

# Protecting health from climate change in Europe

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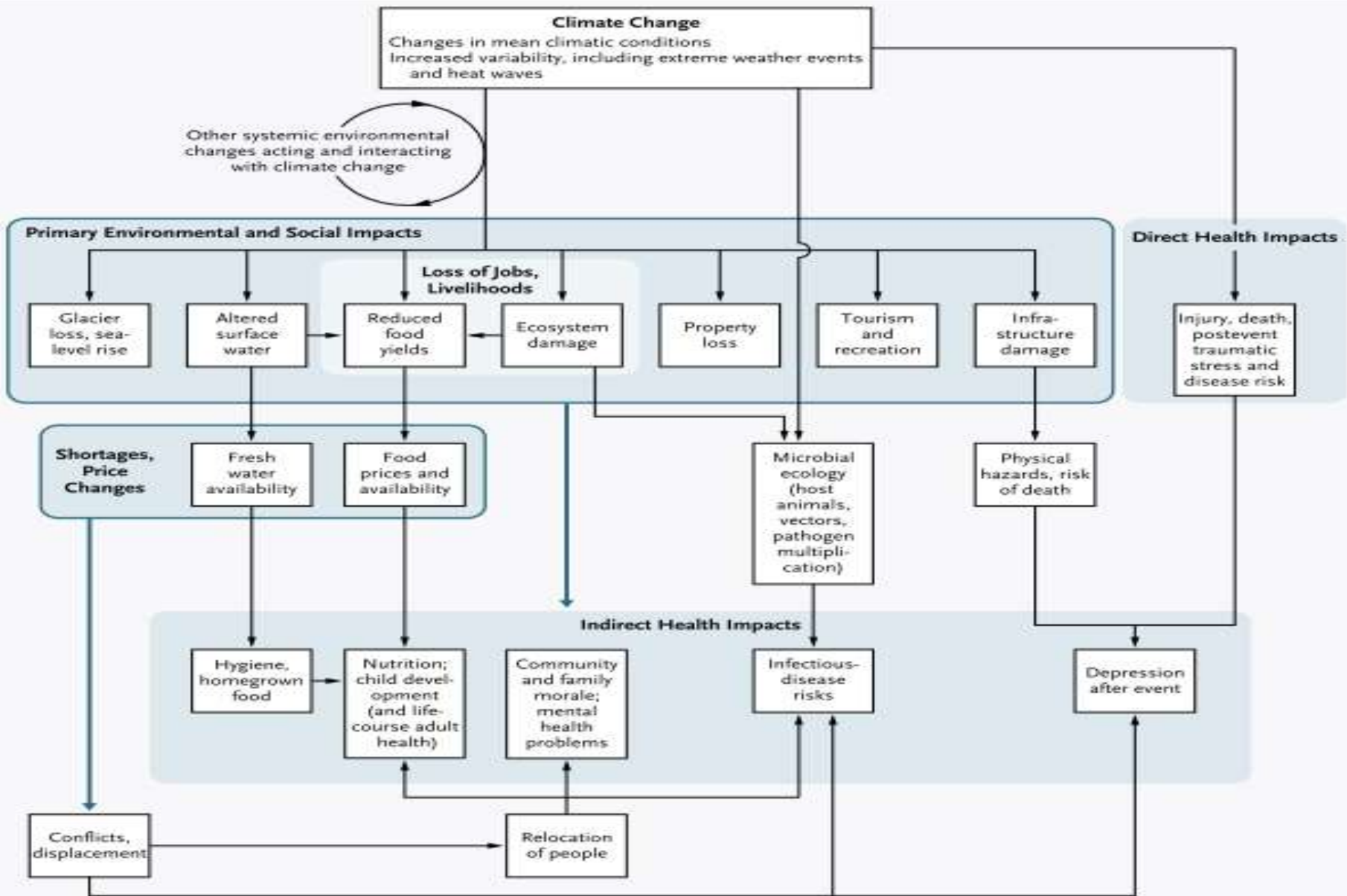
WHO Regional Office for Europe

# Climate sensitive disease burden

## Each year:

- Undernutrition kills 3.5 million
- Diarrhoea kills 2.2 million
- Malaria kills 900,000
- Extreme weather events kill 60,000
- >140,000 excess deaths





# Climate change will affect everybody but not everybody in the same way

## Populations differ in vulnerability

- Children are most at risk from the effects of climate change.
- Heat primarily affects old people: chronic diseases and drugs can decrease their ability to cope with extreme hot weather.
- Emergency services providers and labourers in outdoor environments are especially affected by extreme weather events.



