

A photograph of a man with curly hair and a beard, wearing a blue and white plaid shirt, and a young girl wearing a white long-sleeved shirt and a straw hat with a pink band. They are in a lush green forest, looking down at some plants on the ground. The man is on the left, and the girl is on the right. The background is filled with green foliage and trees.

Environment and health challenges in Europe – and how they affect children

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30 March 2022

In this presentation

- **The BIG picture: main environment and health challenges at the global and regional level**
- **Delivering a better environment for healthy children**
- **Moving forward together: policies and tools to support the collective response to environmental challenges to health**

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Environmental burden of disease

23 % of all global deaths are linked to the environmental conditions (12.6 million deaths/year)

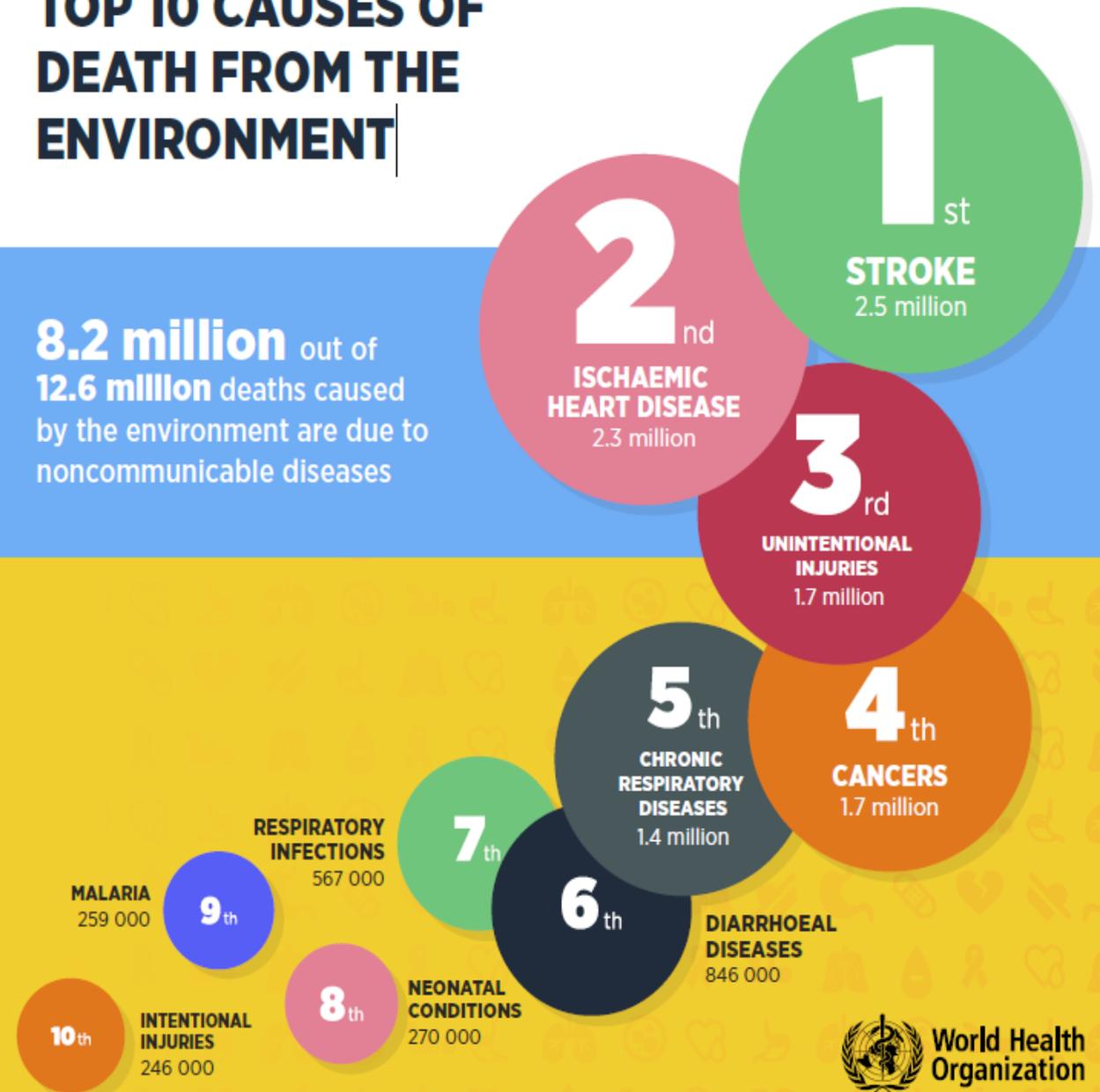
1.4 million in the WHO European Region

=>15% of all deaths

(WHO, 2016)

TOP 10 CAUSES OF DEATH FROM THE ENVIRONMENT

8.2 million out of 12.6 million deaths caused by the environment are due to noncommunicable diseases



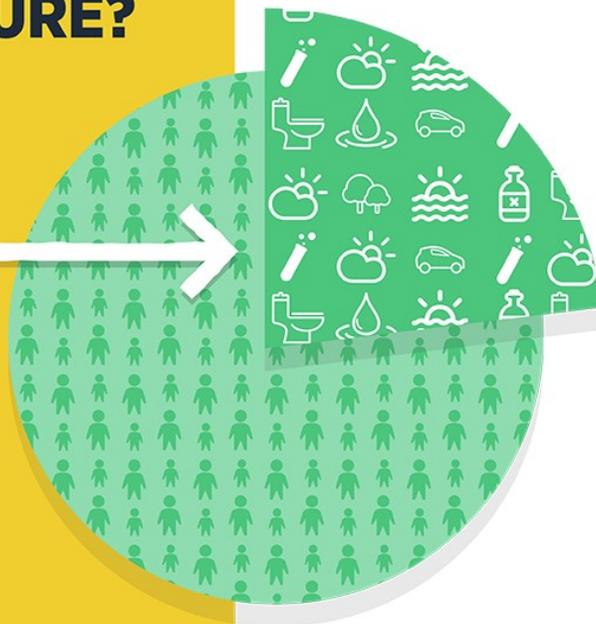
WHAT IS THE BIG PICTURE?

FACT:

24% of all

global deaths are linked to the environment. (2016)

That's roughly **13.7 million deaths** a year.



WHERE IS IT HAPPENING?



