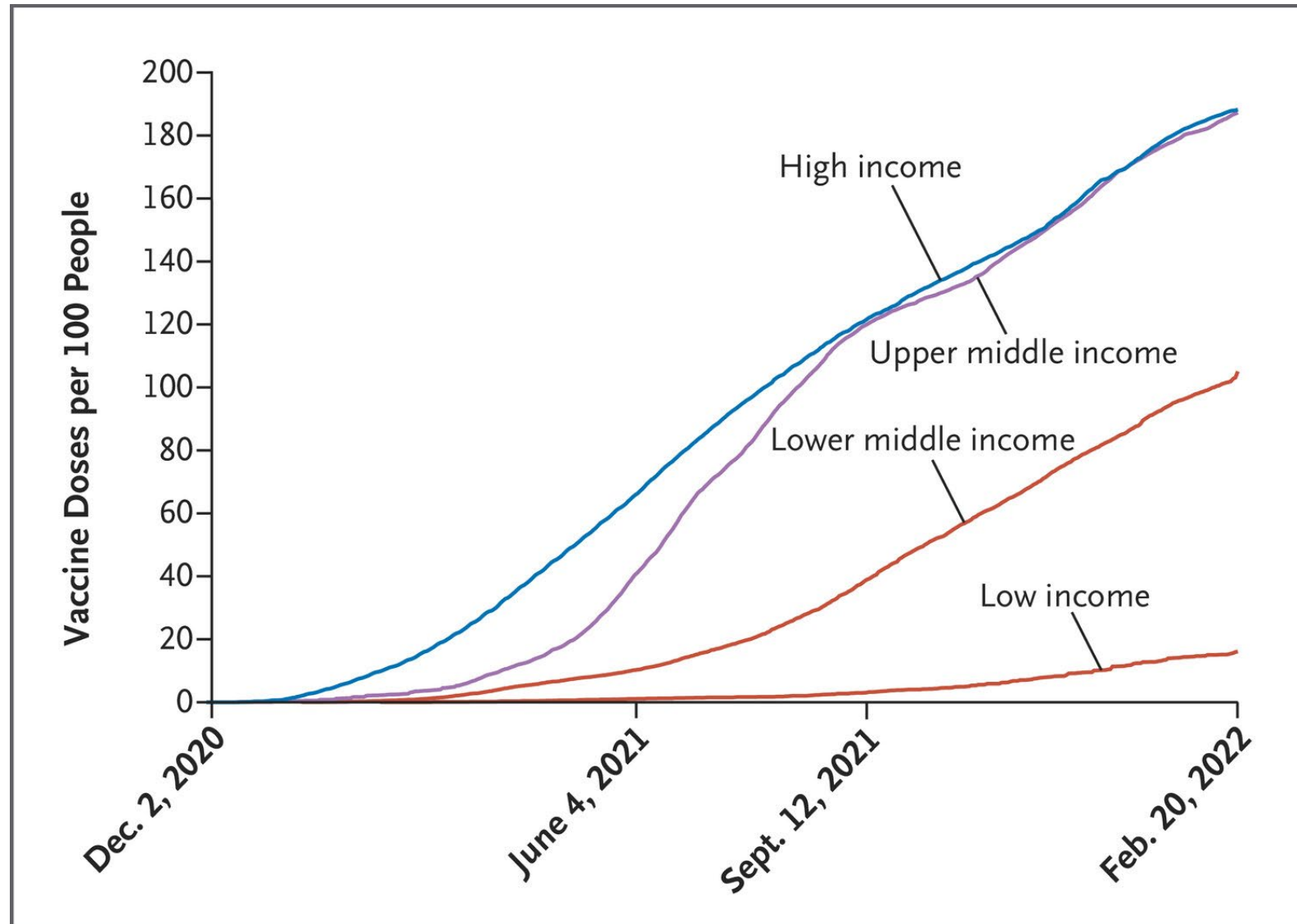
Concept: Madhu Pai (@paimadh)

Art: Sophie Lane (ScEYenceStudios.com)

