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WHO European Centre for Environment and Health, Bonn, Germany 19 January 2022

### In this presentation



• The BIG picture: main environment and health challenges at the global and regional level



How COVID-19 is impacting on the environment and health agenda and priorities

 Moving forward together: policies and tools to support the collective response to environmental challenges to health

### In this presentation



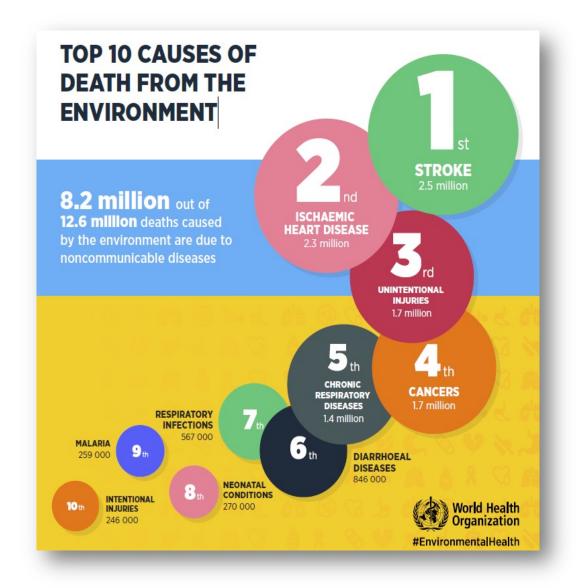
# The BIG picture: main environment and health challenges at the global and regional level

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### **Environmental burden of disease**





- Globally, 12.6 million deaths per year are linked to the environmental conditions (23% of all deaths)
- Every year, <u>at least 1.4 million Europeans</u> still die prematurely as a consequence of polluted environments
- ✓ This is at least 15% of Europe's total deaths
- 50 million heathy life years are lost in the European Region due to environmental hazards
- There are major inequalities in the distribution of risk between and within countries

Source: WHO, 2016

### 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



health-inequalities-in-europe.-second-assessment-report-2019

report (2019) https://www.euro.who.int/en/publications/abstracts/environmental-

### Air pollution and health





Download from::

https://apps.who.int/iris/handle/10665/345329

- Around 7 million premature deaths are attributable to the joint effects of ambient and household air pollution and of these, more than 500 000 happen in the WHO European Region.
- Air pollution is now recognized as the single biggest environmental threat to human health, along with climate change.
- Air pollution affects:
  - NCDs,
  - cardiovascular and respiratory diseases,
  - lower respiratory tract infections,
  - preterm birth,
  - and other causes of death in children and infants

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

- Based on a systematic review of the new 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

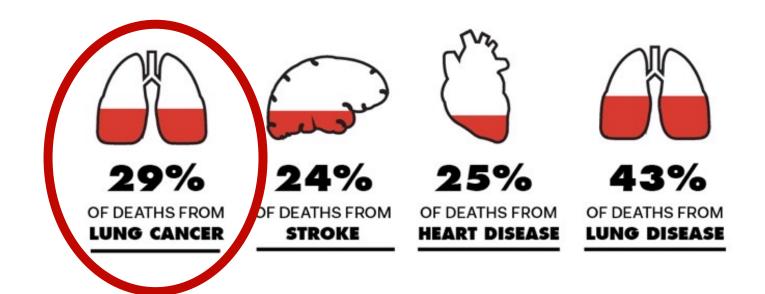
# 1 in 8 deaths worldwide from air pollution, mainly from NCDs