4.1 million
in South-East Asia Region

3.6 million
in Western Pacific Region

2.5 million
in Africa Region

1.4 million
in European Region

1.1 million
in the Region of the Americas

984 000
in Eastern Mediterranean Region

7 million deaths caused by AIR POLLUTION

4.2 million deaths per year due to ambient air pollution (AAP)

3.8 million deaths per year due to household air pollution (HAP)

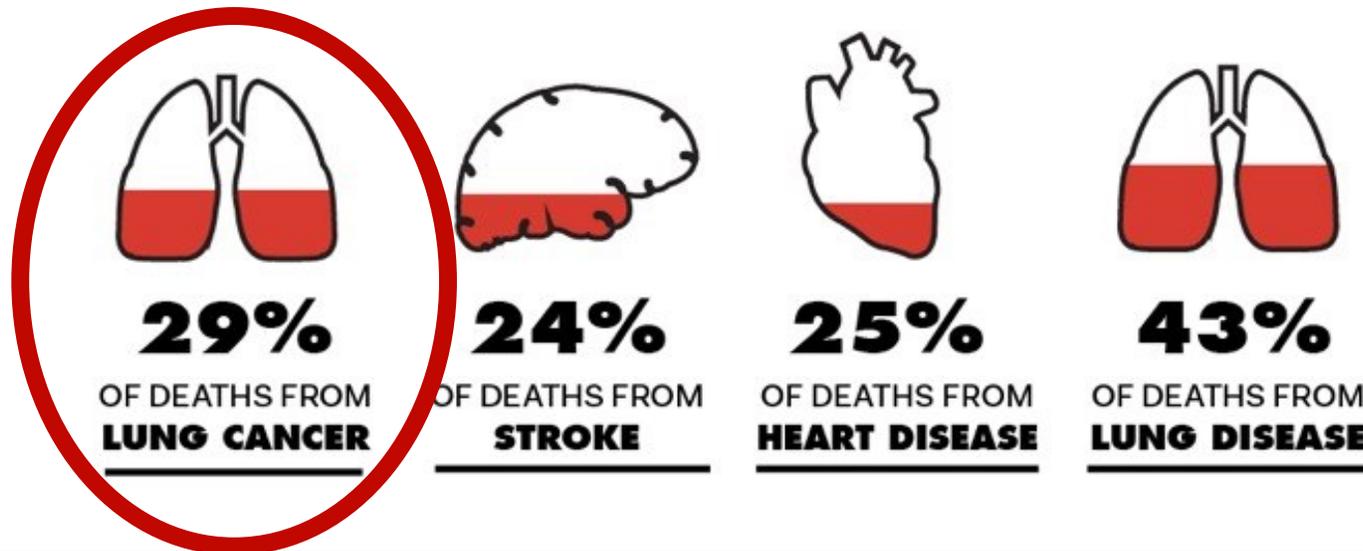
More than 500,000 deaths per year attributable to air pollution in the European Region

1 in 8 deaths

worldwide from air pollution, mainly from NCDs

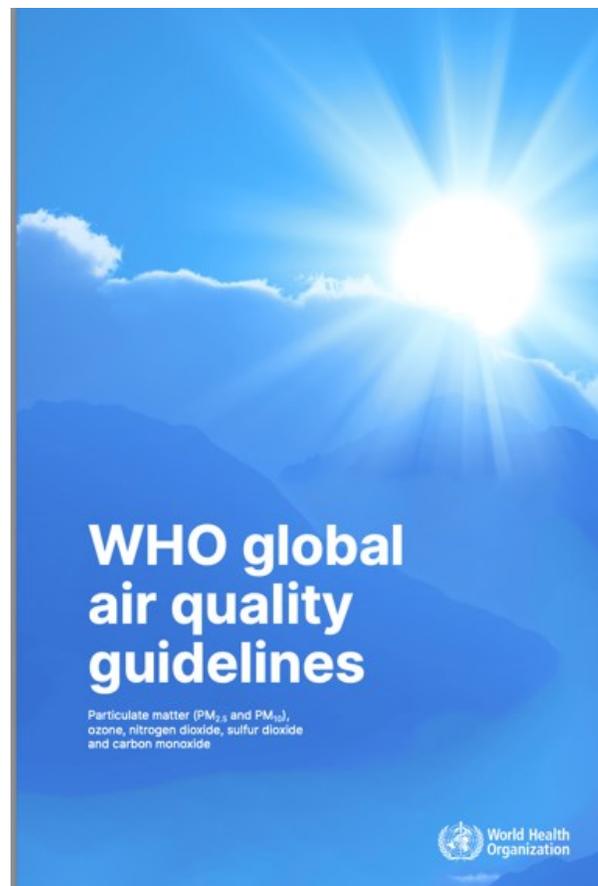
THE **INVISIBLE KILLER**

Air pollution may not always be visible, but it can be deadly.



Population attributable fraction (PAF) for mortality attributable to the joint effects of household and ambient air pollution in 2016

The updated WHO Air Quality Guidelines: a new tool to support action and save lives



- Since the last 2005 global update, there has been a marked increase in the quality and quantity of evidence that shows how air pollution affects different aspects of health.
- There are also now clearer insights about sources of emissions and the contribution of air pollutants to the global burden of disease.
- For that reason, and after a systematic review of the accumulated evidence, **several of the updated AQG levels are now lower than 15 years ago.**
- New features include new AQG levels for peak-season O₃ and 24-h NO₂ and CO, as well as new interim targets.

Where environmental health inequalities can affect you

URBAN ENVIRONMENTS AND TRANSPORT

Air pollution
Noise annoyance
Fatal road traffic injuries
Recreational or green areas
Chemical exposure
Contaminated sites

HOUSING CONDITIONS

Flush toilet
Bath or shower
Overcrowding
Dampness in the home
Adequately warm
Adequately cool

