

Health in All Policies in Climate Actions

Ho Kim

Graduate School of Public Health
Seoul National University

Contents

CC and Health

Health in All Policies (HiAP)

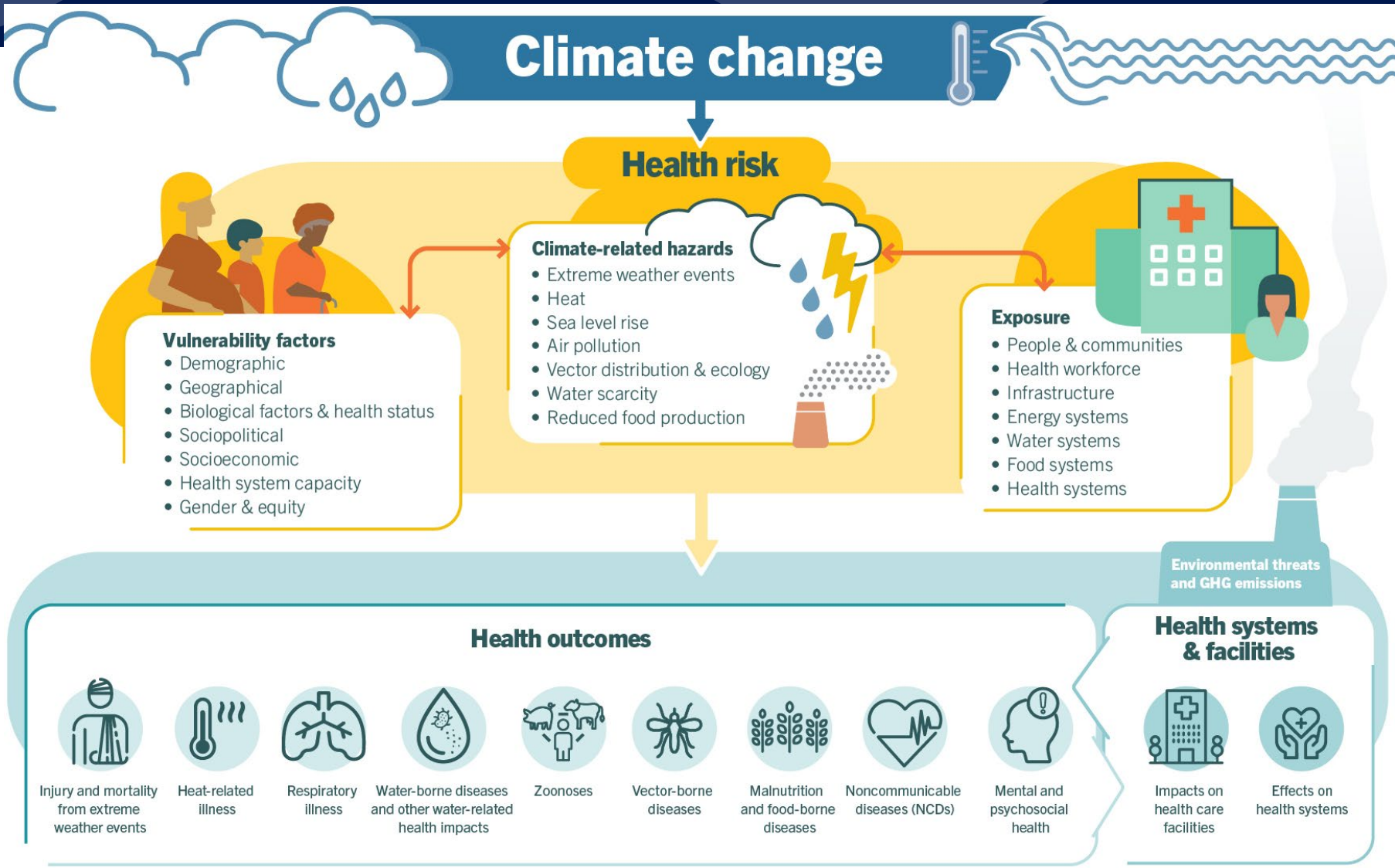
Health Equity

Environment in All Policies (EiAP)

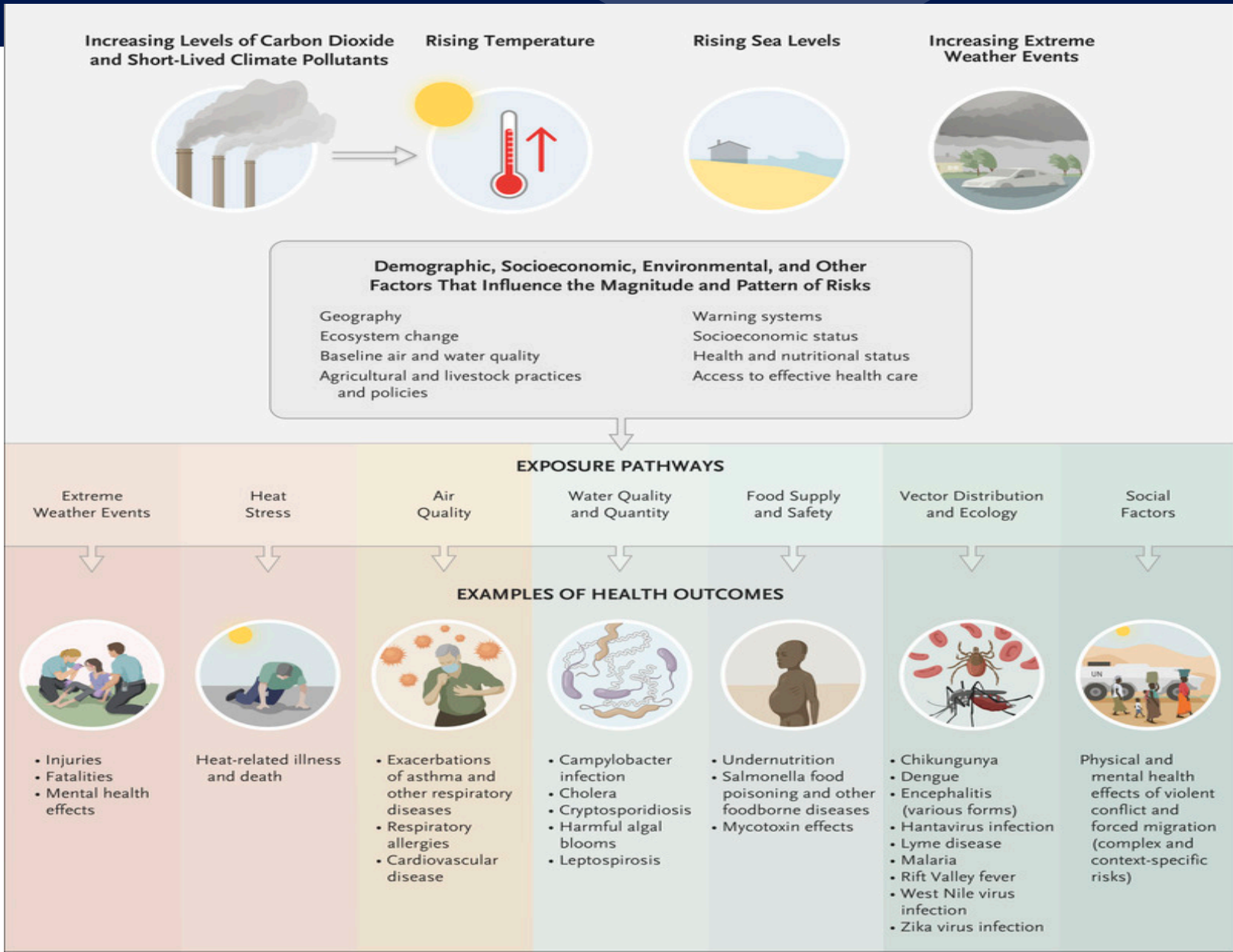
National Adaption Plans and HiAP

Examples: Greenness, Urbanization & Heat

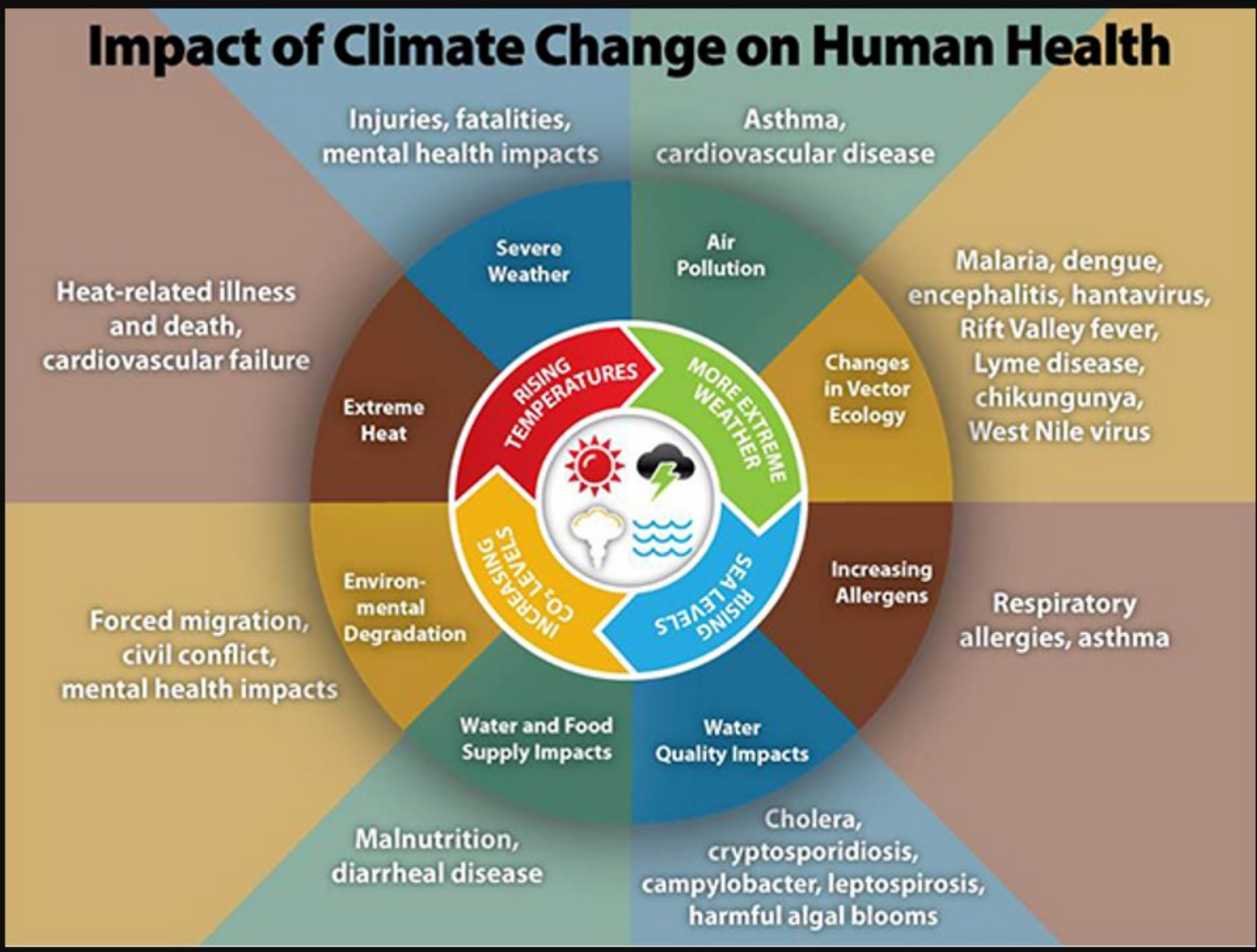
Climate Change and Health (WHO)



Climate Change and Health



(Haines and Ebi, NEJM 2019)



Source: US CDC Climate Effects on Health

What is Health in All Policies (HiAP) ?

“A collaborative approach to improving the health of all people by incorporating health considerations into decision making across sectors and policy areas.”

Rudolph, L., Caplan, J., Ben-Moshe, K., & Dillon, L. (2013). Health in All Policies: A Guide for State and Local Governments. Washington, DC and Oakland, CA: American Public Health Association and Public Health Institute



WHAT IS HEALTH IN ALL POLICIES?



Good health requires policies that actively support health

It requires different sectors working together, for example:



To ensure all people have equal opportunities to achieve the highest level of health

HOW DOES IT WORK?

Here is one example: **Worldwide** is linked to **1 IN 8 DEATHS** AIR POLLUTION EXPOSURE

TO TACKLE AIR POLLUTION COLLABORATION IS NEEDED



Publications

All →



31 August 2023

Working together for equity and healthier populations: sustainable multisectoral collaboration based...