# INVISIBLE KILLER

W. W. Org.

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

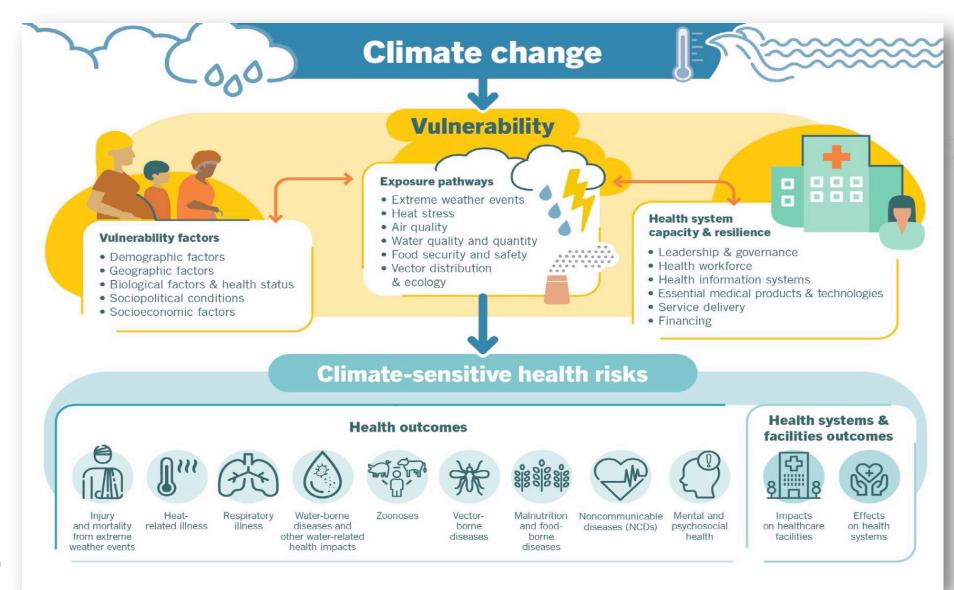


Population attributable fraction (PAF) for mortality attributable to the joint effects of household and ambient air pollution in 2016



### **Vulnerabilities and climate health risks**



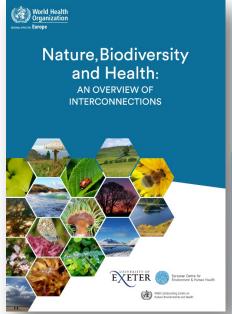


Source: Quality criteria for health national adaptation plan (WHO, 2021)

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











### In this presentation



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# Topics brought to the fore by the <u>immediate</u> 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



# **Environment and health areas brought to the fore by COVID-19 IN CITIES**

- Mailly World Health

#### **DURING** THE CRISIS:

#### TWO PUBLIC HEALTH OBJECTIVES :

- 1. Hygiene
- 2. Physical distancing

- Make hand hygiene (HH) accessible for all
- Manage urban transport and mobility
- Manage the increased production of waste
- Access to urban nature and green spaces (link to mental health and physical activity)
- Housing and indoor conditions (enhanced impact through lockdowns)



# **Environment and health areas brought to the fore by COVID-19 IN CITIES**

#### **AFTER** THE CRISIS:

#### PUBLIC HEALTH OBJECTIVES:

- 1. Increase Urban resilience
- 2. Address systemic failures
- 3. Reduce inequalities

- Consolidate the lessons learnt through lock-downs
- Rethink urban and transport planning
- Reduce air pollution
- Value urban nature and green/blue spaces
- Housing and indoor conditions
- Climate change

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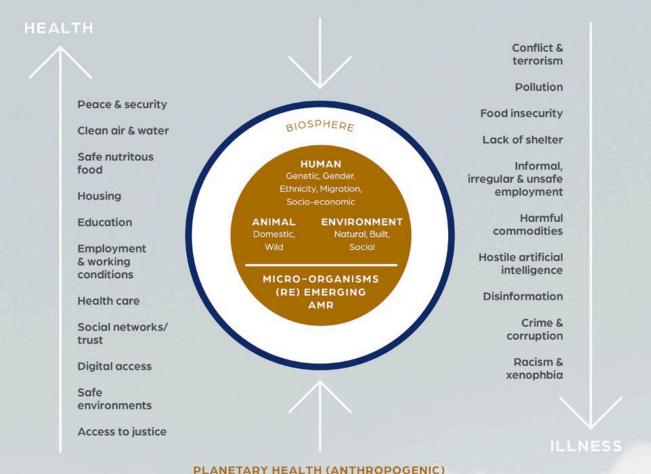
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#### THE DETERMINANTS OF HEALTH IN THE 21ST CENTURY