BASIC SERVICES

Drinking-water
Sanitation
Energy poverty

INJURIES

Fatal poisoning
Fatal falls

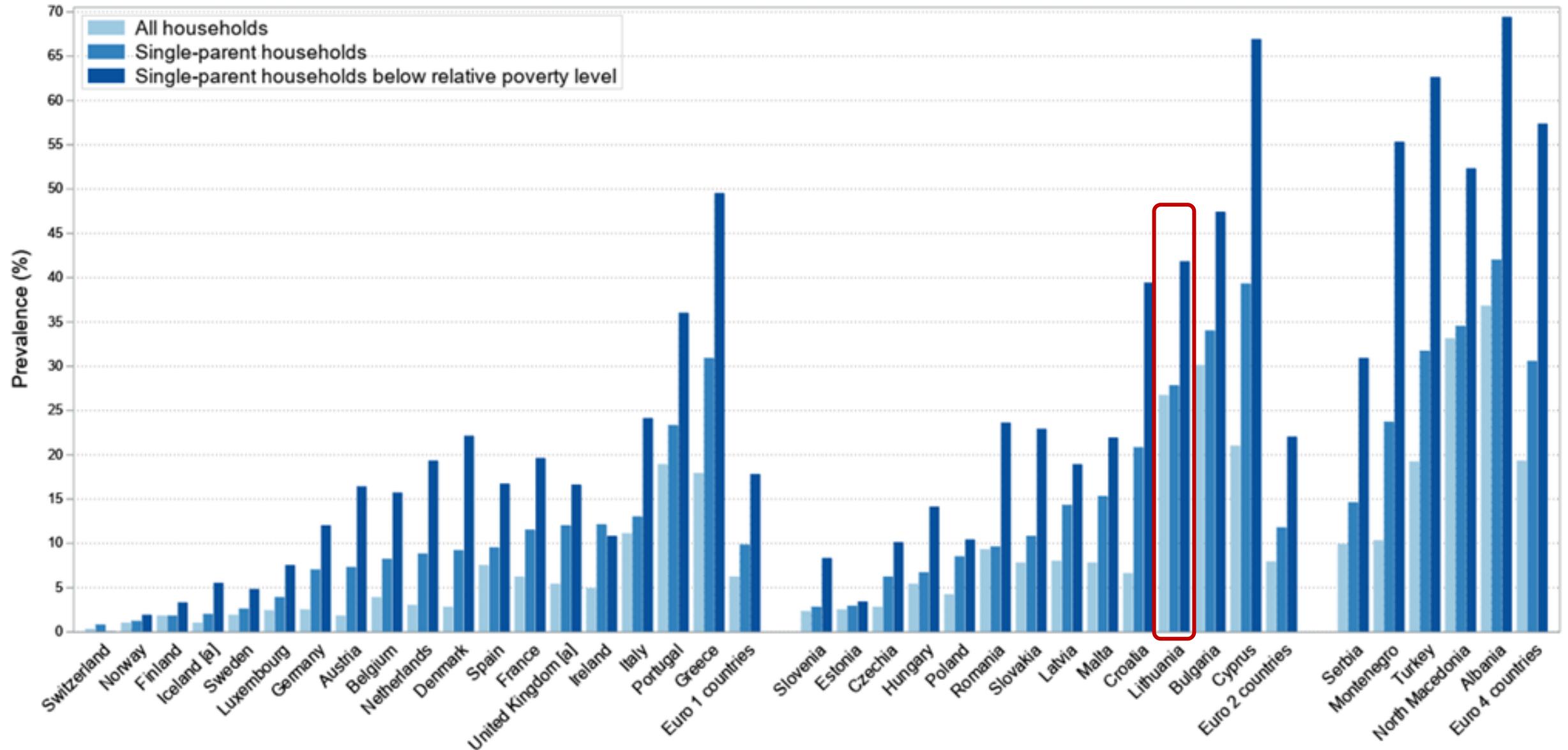
WORK SETTINGS

Fatal injuries
Working environments

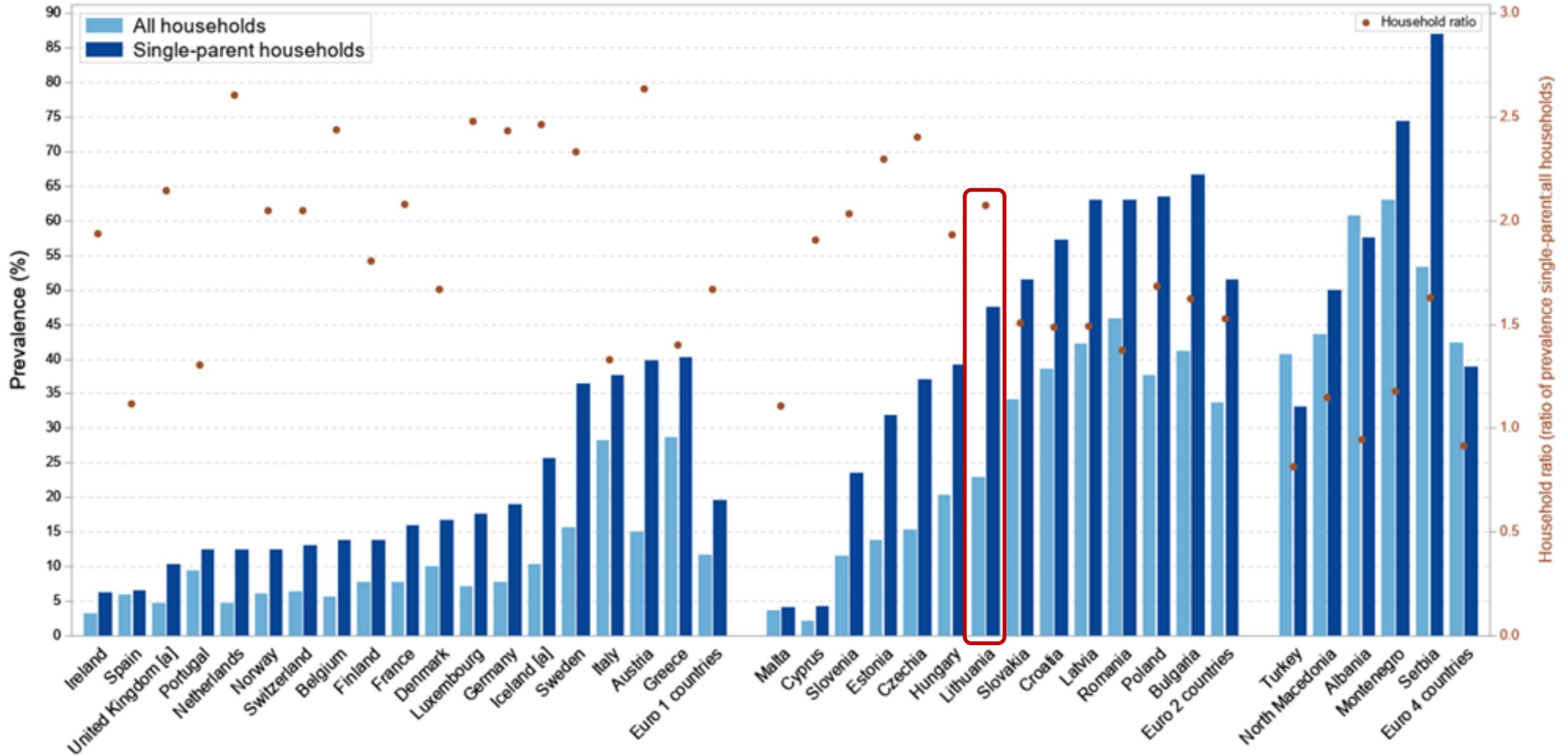


Source: Environmental health inequalities in Europe. Second assessment report (2019) <https://www.euro.who.int/en/publications/abstracts/environmental-health-inequalities-in-europe.-second-assessment-report-2019>

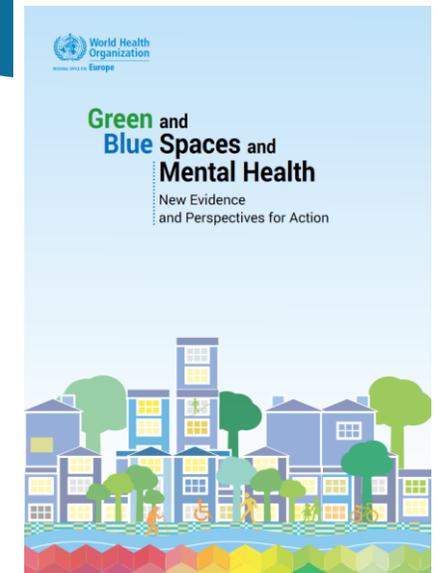
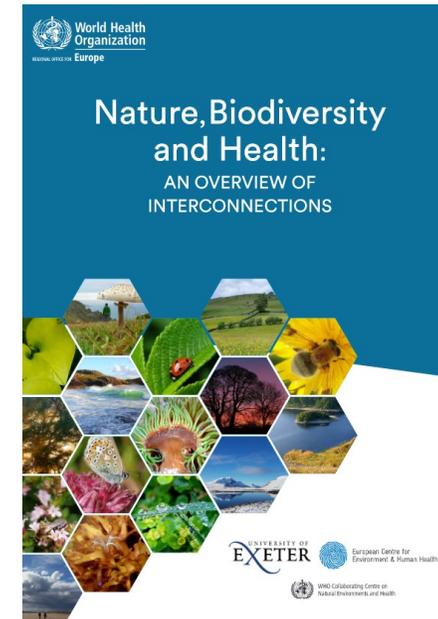
Inability to keep the home adequately warm among single-parent households (2019)



