

Environment and health work in the WHO European Region

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Content

- The WHO work on environment and health – priorities in Europe
- Biodiversity and health go together
- WHO/Euro focus
 - urban green spaces
 - climate change

THE WHO WORK ON ENVIRONMENT AND HEALTH – PRIORITIES IN EUROPE

Health 2020: addressing European challenges

Lifestyle, social, economic and
environmental determinants of health

Health equity

Good governance



WHO European Centre for Environment and Health: Implementing Health2020 and the SDGs



SDG target 3.9 on health improvement by environmental measures



How the environment affects health



AIR POLLUTION

including indoors and outdoors



CLIMATE CHANGE



INADEQUATE WATER, SANITATION

and hygiene



BUILT ENVIRONMENTS

including housing and roads



CHEMICALS

and biological agents



AGRICULTURAL PRACTICES

including pesticide-use, waste-water reuse



RADIATION

ultraviolet and ionizing



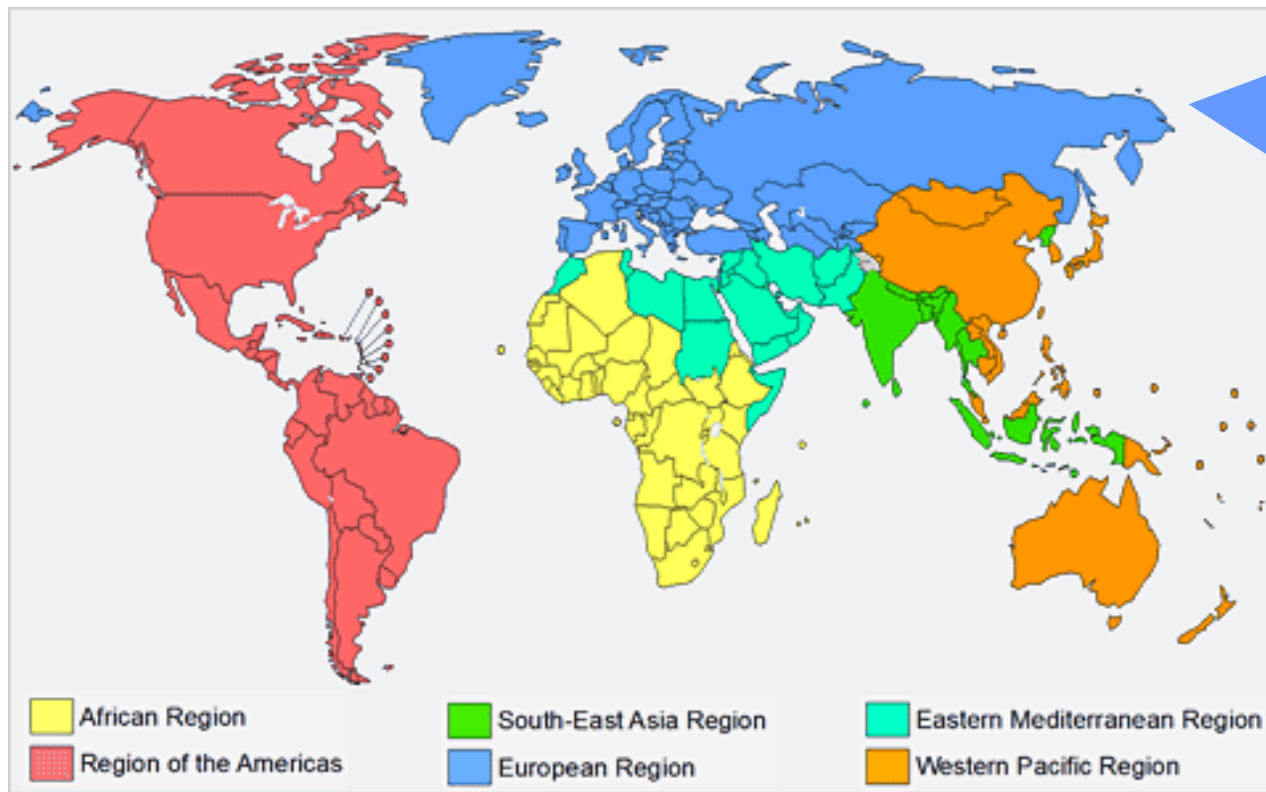
COMMUNITY NOISE



OCCUPATIONAL RISKS



The health burden of inadequate environments

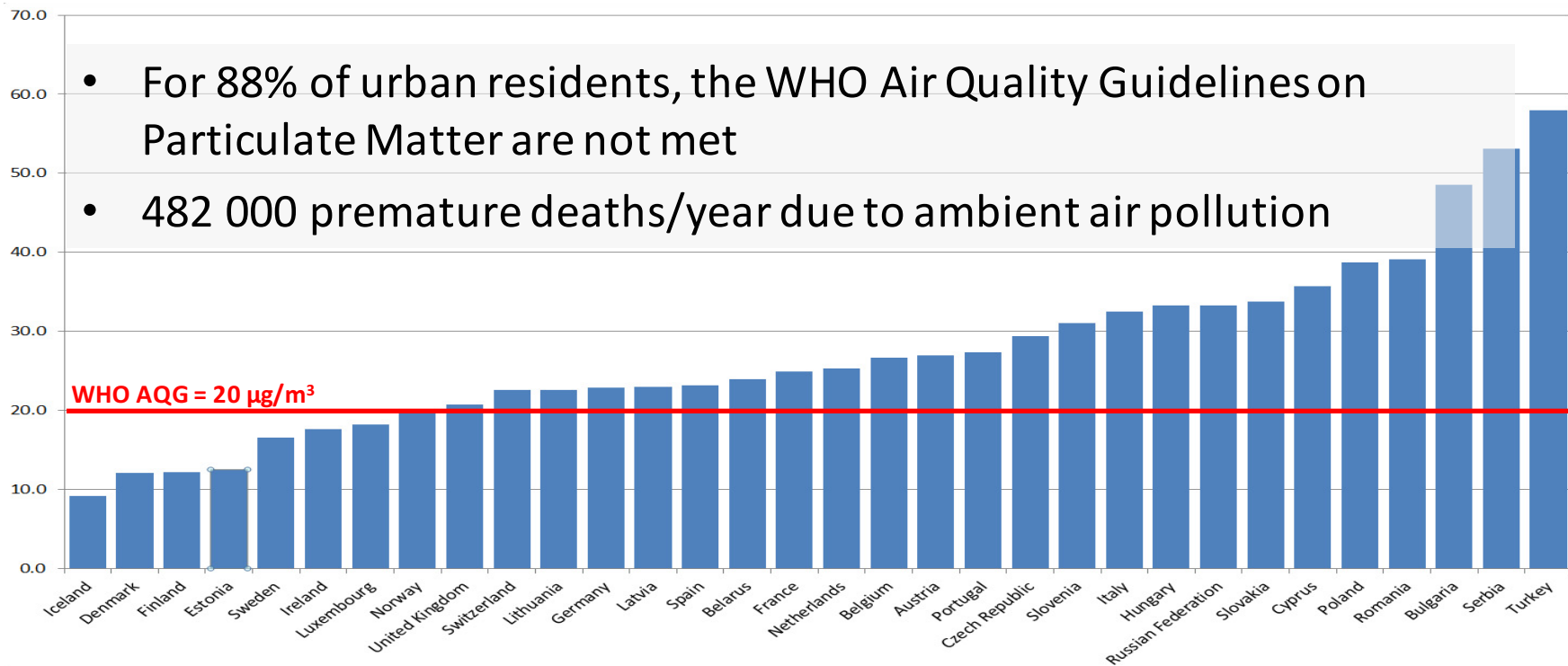


WHO European region: at least 1.4 million deaths per year are related to environmental conditions.