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5 March 2019

Adelaide Statement II on Health in All Policies

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16 April 2018

Key learning on Health in All Policies implementation from around the world: information brochure

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21 June 2015

Health in all policies: training manual

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14 October 2018

Health in All Policies as part of the primary health care agenda on multisectoral action

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12 May 2012

Intersectoral governance for Health in All Policies: structures, actions and experiences

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Intersectoral governance for Health in All Policies

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12 May 2012

Eurohealth: intersectoral governance and Health in All Policies

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12 May 2015

Meeting of experts on health in all policies in South-East Asia



12 May 2014

Regional Framework on health in all policies for South-East Asia

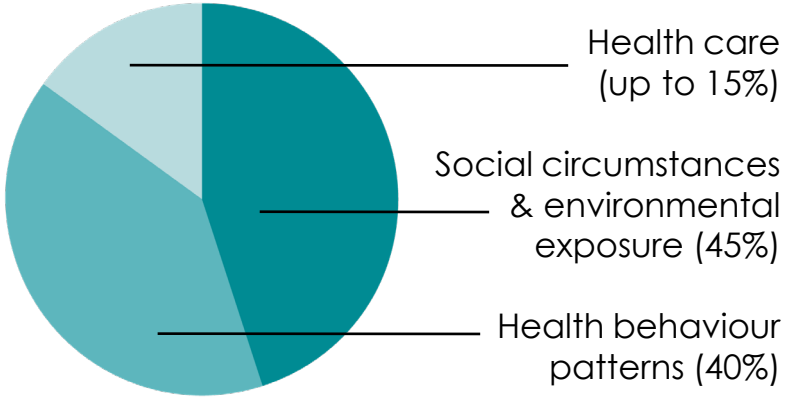


15 July 2017

Progressing the Sustainable Development Goals through Health in All Policies

IMPACT: 30 - 50% OR MORE

**Mc Giniss
et al (2002)**



**Canadian Institute
of Advanced
Research (2012)**

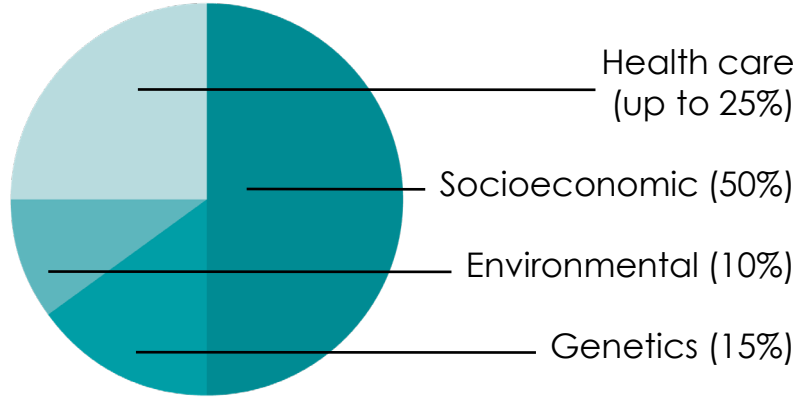
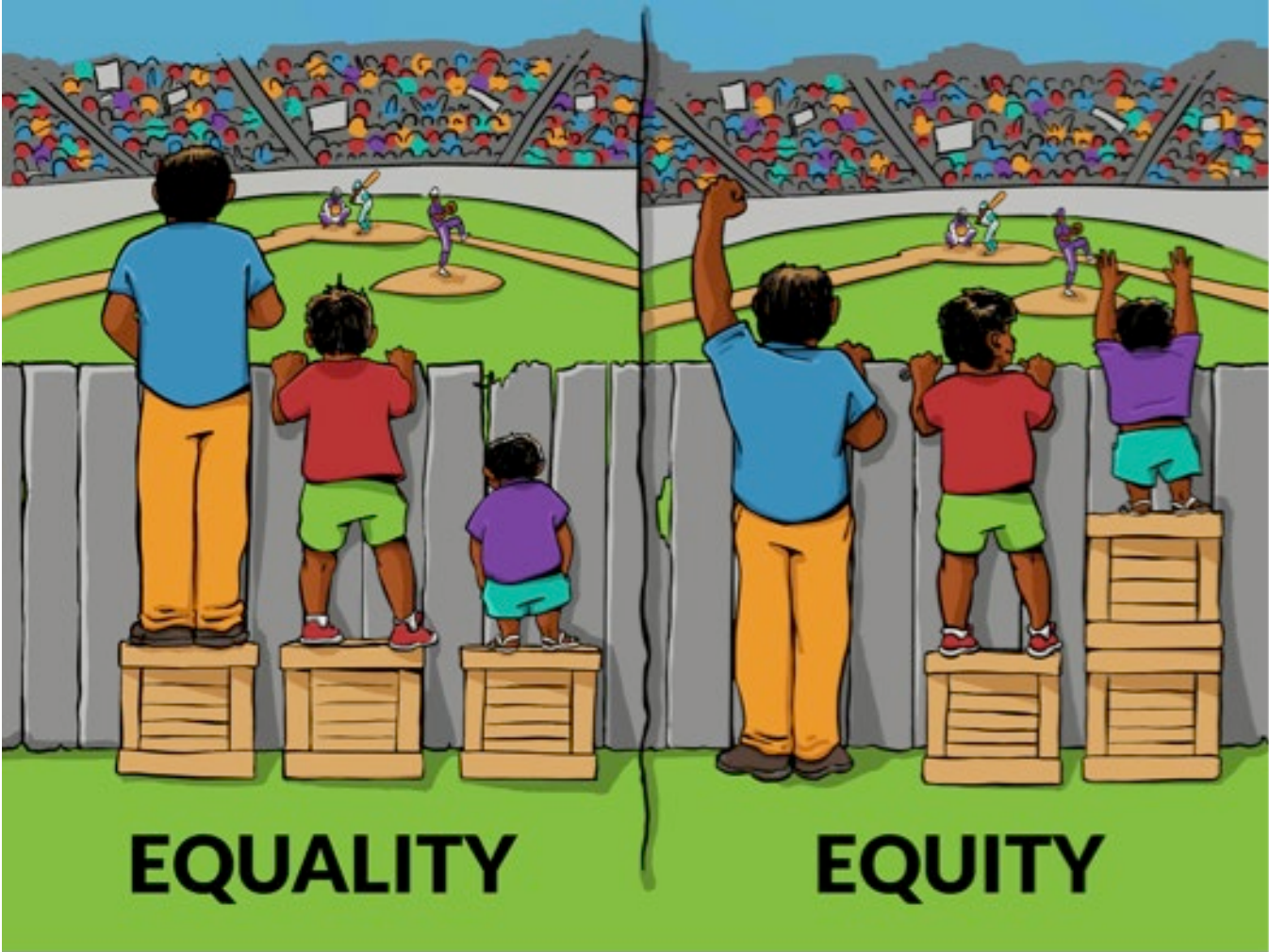


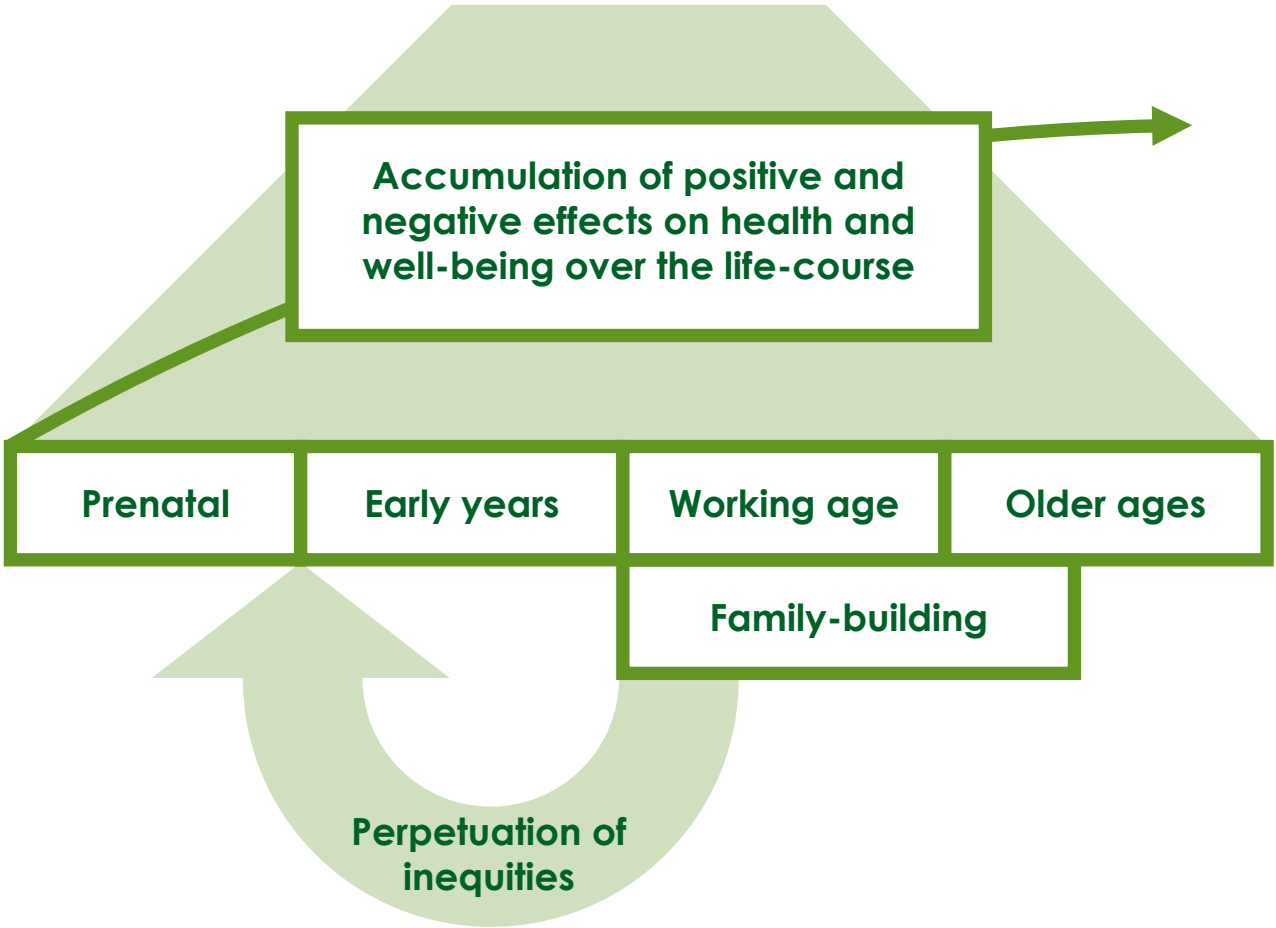
Figure: Estimates of the contribution of the main drivers of health status.

Source: Donkin, A., P. Goldblatt, J. Allen, V. Nathanson and M. Marmot (2017). "Global action on the social determinants of health." *BMJ Global Health*.

A VISUAL DEPICTION OF THE DIFFERENCE BETWEEN EQUALITY AND EQUITY



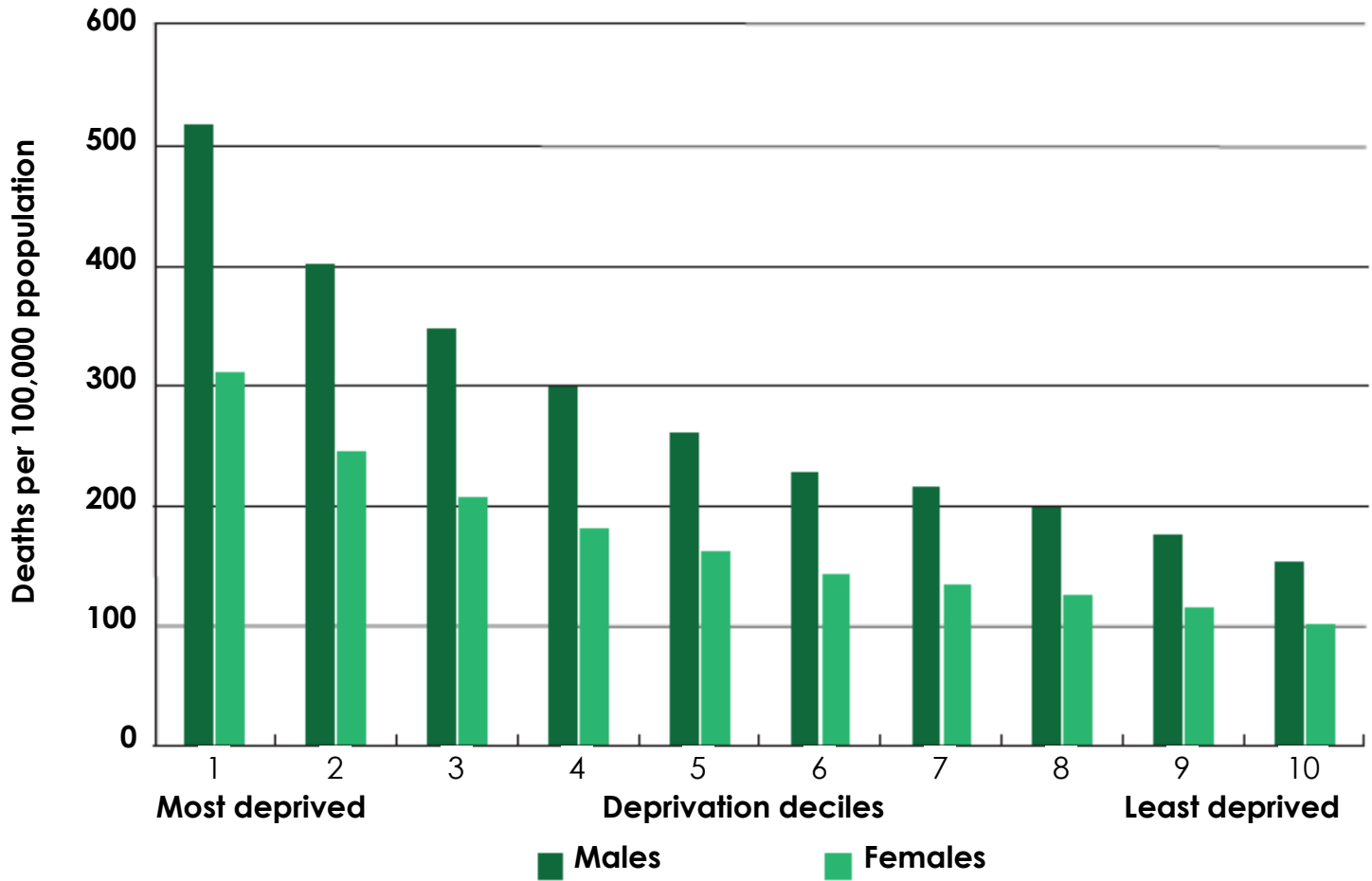
Inequities in health accumulate throughout life



Source: World Health Organization. Review of social determinants and the health divide in the WHO European Region: final report. Copenhagen: World Health Organization, 2013.