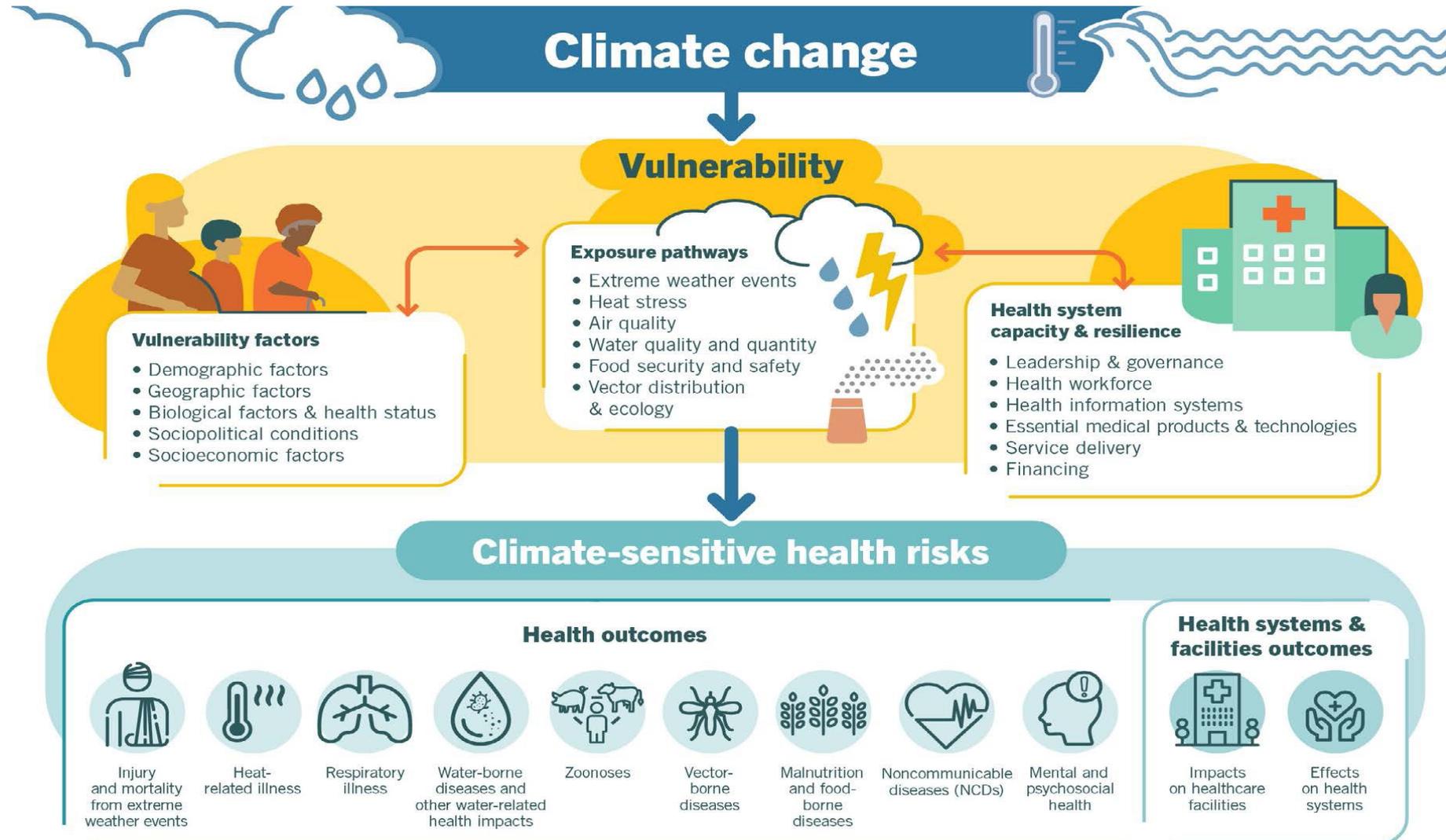
Overcrowding among single-parent households versus the general population (2019)



The growing understanding of the links between nature, biodiversity and health



Vulnerabilities and climate health risks

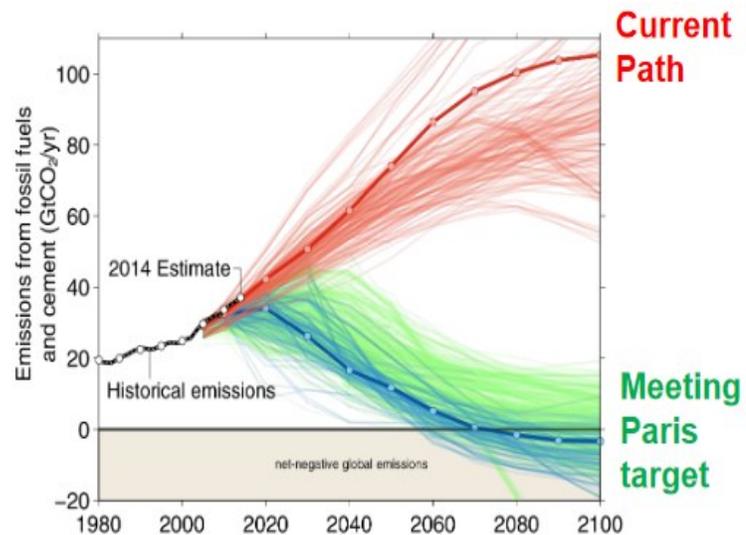


Climate change: three tasks for public health

Help reduce carbon emissions
for promoting health
(air pollution)

Protect health from
full range of rising
climate risks

Make health systems
more sustainable
("lead by example")



Zero Regrets

Working Group on Health in Climate Change of the European Environment and Health Task Force



World Health Organization
REGIONAL OFFICE FOR Europe

ZERO REGRETS
SCALING UP ACTION ON CLIMATE CHANGE MITIGATION AND ADAPTATION FOR HEALTH IN THE WHO EUROPEAN REGION

Key messages from the Working Group on Health in Climate Change



How COVID-19 has reshaped the EH agenda

Topics brought to the fore by the immediate public health response to infectious diseases

- WASH (hygiene);
- Workers' health;
- Waste
- Disinfectants
- Public space/transport
- Indoor air
- Zoonoses