VOLCANIC ACTIVITY ASTEROID IMPACT

EARTHQUAKES/TSUNAMIS GEOMAGNETIC STORM

#### PLANETARY HEALTH (NATURAL)



DEFORESTATION TOXIC WASTE

LOSS OF BIODIVERSITY SOIL & WATER DEPLETION

**GLOBAL WARMING** 



# 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



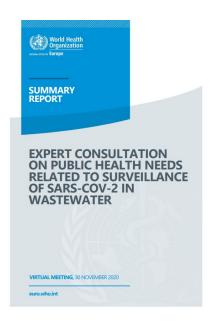
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# Addressing the links between environment, health and the COVID-19 pandemic

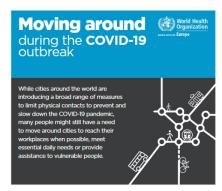
Development and publication of technical guidance and advocacy initiatives

**Expert consultations** 

Knowledge and policy in the making Series of webinars on the EH dimension of COVID-19









Do not move around if you have a fever, cough and difficulty breathing

In this case, stay home and seek medical attention as your local health authority



Whenever feasible, consider

This provides physical distancing while helping you to meet the minimum requirement for daily physical activity, which may be more difficult due to increased teleworking, and limited access to sport and other recreational activities.



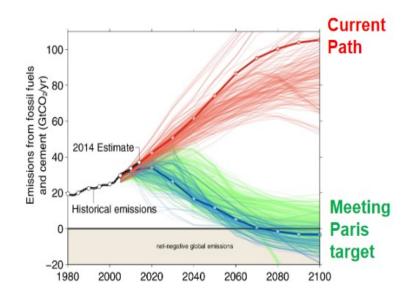
### Climate change: three tasks for public health



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")







- Commit to a healthy recovery.
- Our health is not negotiable.
- Harness the health benefits of climate action.
- Build health resilience to climate risks.
- Create energy systems that protect and improve climate and health.
- Reimagine urban environments, transport, and mobility.
- 7. Protect and restore nature as the foundation of our health.
- Promote healthy, sustainable, and resilient food systems.
- Finance a healthier, fairer, and greener future to save lives.
- Listen to the health community and prescribe urgent climate action.





COP26 SPECIAL REPORT ON CLIMATE CHANGE AND HEALTH

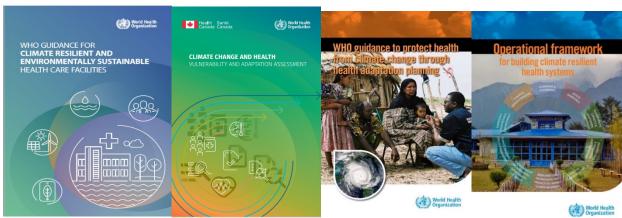
# THE HEALTH ARGUMENT FOR CLIMATE ACTION

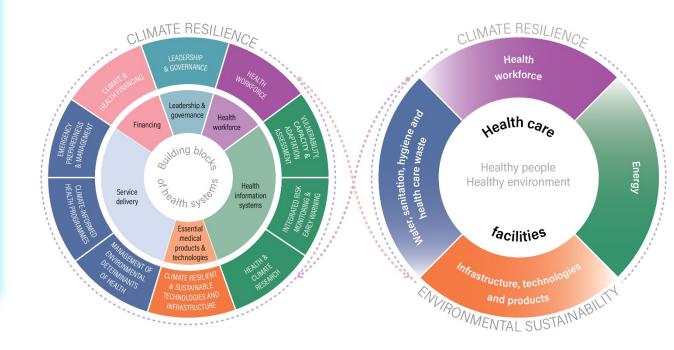


# COP26 Health Initiatives on Climate Resilient and Low Carbon Sustainable Health systems

#### **Countries commit to:**

- Conduct climate change and health vulnerability and adaptation assessments (V&A);
- Develop a Health National Adaptation Plan (HNAP);
- Use the V&A and HNAP to facilitate health access to climate change funding;
- High ambition/high emitters
- Deliver a baseline assessment of GHG emissions of the health system
- Develop an action plan or roadmap by a set date to develop a sustainable low carbon health system.