- Also called “dimensions of inequality”
- Health inequalities tend to stem from social inequalities
- Equity stratifiers typically reflect social conditions
- There are several equity stratifiers that are used to distinguish groups and individuals:
 - Socioeconomic status
 - Education
 - Place of residence (rural, urban etc.)
 - Race or ethnicity
 - Occupation
 - Gender
 - Religion

AGE STANDARDISED AVOIDABLE MORTALITY RATE (PER 100,000) BY DEPRIVATION DECILE, ENGLAND, 2017

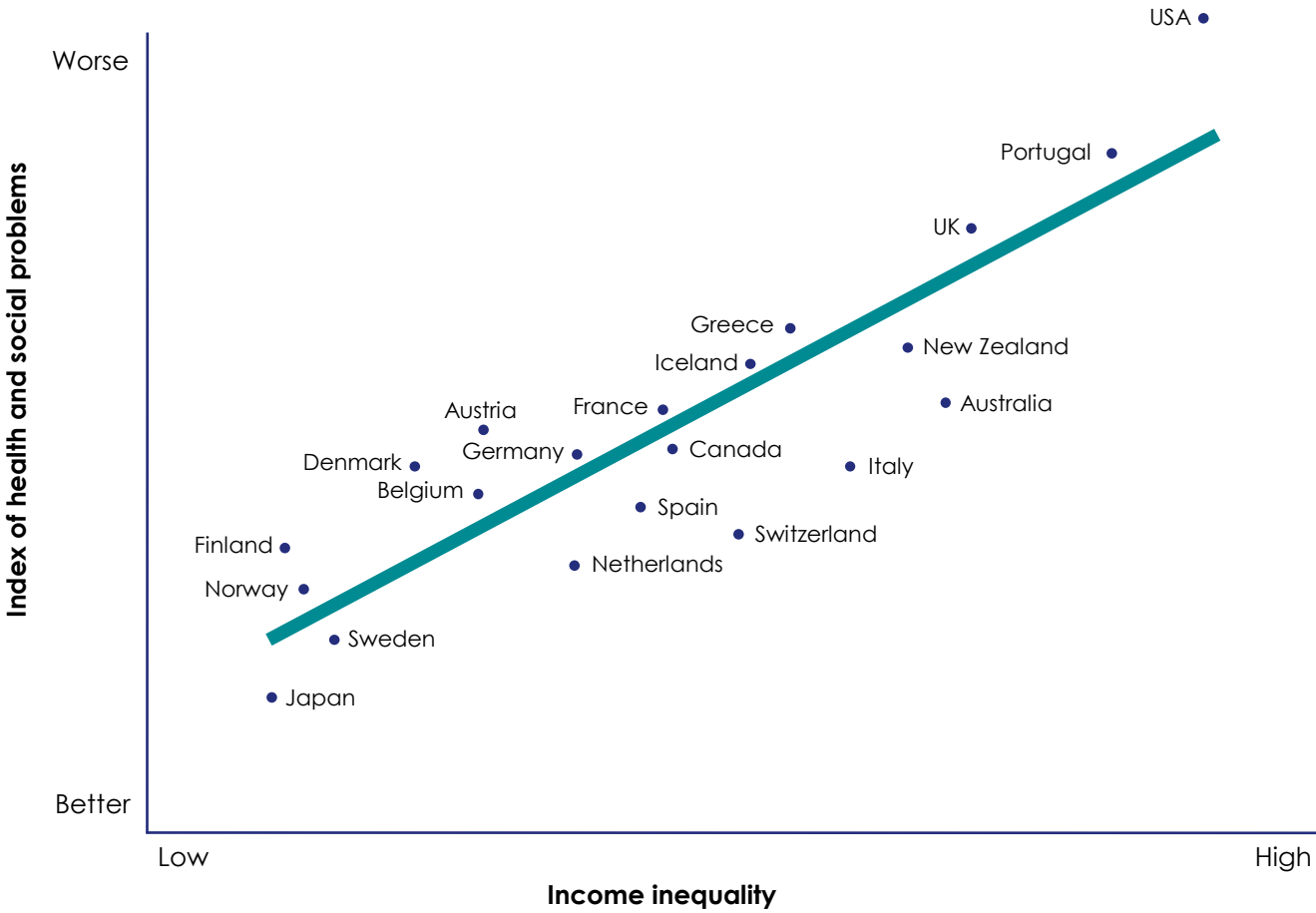


Source: Marmot, M, Allen J. et al. (2020). Health equity in England: The Marmot review 10 years on. London: Institute of Health Equity.

CORRELATION BETWEEN INEQUALITY AND AN INDEX OF HEALTH AND SOCIAL PROBLEMS

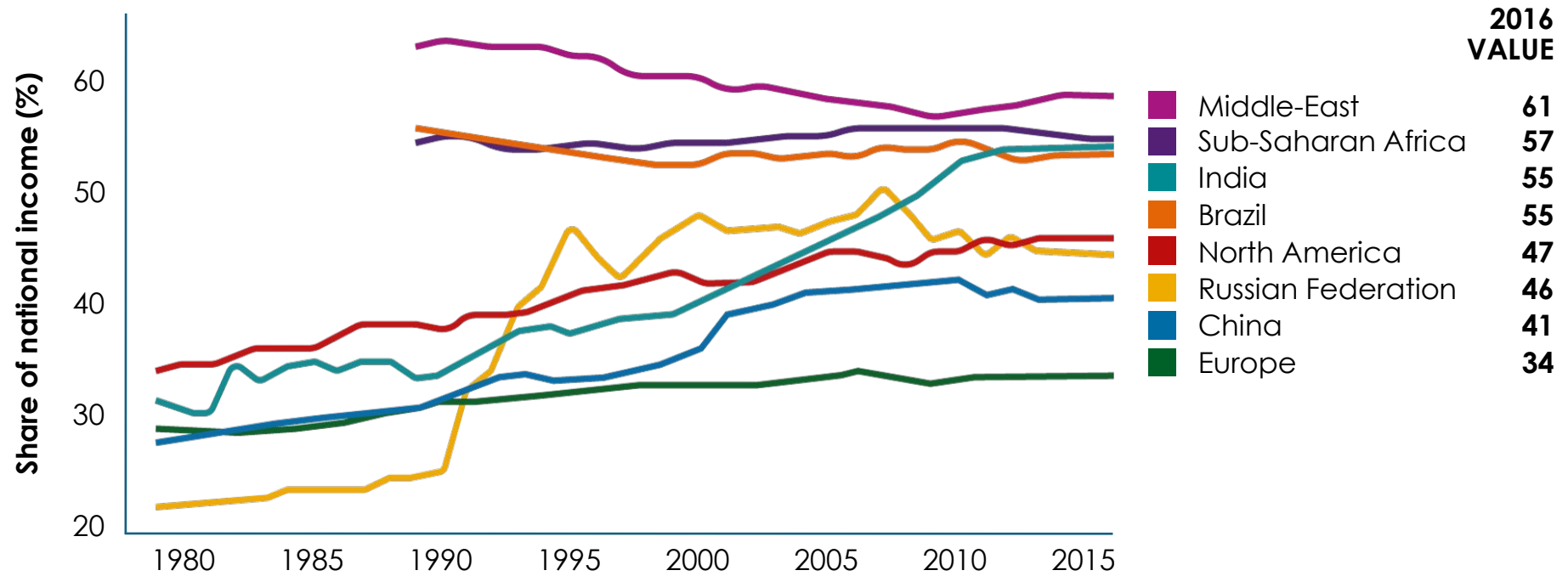
HEALTH AND SOCIAL PROBLEMS ARE WORSE IN MORE UNEQUAL COUNTRIES

- Index of:**
- Life expectancy
 - Maths & Literacy
 - Infant mortality
 - Homicides
 - Imprisonment
 - Teenage births
 - Trust
 - Obesity
 - Mental illness – incl. drugs & alcohol addiction
 - Social mobility



SOCIAL INEQUALITIES ARE PERVASIVE AND HAVE BEEN WIDENING...

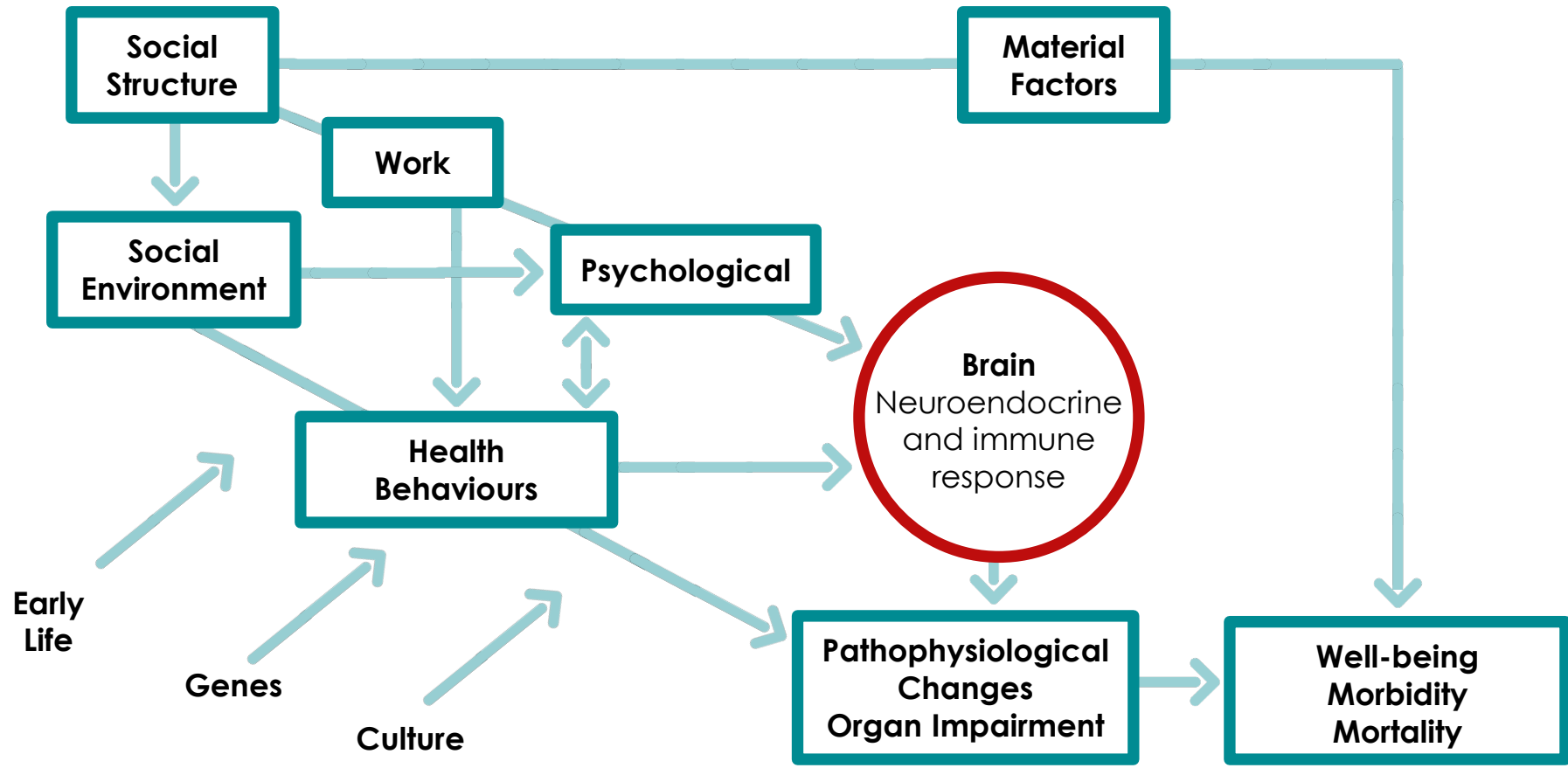
INCOME INEQUALITY BASED ON THE TOP 10 PERCENT'S INCOME SHARE HAS RISEN SINCE 1980 IN MOST REGIONS BUT AT DIFFERENT RATES