=> 15% OF ALL DEATHS

Air quality: the number one environmental health challenge in the WHO European region

- For 88% of urban residents, the WHO Air Quality Guidelines on Particulate Matter are not met
- 482 000 premature deaths/year due to ambient air pollution

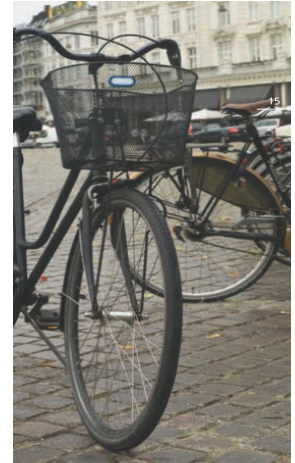


Other environmental challenges in the WHO European region

Inadequate housing causes more than 100,000 deaths/year

Active mobility could prevent many of the 1,000,000 deaths/year attributable to **inadequate physical activity**

Inadequate water, sanitation and hygiene cause an estimated 14 diarrhoeal deaths per day in low and middle income countries



WHO tools and support

Evidence:



- WHO Guidelines and technical reports on environment conditions
 - Transport
 - Housing
 - Air pollution
 - Noise
 - Climate change
 - Water/sanitation
 - Green spaces
- Health Impact Assessments
- Economic assessments



Tools:



- AirQ+ on health impacts of air pollution
- Health Economic Assessment Tools for cycling and walking
- Heat-Health Action Plans
- Climate change and health adaptation cost tool
- Air Quality in Cities database
- Environmental Burden of Disease quantification methods
- Environmental health indicators