# Five reasons for concern

1. GHG emissions have increased by 70% over the last four decades (IPCC 2007). In Europe energy and transport are the biggest emitters.
2. Transport emissions projected to increase of about 50% by 2030 compared to 2000. (EEA 2007).
3. The projected temperature increase for Europe by the end of 21st century is 2.3 - 6 °C (IPCC 2007).

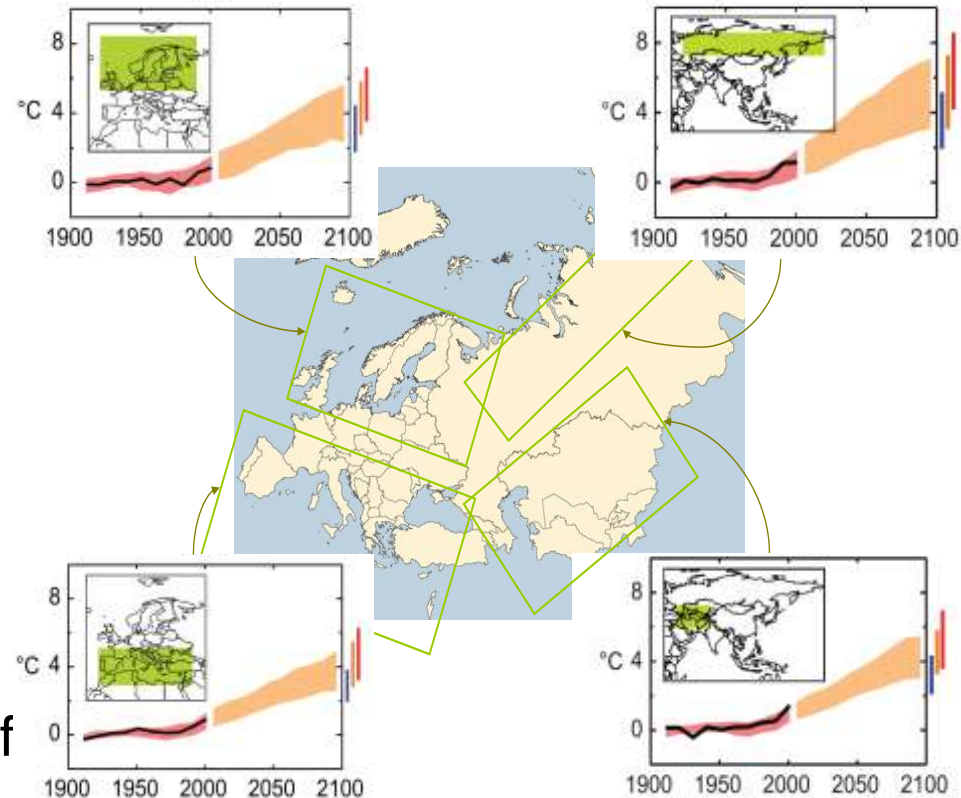


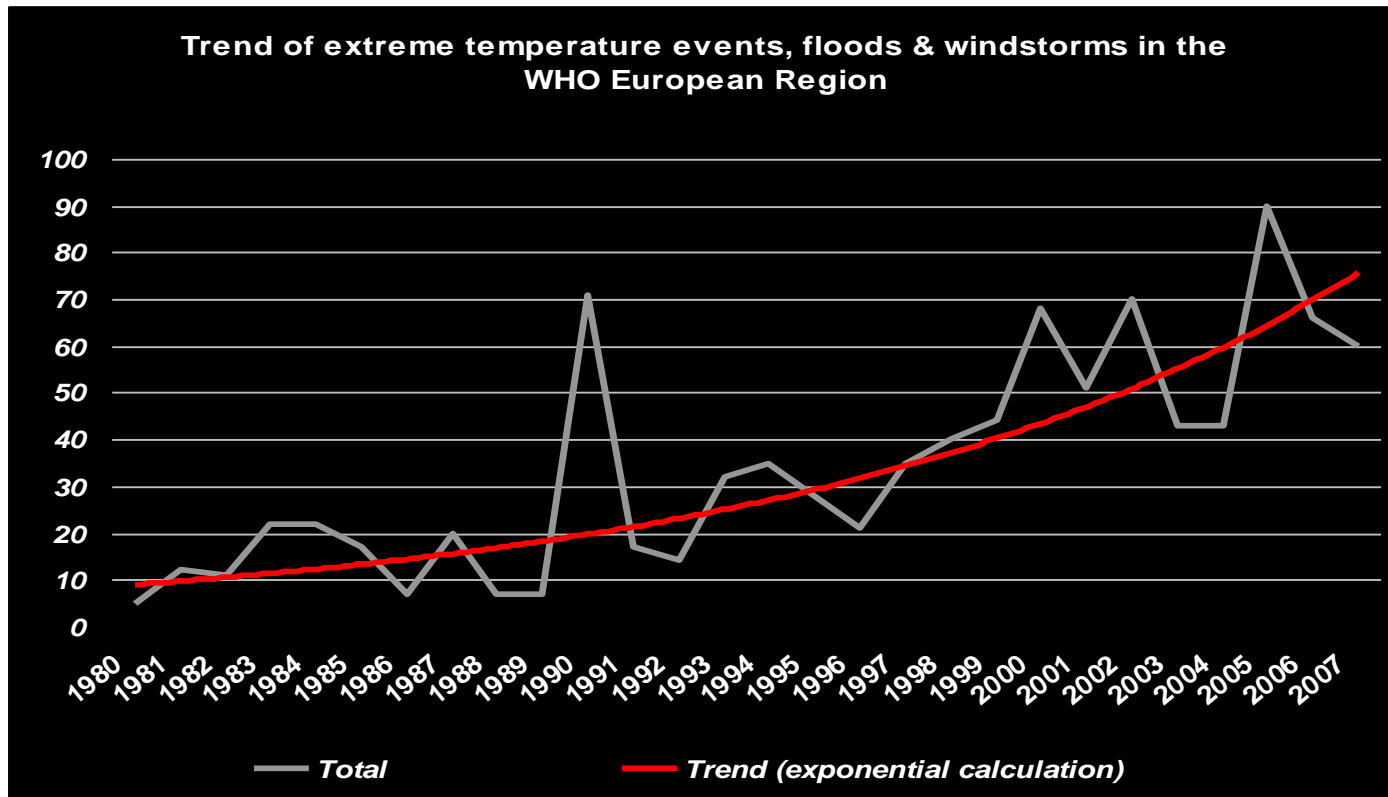
Photo: Istockphoto

# Five reasons for concern

4. Important exposures relevant to human health :
  - reduced water availability
  - increased drought
  - increased forest fires
  - increased energy demand in summer
  - Air pollution episodes