Source: United Nations Development Programme (UNDP), Human Development Report, 2019

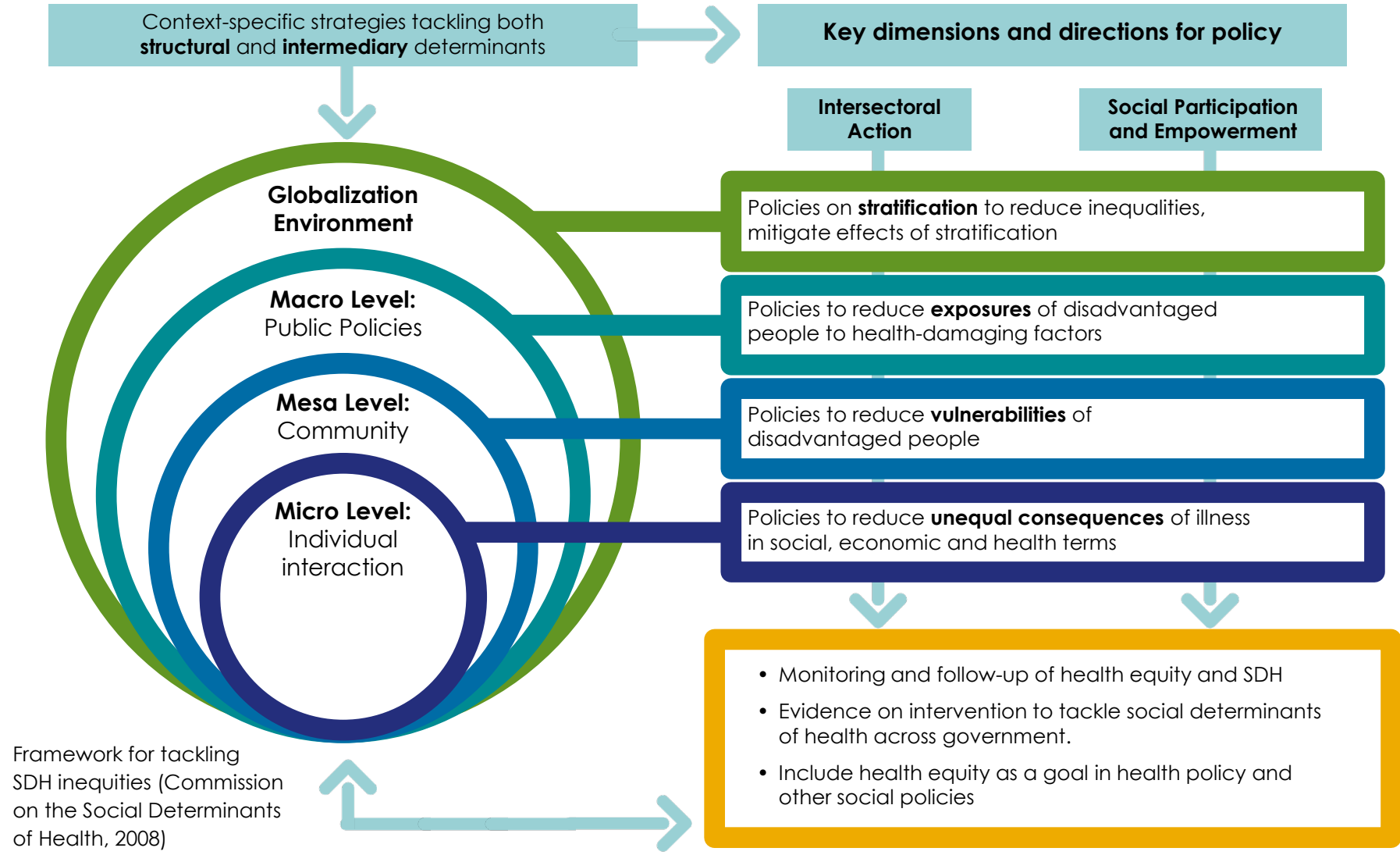
SOCIAL DETERMINANTS OF HEALTH AND THE PATHWAYS TO HEALTH AND ILLNESS

THE ROLE OF PSYCHO-SOCIAL MECHANISMS



Source: Brunner, E., & Marmot, M.G. (2006). 'Social Organization, Stress, and Health.' In M.G. Marmot & R.G. Wilkinson (Eds.), Social Determinants of Health. Oxford: Oxford University Press, Figure 2.2, p.9.

... AMENABLE TO CHANGE: POLICY ACTION



The World Health Organization (WHO) has conducted a global assessment of NAPs (59 NAPs) and a sample of HNAPs (27 HNAPs).

Health at the heart of national adaptation planning.

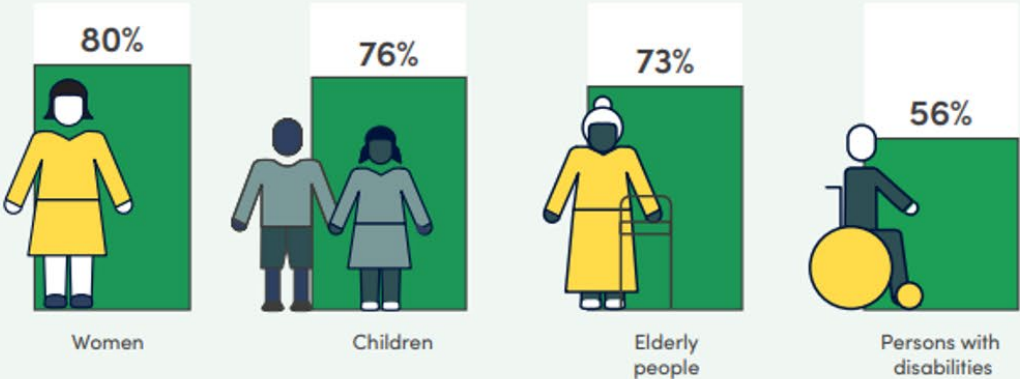
NAPs results

10

Most commonly mentioned most-at-risk populations highlighted in NAPs

Women, children and elderly people are frequently mentioned in NAPs as most-at-risk population groups. Other commonly identified groups include those people with existing chronic health conditions, low socio-economic populations, persons with disabilities, and low-lying coastal communities, amongst others.

Percentage of NAPs mentioning these most-at-risk groups:



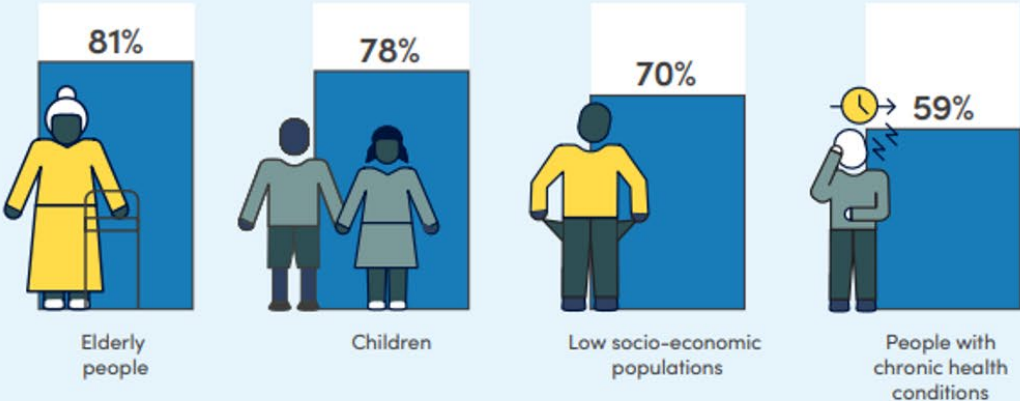
HNAPs results

11

Most commonly mentioned most-at-risk populations highlighted in HNAPs

Elderly people, children and low socio-economic populations are frequently mentioned in HNAPs as most-at-risk population groups. Other commonly identified groups include people with existing chronic health conditions, persons with disabilities and low-lying coastal communities.

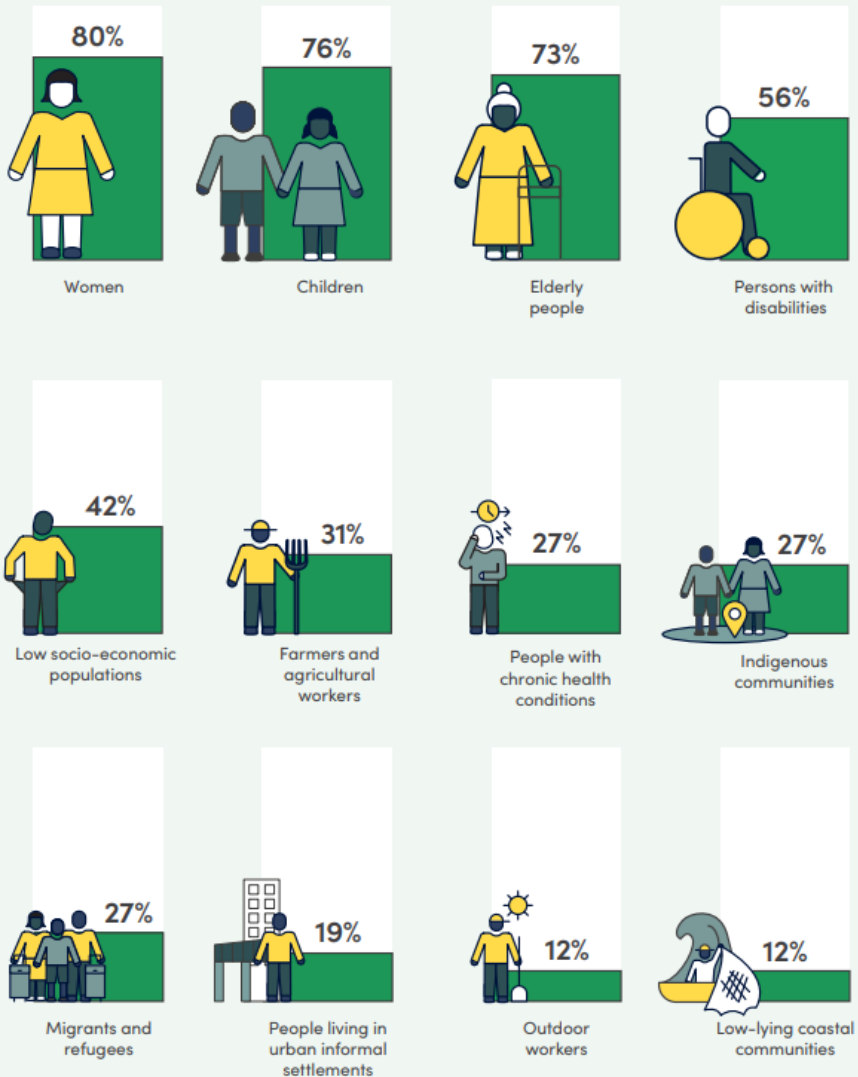
Percentage of HNAPs mentioning these most-at-risk groups:



Most commonly mentioned most-at-risk populations highlighted in NAPs

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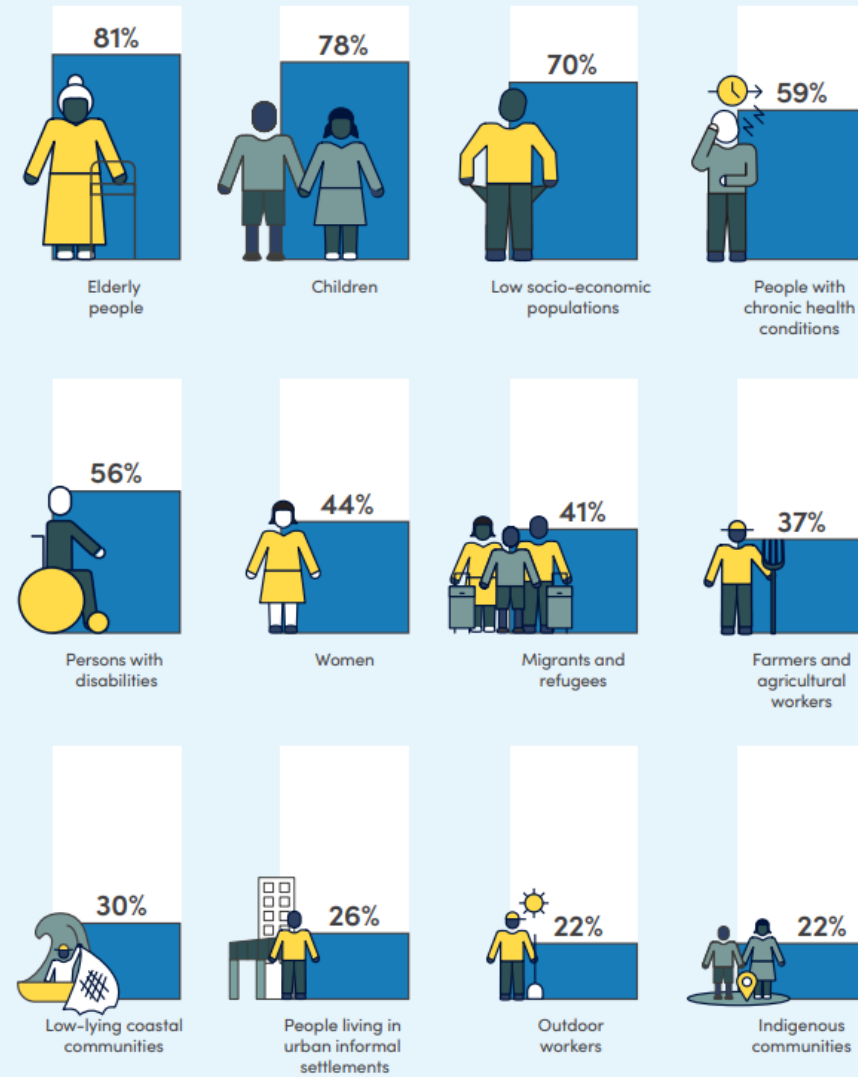
Percentage of NAPs mentioning these most-at-risk groups:

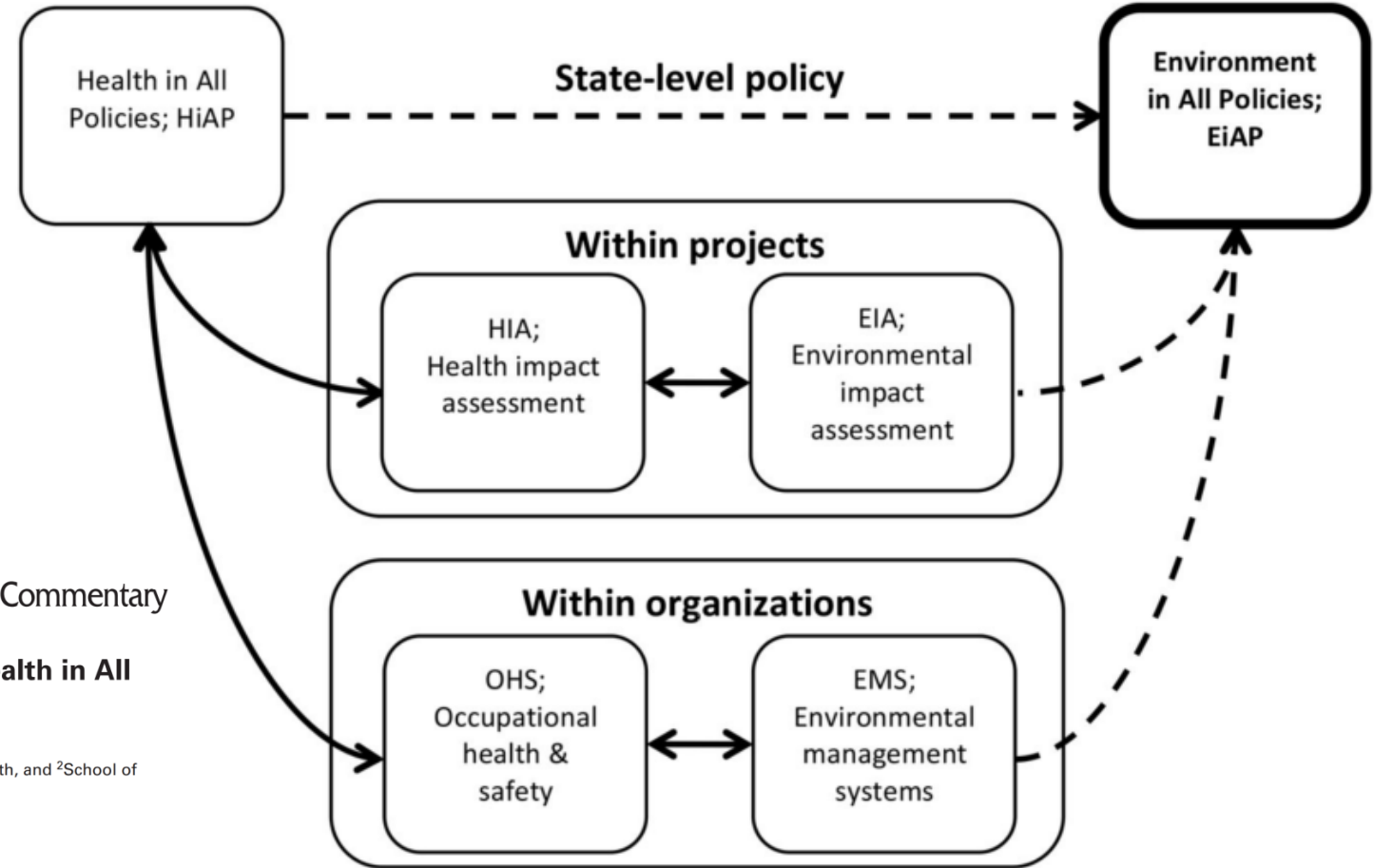


Most commonly mentioned most-at-risk populations highlighted in HNAPs

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Percentage of HNAPs mentioning these most-at-risk groups:





A Section 508-conformant HTML version of this article is available at <http://dx.doi.org/10.1289/EHP294>.

The Case for “Environment in All Policies”: Lessons from the “Health in All Policies” Approach in Public Health

Geoffrey R. Browne¹ and Ian D. Rutherford²

¹McCaughey VicHealth Community Wellbeing Unit, Centre for Health Equity, School of Population and Global Health, and ²School of Geography, University of Melbourne, Parkville, Victoria, Australia

Figure 2. An “environment in all policies” (EiAP) approach complements existing environmental management tools at other levels, as “health in all policies” (HiAP) does for health. Solid lines show how existing approaches are informed by each other, and dashed lines show how EiAP would be informed by existing approaches.

From Health in All Policies to Health for All Policies



Scott L Greer, Michelle Falkenbach, Luigi Siciliani, Martin McKee, Matthias Wismar, Josep Figueras

Worldwide responses to the COVID-19 pandemic have shown that it is possible for politicians to come together across departmental boundaries. To this end, in many countries, heads of government and their health ministers work *Lancet Public Health 2022; 7: e718-20*

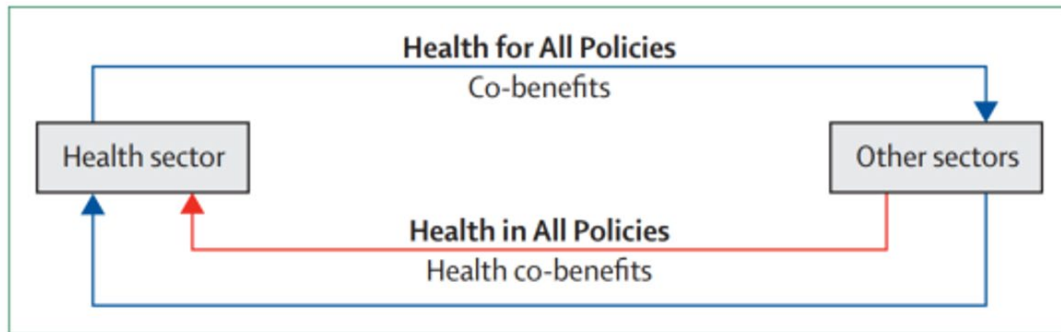


Figure 1: The association between health and other sectors

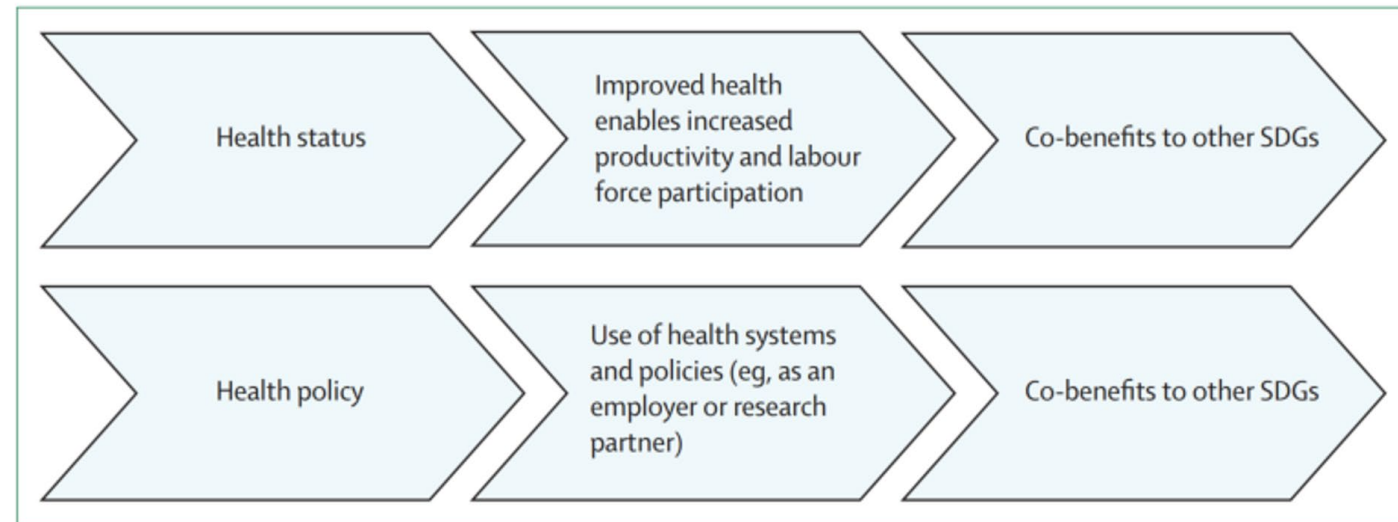
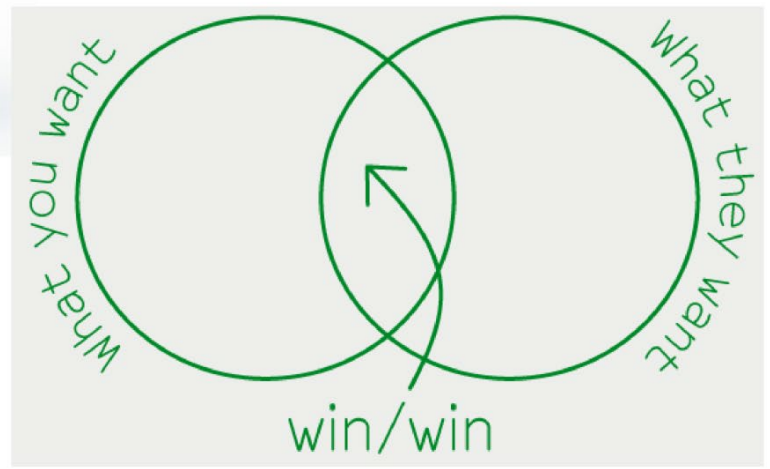
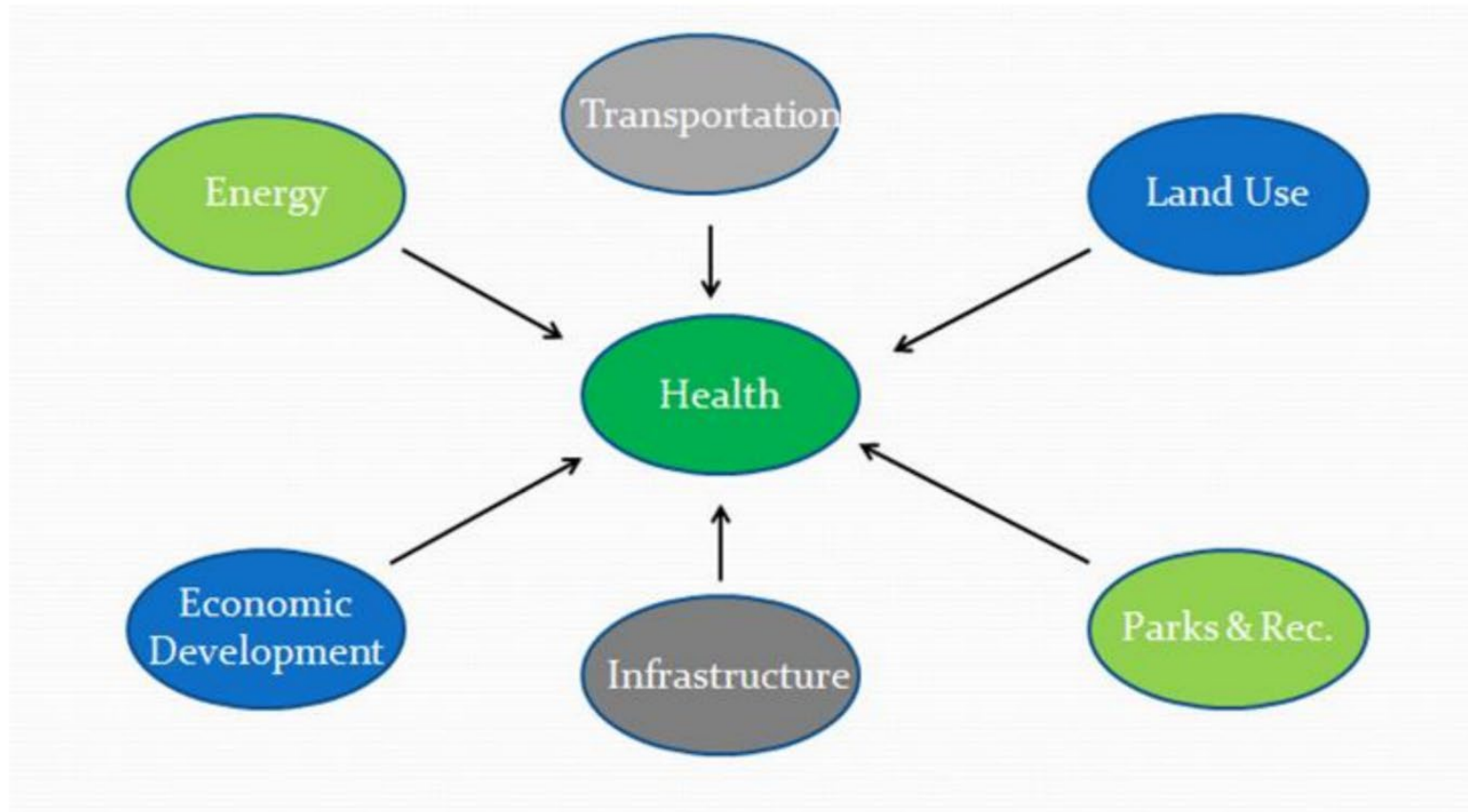


Figure 2: Causal pathways in Health for All Policies
SDGs=Sustainable Development Goals.