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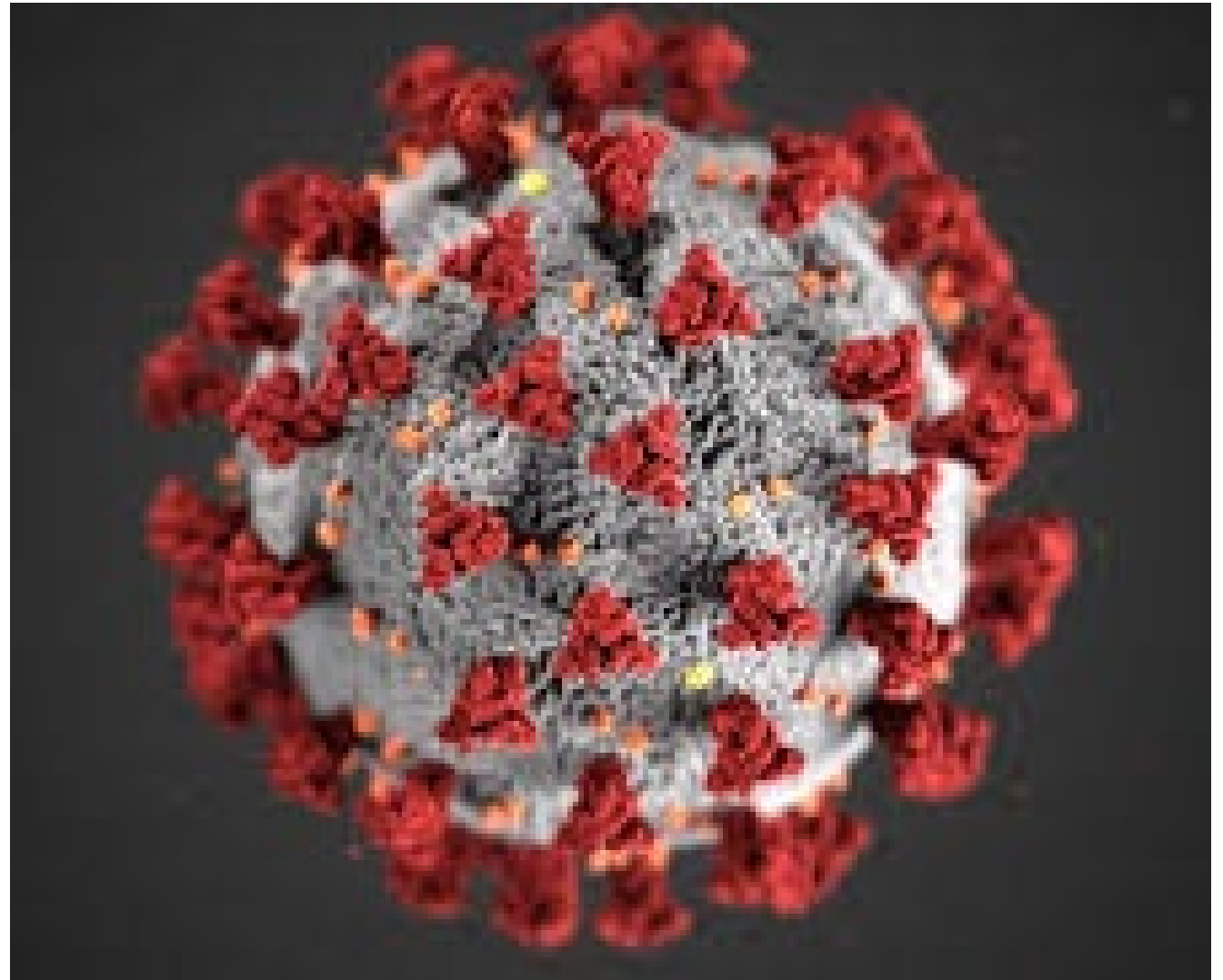
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Global Inequity in COVID Vaccines



Turbulence Begins: COVID-19 Pandemic

- **Estimated 25-30 million deaths (2020-2023)**
- **Largest economic recession since World War II**
- **Eroded tax bases and reduced government revenue in LMICs**