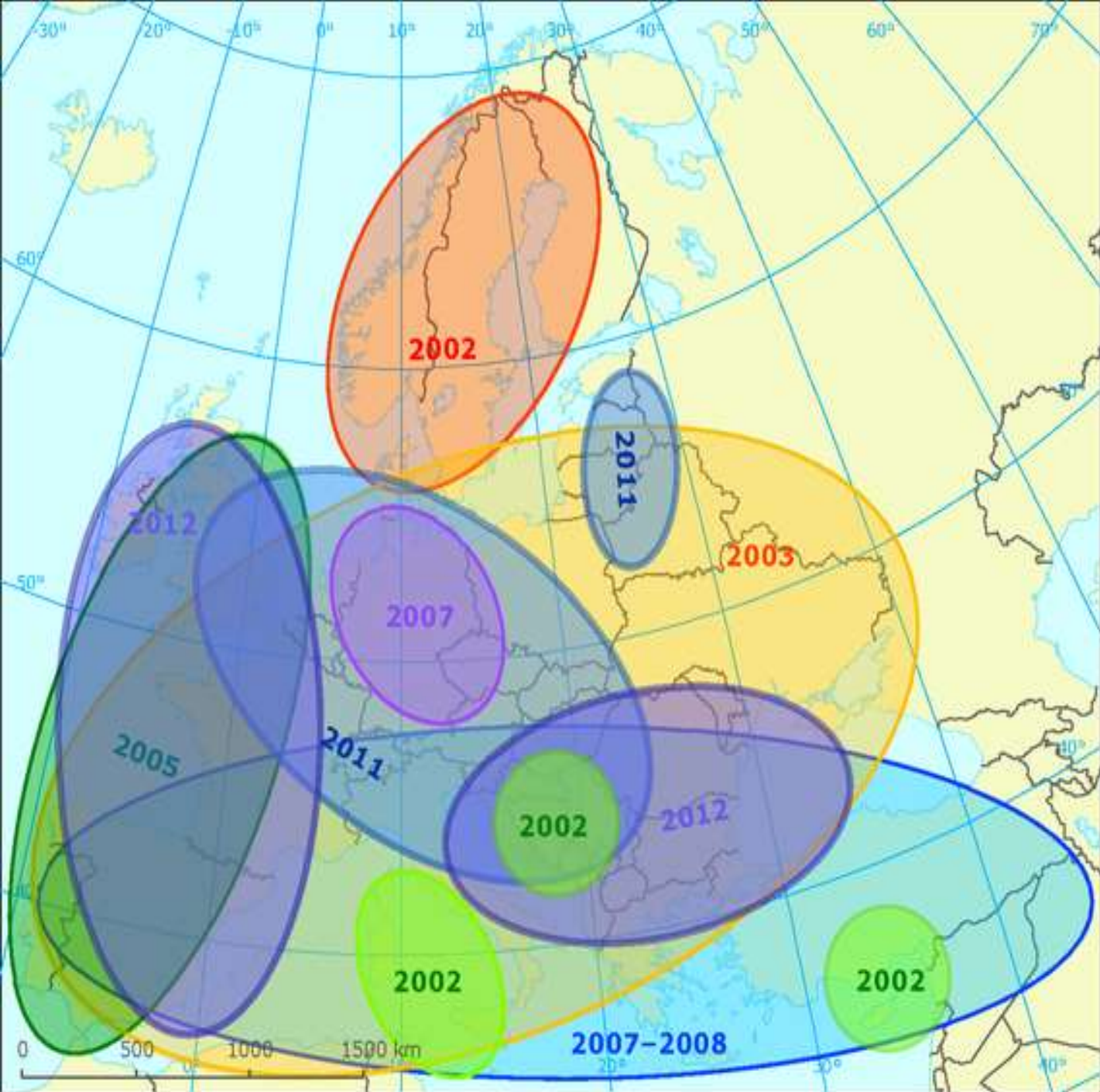
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# Increase in heat-waves frequency and intensity

