

Protecting Human Health From Climate Change: A Global Perspective

**Dr. Diarmid Campbell-Lendrum,
Public Health and Environment Department,
WHO-Geneva**



**World Health
Organization**

The health community has recognized the threat

- Identified by WHO DG as a top priority in 2007, and selected as theme for World Health Day 2008
- WHA resolution (2008), and Executive Board endorsement of WHO action plan (2009)
- Campaigns by health NGOs, professional associations, medical journals



"With impoverished populations in the developing world the first and hardest hit, climate change is very likely to increase the number of preventable deaths. The gaps in health outcomes we are trying so hard to address right now may grow even greater.

This is unacceptable."

Three Key Strategic Messages

- (1) Health should be more central in the climate debate**
- (2) Health action can save lives now and protect from future climate change**
- (3) Well planned climate mitigation can improve health**



Key Message 1:

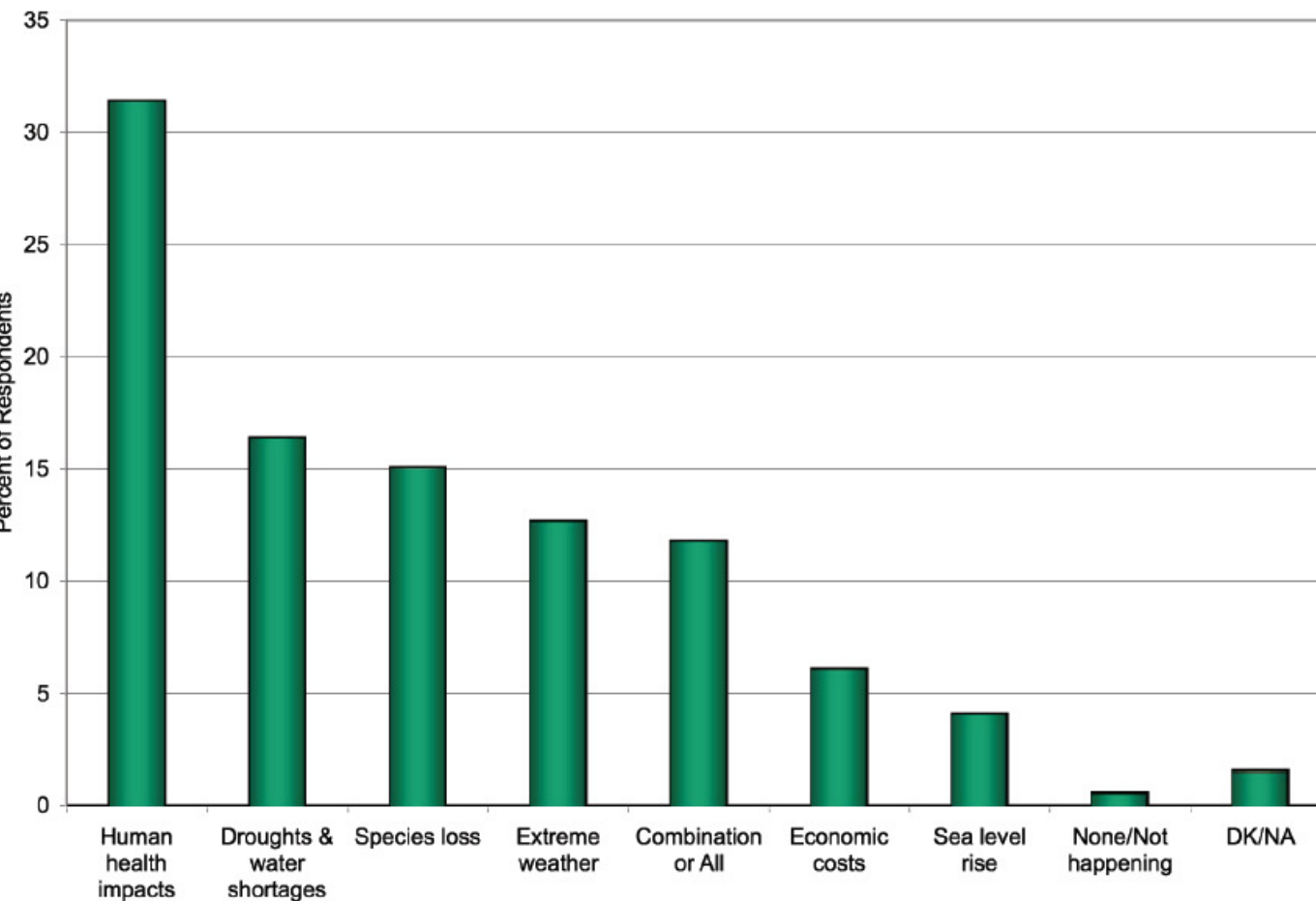
Health as a pillar of climate policy

Principles of the 1992 UNFCCC –
Avoiding adverse effects of climate
change

“Adverse effects of climate change”

- changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of **natural and managed ecosystems** or on the operation of **socio-economic systems** or on **human health** and welfare.