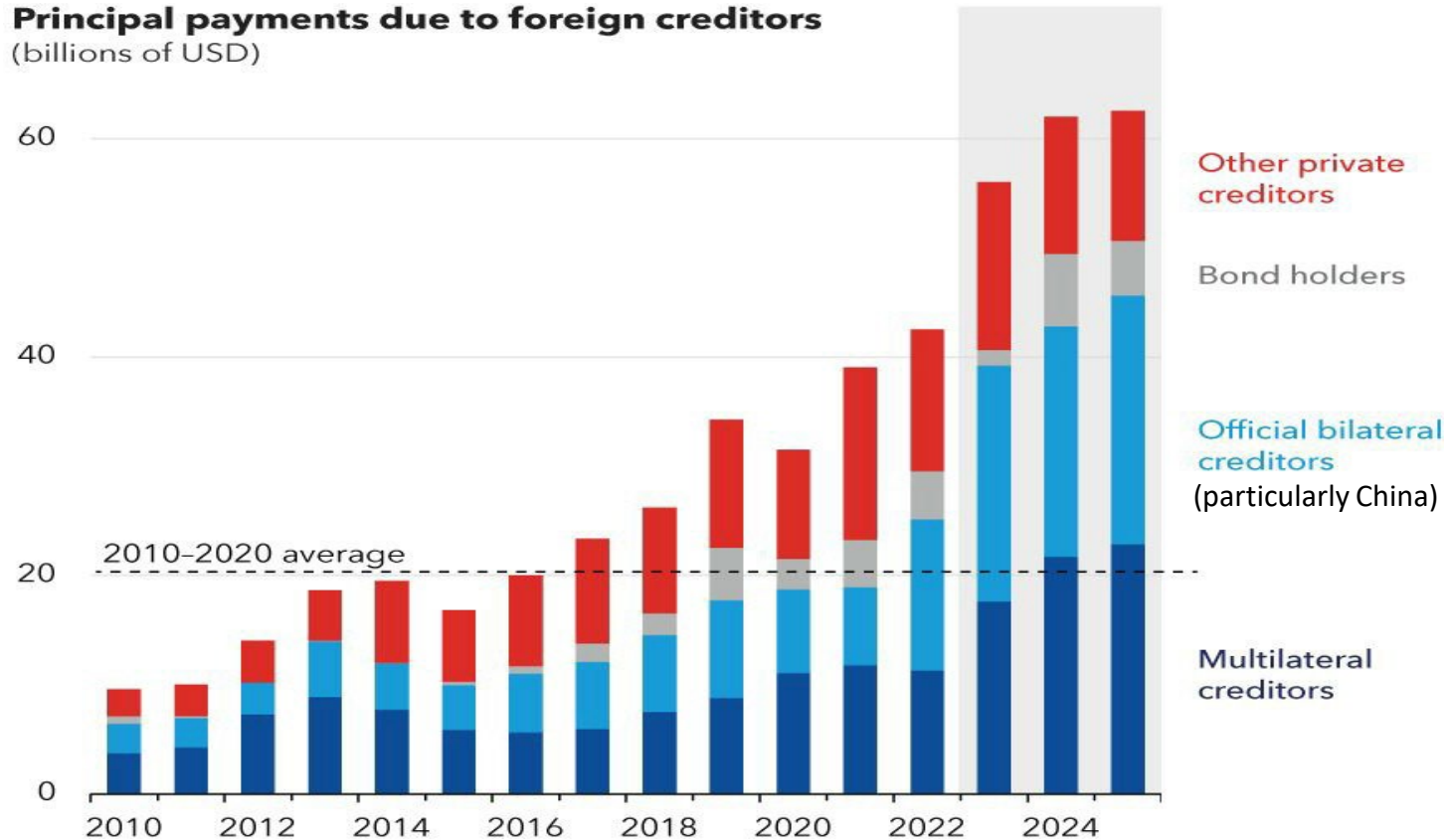


Debt Crisis for Low Income Countries

Large refinancing needs

Low-income country repayments now