BIODIVERSITY AND HEALTH GO TOGETHER

Biodiversity and health – an old topic with new relevance

On Airs, Waters and Places
Hippocrates



Published by the Library of Alexandria

Ecosystem effects of biodiversity loss could rival impacts of climate change

Date: May 2, 2012

ScienceDaily
Your source for the latest research news

Tropical Mosquitoes Gain Foothold in Northern Europe

Date: May 9, 2016

**SPIEGEL
ONLINE**

Scientists warn of 'unsafe' decline in biodiversity

Date: July 15, 2016

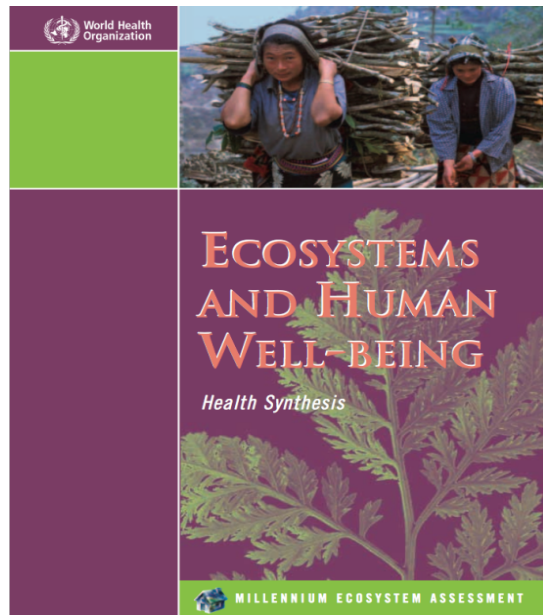
BBC

Climate change: global reshuffle of wildlife will have huge impacts on humanity

Date: March 30, 2017

theguardian

Importance of biodiversity and ecosystems to human health

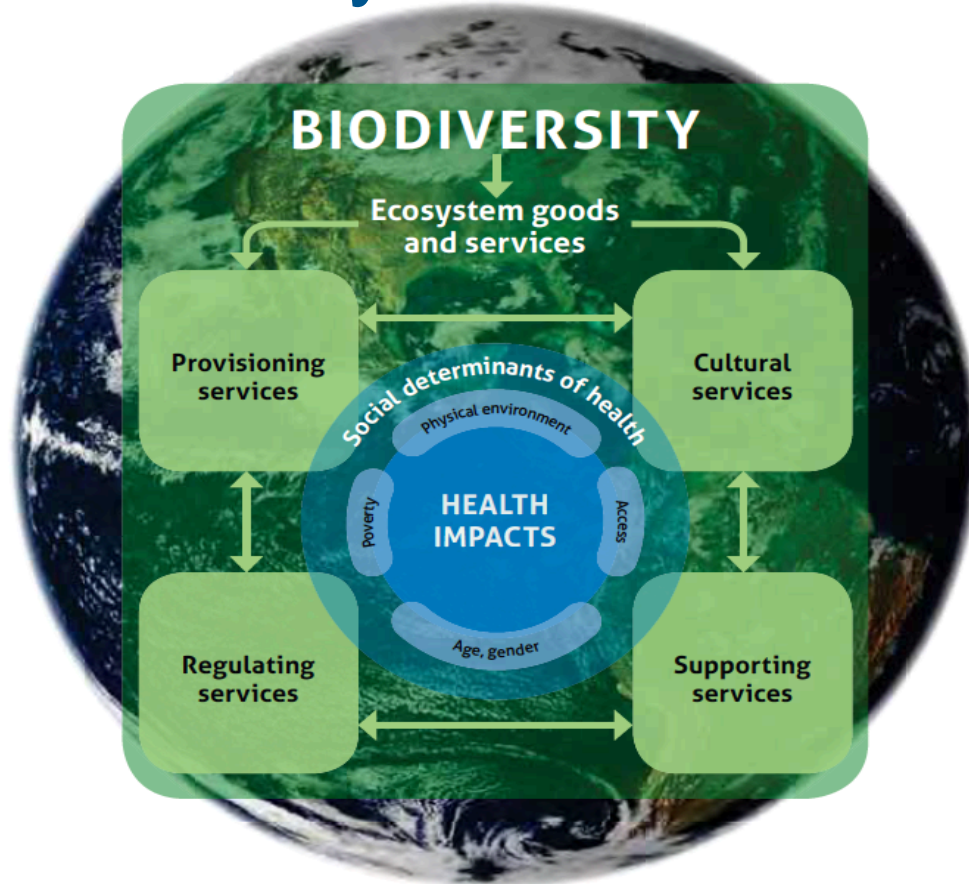


“Nature’s goods and services are the ultimate foundations of life and health, even though in modern societies this fundamental dependency may be (...) poorly recognized.

We now need to look at environmental health through a broader lens (...)”

(Lee Jong Wook, former DG of WHO)

Linkages and co-dependencies at the intersection of biodiversity and human health



Ecosystem service changes – affecting us all

Ecosystem services are indispensable to the wellbeing of people everywhere.



Even wealthy populations cannot be fully protected from the impacts of degradation of ecosystem services.

OUR WORK FOCUS IN RELATION TO BIODIVERSITY:

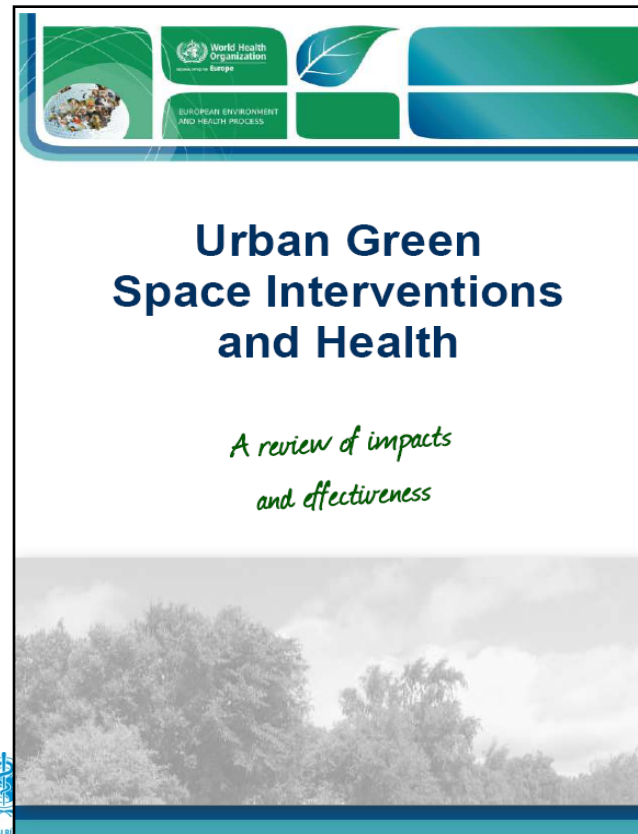
- *URBAN GREEN SPACES*
- *CLIMATE CHANGE*

Political frameworks for our work on green space and health

- WHO Parma Declaration commitments:
By 2020: “to provide each child with access [...] to green spaces in which to play and undertake physical activity”
- SDG agenda “Leaving no-one behind” SDG 11.7:
“provide universal access to safe, inclusive and accessible green and public spaces, in particular for women and children, older persons and persons with disabilities”
- New Urban Agenda adopted at Habitat III, Quito, 2016:
“We envisage cities and human settlements that [...] prioritize safe, inclusive, accessible, green and quality public spaces”



Compiling evidence for action



Green space benefits: health, equity and beyond

Green spaces benefit cities and urban quality of life because they can:

deliver positive environmental, social and health outcomes

upgrade the social and environmental quality of disadvantaged and deprived areas

make cities more liveable and enjoyable

Many urban green space interventions consider biodiversity and wildlife aspects!

