



Lancet Countdown 2018 Report: Briefing for Policymakers in The Netherlands

November 2018





Introduction

This briefing, launched in parallel with the 2018 Lancet Countdown report, focuses on the links between health and climate change, and their implications for political commitments in the Netherlands. It has been developed in conjunction with the Dutch Nurses' Organisation (V&VN) and focuses on implications for policymakers in key areas.

Acknowledgements

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Strategic Partners



About the Lancet Countdown

The "Lancet Countdown: Tracking Progress on Health and Climate Change" is a global, interdisciplinary research collaboration between 27 academic institutions and inter-governmental organisations. It monitors progress on the relationships between health and climate, and their implications for national governments, reporting annually. The Lancet Countdown follows in the footsteps of two Lancet Commissions on climate change. The first surveyed the impacts climate change is having on health, determining that "climate change is the biggest global health threat of the 21st century,"(1) whilst the second concluded that responding to climate change could represent "the greatest global health opportunity of the 21st century."(2) The 2018 report presents data on indicators selected following a consultation process in 2017. These span five domains, from impacts and adaptation to mitigation, and the economics and politics of climate policy.(3) Key data for the 2018 Briefing for Dutch Policymakers has been provided by the authors of the Lancet Countdown.

The Dutch Nurses' Organisation

The Dutch Nurses' Organisation (V&VN) with over 95,000 members, is the largest professional organisation for nurses in the Netherlands.V&VN represents nurses, health care assistants, nurse specialists and nursing students. The mission of V&VN is to enable nurse professionals to practice nursing with pride, passion and in a professional manner.

The organisation consists of 41 departments and platforms who work together in four committees: Committee for Acute Care, Committee for Chronic Care; Committee for Mental Health Care and Committee for Care for the Elderly.

Recommendations from the Lancet Countdown Policy Brief for the Netherlands

Recommendation I

Local, regional, and national governments should adopt a "health in all policies" approach that encompasses climate-related considerations and includes health impact assessments for major projects.

Recommendation 2

Rapidly integrate climate change and health into the curriculum of all medical, nursing and health sciences faculties.

Recommendation 3

Create systems to systematically measure and reduce the carbon footprint, water footprint and waste of healthcare facilities.

Recommendation 4

Protect health in the Netherlands by ensuring that the government's plan to phase out coal by 2030 is carried out. This target deserves wide support from the health community and progress must be monitored closely.

Recommendation 5

Increase support for healthy, sustainable transportation strategies that decrease air pollution and greenhouse gas emissions including electric vehicles and bicycles, transit, cycling and walking. Calculate the healthcare savings that result from policy changes in this area and include these in the decision-making process.

Recommendation 6

Expand urban green spaces to provide more opportunities for green recreation and to reduce the urban heat island effect and improve population health during heat waves.

Key messages of the 2018 Lancet Countdown report

- Present day changes in labour capacity, vector-borne disease, and food security provide early warning of compounded and overwhelming impacts expected if temperature continues to rise. Trends in climate change impacts, exposures, and vulnerabilities demonstrate an unacceptably high level of risk for the current and future health of populations across the world.
- A lack of progress in reducing emissions and building adaptive capacity threatens both human lives and the viability of the national health systems they depend on, with the potential to disrupt core public health infrastructure and overwhelm health services.
- Despite these delays, trends in a number of sectors are breathing life in to the beginning of a lowcarbon transition, and it is clear that 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.
- Ensuring a widespread understanding of climate change as a central public health issue will be vital in delivering an accelerated response, with the health profession beginning to rise to this challenge.



Overview of Climate Change and the Netherlands

Although some reductions in overall greenhouse gas emissions have been achieved over the past decade, (4) the Dutch government has decided to make healthy environmental policy one of its top priorities. The Health Council of the Netherlands recommends that national policies be based on a broad definition of health and include wellness considerations in which people's performance, resilience and self-management are taken into account. (5) The government has contributed multiple laws and programs designed to favour a healthy way of living that contributes to overall wellbeing and social cohesion. (6) We strongly support a "health in all policies" approach that takes climate change into account and not only reduces the burden of disease but ensures that health promotion is included as a consideration across ministries. One important strategy is to ensure that health impact assessments are built in to the planning, costing and approval phases of all new projects. By developing tools and capacity to enforce this, policy makers can better understand the health and wellness consequences decisions.