triple the long term average.

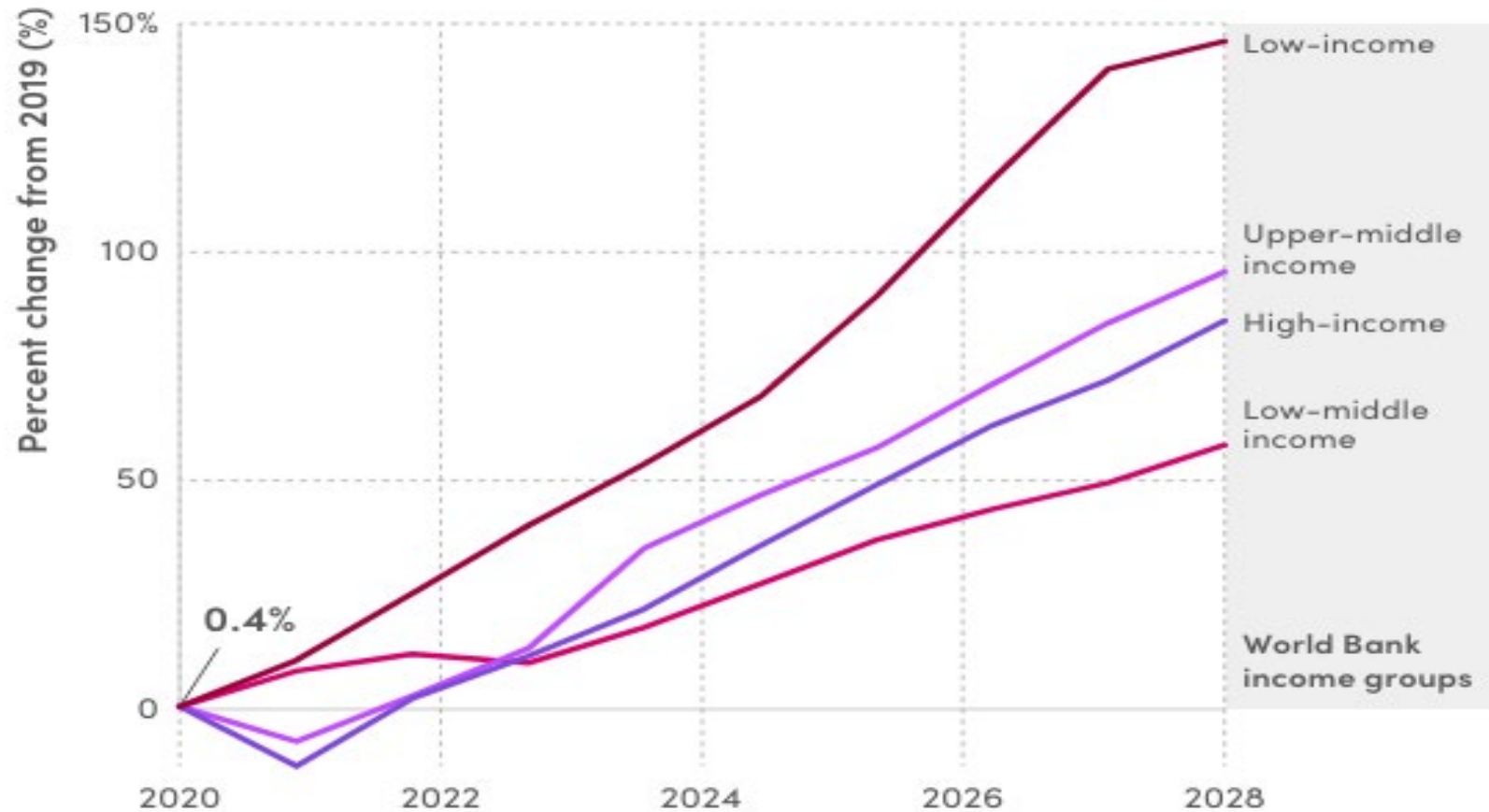
Principal payments due to foreign creditors (billions of USD)