Topics for prevention/resilience/preparedness to infectious diseases and beyond – build forward better

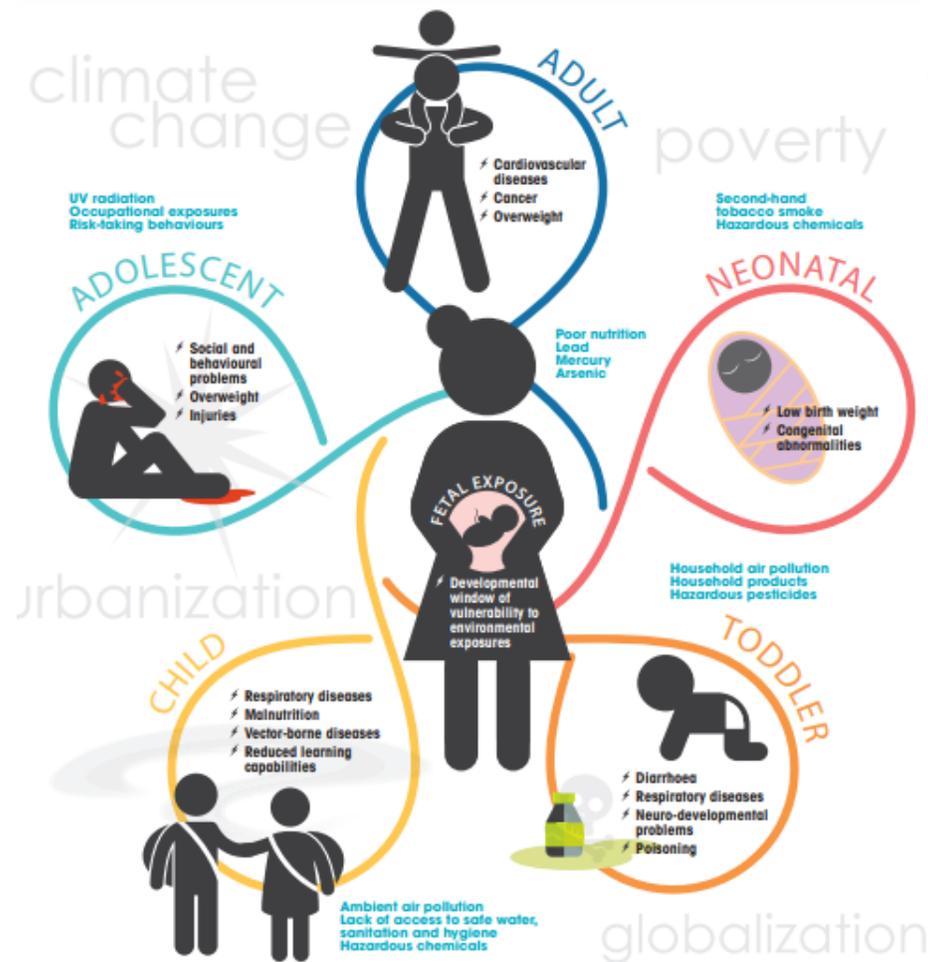
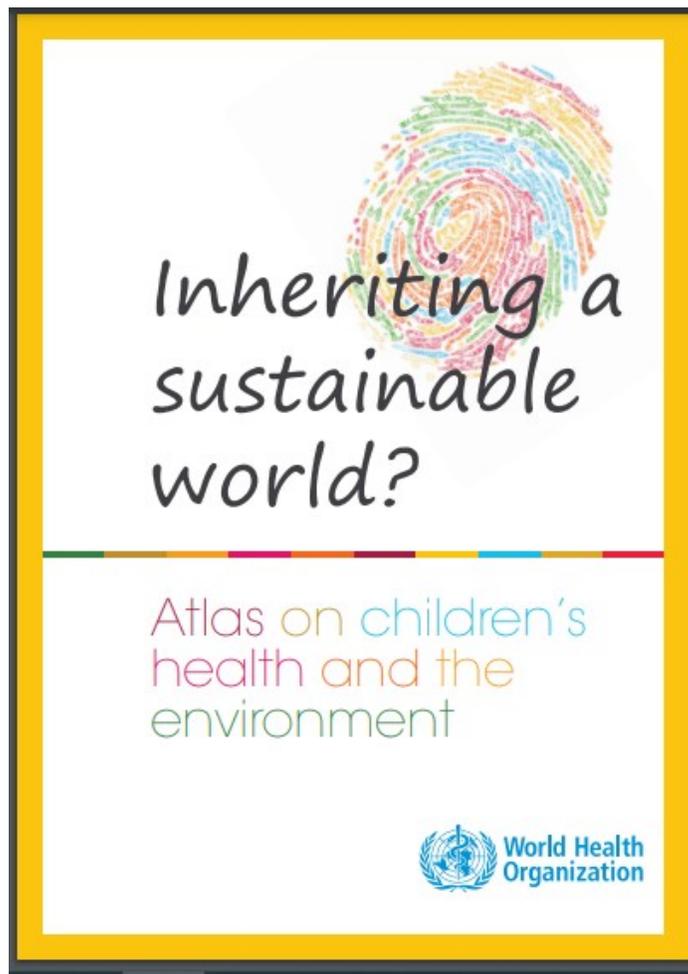
- Climate change/COP-26 and beyond
 - *Energy transitions/De-carbonization*
- Systems approaches –One health approaches
- Biodiversity/nature and health
- Air Pollution - in climate change and NCDs agenda
- Urban agenda: Housing (crowding; new needs – studying/working/nursing; mental health; violence)
Transport/mobility
- (Circular) economy – Waste
- Digital revolution
- One Health approaches