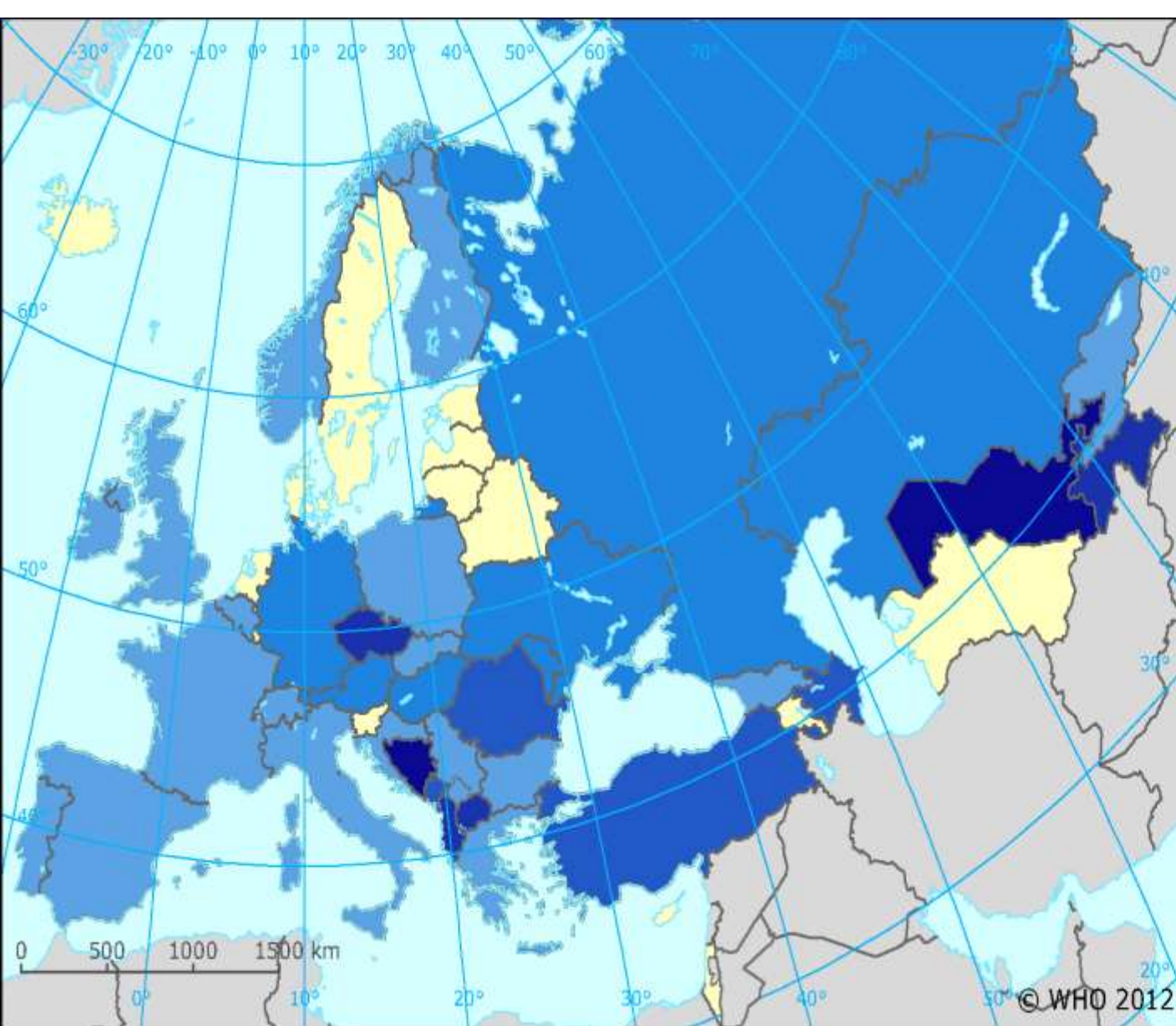


**Over 1,000 climate-related events hit Europe  
in the last three decades**

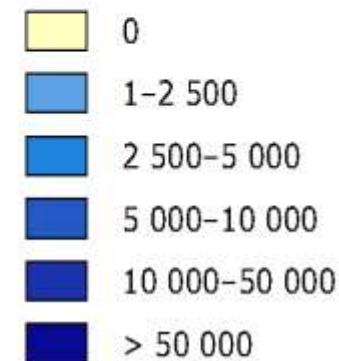
**Water scarcity and drought events in Europe during the last decade**







## People (per million) affected by flood and wet mass movement (2000-2011)



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

# Weather-related disasters kill thousands in rich and poor countries

**"It is *virtually certain* that increases in the frequency and magnitude of warm daily temperature extremes and decreases in cold extremes will occur in the 21st century on the global scale."**

Draft Special report on extreme weather events (SREX) SPM, Pg 10



Russia 2010:

1 month heatwave (38 degrees+)

54,000 excess deaths (cf 2009)