The Dutch Government must increase its ambition with regards to greenhouse gas reductions. In October 2018 the Intergovernmental Panel on Climate Change report on 1.5°C indicated that there are substantial health benefits to staying within 1.5°C of warming,(7) and that in order to do that, "Global net human-caused emissions of CO_2 would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050." (8) Also, on October 9th 2018, the Hague Court of Appeal upheld the historic victory of the Urgenda Foundation and 886 Dutch citizens in their climate case against the Dutch Government. The Appeal Court affirmed that the Government must reduce emissions by at least 25% by 2020 compared to 1990 levels. Reductions of a lesser amount would be a violation of the rights of Dutch citizens as protected by the European Convention on Human Rights. (9)

Recommendation I

Local, regional, and national governments should adopt a "health in all policies" approach that encompasses climate-related considerations and includes health impact assessments for major projects.



The role of health care professionals

The Headline Statement D7 of the IPCC report on 1.5°C states: "Strengthening the capacities for climate action of national and sub-national authorities, civil society, the private sector, indigenous peoples and local communities can support the implementation of ambitious actions implied by limiting global warming to 1.5°C (high confidence)." (8)

The fourth key message of the 2018 *Lancet Countdown* emphasizes that widespread public understanding of climate change as a central public health issue is vital to an effective societal response, and that the health professions are only beginning to rise to this challenge.(3) It further points out that maintaining global average temperature rise to well below 2°C will necessitate "profound changes in the methods of delivery of healthcare."(3) Combined, these should be interpreted as a call to the health care branch as a whole to integrate climate change and health into their curricula, their clinical work and their policy engagement.

Health professional involvement and framing of climate change as a health issue can help generate urgency for effective mitigation and adaptation policies. As expressed in the August 2018 report "Balans-van-de-leefomgeving" ("Balance in habitat", document in Dutch) any action by the government will only work effectively, when there is broad sense of urgency and support with the general population, and also when the population feels that burden and costs are fairly distributed over society. (10,11)

University Medical Centers (UMC) are the medical educational/training and research institutes in the Netherlands, and are also contributors to the environmental burden created by the health care sector. Medical and nursing professionals are the obvious advocates to inform and educate the health sector, society, policy makers and others on the effects of the changing environment on health. In order for these changes to happen quickly enough, the topic of sustainable health and health care needs to become a subject within the medical and nursing curriculum. The International Federation of Medical Students' Associations has launched an initiative to have climate-health included in all medical school curricula in the world by 2020, with fuller integration by 2025.(12)

There is also a need for University Medical Centers and other healthcare facilities to take practical measures to systematically measure and reduce their greenhouse gas emissions, water footprint and waste, as the Sustainable Development Unit in the United Kingdom has done.(13) Apart from actions on an institutional level, all care pathways, procedures, interventions, and outpatients clinics should be evaluated and where necessary redesigned to optimize patient care, environmental impact and cost.

Medical and nursing professionals must also put the topic of sustainable health and health care on the agenda of their societies. (14,15) This will create awareness amongst members. These societies can offer a platform for discussions amongst colleagues, as well as a vehicle for the creation of guidelines to encourage sustainable care pathways and treatment strategies, to facilitate practicechanging interactions with pharmaceutical and medical device industries, and to coordinate advocacy with regulatory and policy making bodies.

Recommendation 2

Rapidly integrate climate change and health into the curriculum of all medical, nursing and health sciences faculties.

Recommendation 3

Create systems to systematically measure and reduce the carbon footprint, water footprint and waste of healthcare facilities.



Healthy Energy and Air Pollution

Lancet Countdown Indicator 3.2 Coal Phase Out

The phase-out of coal-powered electricity generation is a public health priority due to its impacts on global health via climate change, and local health via air pollution and heavy metal contamination. (2) Coal is responsible for approximately 44% of global CO₂ emissions. (16) The 2018 International *Lancet Countdown* report found that, "since 2013, coal use has declined, resulting largely from reductions in consumption from China, enhanced efficiency in coal generation and continued increase in use of shale gas in the US."(3) Despite this decrease, fine particulate air pollution (PM_{2.5}) associated with coal use accounted for approximately 464,000 premature deaths globally in 2015.(3)

Premature deaths from ambient air pollution are primarily due to ischemic heart disease, stroke, chronic obstructive lung disease, lung cancer, and acute lower respiratory infections in children.(17) Data provided by the *Lancet Countdown* shows that ambient $PM_{2.5}$ in the Netherlands in 2015 led to 8065 deaths, including 793 deaths from coal-fired power plants.(3)



Figure 1 Share of coal fuel use in electricity generation in the Netherlands. (Data provided by the Lancet Countdown)

