## Towards a healthier and safer environment



The Lancet Commission on pollution and health by Philip Landrigan and colleagues<sup>1</sup> is an immensely important piece of work highlighting the impact that environmental pollution has on death and disease and the related need to scale up political will if we are to effectively confront this issue.

WHO has long recognised the important influence that environmental integrity has on human health and development. We know from WHO's most recent environmental burden of disease assessment that at least 12.6 million people die each year because of preventable environmental causes.2 This is almost a quarter of all annual deaths globally. Environmental risk factors—mainly due to the influence of air pollution on non-communicable diseases—are driving up healthcare costs, which consume nearly 10% of global gross domestic product.<sup>3,4</sup> Moreover, as highlighted by this Commission, it is vulnerable populations in low-income and middle-income countries (LMICs) that are most heavily affected. This is an unacceptable loss of lives and human development potential.

Today, we have more knowledge, evidence, and understanding than ever before about how and through what pathways climate and environmental change impact health. We know which sector policies and interventions effectively address environmental root causes of disease (eg, energy, transport, housing, and agriculture) and in which settings (eg, cities, workplaces, and homes) these interventions will likely have the greatest impact. For instance, energy policies that facilitate or scale up household access to clean fuels for cooking, heating, and lighting in LMICs will help avert the 3.5 million deaths per year that result from exposure to household air pollution.<sup>5</sup> We also know many of the co-benefits to health, the environment, and the economy that could accrue with a more integrated approach to development policy and planning.

This is particularly the case in cities that are home to about 4 billion people-nearly half of the world's population.<sup>6</sup> People who live in cities are exposed to a range of environmental threats such as those arising from lack of adequate housing and transport and poor water, sanitation, and waste management. Nearly 90% of the population living in cities worldwide is breathing air that fails to meet WHO air quality guideline limits.7 Since most future population growth will take place in cities, urban expansion needs to be planned and designed in ways that make cities a centre of health and wellbeing. Specific sector policies such as energy, urban planning, transport, and infrastructure should be designed and implemented with clear and tangible health and environmental objectives in mind.

Governance of environmental threats to health is, however, also more challenging today than ever before. As argued persuasively in the Lancet Commission, environmental risk factors are changing in nature, origin, and influence. Some countries now face a combination of unresolved and new environmental and health challenges, where, for example, the poorest populations do not have access to clean water, clean household energy, and sanitation, and other populations are being increasingly exposed to chemicals, radiation, air pollution, and new and more complex occupational hazards. Conflict and natural disasters are adding further complexity to these governance challenges.

Simply put, the ways environmental threats to health are governed are no longer suited to today's development context. We need a different approach. Although we do need more pollutioncontrol strategies to set and regulate environmental emission thresholds and to foster increased use of best available techniques and best environmental

October 19, 2017 http://dx.doi.org/10.1016/ S0140-6736(17)32545-X See Online/The Lancet Commissions http://dx.doi.org/10.1016/ 50140-6736(17)32345-0



1

practices, pollution is not the root driver of ill health. Pollution is a symptom and unintended consequence of unhealthy and unsustainable development. If we want to substantially reduce the global environmental burden of disease, we need to act further upstream and address the drivers and sources of pollution to ensure that development policies and investments are healthy and sustainable by design and that the choices we make—at the government, private sector, and individual levels—cultivate a healthier and safer environment. In other words, we need to move beyond a "do-no-harm" approach and ensure that development actively and explicitly improves the environmental and social conditions that give rise to, and expose populations to, disease.

The timing of this *Lancet* Commission could not be better given the clear need to scale up action in support of this agenda. There is growing global momentum around the Paris Agreement on Climate Change, arguably one of the most important treaties for public health in decades. This momentum, together with increased global demand for universal access to clean energy and more sustainable urban development, as reflected in the New Urban Agenda,<sup>8</sup> provide a strategic opportunity for health actors to influence development policies and investments that can give rise to major environmental threats to health.

For its part, WHO has prioritised such action, having placed particular focus on addressing the "health impacts of climate and environmental change" as one of four top health priorities for the next 5 years. WHO is also scaling up its programme of work on health and environment, placing greater focus on advocacy and awareness raising, the provision of technical support to countries, particularly those most vulnerable to climate and environmental change, and leveraging of key partnerships and constituencies such as in the energy, environment, water and sanitation, and urban planning sectors. In this, and through greater alignment of its focus with the 2030 Agenda for Sustainable

Development, WHO is reaffirming its commitment to reshape health and the determinants of health in today's sustainable development context.

The transition to a healthier and safer environment will require coordinated action and inputs from a range of actors from within and outside of the health sector. This action needs to be underpinned by scientifically sound and compelling evidence. WHO applauds and welcomes the timely *Lancet* Commission on pollution and health for its contribution to this global effort on both fronts.

## \*Maria Neira, Michaela Pfeiffer,

Diarmid Campbell-Lendrum, Annette Prüss-Ustün Department of Public Health, Environmental and Social Determinants of Health, World Health Organization, 1211 Geneva 27, Switzerland neiram@who.int

We declare no competing interests.

© 2017. World Health Organization. Published by Elsevier Ltd. All rights reserved.

- 1 Landrigan PJ, Fuller R, Acosta NJR, et al. The Lancet Commission on pollution and health. Lancet 2017, published online Oct 19. http://dx.doi. org/10.1016/S0140-6736(17)32345-0.
- 2 Prüss-Ustün A, Wolf J, Corvalán C, Bos R, Neira M. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. Geneva: World Health Organization, 2016. http://apps.who.int/iris/bitstream/10665/204585/1/ 9789241565196\_eng.pdf?va=1 (accessed Sept 18, 2017).
- 3 WHO. World Health Organization Global Health Expenditure Database. http://apps.who.int/nha/database (accessed Sept 18, 2017).
- 4 The World Bank. World Bank Open Data. DataBank. Health expenditure, total (% of GDP). https://data.worldbank.org/indicator/SH.XPD.TOTL.ZS (accessed Sept 18, 2017).
- 5 WHO. Burning opportunity: clean household energy for health, sustainable development, and wellbeing of women and children. Geneva: World Health Organization, 2016. http://apps.who.int/iris/bitstream/10665/204717/1/ 9789241565233\_eng.pdf?ua=1 (accessed Sept 18, 2017).
- 6 The World Bank. Urban population World Bank staff estimates based on United Nations, world urbanization prospects. https://data.worldbank.org/ indicator/SP.URB.TOTL (accessed Sept 18, 2017).
- 7 WHO. Ambient air pollution: a global assessment of exposure and burden of disease. Geneva: World Health Organization, 2016. http://apps.who.int/ iris/bitstream/10665/250141/1/9789241511353-eng.pdf?ua=1 (accessed Sept 18. 2017).
- 8 UN. The New Urban Agenda adopted at Habitat III: the United Nations Conference on Housing and Sustainable Urban Development on 20 October 2016. 2016. http://habitat3.org/wp-content/uploads/ NUA-English.pdf (accessed Sept 18, 2017).
- 9 WHO. Priorities: health impacts of climate and environmental change. 2017. http://www.who.int/dg/priorities/climate-change/en/ (accessed Sept 18, 2017).