Source: IMF World Economic Outlook database, Oct. 2023; World Bank International Debt Statistics; and IMF staff calculations. Note: Figures for 2023 and beyond are projections.

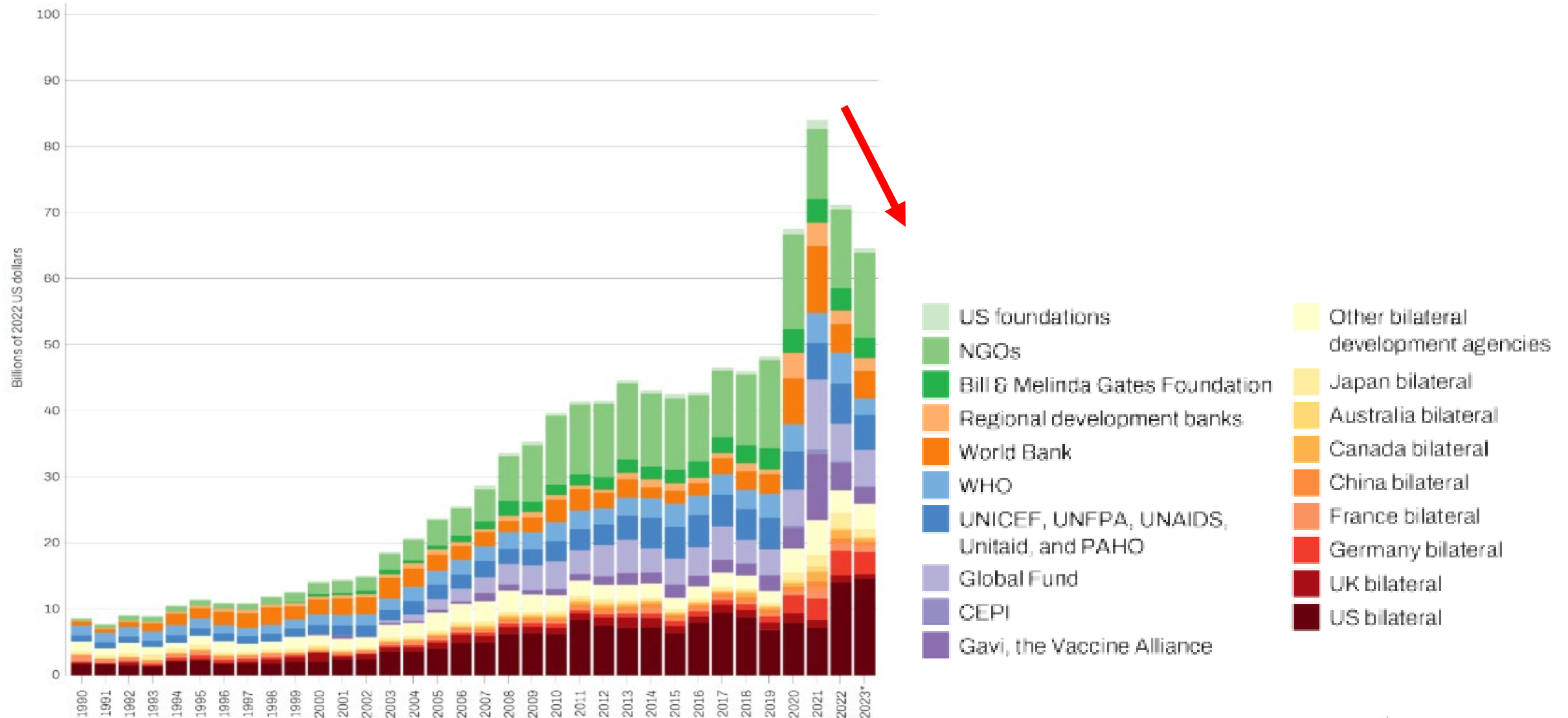
COVID's Lasting Financial Legacy

Increase in interest payments for countries relative to 2019^{(vi), (vii)}

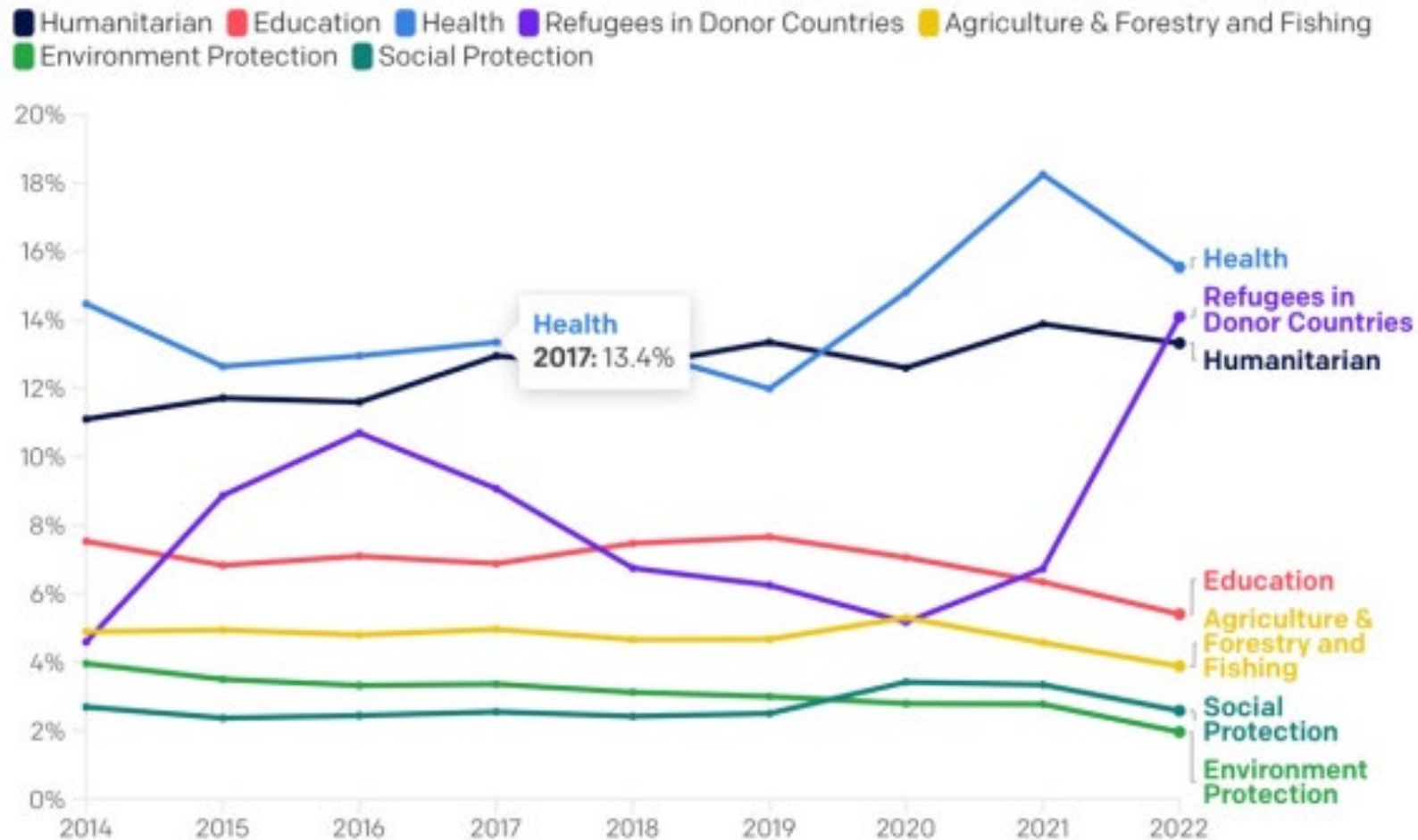


At least 1-2 billion people living in low-income countries spending 2-4 times more on debt interest payments than on health and education combined

