PLANETARY HEALTH

THE HEALTH OF HUMAN CIVILISATION AND THE NATURAL SYSTEMS ON WHICH IT DEPENDS

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THE HUMAN POPULATION IS HEALTHIER THAN EVER BEFORE

**LIFE EXPECTANCY**
Mean global life expectancy at birth (years)

**POVERTY**
Population of world in poverty (%)

**CHILD MORTALITY**
Recorded deaths of under-fives

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But to achieve this we’ve exploited the planet at an unprecedented rate.

The period of environmental changes induced by human exploitation of the planet defines a new geological era: the Anthropocene epoch.
ON OUR CURRENT TRAJECTORY WE WILL PUT EVEN MORE PRESSURE ON THE PLANET

**POPULATION**
World population (billions)
- 1800: 1 billion
- 2014: 7 billion
- 2050: 9.6 billion

**GRAIN PRODUCTION REQUIREMENTS**
Total global cereal production (billions of tonnes)
- 1960: 1 billion
- 2014: c. 4.2 billion
- 2050: 5.5 billion

**WATER DEMAND**
- 2000: 3,500 km³
- 2050: 5,500 km³

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DAMAGING THE PLANET DAMAGES HUMAN HEALTH

CLIMATE CHANGE
If unchecked climate change-related impacts could cause an extra 250,000 deaths per year between 2030 and 2050.

BIODIVERSITY LOSS
Overfishing together with increasing acidity and other environmental changes threaten fish supplies.

UNDER NUTRITION
Millions of people are at risk of under nutrition due to the combined effects of climate change and other environmental changes.

WATER USE
By 2050 over 40% of the world’s population could be living in areas under severe water stress.

SOIL DEGRADATION
This leads to a loss of 1-2 million hectares of agricultural land per annum.

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TO SAFEGUARD HUMAN HEALTH WE NEED TO MAINTAIN THE HEALTH OF THE PLANET ON WHICH WE DEPEND

LEARN ABOUT PLANETARY HEALTH

Planetary health is the highest standard of health, wellbeing, and equity worldwide. Human systems are responsible for shaping the future of human civilisation and the Earth's natural systems.

REDUCE FOOD WASTE

30-50% of all food produced is never consumed. Reducing food waste means less land is needed for agriculture; saving energy, water; helping to protect biodiversity and improving food security.

HEALTHY DIETS WITH A LOW ENVIRONMENTAL IMPACT

Diets low in red meat with plenty of fruit and vegetables reduce the risk of heart disease. Dietary changes could reduce greenhouse gas emissions and land use requirements by up to 50%.

BEFTER GOVERNANCE

Coordinated global, national and local policies that reduce environmental damage and improve health need to be implemented.

USE WATER MORE EFFICIENTLY

Although drip or trickle irrigation methods are more expensive to install, they can be 33% more efficient in water use.

END DEFORESTATION

Since 2000 we have cut down over 2.3 million km² of primary forest. The REDD+ mechanism aims to reduce greenhouse gas emissions and improve local livelihoods.

FAMILY PLANNING

Around 225 million women who want to avoid pregnancy are not using effective contraception. Access to family planning could cut maternal deaths by almost 35% and improve food security.

CITY PLANNING

Planning healthy and sustainable cities can increase resilience to environmental change, reduce environmental impacts and improve people's health.
Examples of the many aspects of the climate system in which changes have been formally attributed to human emissions of heat-trapping gases and particles by studies published in peer-reviewed science literature.

Potential effects of global climate change on child health.

**Mitigation**
Increase development of clean energy sources, energy efficient transport systems, buildings & carbon capture. Reduce waste and animal product consumption.

**Rapidly Accelerating Climate Change**

**Environmental effects**
- Extreme weather events, natural disasters
- Increased temperatures
- Ecosystem disruption (land and water)
- Rising sea level, receding coastlines

**Children’s health effects**
- Increased susceptibility to injury/death, post-traumatic stress, loss of caregiver, disrupted education, displaced populations
- Damage to lung function and growth including exacerbations of asthma and allergies from elevations in aeroallergens, ozone and wildfire smoke
- Increased waterborne, foodborne illness Range shifts in vectorborne infections Novel infections
- Heat exhaustion, heat stroke
- Disruptions of crop yield/nutrient content and freshwater supply, displaced populations, unstable social/political landscape, increased conflict

**Adaptation**
Increase public health system preparedness, disease surveillance, research and vaccination; improve access to education, early warning systems and health care.