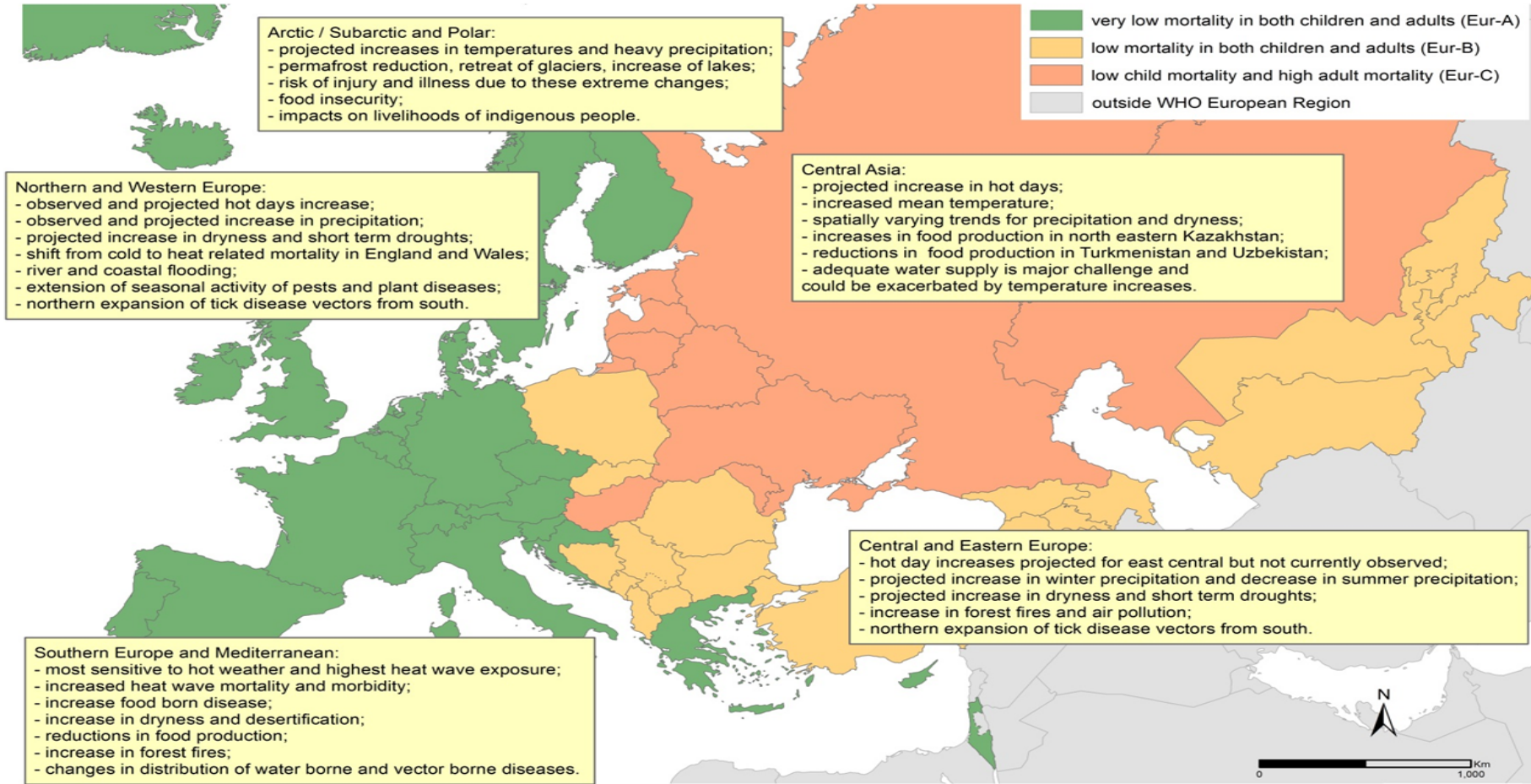
Urban green spaces: a WHO brief for action



Climate-related increases in ill-health in the European Region will occur through

- Expected further impacts of extreme weather events on health
- Disruption and stress for health services
- **Changing distributions of infectious diseases**
- Changes in air quality, food and water quality and security
- Consequences for health of lost work capacity and reduced labor productivity

Climate change and high level of diversity



Examples of vector-borne diseases in the WHO European Region

Mosquito-borne

- Dengue fever
- Chikungunya
- Malaria
- West Nile fever (WNF)