Channels of Development Assistance for Health



Share of ODA by Sector 2014-2022

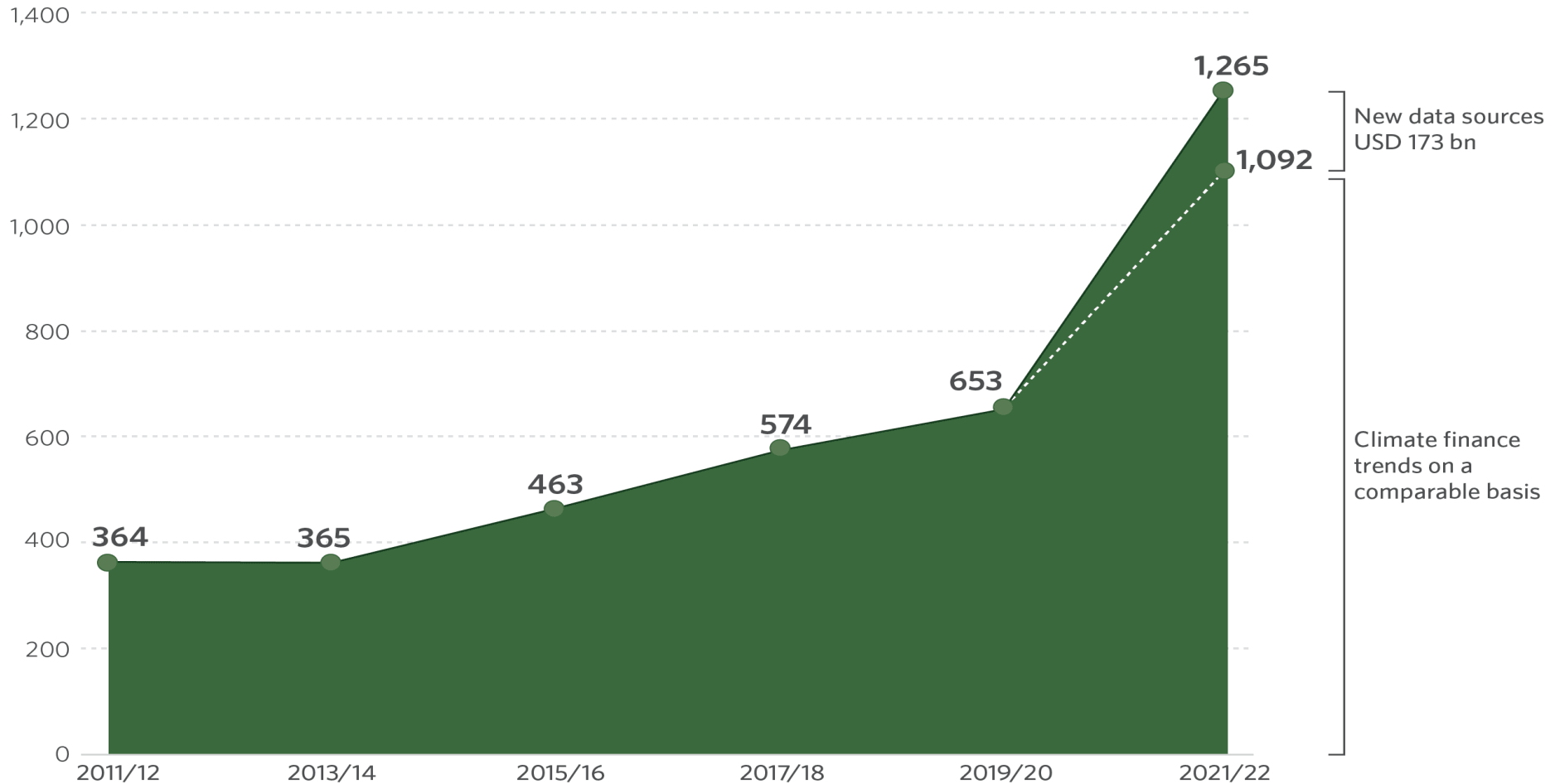


Sources OECD DAC (CRS)

Climate Financing

Figure ES2: Global climate finance in 2011-2022, biennial averages

USD billion



Source: Climate Policy Initiative

USA Ends Commitment To Global Health

- **Withdrawal From WHO** (largest contributor), other international agencies (GAVI) and agreements (Pandemic Agreement)
- **Dismantling USAID:** budget \$40 B/yr; 170 000 jobs lost worldwide; 5300 (85%) projects stopped: disease prevention; food security;
- **Drastic cuts in PEPFAR:** provide HIV treatment to \$21 M persons in 55 countries;
- Adds up to **84% reduction in U.S. foreign aid**, $\frac{3}{4}$ to Africa;
- **Withdrawal from Paris Agreement** on Climate Change and UN Framework Convention on Climate Change