Co-Benefits

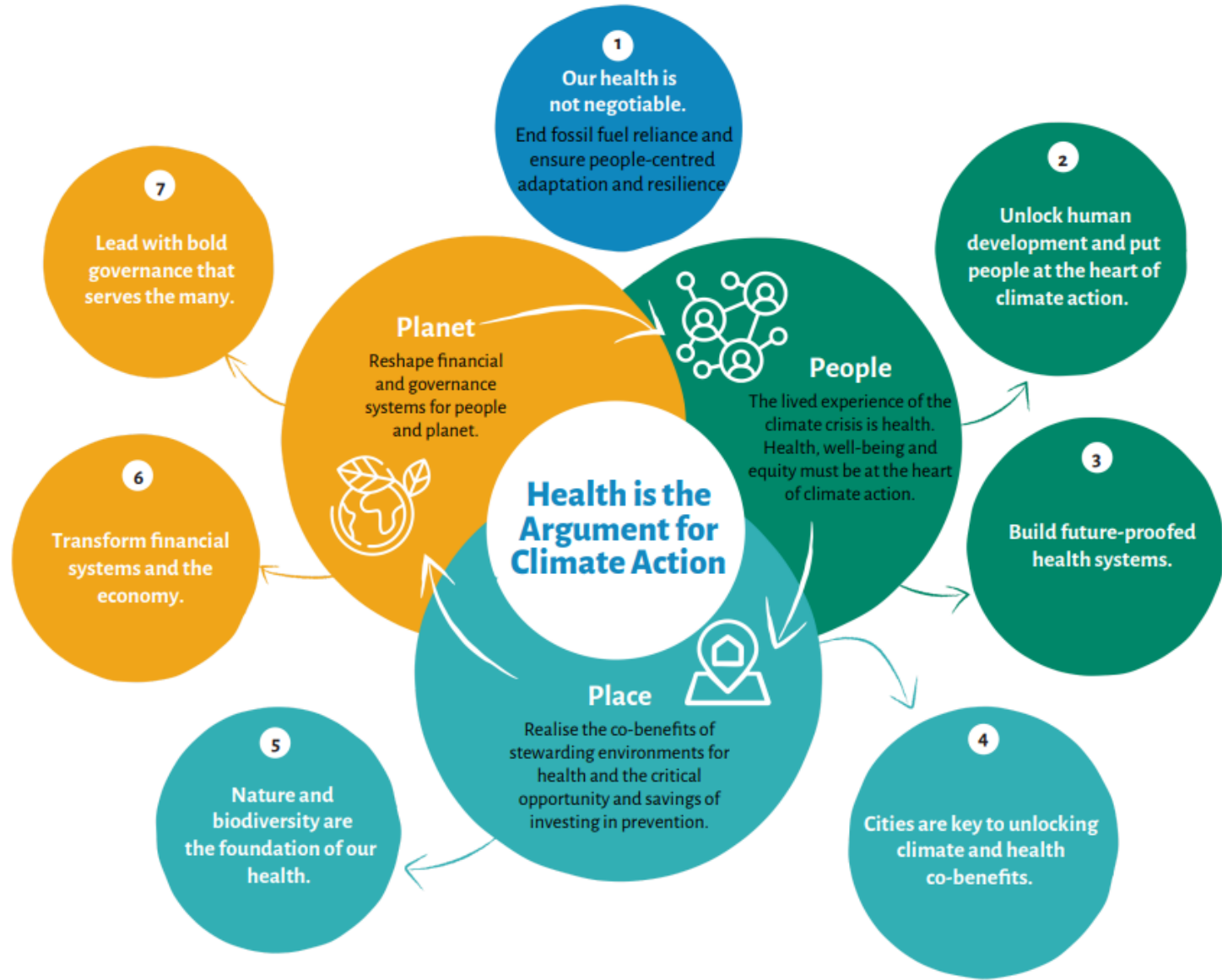


Intersectoral Collaboration



ABCDEFGHI
ABCDEFGHI
ABCDEFGHI

Climate change is making us sick, and urgent action is a matter of life and death. Prioritizing health and well-being in climate action is not only a moral and legal imperative but a strategic opportunity to unlock transformative health benefits, secure economic opportunity, and ensure a just and equitable future. The COP29 Special Report on Climate Change and Health outlines priority actions from the global health community for governments, policymakers, and other sectors to place health at the heart of climate solutions. Developed by the World Health Organization with over 100 organizations and 300 experts, the report emphasizes health as the definitive argument for climate action across people, place, and planet, through seven key messages and critical asks. This report is a call to action: the success of collective efforts to combat climate change will be measured not only by greenhouse gas reductions but also in tangible improvements in people's lives. It highlights opportunities to reduce health inequalities, bridge the development gap, and presents a vision for a just, resilient, sustainable, and healthy future.



Related health topics



| Socio-political determinants
Commercial determinants of health



| Physical environment
Environmental health

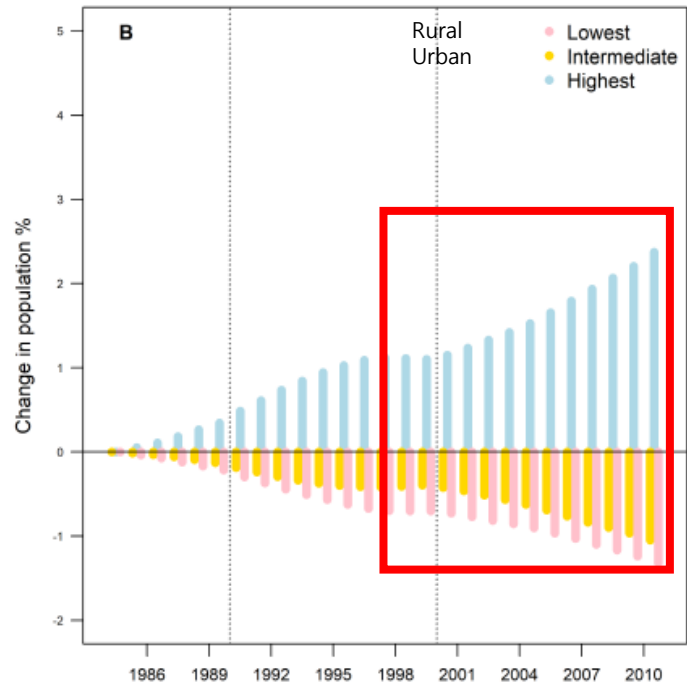


| Other
Health equity

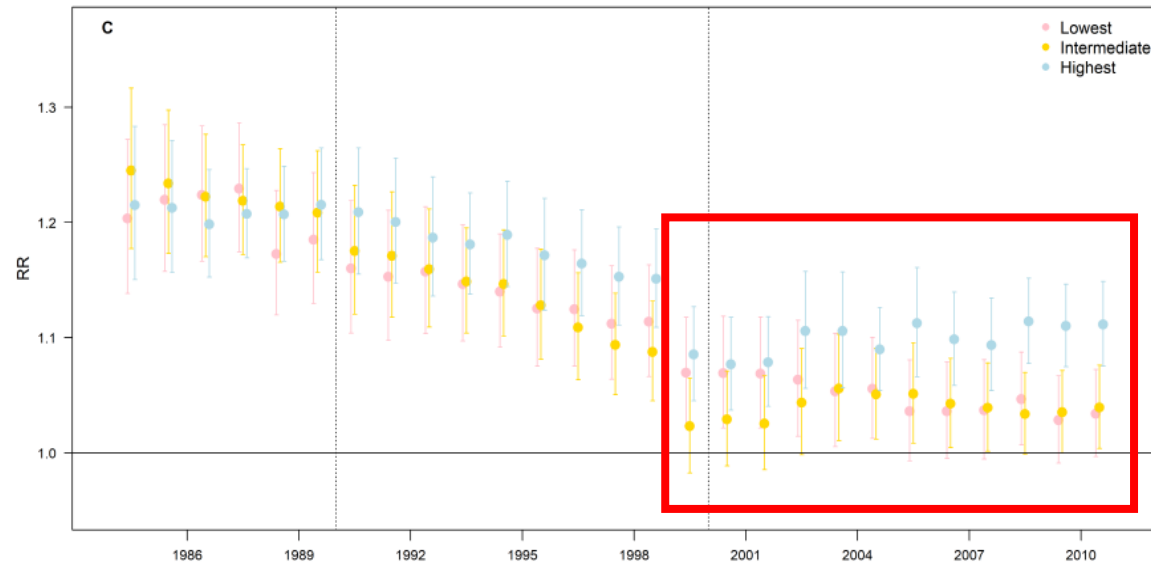


| Socio-political determinants
Urban health

- **Japan: Population concentration & Higher heat risk in metropolitan areas** (high apartment, low greenness, and low accessibility to emergency medical services)



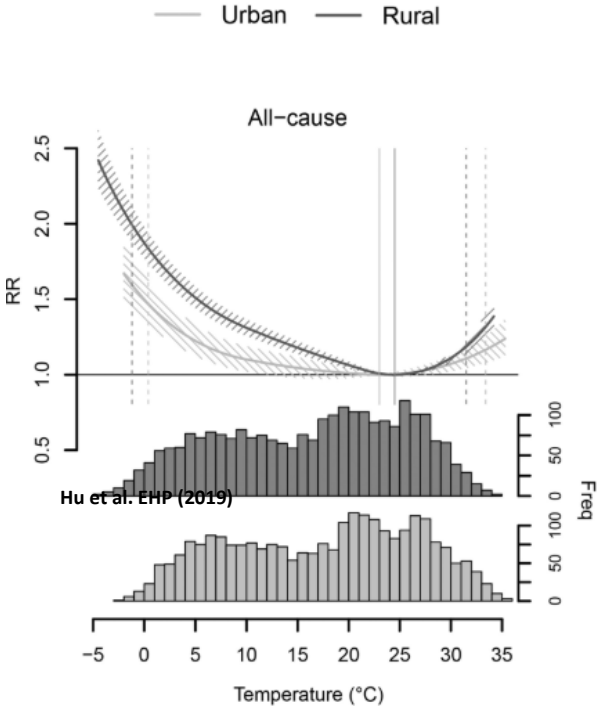
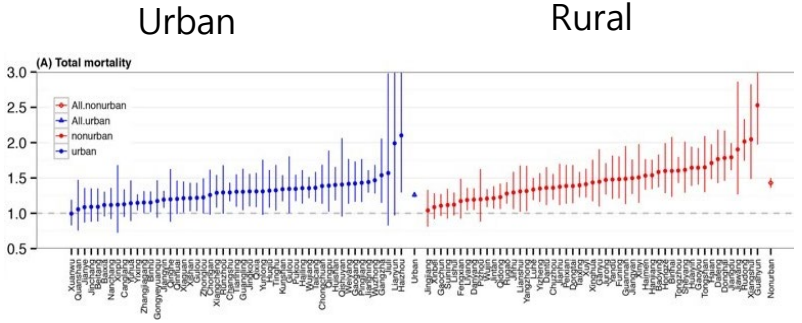
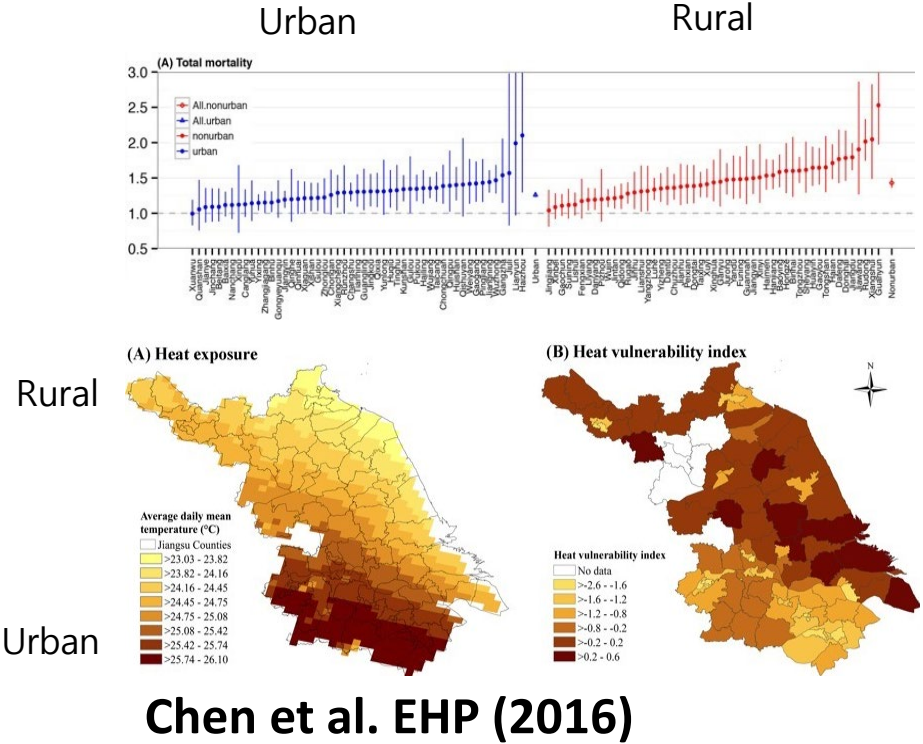
Heat risk over years in Japan