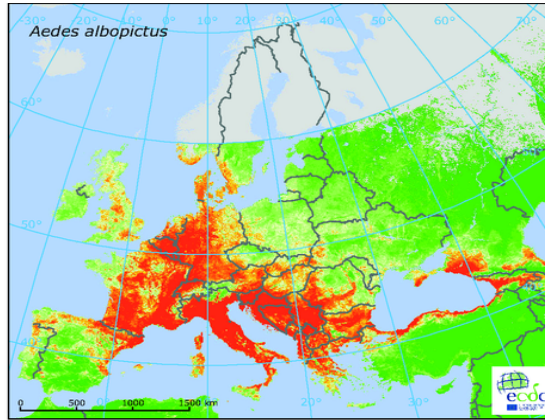
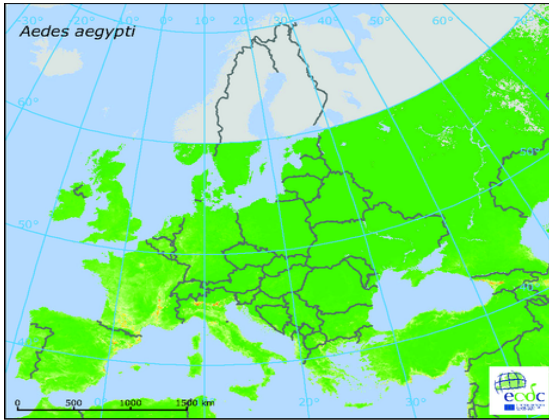
Sandfly-borne

- Leishmaniasis

Tick-borne

- Lyme disease
- Tick-borne encephalitis (TBE)
- Crimean–Congo haemorrhagic fever

Key facts – WHO European Region



Climatic suitability for *Aedes aegypti* and *Aedes albopictus* (Asian tiger mosquito) in Europe

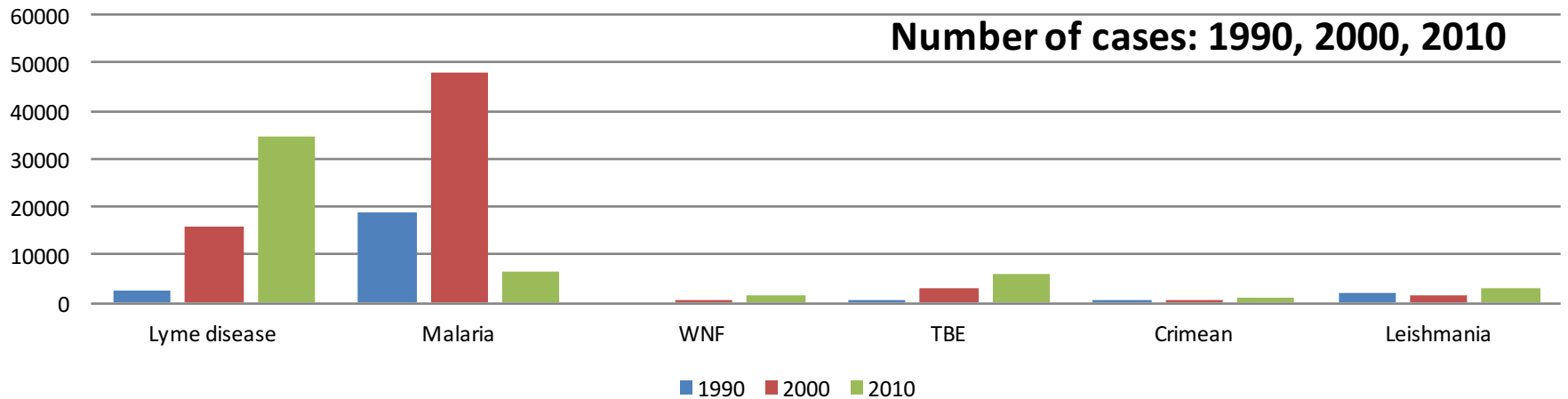
Suitability (%)



- 77 000 Europeans on average fall sick from vector-borne diseases every year.
- Mosquito species, such as *Aedes aegypti*, are re-emerging, and *Ae. albopictus* is emerging.

Increasing and decreasing trends

Over recent decades, many plant and animal species have shifted their geographical ranges, altered their abundance and shifted their seasonal activities in response to observed climate change (e.g. bird migration or pollen production). These shifts may increase the incidence of pollen allergies and vector-borne diseases in the European Region



Source: WHO centralized information system for infectious diseases (CISID) (<http://data.euro.who.int/cisid>).

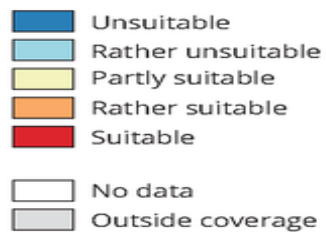
Growing public health concern

A combination of factors increases the threat of vector-borne diseases in the WHO European Region:

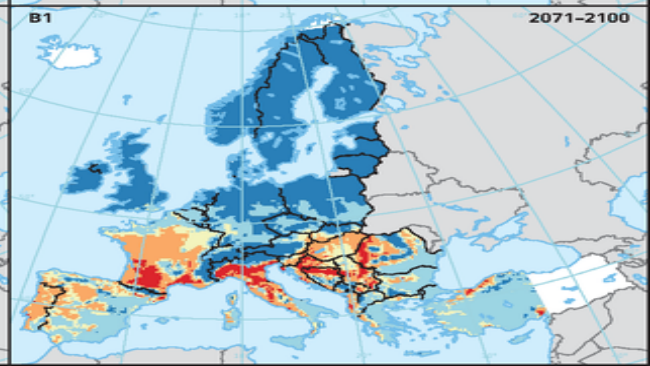
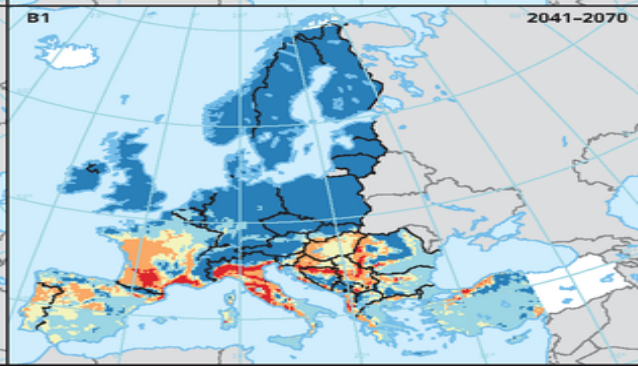
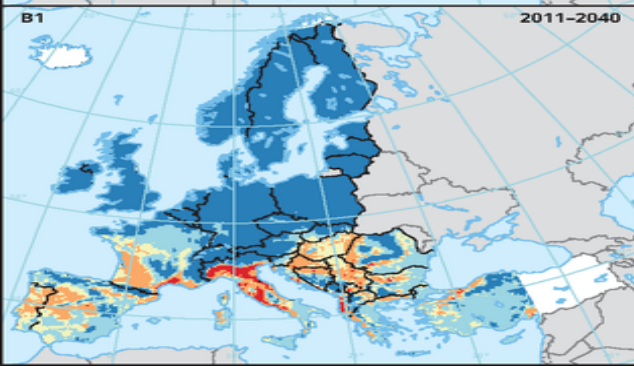
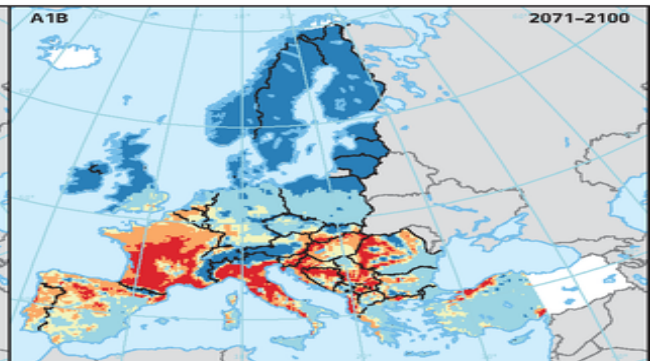
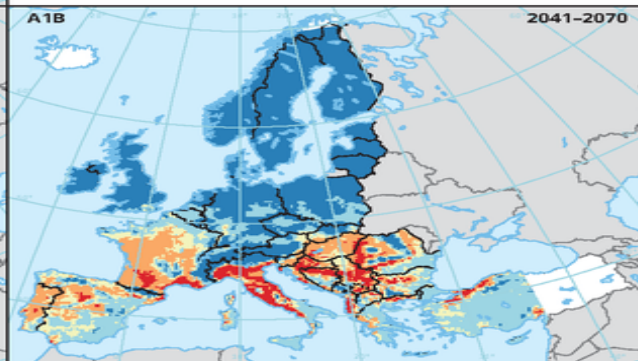
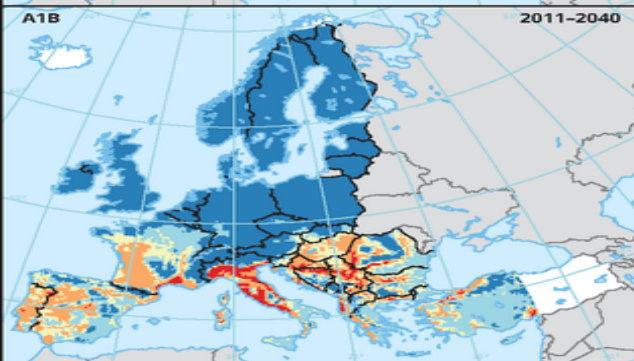
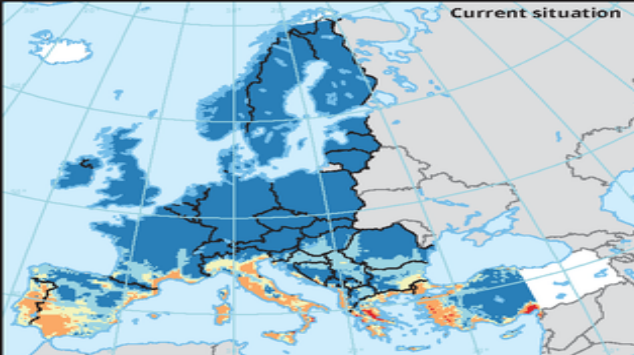
- changing social and economic conditions;
- globalized travel and trade;
- increased urbanization;
- climate change;
- **biodiversity changes.**