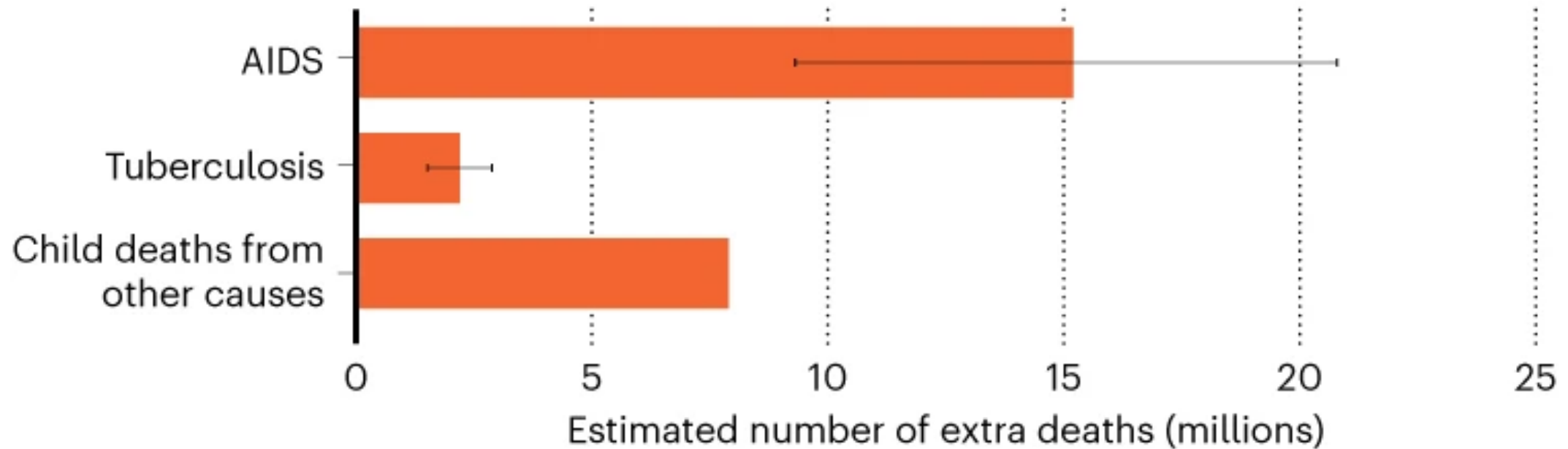
USAID cuts could send global health into chaos

BY NATHANIEL WEIXEL - 03/02/25 6:00 AM ET



U.S. Aid Cuts Impact on Global Health

Millions of people could die between 2025 and 2040 if all United States funding for global health is terminated and not replaced.



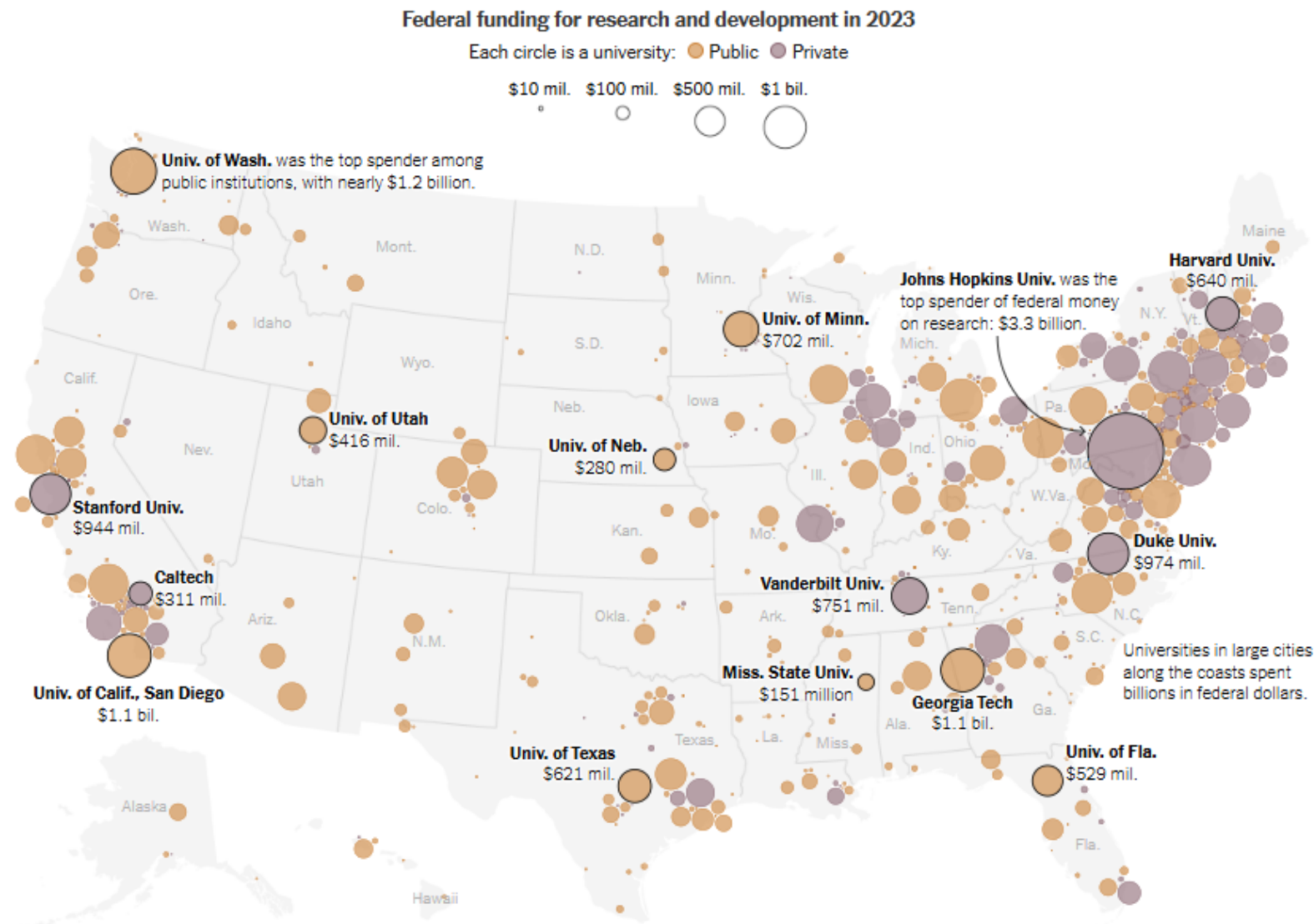
*Compared with estimates of continued funding at 2024 levels.