In this presentation

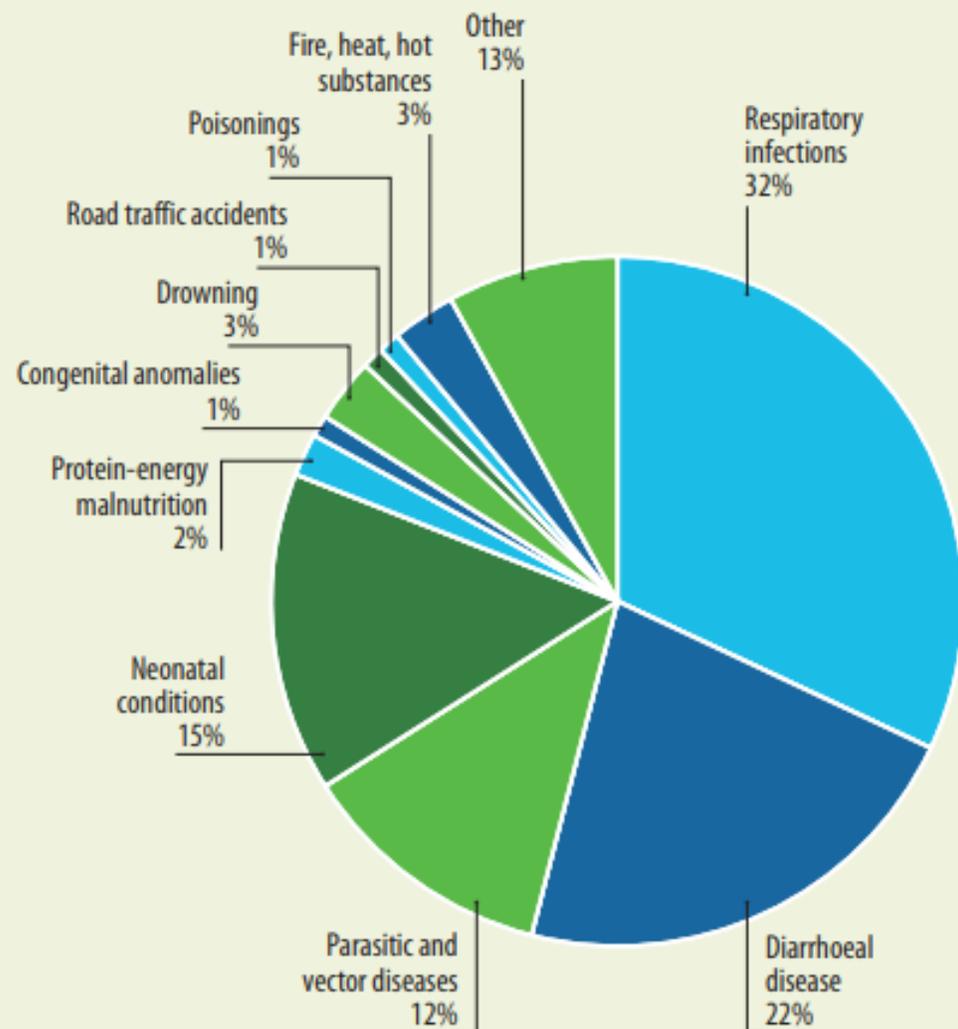
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Reducing environmental risks could prevent a quarter of childhood deaths and disease

Source: Prüss-Ustün et al, 2016.



Main diseases contributing to the environmental burden of disease for children under five years, 2012



- Lower respiratory infections,
- Diarrhoea,
- Neonatal conditions,
- Malaria
- Protein-energy malnutrition
- Injuries

A safe school environment through quality WASH services

Ensuring safe and accessible water, usable and hygienic sanitation, and provisions for hand and menstrual hygiene

Protects Child's Right and equity in access to education

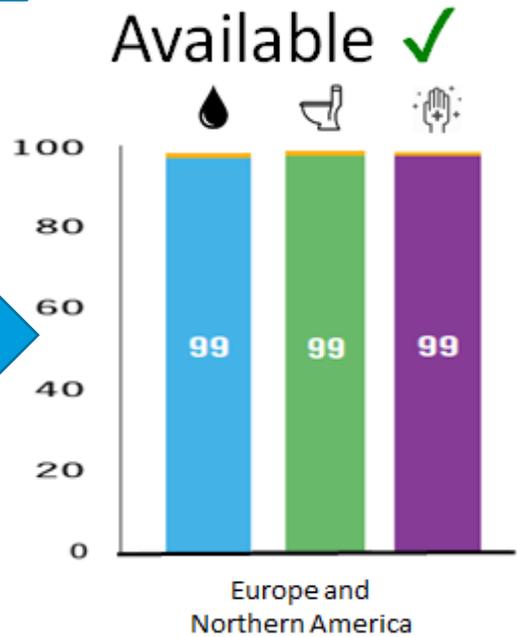
Prevents adverse health effects in children, staff and families, including COVID-19

Improves educational outcomes through healthy learning environments

Provides educational opportunities to promote safe environments at home and in communities

Supports learning and practicing of life-long positive healthy behaviours

WASH services in European schools



Accessible ?

1:10
1:20
1:50
1:400

Examples of toilet to pupil ratios

Acceptable ✗

France
Never defecate in school:



Croatia
Do not use school toilet regularly:



UK – Scotland
Never uses school toilets:



Menstrual hygiene !

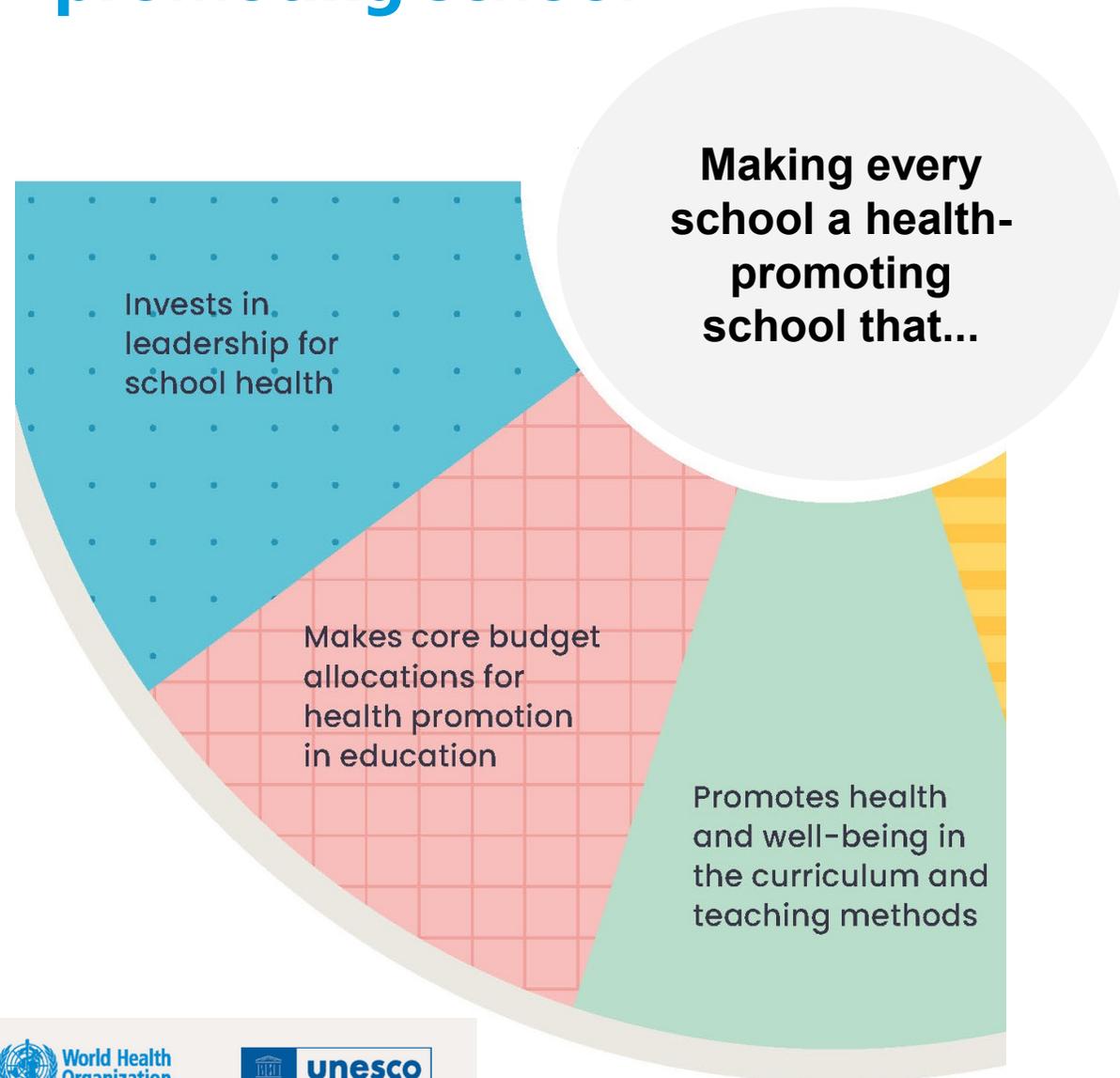
UK
experienced difficulty with affording menstrual hygiene products