Projected change in the climatic suitability for chikungunya transmission



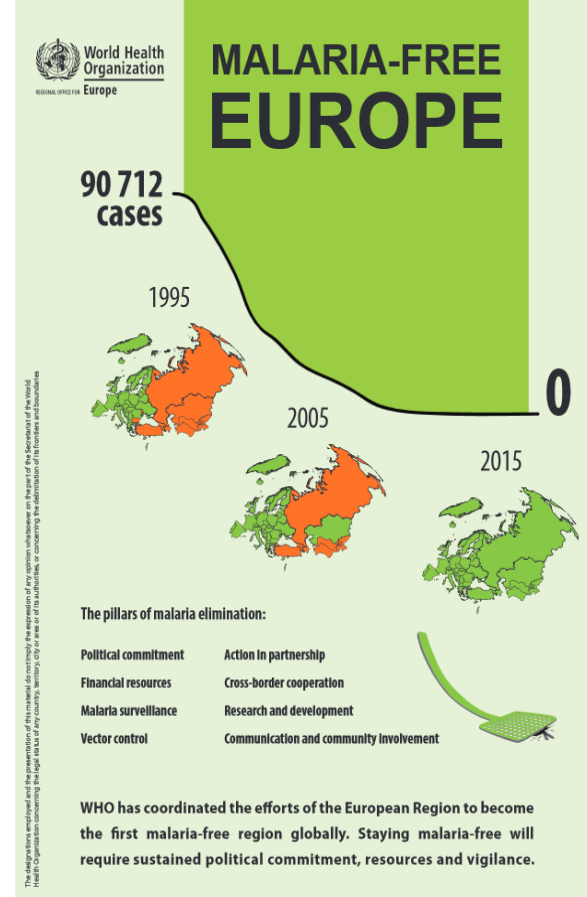
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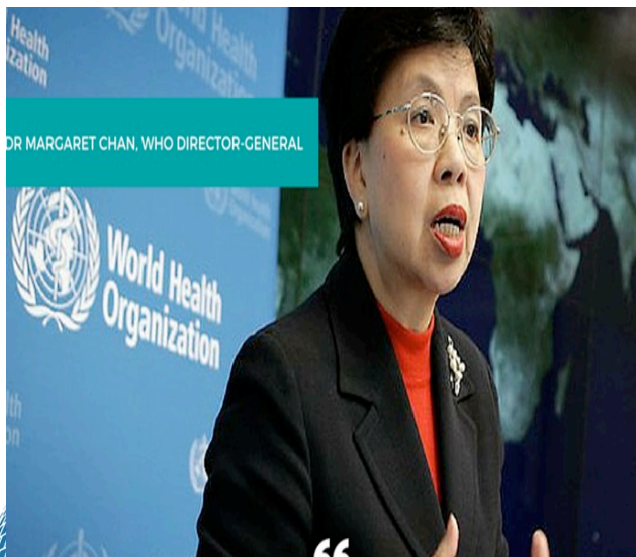
Public health action

3 phases of vector and disease prevention and control

- Control the vector
- Prevent the disease
- Limit the spread



Opportunity to Link Health, Biodiversity and Climate Change



DR MARGARET CHAN, WHO DIRECTOR-GENERAL

Important for the climate change community to explicitly recognize that human health and well-being are influenced by the health of local plant and animal communities, and the integrity of the local ecosystems

“

Climate change, and all of its dire consequences for health, should be at centre-stage, right now, whenever talk turns to the future of human civilizations. After all, that's what's at stake.

Health
zation



Structure and processes on environment and health



REGIONAL DIRECTOR (RD)

RD's Office

Country Relations
and Corporate Communications

Strategic Partnerships
and Resource Mobilization +
WHO Office at the European Union

Director of
Programme Management

European Observatory
on Health Systems and Policies

Division of
Policy and Governance
for Health and Well-being

Division of
Health Systems
and Public Health

Division of
Health Emergencies and
Communicable Diseases

Division of
Noncommunicable Diseases
and Promoting Health through
the Life-Course

Division of
Information, Evidence,
Research and Innovation

Division of
Administration and Finance

WHO European Office
for Investment for
Health and Development

WHO Barcelona Office
for Health Systems
Strengthening

Planned GDO for
preparedness for humanitarian and
health emergencies

Planned GDO for
noncommunicable diseases

EURO Staff Association
Secretariat

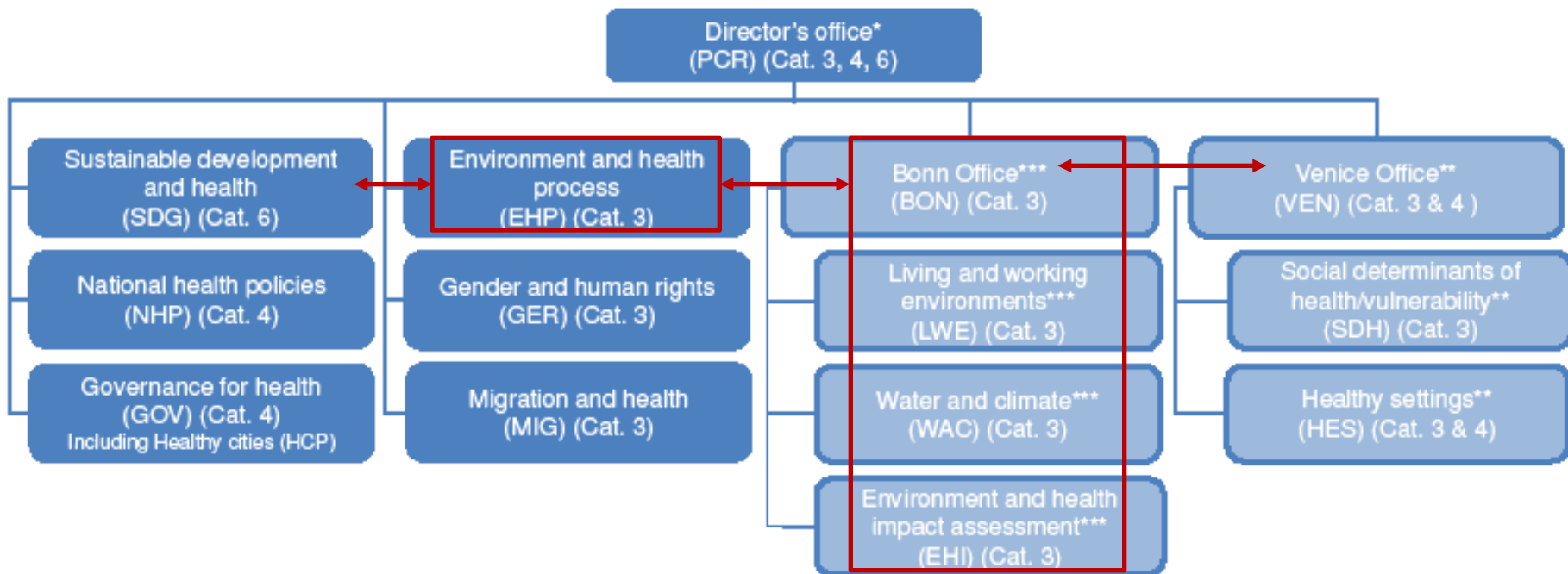
WHO European Centre for
Environment and Health