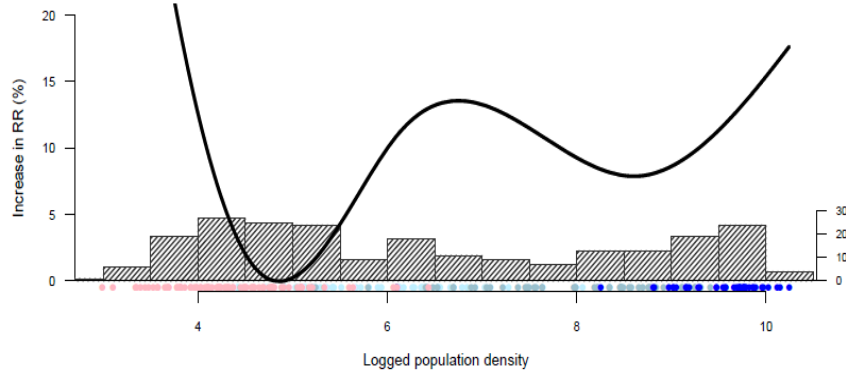
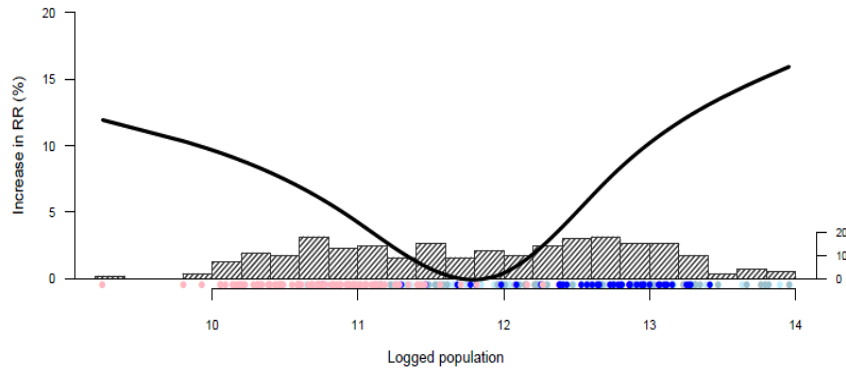
Lee et al. *int J of Epidemiology* (2020)

Urbanization is still on-going

- **China:** Higher heat vulnerability in rural areas (more aged pop, limited health-care availability, low education, and low air conditioning prevalence).



- **Korea:** Higher heat vulnerability in high-urban/rural areas (Limited hospital beds in rural and highly urbanized areas)



rural ←————→ urban

Table 3. The associations between urbanization relevant indicators and heat-related mortality risk in the total population and for urban and rural areas; the associations were expressed as percentile increases (95% confidence interval) in heat-related mortality risk (relative risk; RR) per unit increase in each indicator.

	Total (229 districts)	Urban (147 districts)	Rural (82 districts)
Number of beds in hospitals (per 1,000 persons)	-0.7 (-1.3, -0.2)*	-0.8 (-1.4, -0.2)*	-0.2 (-1.5, 1.0)
Number of emergency physicians (per 100,000 persons)	-0.6 (-2.3, 1.1)	-0.6 (-2.3, 1.2)	-1.6 (-6.9, 4.0)
Urban forest areas per capita (km ²)	-0.1 (-0.3, 0.2)	-0.3 (-1.0, 0.5)	-0.3 (-0.6, 0.1)
EQ-5D ¹ (per 0.01 scores)	-0.3 (-0.8, 0.3)	0.1 (-0.5, 0.7)	-2.0 (-3.4, -0.6)*
Percentage of detached houses	0.0 (-0.3, 0.2)	-0.2 (-0.5, 0.1)	0.2 (-0.5, 0.9)
Average sleep duration per day (unit: 10 minutes)	-6.4 (-13.1, 0.8)	-7.6 (-15.6, 1.1)	-9.9 (-27.4, 12.0)
Social gathering index ²	-0.4 (-1.0, 0.2)	-0.1 (-0.8, 0.6)	-1.7 (-3.1, -0.3)*

Note: *p*-value<0.05 (*)

Lee et al. IJE (2021)

ENVIRONMENTAL RESEARCH HEALTH

PAPER

A protective role of urban greenspace on the association between night-time heat and suicide in Seoul, South Korea

Jinah Park¹, Jeongmin Moon¹, Dohoon Kwon¹, John S Ji², Ho Kim¹ and Yoonhee Kim^{3,*}

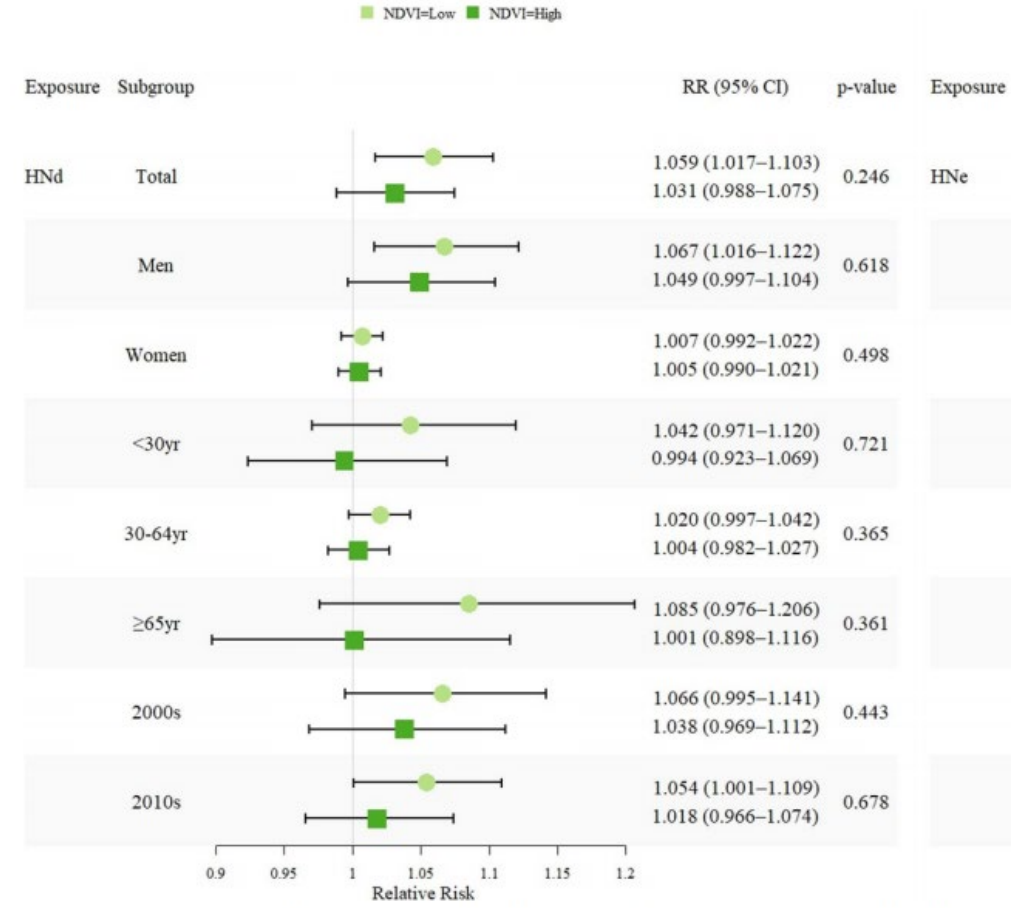
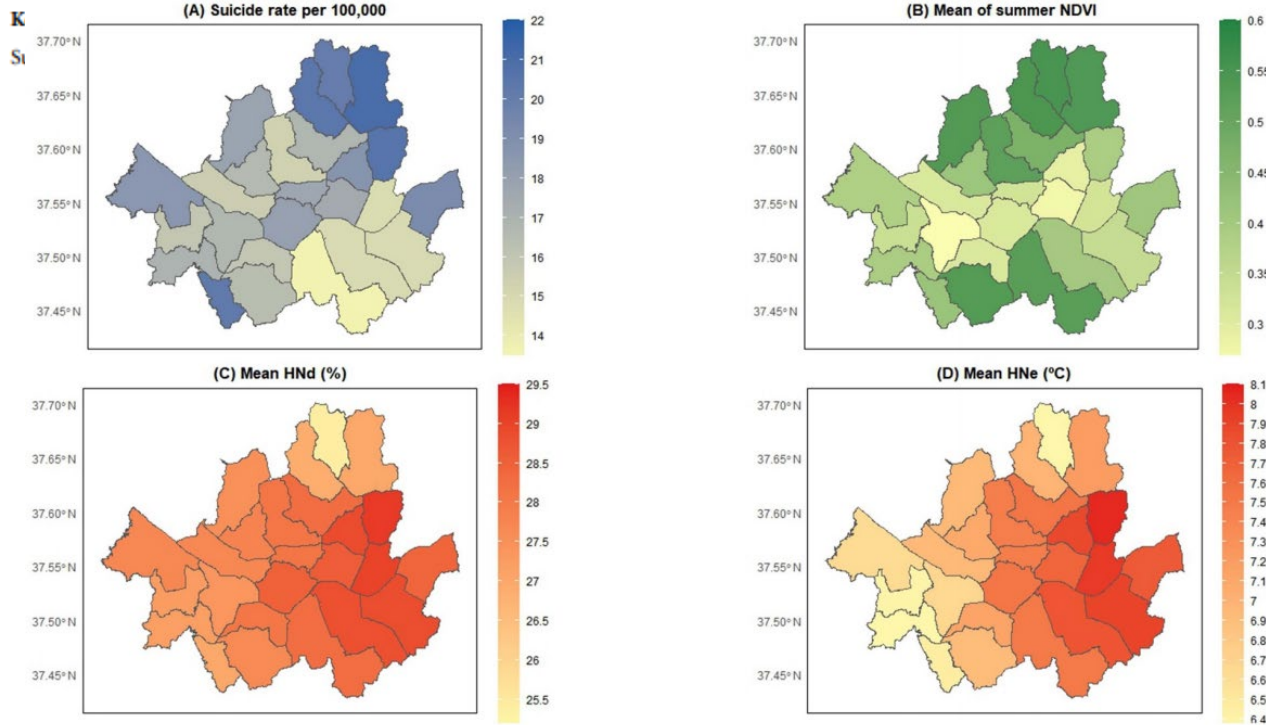
¹ Department of Public Health Sciences, Graduate School of Public Health, Seoul National University, Seoul, Republic of Korea

² Vanke School of Public Health, Tsinghua University, Beijing, People's Republic of China

³ Department of Global Environmental Health, Graduate School of Medicine, University of Tokyo, Tokyo, Japan

* Authors to whom any correspondence should be addressed.