Macedonia (rural areas)
Girls & women absent from school&work for 4 to 5 days/month when they have a their period



Quality WASH services as key elements of a health-promoting school



Key actions for quality WASH

- **Leadership** by the education sector
- **Partnership** across all concerned sectors, civil society and the youth
- **Clear policy** targets, regulations and progressive implementation
- **Use of surveillance data** for informed policy-making
- **Local budgets** for recurrent hygiene costs
- **Attentive school management**
- **Multicomponent action:** education, school policies, staff capacity, infrastructure and budget

NONTOXIC ENVIRONMENTS FOR A SUSTAINABLE FUTURE FOR CHILDREN

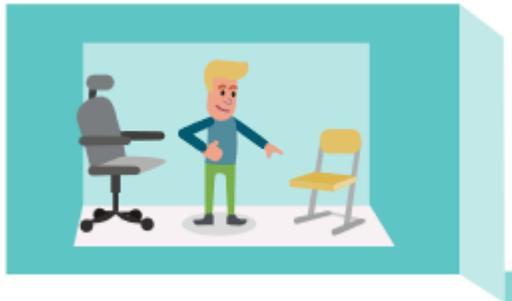


- Improving indoor and outdoor air quality for all
- Minimizing the adverse effects of chemicals on human health and the environment

Ostrava Declaration on Environment and Health, 2017

We aim to protect each child from the risks posed by exposure to harmful substances and preparations places where children live, learn and play.

Parma Declaration on Environment and Health, 2010



Indoor air pollution as children's health determinant

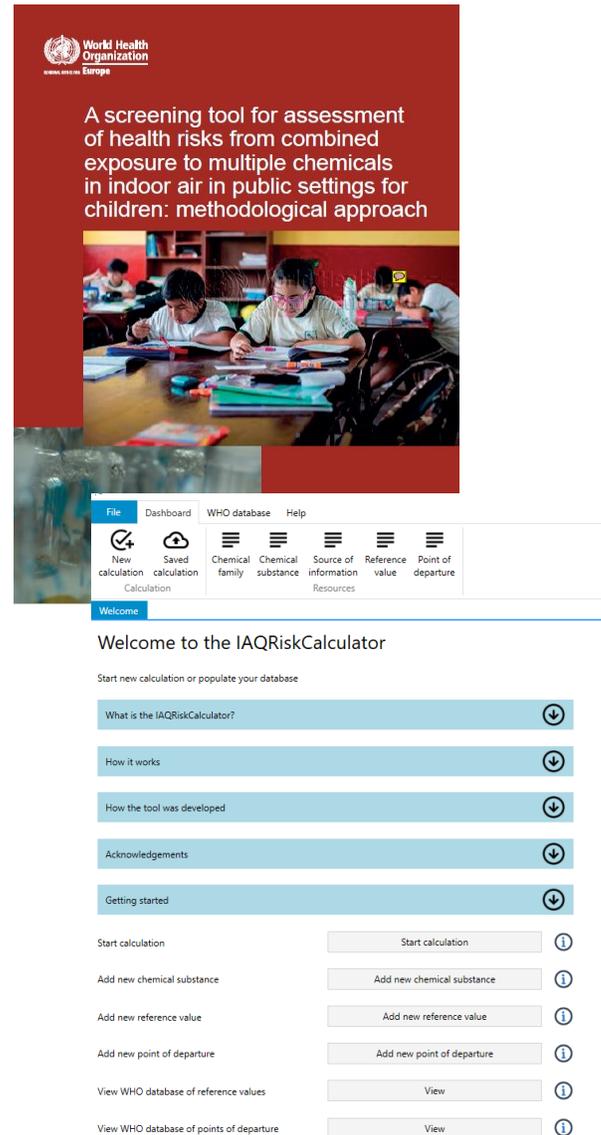


Prevention of early-life exposures to heavy metals

Risk assessment of combined exposure

- Screening tool for assessment of health risks from combined exposure to multiple chemicals in indoor air in public settings for children: methodological approach

- Software
IAQRiskCalculator



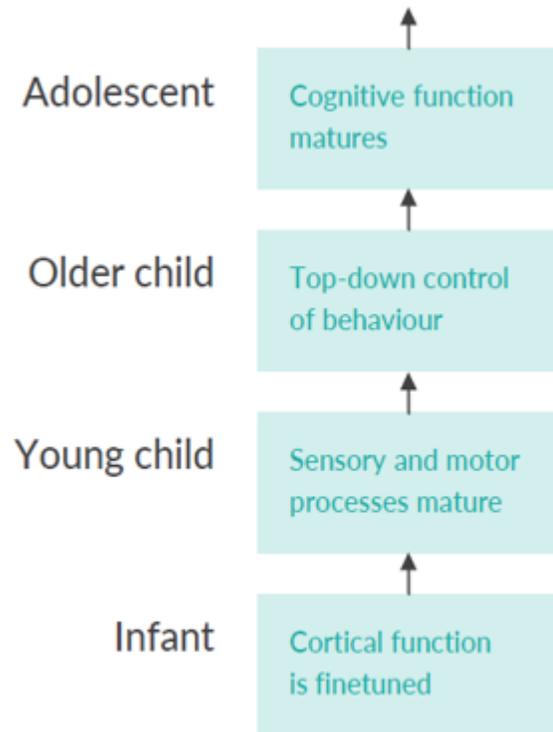
Supplementary documents

- Screening questionnaire for selection of sampling sites
- Methods for sampling and analysis of chemical pollutants in indoor air
- Literature review on chemical pollutants in indoor air in public settings for children and overview of their health effects
- Educational course on indoor air pollution and children health
- Measures to reduce risks for children's health from combined exposure to multiple chemicals in indoor air in public settings for children (in progress)

Heavy metals in the environment: Lead poisonings prevention

Neurological and behavioural impact might be irreversible

WHY?



WHAT?