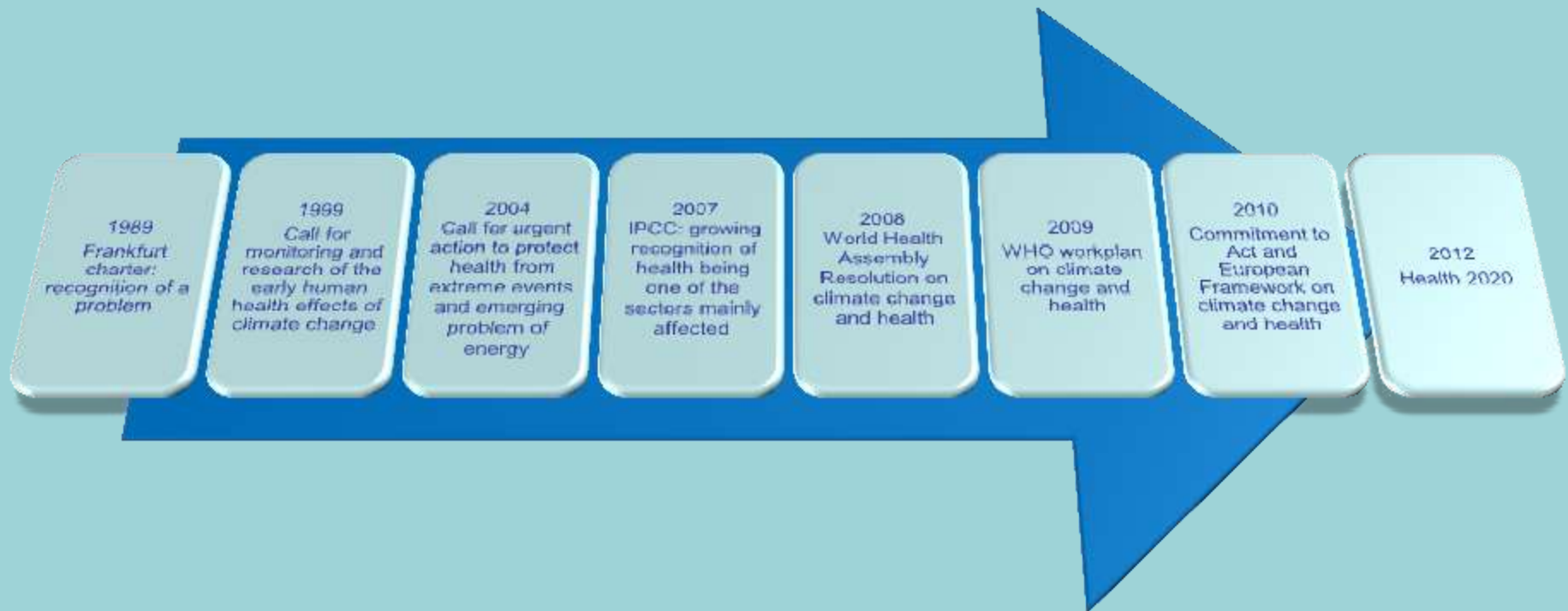
*'Mega-heatwaves' such as the 2003 and 2010 events broke the 500-yr long seasonal temperature records over approximately 50% of Europe. According to regional multi-model experiments, the probability of a summer experiencing 'mega-heatwaves' will increase by a factor of 5 to 10 within the next 40 years. Barriopedro et al Science 21 March 2011 10.1126/science.1201224*

# Action by WHO/Europe

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# WHO Regional Office for Europe has been taking action since 1989



# Resolution WHA61.19 on climate change and health, May 2008

## Urges Member States:

- to develop health measures and integrate them into plans for adaptation to climate change;
- to strengthen the capacity of health systems;
- to promote effective engagement of the health sector and its collaboration with all related sectors;
- to provide clear directions for planning and investment.

# Protecting health from climate change in an environment challenged by climate change

1. Health in other policies

2. Strengthen health systems

3. Raise awareness

4. Greening health services

5. Research, innovation, development

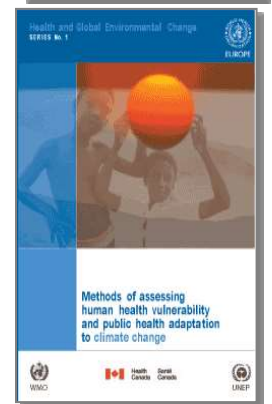
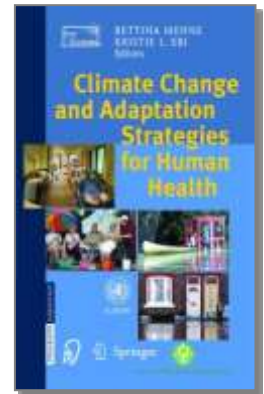


# WHO supports European countries

Activities of the WHO European Office build on decadal experience of strengthening countries' health systems to protect health from climate change.

They include

- heat-health action plans;
- disaster preparedness;
- programmes to combat infectious disease, improve water and sanitation services and respond to natural disasters;
- information to the public on how to avoid risks;
- co-ordination of scientific reviews of the evidence of the links between climate and health;
- capacity building on climate change and health.