Key Message 1: Health as a pillar of climate policy



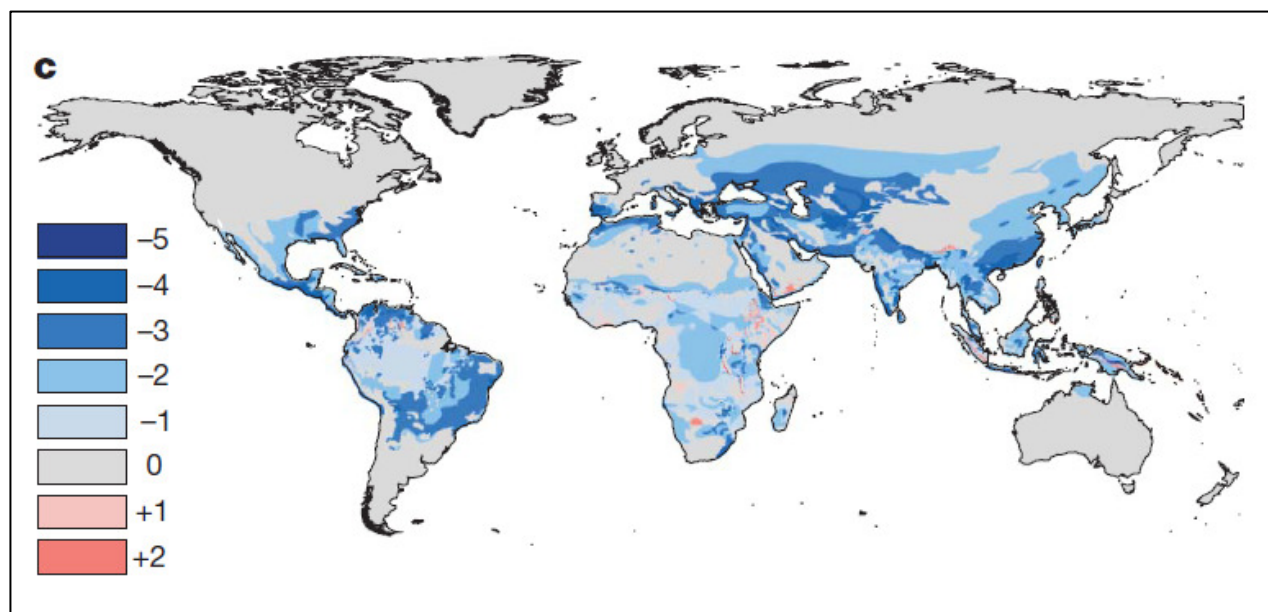
Globescan poll in 30 countries (UNDP 2007):

“Now I would like to ask you some questions about climate change, which is sometimes referred to as global warming or the greenhouse effect. Which ONE of the following possible impacts most concerns you personally, if any?”

Health as a pillar of climate policy – What WHO is doing

- (1) Producing, disseminating advocacy material on climate and health**
- (2) Facilitating networks of NGOs and delegates to the UN climate convention**
- (3) Supporting health in the various UN climate mechanisms**

Key message 2: Health actions are effective climate change adaptations



Change in malaria endemicity
class, 1900-present:
(*Gething et al, Nature, 2010*)

- We have proven, cost-effective interventions, from clean water and sanitation, bednets for vector control, disaster risk reduction, humanitarian aid...
- All of these deaths are preventable – **IF** health protection is prioritized, and **IF** adaptation aid is additional to ODA

Strengthening health programmes to protect from climate change - What WHO is doing

- (1) Providing scientific evidence on health risks and effective interventions
- (2) Supporting health vulnerability and adaptation assessments (over 30 countries)
- (3) Defining "minimum public health package" of interventions
- (4) Running pilot projects on protecting health from climate change (16 major projects in 14 countries)