E-mail: hokim@snu.ac.kr and yoonheekim@m.u-tokyo.ac.jp



Estimated relative risk (RR) (95% confidence interval [CI]) of hot night effect (hot night duration [HND], hot night effect [HNe]) per 10% increase in HND, and RR for HNe (hot night effect) by sex and age by low and high urban greenspace levels were measured with the Wald test, and the p-value

Effect modification of greenness on the association between heat and mortality: A multi-city multi-country study

Hayon Michelle Choi,^{a*} Whanhee Lee,^a Dominic Roye,^b Seulkee Heo,^a Aleš Urban,^{c,d} Antonella Zanobetti,^g Antonio Gasparrini,^{h,i,j} Antonis Analitis,^k Aurelio Tobias,^{l,m} Ben Carmen Íñiguez,^o Christofer Åström,ⁿ Ene Indermitte,^p Eric Lavigne,^{q,r} Fatemeh Mayva Hans Orru,^p Ho Kim,^u Jan Kyselý,^{c,d,v} Joana Madueira,^{w,x} Joel Schwartz,^g Jouni J.K. Ja Magali Hurtado Diaz,^z Martina S. Ragetti,^{aa,bb} Mathilde Pascal,^{cc} Niilo Rytty,^y Noah Sc Shilu Tong,^{ff,gg,hh,ii} Xerxes Seposo,^m Yue Leon Guo,^{jj,kk} Yuming Guo,^{ll} and Michelle L. B

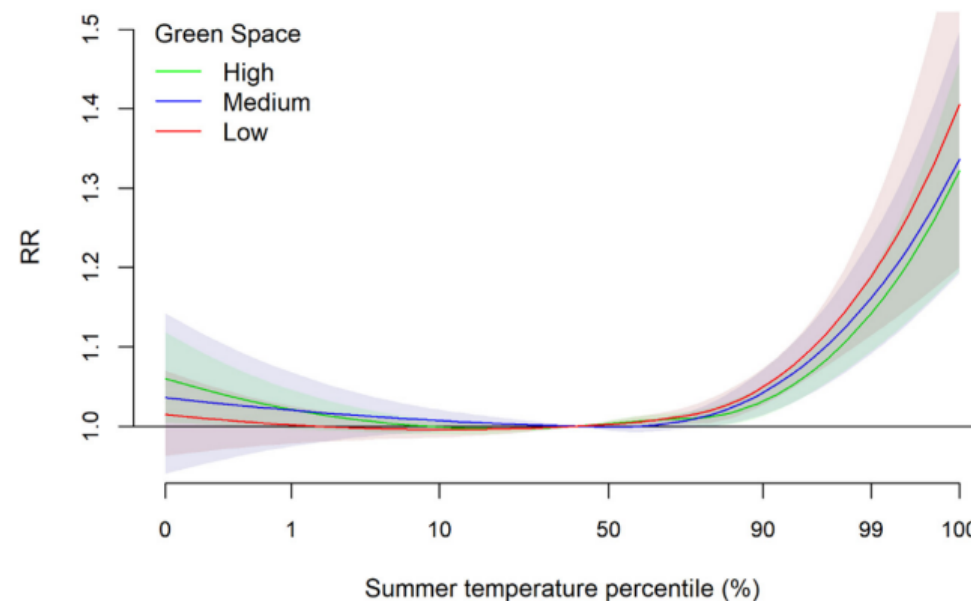
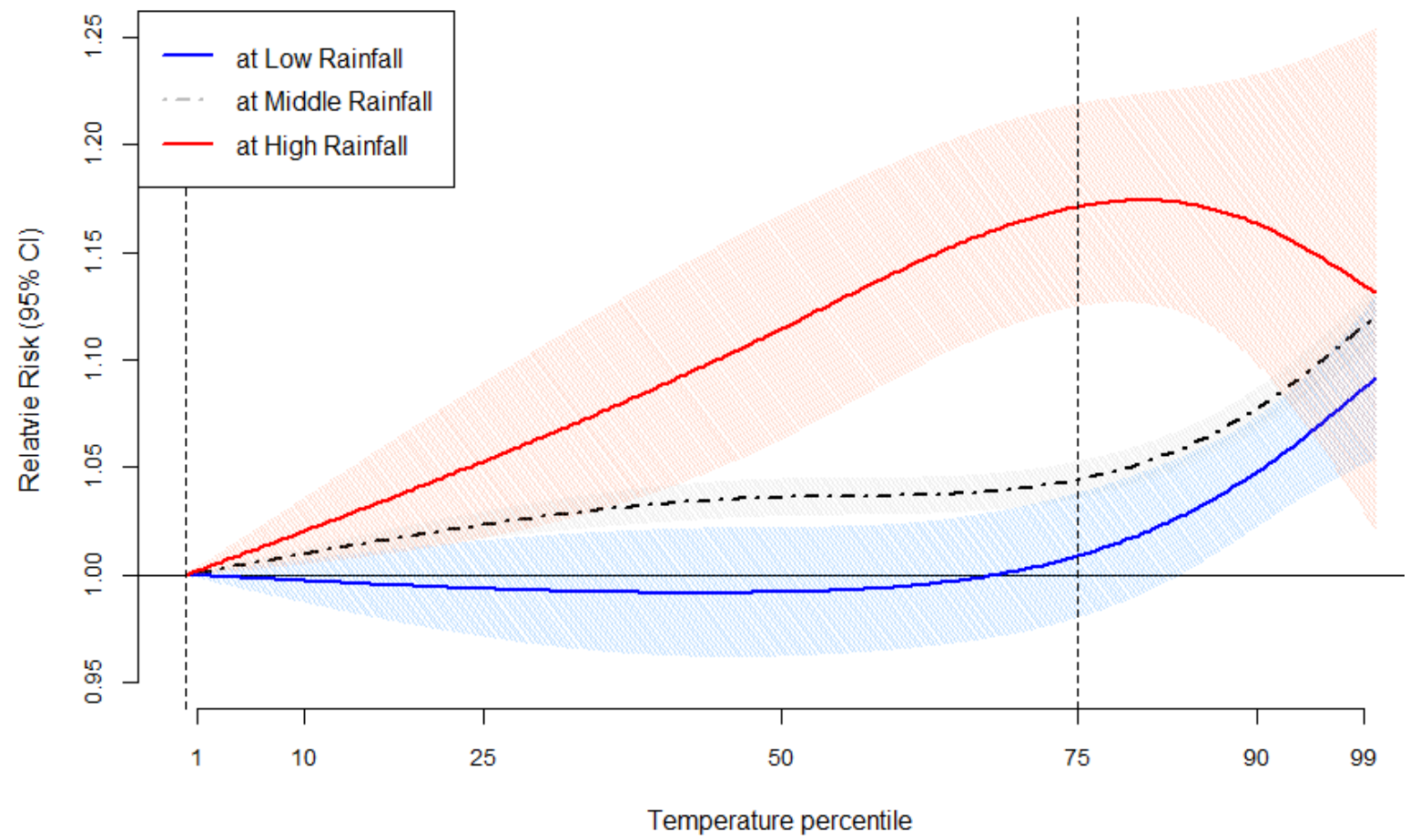
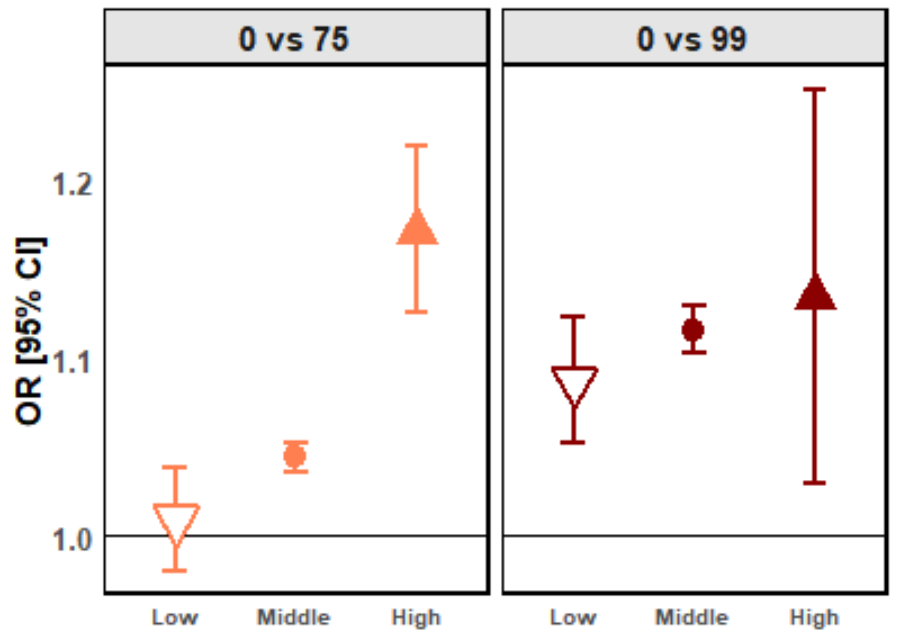


Figure 2. Overall cumulative temperature-mortality relationship by different greenspace level. The pooled relative risk was centered at the median temperatures (22.1°C); High greenspace group (EVI \geq 0.42), medium (0.33 \leq EVI < 0.42), and low greenspace group (EVI < 0.33).

Enhanced Vegetation Index (EVI) as the greenspace measurement.

Combined Exposure : Flood and heat

Mortality risk vs. temp
With disabilities (Previous 7 days Rainfall)



Park et al. In progress

Combined Exposure : Day-time heat and Night-time heat (Tropical Night: 熱帶夜)

nature communications



Article

<https://doi.org/10.1038/s41467-025-56067-7>

Nonlinear exposure-response associations of daytime, nighttime, and day-night compound heatwaves with mortality amid climate change

Received: 3 May 2024

Jiangdong Liu¹, Ho Kim², Masahiro Hashizume³, Whanhee Lee⁴, Yasushi Honda^{5,6}, Satbyul Estella Kim^{5,6}, Cheng He⁷, Haidong Kan^{1,8} & Renjie Chen¹✉

Accepted: 8 January 2025

Published online: 14 January 2025

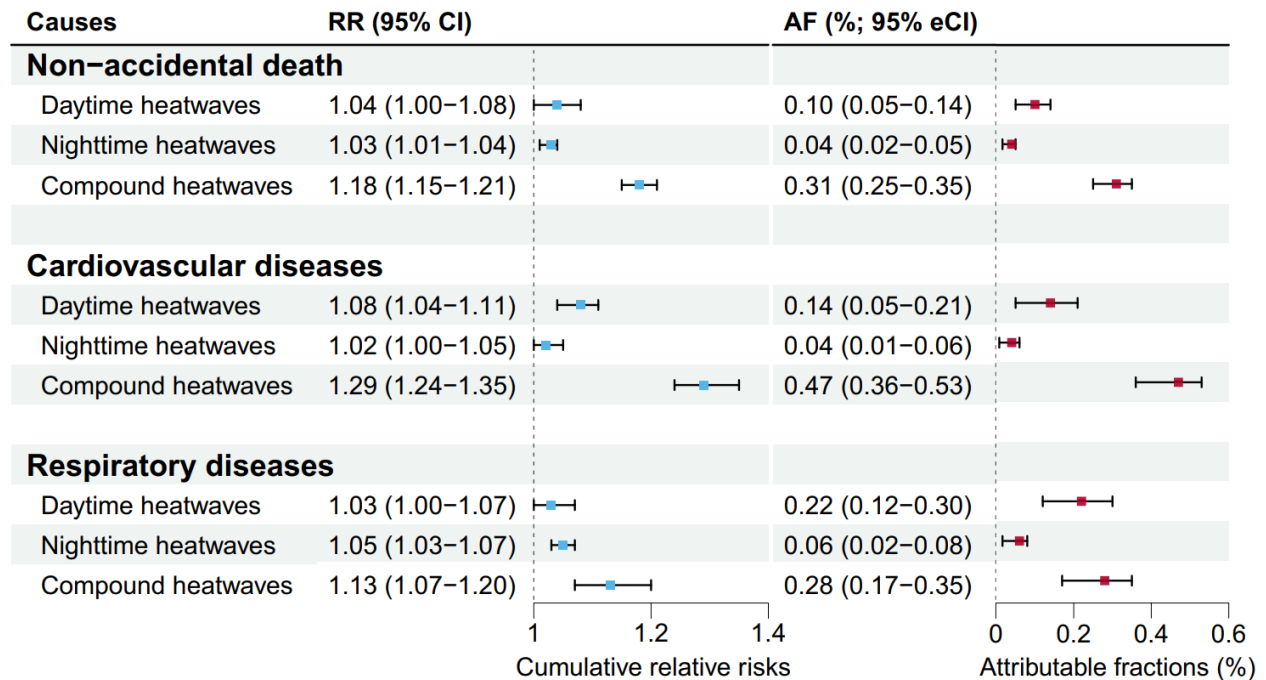


Fig. 5 | Cumulative relative risks (RRs) and attributable fractions (AFs) of non-accidental, cardiovascular disease, and respiratory disease mortality associated with daytime, nighttime, and day-night compound heatwaves in East Asia. RRs and AFs are depicted as squares (centres of the error bars), with the

error bars representing the 95% confidence intervals. RRs were defined as the risks at the mean of the 90th percentile of cumulative excess heatwave index distributions compared with the risks on non-heatwave days. Source data are provided as a Source Data file. Abbreviation: eCIs empirical confidence intervals.

- Reframe climate action as public health imperative
- Prioritize prevention, equity, and wellbeing
- Align policies for sustainable futures
- More evidences from solid researches

HiAP

EiAP

CCiAP

