10th GENEVA CONFERENCE ON PERSON-CENTERED MEDICINE

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Update on estimate of total preventable health impacts linked to environments
ENVIRONMENTAL IMPACTS ON HEALTH

WHAT IS THE BIG PICTURE?

FACT:
23%
of all global deaths are linked to the environment.
That’s roughly 12.6 million deaths a year.

WHERE IS IT HAPPENING?

3.8 million
in South-East Asia Region

3.5 million
in Western Pacific Region

2.2 million
in Africa Region

1.4 million
in European Region

854,000
in Eastern Mediterranean Region

847,000
in the Region of the Americas
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

1st
STROKE 2.5 million

2nd
ISCHEMIC HEART DISEASE 2.3 million

3rd
UNINTENTIONAL INJURIES 1.7 million

4th
CANCERS 1.7 million

5th
CHRONIC RESPIRATORY DISEASES 1.4 million

6th
DIARRHEOAL DISEASES 846 000

7th
NEONATAL CONDITIONS 270 000

8th
8th
INTENTIONAL INJURIES 246 000

9th
RESPIRATORY INFECTIONS 567 000

10th
MALARIA 259 000

World Health Organization
#EnvironmentalHealth
HOW THE ENVIRONMENT IMPACTS OUR HEALTH

People are exposed to risk factors in their homes, work places and communities through:

- Air pollution including indoors and outdoors
- Inadequate water, sanitation and hygiene
- Chemicals and biological agents
- Radiation ultraviolet and ionizing
- Community noise
- Occupational risks
- Climate change
- Built environments including housing and roads
- Agricultural practices including pesticide-use, waste-water reuse

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WHO IS MOST IMPACTED BY THE ENVIRONMENT

Environmental impacts on health are uneven across age and mostly affect the poor.

Low- and middle-income countries bear the greatest share of environmental disease.

Children under five and adults between 50 and 75 years old are most affected by the environment.

YEARLY

4.9 MILLION
Deaths in adults between 50 and 75 years. The most common causes are noncommunicable diseases and injuries.

1.7 MILLION
Deaths in children under five. The most prominent causes are lower respiratory infections and diarrhoeal diseases.

Men are slightly more affected due to occupational risks and injuries.

Women bear higher exposures to traditional environmental risks such as smoke from cooking with solid fuels or carrying water.

World Health Organization
#EnvironmentalHealth
How the burden of unhealthy environments can be reduced to protect health?
Focusing on primary prevention

Expenditure on Prevention and Public Health Services accounted for an estimated 3.6% of total health expenditures worldwide in 2013.

Source: WHO GHO, OECD, UK NHS, EIU, PHE Estimates
Systematically considering health in all sectors

1. Apply low carbon strategies in energy generation, housing and the industry.
2. Use more active and public transportation.
3. Introduce clean fuels for cooking, heating and lighting and clean technologies.
4. Reduce occupational exposures and improve working conditions.
5. Increase access to safe water and adequate sanitation and promote hand washing.
6. Change consumption patterns to lower the use of harmful chemicals, minimize waste production and save energy.
7. Implement interventions that can increase sun protective behaviour.
8. Pass smoking bans to reduce exposure to second-hand tobacco smoke.
9. Always use a health in all policies approach to create healthier environments and prevent disease.
The 2030 Agenda for Sustainable Development

• A plan of action agreed by Member States

• The SDGs are "unprecedented in scope and significance"
  – cover the economic, environmental and social pillars of sustainable development, as well as peace and security

• The SDGs are about "Leaving no one behind"
  – strong focus on equity, addressing the needs of disadvantaged populations wherever they may live
Creating healthy environments to support SDGs achievement
3.4 By 2030, reduce by one third premature mortality from non-communicable disease through prevention and treatment and promote mental health and well-being

3.9 By 2030, to substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

6.3 By 2030, to improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

361,000 preventable child deaths from diarrhoea each year.
Ensure access to affordable, reliable, sustainable, and modern energy for all

7.1 By 2030, ensure universal access to affordable, reliable and modern energy services

Over 170 000 under five child deaths due to ambient air pollution per year

500 000 under five child deaths to household air pollution
11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

11.7 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management.

Safe roads, buildings and public spaces can prevent injury and encourage healthy activity among the young.
Ensure sustainable consumption and production patterns

12.4 By 2020, to achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

Childhood lead exposure contributes to about 600,000 new cases of intellectual disability every year.
Example: Lead – time to act NOW

• Global Alliance to Eliminate Lead Paint
• Aims to eliminate lead in all paint, with particular attention to decorative paint
• Goal is to prevent children’s exposure to lead via paints and to minimize occupational exposures to lead in paint
• Target: all countries will have legally-binding controls on lead paint by 2020

• As of March: at least 68 countries do not have legally-binding controls
Example: Air pollution causes huge non-communicable disease burden

**THE INVISIBLE KILLER**
Air pollution may not always be visible, but it can be deadly.

- 36% of deaths from Lung Cancer
- 34% of deaths from Stroke
- 27% of deaths from Heart Disease

Also contributes to:

- 50% of child deaths from pneumonia
- Other cancers, Asthma (ozone), Cataracts, Adverse pregnancy outcomes, TB

**BREATHE LIFE.**
Clean Air. Healthy Future.
Promoting assessment of health impacts of projects and policies
as a driver for sustainable development