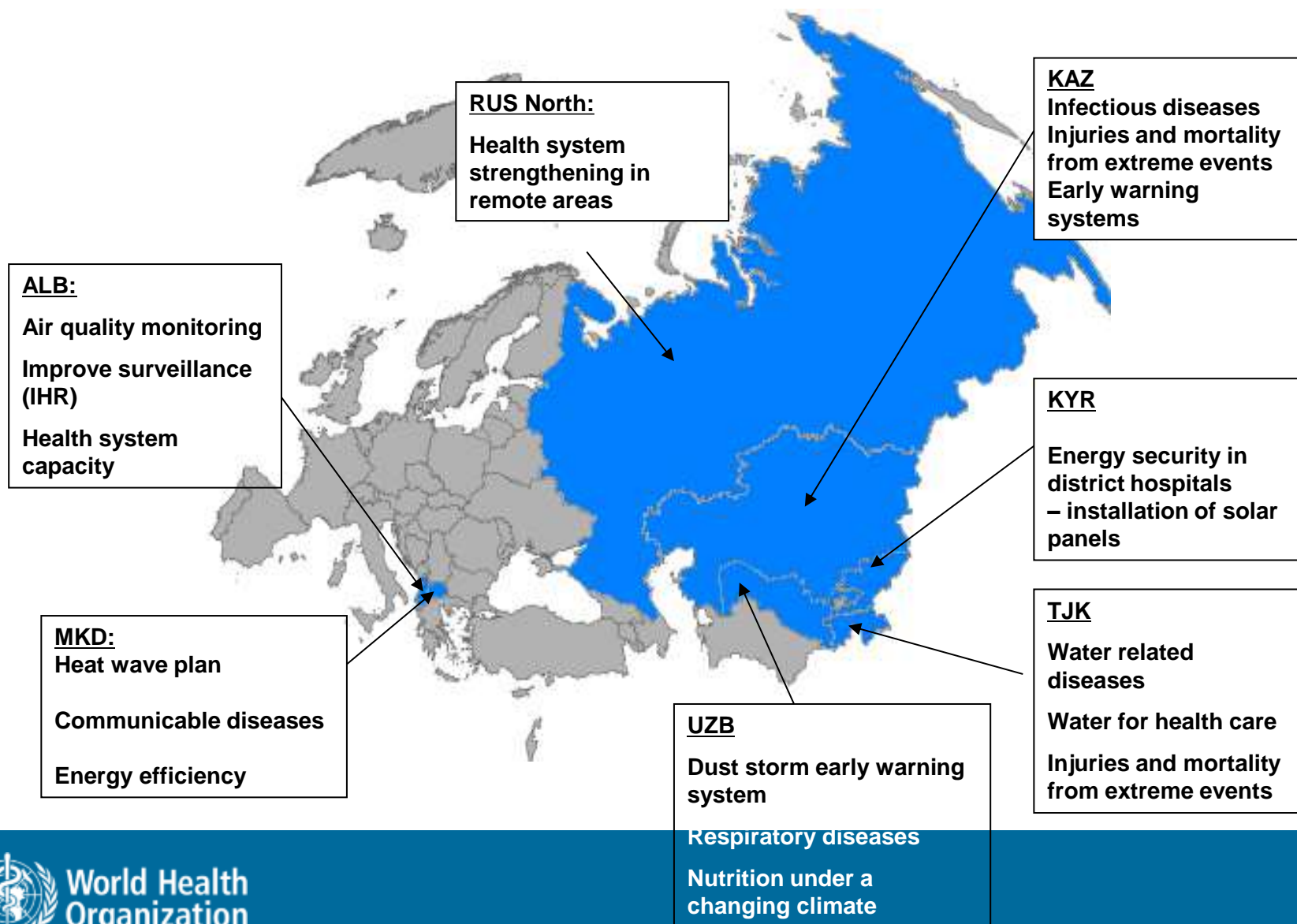
# Over half of the countries of the European Region belong to the EU

The European Commission (EC) is a key partner in the response to the new threats posed by climate change to health. 10 years of cooperation are made of

- guidelines on heat health warning systems and heat-health action plans;
- scientific and public health co-funded projects (i.e. Climate change and adaptation strategies for human health–cCASHh; Climate change impacts in the Mediterranean-CIRCE; Health security assessments; Euroheat, Cehis);
- contribution to the EC green paper on adaptation to climate change and impact assessment of health adaptation policies needed at European level;
- work with EEA (indicators of climate change impacts) and ECDC (disease tracking).



