



**World Health
Organization**

10th GENEVA CONFERENCE ON PERSON-CENTERED MEDICINE

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Update on estimate of total preventable health impacts linked to environments



PREVENTING DISEASE THROUGH HEALTHY ENVIRONMENTS

A global assessment of the burden of disease from environmental risks

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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

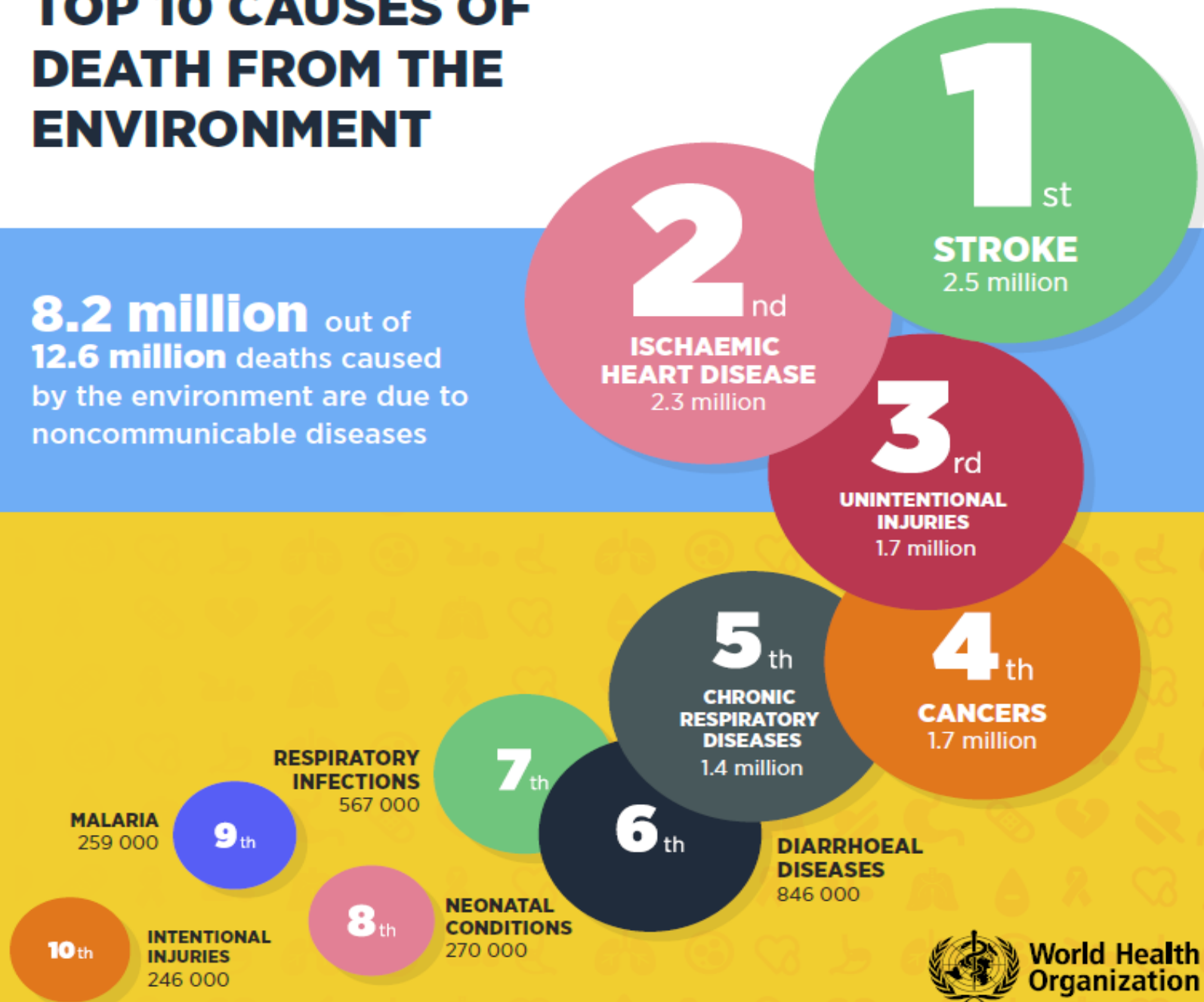
1.4 million
in European Region

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



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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.



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.

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.