As seen in Figure 1, created with data provided by the Lancet Countdown, the share of coal fuel use in electricity generation increased in the Netherlands between 2010 and 2015. (3) In May 2018, the Netherlands' Minister of Economic Affairs and Climate, Eric Wiebes, announced that all coal-fired power plants will be closed by 2030 at the latest, and that the two oldest plants — the Hemweg and Amer coal-fired power plants — must shutter their doors by the end of 2024. (19) Three of the five remaining plants in the country have only recently entered operation, in 2015 and 2016 respectively, meaning that they will operate for less than half of their expected lifetimes. The Dutch Government has advised the remaining coal-fired power plants that, in the intervening period, they should make their plants suitable for electricity production by other means or other fuels — such as sustainable biomass.(19) The ban on coal is part of the Netherlands' efforts to reduce its CO2 emissions by 49% by 2030. The Netherlands was one of seven European Union Member States in April 2018 to call on the EU and other Member States to align their long-term climate ambitions with the objectives laid down in the Paris Climate Agreement, and is a member of the Powering Past Coal Alliance. (20)

Recommendation 4

Protect health in the Netherlands by ensuring that the government's plan to phase out coal by 2030 is carried out. This target deserves wide support from the health community and the public at large and progress must be monitored closely.





Sustainable travel infrastructure and uptake

Lancet Countdown Indicator 3.7

The Netherlands is a small and densely populated country. Passenger cars produce about 54% of total CO₂ emission related to transport. (21) About one fifth of these emissions are produced during trips of 15 km or less. (21) Only 47% of trips are related to work: the remainder are related to free time and other private activities. (21) Unfortunately, air pollution related to transport leads to significant mortality in the Netherlands: data provided by the Lancet Countdown shows that of the 8065 deaths due to ambient PM_{25} in the Netherlands in 2015, 1146 deaths were due to land-based transport.(3) The Health Council emphasizes in its recent report that health benefits are to be expected with further reductions in CO₂ emissions. (22)

The use of a bicycle seems an obvious alternative, both for work and pleasure. As seen in Figure 2, below, taken from the 2018 Lancet Countdown, the Netherlands, represented by Rotterdam, does reasonably well, but other cities, such as Hangzhou and Copenhagen, perform much better.



Figure 2, Courtesy of the 2018 *Lancet Countdown*, shows the percentage of trips made via bicycle in a selection of cities worldwide. (3)

Greenhouse gas emissions and local air pollution can both be decreased by moving from private transport to public transport, walking and cycling.(3) There are multiple benefits for health: commuting on foot or by bike has been shown to decrease cardiovascular mortality, and cycling has been shown to decrease all-cause mortality and mortality from cancer.(24)

Data from the European Platform on Mobility Management shown in Figure 3 confirms that a considerable percentage of trips within cities in the Netherlands are made by car. (23) Initiatives are underway in the Netherlands to improve these statistics: the Health Council recently recommended reducing air pollution by creating low-traffic inner city areas, increasing environmental zones (i.e. areas within cities where stricter limits exist on polluting vehicles such as diesel cars), and actively promoting electrical transport, bicycles and walking, especially in areas of high exposure such as city centers. (22)



Figure 3: Distribution of percentages of trips via various modes of transport in various cities in the Netherlands. (European Platform on Mobility Management) (23)

The city councils of some cities have developed clear vision statements on mobility and the environment. For instance, Utrecht aims to be carbon neutral in 2030 and has a policy document on mobility. (25)

Recommendation 5

Increase support for healthy, sustainable transportation strategies that decrease air pollution and greenhouse gas including electric vehicles and bicycles, transit, cycling and walking. Calculate the healthcare savings that result from policy changes in this area and include these in the decision-making process.



Case Study: Importance of Green Space for Public health

Recreation in green spaces is important for public health in the Netherlands. However, in recent decades, the opportunities for such recreation in and around the cities has not kept pace with the demand generated by a growing population. This population is also ageing and therefore has more time to relax outdoors. The Health Council of the Netherlands recommends expanding the opportunities for 'green recreation' in the urban environment. (26) In this context, 'green' refers to nature in the broadest sense of the term, including bodies of water. Increased expanse and number of green spaces is also useful to decrease the urban heat island effect, thereby helping to reduce the health impacts related to increasing exposure to heat as the climate changes. (27)

The health of the Dutch population would benefit from an expansion in opportunities for recreational activities in a natural environment in and around the cities. The Environmental and Planning Act makes it possible for municipalities to integrate such an expansion into vision documents and plans for healthy, sustainable, and climate-proof cities which including recreational water bodies that are safe for the public.

Recommendation 6

Expand urban green spaces to provide more opportunities for green recreation and to reduce the urban heat island effect and improve population health during heat waves.

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