Key message Number 3: Cutting carbon can bring direct health benefits

"Health benefits from reduced air pollution as a result of actions to reduce greenhouse gas emissions... may offset a substantial fraction of mitigation costs" – IPCC, 2007

"while the climatic effects of mitigation measures are long-term and dispersed throughout the world, the health benefits are immediate and local" – M. Chan, 2009



Key message Number 3: Cutting carbon can bring direct health benefits

- Sustainable urban transport – could cut heart disease and stroke by 10-20%, breast cancer by 12-13%, depression and dementia by 5-8% in developed countries - greater gains in developing countries
- 30% reduction in animal fat consumption could reduce heart disease by 15-16% in high-consumption populations, and cut GHG emissions
- Clean household energy: Improved stoves in India could save 2 million lives over 10 years, and reduce warming from black carbon.



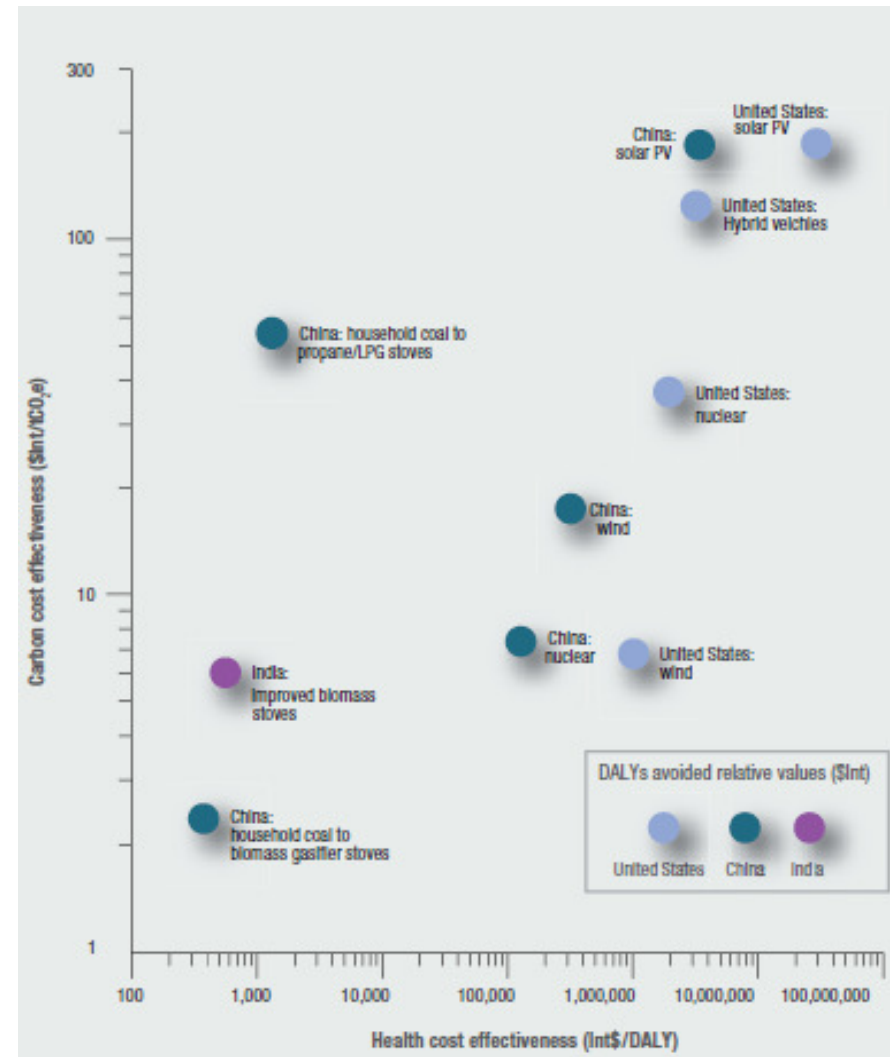
All estimates from Lancet, 2009.