©nature

Health and Human Services (HHS)

- Includes CDC, FDA, NIH; Reduction 20,000 employees; reorganizations
- Tough time for Universities:
 - ❖ *Cancelled \$2.7 B in NIH research grant funds as changing priorities;*
 - ❖ *Withholding billions of federal dollars from 8 universities as citadels of “antisemitism and liberal indoctrination”*
 - ❖ *Proposed 40% cut (\$27 B) in NIH budget for next year*
 - ❖ *Loss of jobs; hiring freezes; less priority for international research*
 - ❖ *US research enterprise under threat; demoralized; brain drain*
 - ❖ *International students no longer feel welcome (1.1 M)*

Funding for Research and Development in 2023



Source: National Center for Science and Engineering Statistics • Note: Numbers are for fiscal year 2023.

The New York Times

Trump Administration Disqualifies Harvard From Future Research Grants

A letter from Linda McMahon, the education secretary, said university leaders must demonstrate more responsible management before receiving additional federal grants.

Michael C. Bender and Alan Blinder, May 5, 2025



Harvard University is seen from across the Charles River in Boston last week. Sophie Park for The New York Times



By Onyango K'Onyango • March 31, 2025

Kenya should deepen health partnership with China for sustainable growth



China Not Likely to Step Into US Role

- Not prioritize multilateral programs, cross-border disease threats, or aid to poorest countries
- Skeptical of international global health bodies
- Targeted countries participating in its Belt and Road Initiative, mostly infrastructure-driven investments in Southeast Asia and Latin America
- Since 2020, brand itself a leader of the global pandemic response, but donations primarily to countries in region

Fake News

Nigerian Ebola Hoax Results in Two Deaths

Twenty more were hospitalized after drinking excessive amounts of salt water.

By LIZ NEPORENT

September 30, 2014, 6:10 AM • 4 min read



Outbreak News Today

BREAKING Botulism in Ukraine 2021: 98 cases, 10 deaths

Outbreak News Radio Interviews Drugs and antibiotics Vaccines Research Blogs

TRENDING US News Latin America and the Caribbean Animal diseases

Home » Asia » Malaysia health officials battle anti-vaccine propaganda

Malaysia health officials battle anti-vaccine propaganda

by NEWS DESK

🕒 January 23, 2019 📁 Asia, Vaccines 💬 1 Comment

BBC

'Hundreds dead' because of Covid-19 misinformation

12 August 2020

By Alistair Coleman, BBC Monitoring

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npr

How vaccine misinformation made the COVID-19 death toll worse

MAY 16, 2022 · 5:07 AM ET By A Martínez, Allison Aubrey

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As Brazil Confronts Zika, Vaccine Rumors Shape Perceptions

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Drowning in Conflict Information

- There is loss of confidence in the health system; it has often failed to deliver
- Many get their health information from social media
- Social media rewards sensational content, even if untrue, not accuracy
- Falsehoods spread 6x faster than the truth
- Outcome: **Loss of Trust in Public Health**

Navigating the Future of Global Health

- **Status quo not return;** Majority of Americans favor less foreign aid; Change also in Europe; **Golden Age of GH has ended (with Pandemic bookends)**
- **Radical rethinking of GH governance and structure;** smaller WHO; less duplication and competition among agencies
- **Need new funders;** 90% multilateral funding coming from 10 governments; more private sector engagement
- **More from local governments;** help restructure debt; greater support to health; learn to do more with less; build self-reliance
- **Make tough choices on priorities.**

Philanthropy Asia Summit, Singapore, 5-7 May 2025



- Focused on **how** Asia's **rapidly rising wealth** might **reshape global giving**
- Asia is home to more than 1,000 billionaires with **collective \$4.7 trillion in wealth by 2026**. If Asian donors matched the 2% of gross domestic product that U.S. donors give to charity, **an estimated \$702 billion could be unleashed**.
- Could Singapore, with its geographic and political centrality, multicultural fabric, and famed stability, **become the hub for regional and even global giving?**

The New York Times Magazine

May 8, 2025

The \$200 Billion Gamble: Bill Gates's Plan to Wind Down His Foundation

In a wide-ranging interview, he explains his decision — amid the Trump administration's assault on foreign aid — to accelerate the end of his giving.



Tackling Rumors and
Understanding & Strengthening

TRUST

in Public Health

Why We Need Global Health

The value of Investing in global health is immeasurable. It protects people everywhere from acute and chronic disease and death, builds trust and goodwill with governments and their citizens, and creates an environment for economic growth, social progress, and peace.

Is there a Future for Multilateralism?