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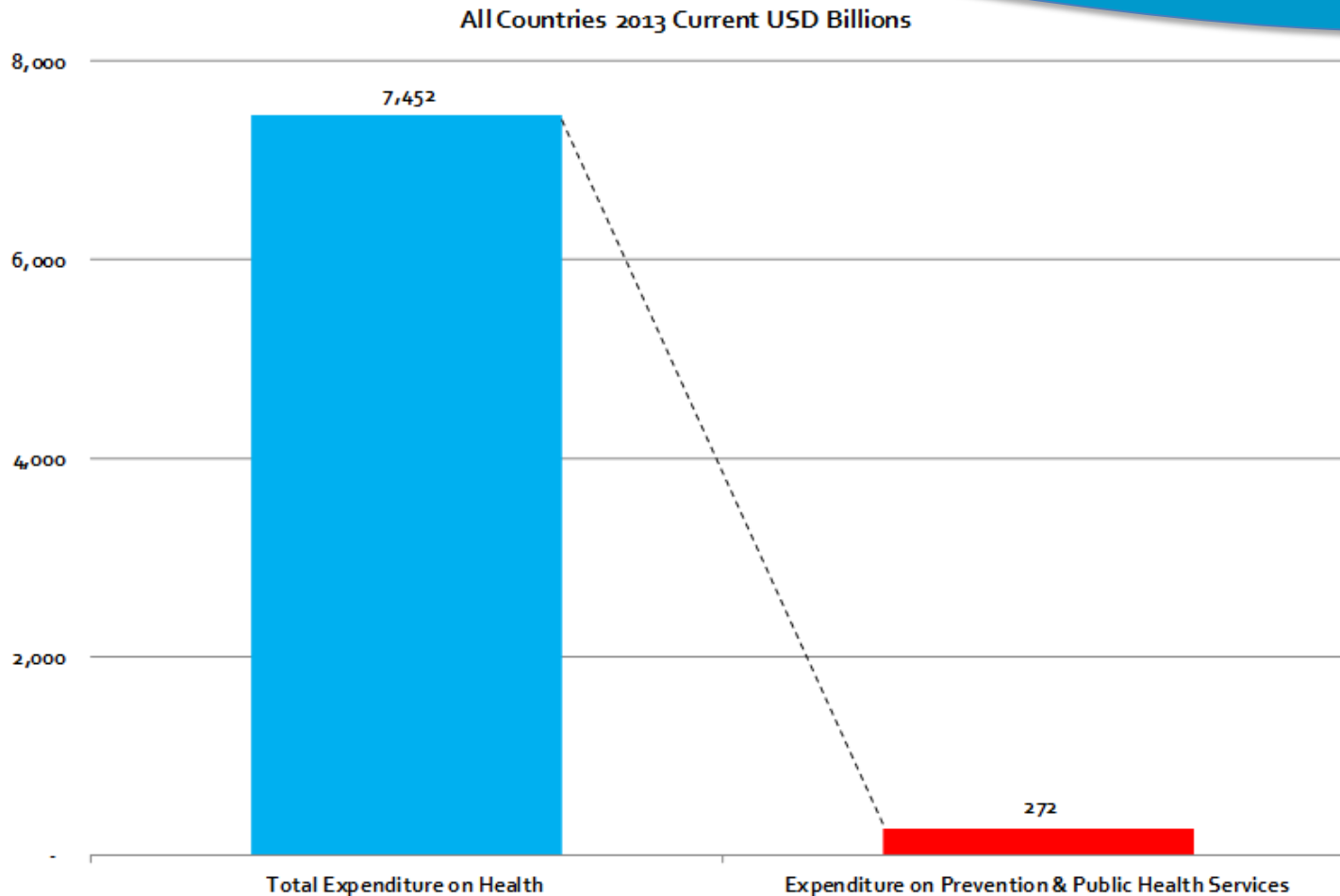
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How the burden of unhealthy environments can be reduced to protect health?



Focusing on primary prevention



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

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



ENVIRONMENT-HEALTH LINKS

3 GOOD HEALTH
AND WELL-BEING



Ensure healthy lives and promote well-being for all at all ages

- 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 CLEAN WATER AND SANITATION



Ensure availability and sustainable management of water and sanitation for all

- 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

**7 AFFORDABLE AND
CLEAN ENERGY**



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 SUSTAINABLE CITIES
AND COMMUNITIES



Make cities and human settlements inclusive, safe, resilient and sustainable

- 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.

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



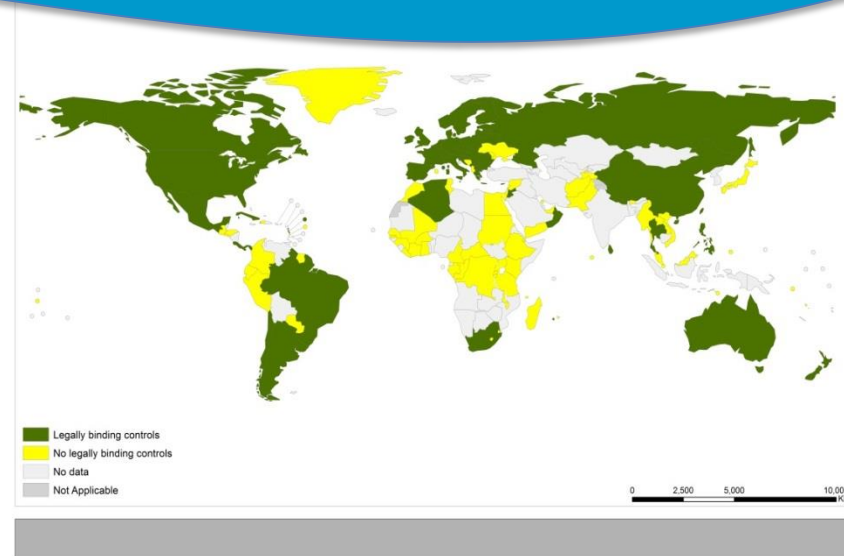
Ensure sustainable consumption and production patterns

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

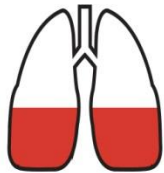


- As of March: at least 68 countries do not have legally-binding controls

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

BREATHELIFE.
Clean Air. Healthy Future.



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CLIMATE &
CLEAN AIR
COALITION
TO REDUCE SOOTY, OZONE-DEPLETING
CLIMATE POLLUTANTS



TO TACKLE AIR POLLUTION COLLABORATION IS NEEDED

CLEAN ENERGY

SUSTAINABLE,
CLEAN FUELS



HOUSING

HEATING AND LIGHTING

CONSTRUCTION
STANDARDS



URBAN PLANNING

COMPACT AND EFFICIENT



TRANSPORT

LOW EMISSION
VEHICLES



INDUSTRY

REPLACE SMOKE STACKS



WASTE MANAGEMENT

EMISSION CONTROLS

BIO-WASTE
MANAGEMENT



LOCAL AND REGIONAL AUTHORITIES

PLANNING CODES



HEALTH MINISTRY

TRACK HEALTH IMPACT



*Promoting
assessment of
health impacts
of projects and
policies*





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*as a driver for sustainable
development*