Supporting Member States (12 countries) for developing a legal basis for prohibiting lead in paints (2019-2022)

- **Enforced: Israel, Georgia, Moldova, Ukraine**
- **Developed and adopted: Armenia, Belarus, Bosnia and Hercegovina, Kazakhstan, Kyrgyzstan, Tajikistan**
- **Political decision taken and development process: Azerbaijan, Uzbekistan**

Annual campaign: to raise awareness, to promote actions

Lead Free Kids
for a healthy future

Međunarodna sedmica prevencije trovanja olovom
25 - 31. oktobar 2015

Елиминирајте олово у бојама

Информирајте се о чињеницама

Предузмите потребне мјере

EKSPOZIMI NDAJ PLUMBIT MUND TË NDODH... #BanLeadPaint

Tribitja
Gëllitja

Produkte që përmbajnë plumb

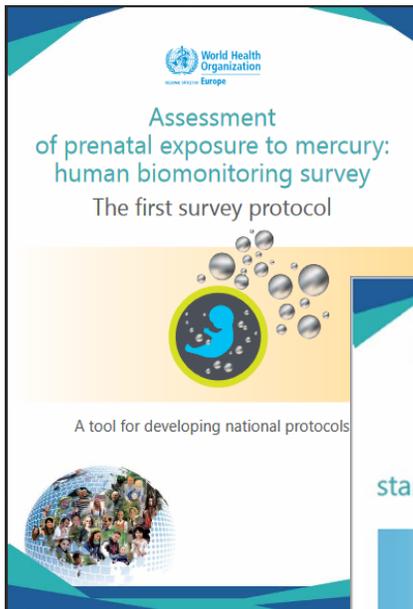
Ushqimi ose Uji

Nuk ka asnjë nivel sigurie nga ekspozimi i Plumbit



ASSESSMENT OF PRENATAL EXPOSURE TO MERCURY: THE WHO APPROACH

- the target population (mothers of newborn children);



Standard operating procedures for the sampling and analysis of mercury in:

- scalp hair – to characterize long-term exposure to methylmercury;
- cord blood – to assess short-term exposure to organic and inorganic mercury;
- urine – to evaluate exposure to inorganic mercury or elemental mercury vapour.

MERCURY AND HUMAN HEALTH

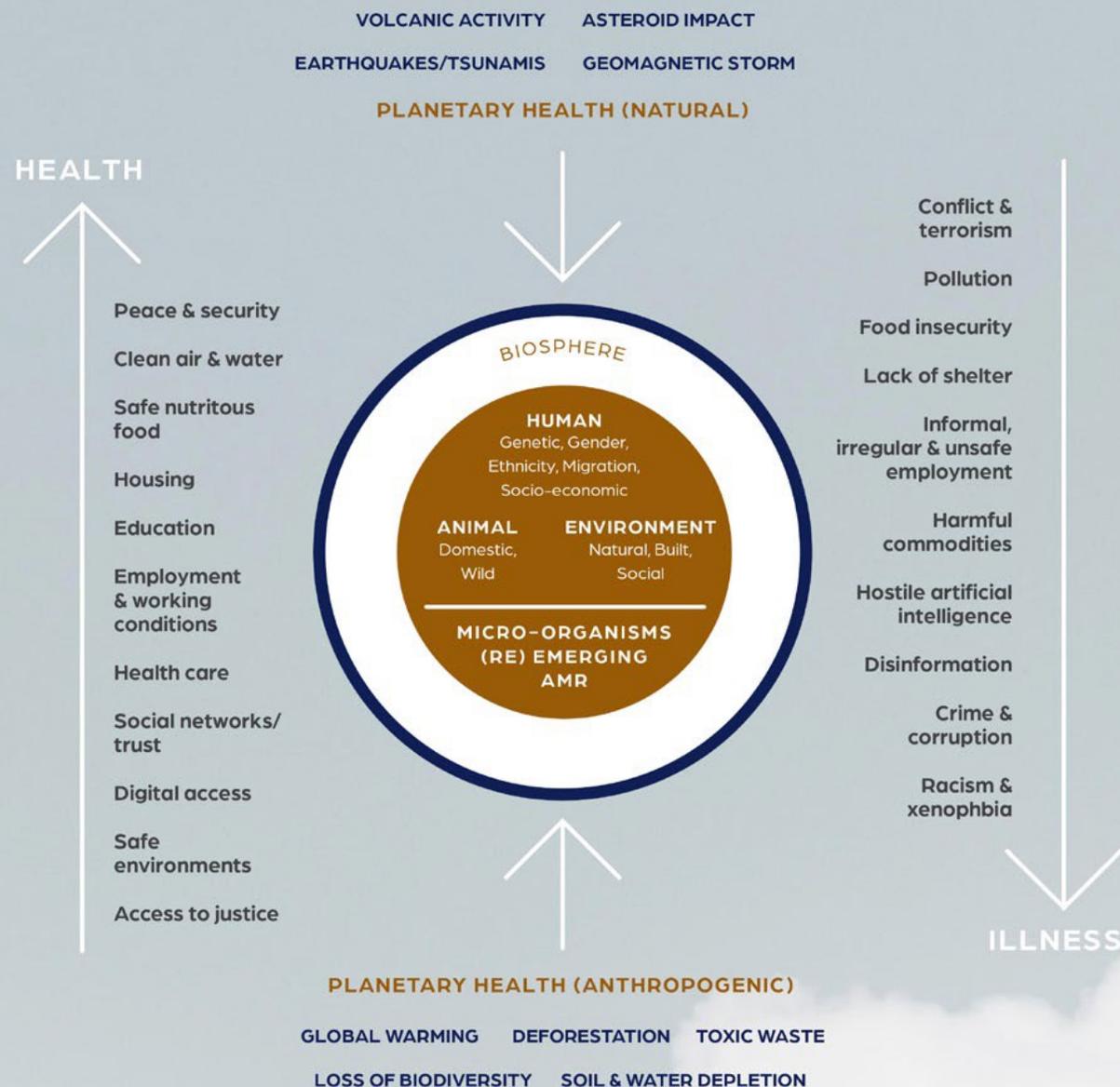


Educational course

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THE DETERMINANTS OF HEALTH IN THE 21ST CENTURY



Need to embrace complexity and adopt comprehensive frameworks:

- Global warming;
- Loss of biodiversity
- Environmental pollution

Source: [Evidence Review. Drawing light from the pandemic: a new strategy for health and sustainable development. \(2021\)](#)

Building forward better – mutual benefits for environment and for health:

Protect and preserve the source of human health: Nature

Invest in essential services, from water and sanitation to clean energy in healthcare facilities

Ensure a quick healthy energy transition

Promote healthy, sustainable food systems

Build healthy, livable cities

Stop using taxpayers money to fund pollution



**Prescriptions and Actionables for
a Healthy and Green Recovery**



Developing transformative leadership for environment and health

- ✓ Bonn Environment and Health School supporting capacity building in Member States
- ✓ Focus on developing transformative leadership
- ✓ Environment and health research priorities



The journey to Budapest: working in partnership across sectors to address the environment and health challenges of the 21st century

Series of Ministerial Conferences on Environment and Health



1989
Frankfurt



1994
Helsinki



Action in Partnership

1999
London



2004
Budapest



2017
Ostrava

2023
Budapest

Thank you

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