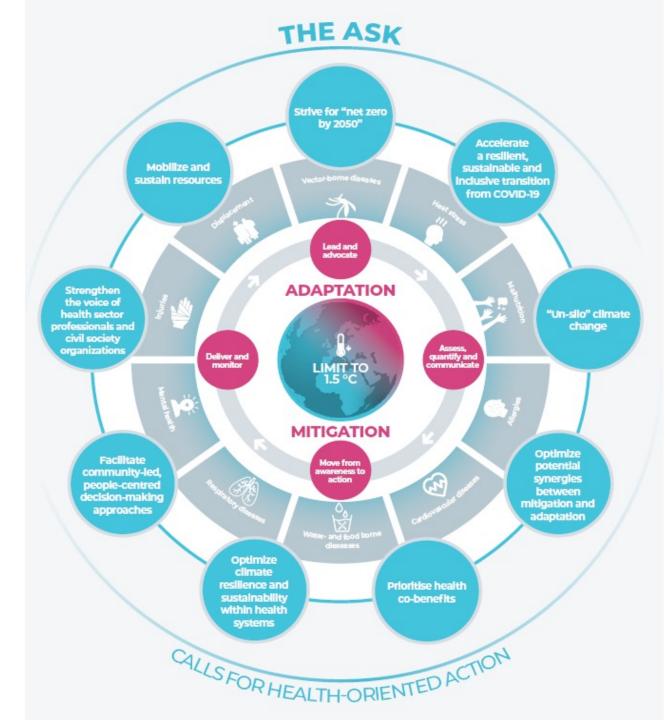




### Zero Regrets

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

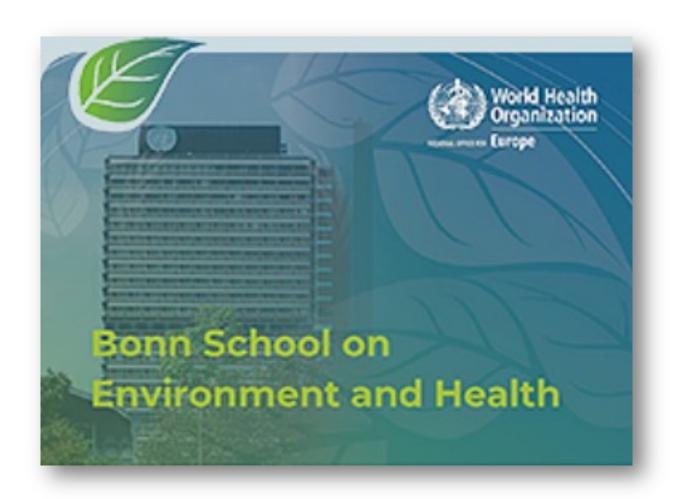




# **Developing transformative leadership for environment and health**



- 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 21<sup>st</sup> century



#### Series of Ministerial Conferences on Environment and Health











1989 Frankfurt 1994 Helsinki 1999 London 2004 Budapest 2010 Parma 2017 Ostrava 2023 Budapest



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World Health Organization

REGIONAL OFFICE FOR Europe



Organisation mondiale de la Santé

BUREAU RÉGIONAL DE L' Europe



Welt ge sund heit sorganisation

REGIONALBÜRO FÜR EUROPA



Всемирная организация здравоохранения

Европейское региональное бюро