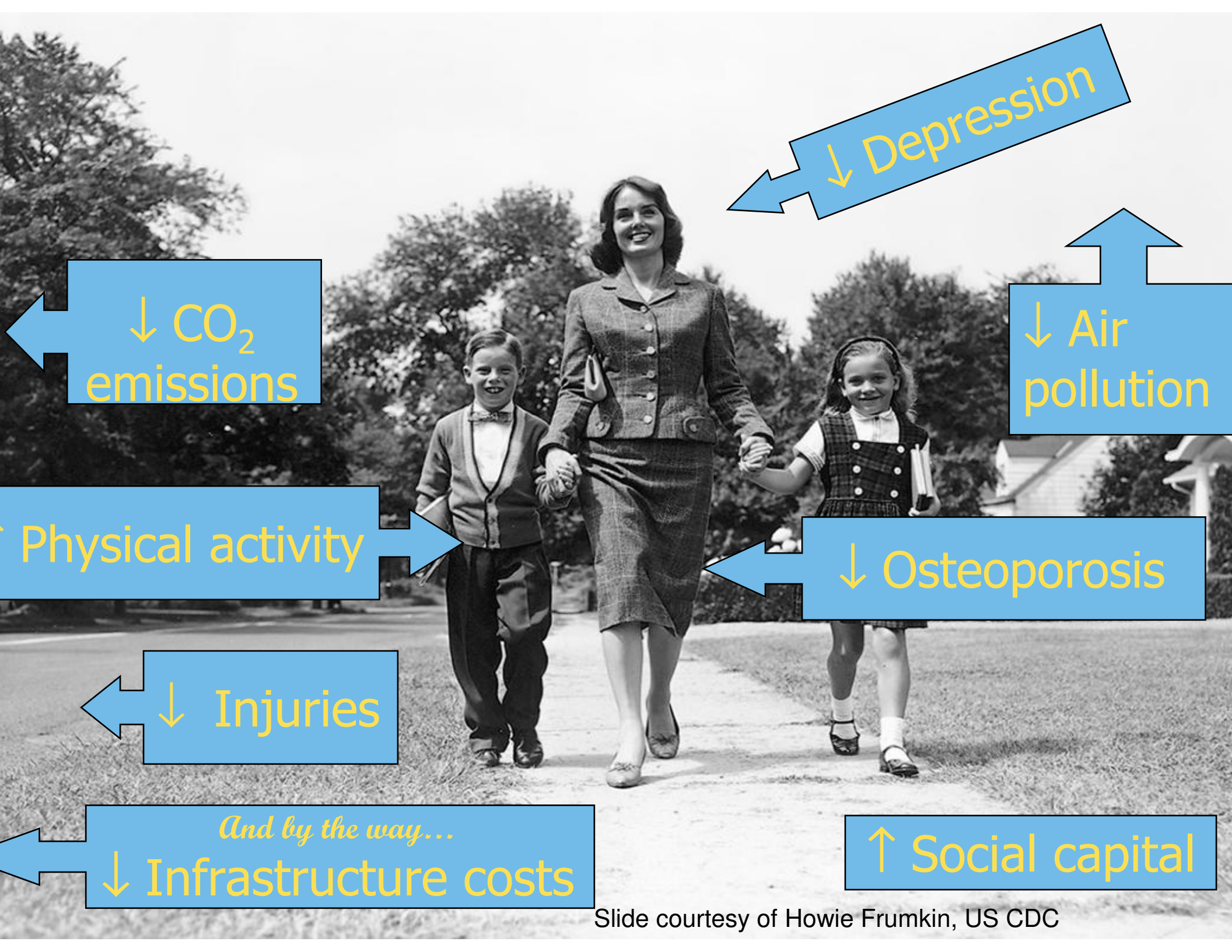
Key message Number 3:

Cutting carbon can bring direct health benefits

Indoor air pollution:

- Annually kills about 2 million of the poorest women and children
- Significant contributor to climate change
- Improved stoves are cost-effective both for health and climate
- A "Win-win-win-win-win" intervention





↓ Depression

↓ CO₂
emissions

↓ Air
pollution

Physical activity

↓ Osteoporosis

↓ Injuries

And by the way...
↓ Infrastructure costs

↑ Social capital

Slide courtesy of Howie Frumkin, US CDC

Improving health while cutting greenhouse gases - What WHO is doing

- (1) Providing scientific evidence on potential health co-benefits of mitigation policies
- (2) Providing guidance on reducing environmental impact of the health sector
- (3) Initiating projects on "green and safe" health facilities



Conclusions



- Health should be central to climate policy- but the links are neglected
- Investing in proven public health measures can save lives now and protect from climate change
- Well-planned mitigation decisions can bring immediate health benefits
- The health sector can lead by example in sustainability