WHO European Centre for
Primary Health Care

Office of the
Ombudsperson



Division of Policy and Governance for Health and Well-being (PCR)

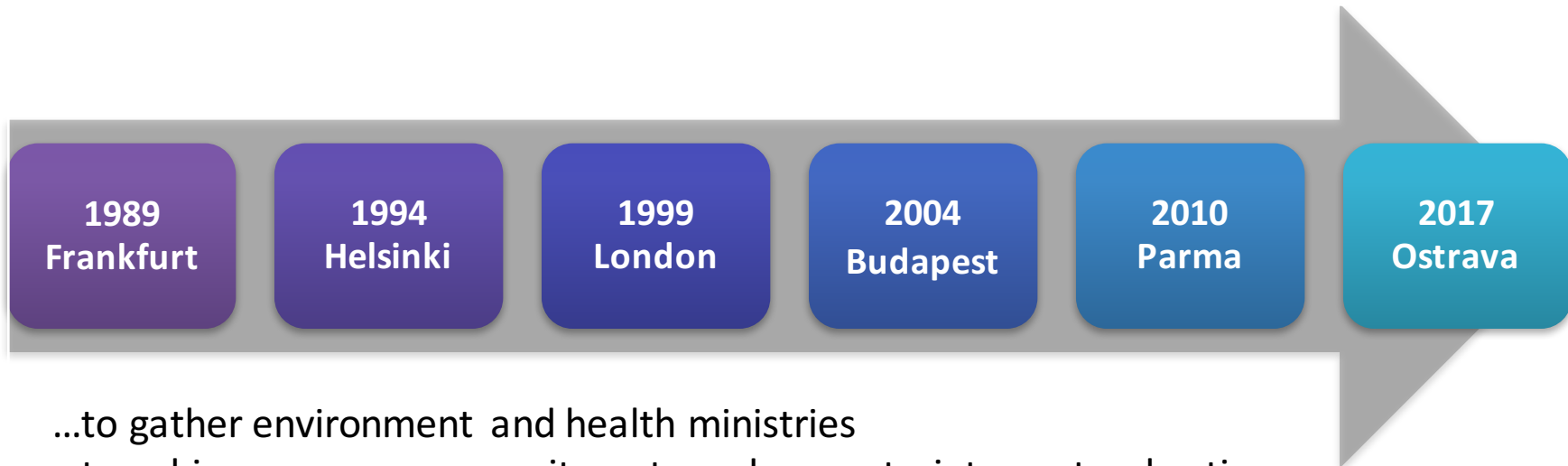


European EH Process (EHP)

An institutional framework ensures appropriate coordination between national implementation and international policies, and the proper level of monitoring and implementation.

- **National mechanisms and structures** are to be set up or strengthened in countries.
- **The European Environment and Health Ministerial Board (EHMB)** is the political face and driving force of international policies and commitments made within the EHP. The EHMB is composed of four ministers of health, four ministers of environment and four representatives of intergovernmental organizations.
- **The European Environment and Health Task Force (EHTF)** is the leading international body for implementation and monitoring of the EHP, meeting annually. Task Force members are leading officials from all Member States in the WHO European Region, nominated at national level as focal points for the Process.
- **Secretariat:** the whole institutional framework will be serviced by WHO/Europe, which will cooperate closely with UNECE and UNEP Regional Office for Europe.

Ministerial Conferences on EH



...to gather environment and health ministries

...to achieve common commitments and promote intersectoral action

...to identify key priorities for WHO work on environment and health

Environment and Health structure

WHO Regional Office for Europe
Division of Policy and Governance for Health and Well-being

European Environment and Health Process (EHP)

Copenhagen office

- Environment and health policies
- Transport and health

Bonn office

- Living / working environments
- Water and Climate
- Environment and health impact assessment

Programmatic work areas

AIR QUALITY

CHEMICAL SAFETY

CLIMATE CHANGE

ECONOMICS OF ENVIRONMENT AND HEALTH

ENVIRONMENTAL HEALTH INEQUALITIES

ENVIRONMENTAL NOISE

ENVIRONMENTALLY SUSTAINABLE HEALTH SYSTEMS

ENVIRONMENT AND HEALTH IMPACT ASSESSMENT

TRANSPORT AND HEALTH

URBAN AND BUILT ENVIRONMENTS

WASTE MANAGEMENT AND HEALTH

WATER, SANITATION AND HYGIENE

WORKERS` HEALTH