# Learning from a seven country pilot project



# Core Activities for all countries

- **Impact vulnerability and adaptive capacity assessment**
- **Strategy development**
- **Communications and awareness raising**
- **Education & training**

# ALB- Specific Objectives Achieved

- Emergency planning guidance and training
- Energy Efficiency Report of 3 hospitals
- Vector borne assessments conducted on Leishmaniasis, leptospirosis and Hanta virus, mosquitoes, sand fly-, tick- and rodent-borne infections
- A report on IHR implementation
- A Video broadcast nationally
- A Summary Brochure Produced



# The importance of this initiative

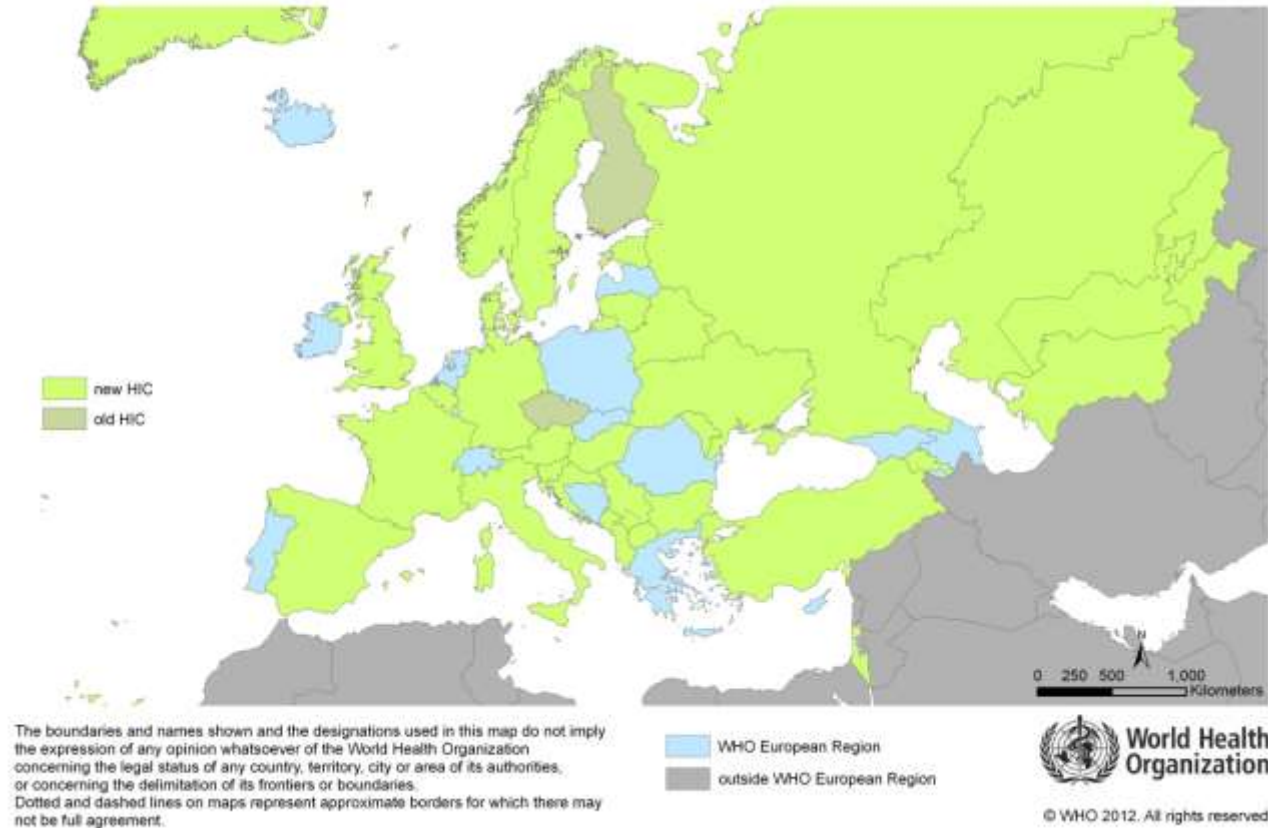


- The multiplier effect
  - From 1 to 4
- The leapfrog effect
  - Innovation and technology
- The snow ball effect
- The political effect
  - Top priority (BCA-WHO)
  - Health in the UNFCCC
  - In the WHA
- The economic benefits of adaptation
  - Disease averted; absenteeism avoided
- The environment benefits
  - GHG savings
- The health benefits



# Working group on climate change and health (HIC)

WHO European Region



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# Engagement of European members states -

1. Assignment of National Focal Points for the European Framework for Action
2. Assignment of inter-country working groups
3. Meetings on identification of the implementation strategy and definition of clear action plan
4. Regular meetings to monitor the implementation
5. Request for regular reporting from the countries on the implementation and provision of feedback

# Climate change: the public health challenge of this century



- The climate is changing
- Health is already affected
- Millions of people will be affected in the future
- Health protection is needed now



Thank you