Health hazards: 
WHO point of view under the international framework

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7th International Workshop
How to handle imported containers safely
Berlin, 22 May, 2014
Outline

• WHO is WHO?
• WHO European Region and health status
• WHO Policies on environment and occupational health
• Further considerations
The WHO European Region

53 Member States: 900 000 000 pop

Life expectancy at birth, in years

Last available European Region 76.41

- <= 85
- <= 81
- <= 77
- <= 73
- <= 69
- No data

Mn = 65
Evidence for policy and action

- Evidence (based) informed policy making
- Using the best available evidence
- Inspiring new research
- Developing the arguments / making the case
- Creating political commitment
- Creating the preconditions for change
- Creating the capacity for change

Issues

- Applying what we know – context and political processes
- The time-lag factor
- Research methodologies - the transfer of knowledge and attribution
- Action research and learning from doing
- The know-how of reaching out to others
- Intellectualising is a barrier for action
- Missing the stories - case studies unreadable for learning
- Understanding and investing in innovation processes
WHO European Region:

- Significant improvements in health and well-being but ... uneven and unequal
- Europe’s changing health landscape: new demands, challenges and opportunities
- Economic opportunities and threats: the need to champion public health values and approaches
European Region landscape

- We are dealing with complexity and uncertainty
- Health challenges are multi-faceted and require active involvement of all levels of government (international, national, and local)

People live longer and have less children.

People migrate within and between countries, cities grow bigger.

Noncommunicable diseases dominate the disease burden.

Depression and heart disease are leading causes to healthy life years lost.

Infectious diseases, such as HIV, tuberculosis remain a challenge to control.

Antibiotic-resistant organisms are emerging.

Health systems face rising costs.

Primary health care systems are weak and lack preventive services.

Public health capacities are outdated.
## The 10 Leading Causes of Death, Global, 2000 and 2012

<table>
<thead>
<tr>
<th>No</th>
<th>Causes of death, 2000</th>
<th>Deaths (million)</th>
<th>% of deaths</th>
<th>No</th>
<th>Causes of death, 2012</th>
<th>Deaths (million)</th>
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<td>1</td>
<td>Ischaemic heart disease</td>
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<td>Stroke</td>
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<td>10.7</td>
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<td>6.7</td>
<td>11.9</td>
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<td>3</td>
<td>Lower respiratory infections</td>
<td>3.5</td>
<td>6.6</td>
<td>3</td>
<td>COPD</td>
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<td>5.6</td>
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<td>COPD</td>
<td>3.0</td>
<td>5.8</td>
<td>4</td>
<td>Lower respiratory infections</td>
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<td>5</td>
<td>Diarrhoeal diseases</td>
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<td>4.1</td>
<td>5</td>
<td>Trachea, bronchus, lung cancers</td>
<td>1.6</td>
<td>2.9</td>
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<tr>
<td>6</td>
<td>HIV/AIDS</td>
<td>1.7</td>
<td>3.2</td>
<td>6</td>
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<td>1.5</td>
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<tr>
<td>7</td>
<td>Tuberculosis</td>
<td>1.3</td>
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<td>8</td>
<td>Prematurity</td>
<td>1.3</td>
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<td>8</td>
<td>Diabetes mellitus</td>
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<td>2.7</td>
</tr>
<tr>
<td>9</td>
<td>Trachea, bronchus, lung cancers</td>
<td>1.2</td>
<td>2.2</td>
<td>9</td>
<td>Road injury</td>
<td>1.3</td>
<td>2.2</td>
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<tr>
<td>10</td>
<td>Birth asphyxia &amp; trauma</td>
<td>1.0</td>
<td>2.0</td>
<td>10</td>
<td>Hypertensive heart disease</td>
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<td>Diabetes mellitus</td>
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<td>16</td>
<td>Birth asphyxia &amp; trauma</td>
<td>0.7</td>
<td>1.3</td>
</tr>
</tbody>
</table>
YLL per 100,000 by cause and region, 2012

- Suicide, homicide and conflict
- Unintentional injuries other than road injury
- Road injury
- Other noncommunicable diseases
- Chronic respiratory diseases
- Cancers
- Cardiovascular diseases and diabetes
- Maternal, neonatal, nutritional
- Other infectious diseases
- Lower respiratory infections
- Diarrhoeal diseases
- HIV, TB and malaria

- World Health Organization
- Regional Office for Europe
- 7th International Workshop
- How to handle imported containers safely
- Berlin, 22 May, 2014
Human and Economic Burden of Occupational Accidents and Diseases

- Daily 1,000 people do not return home from work because they die in a workplace accident\(^1\)
- Annually 2.3 million people die around the world from occupational accidents or work-related diseases \(^2\)
- 4% of the world's annual GDP is lost as a result of occupational diseases and accidents \(^2\)
- 70% of workers are not ensured to compensate occupational diseases and injuries

\(^1\) ILO (2013), “Safety and Health at Work: Hopes and challenges in development cooperation”, Geneva, Switzerland
Labour force statistics in the WHO European Region

- In 2011 over 230 million were employed
- 1.7% burden of diseases - due to major occupational risks associated with this burden are:
  - Injuries (40% of the occupational burden of disease)
  - Noise (22%)
  - Carcinogens (18%)
  - Airborne particulate matter (17%)
WHO policies

1. International Health Regulations, 2005
3. Parma Declaration, 2010
4. European Health 2020 policy, WHO 2012
1. The IHR Core Capacities

**Capacity in/for:**
- Legislation and policy
- Inter-sectoral coordination
- Surveillance
- Response
- Preparedness
- Risk communication
- Human resource capacity
- Laboratory
- Multi-sectoral and environmental hazards (zoonotic, chemical, radiologic, food safety)
- At Points of Entry

Based on national action plans developed in 2007-2009

WHO tools, guidelines, & on-site support
2. Workers’ health: Global Plan of Action

Objectives:

1. To devise and implement policy instruments on workers’ health
2. To protect and promote health at the workplace
3. To improve the performance of and access to occupational health services
4. To provide and communicate evidence for action and practice
5. To incorporate workers’ health into other policies
3. Parma Declaration: actions on major environmental risk factors

4 Regional Priority Goals

Goal I. to prevent and significantly reduce the morbidity and mortality arising from gastrointestinal disorders and other health effects, .... safe and affordable water and adequate sanitation for all children.

Goal II. to prevent and substantially reduce health consequences from accidents and injuries ..... by promoting safe, secure and supportive human settlements for all children.

Goal III. to prevent and reduce respiratory disease due to outdoor and indoor air pollution, ....an environment with clean air.

Goal IV. to reduce the risk of disease and disability arising from exposure to hazardous chemicals (such as heavy metals), physical agents (e.g. excessive noise) and biological agents and to hazardous working environments during pregnancy, childhood and adolescence.
WHO guidelines
Studying health effects: Exposure

• Occupational
• Many (mixed) contaminants
• Many exposure pathways
• Low quality data
  – Emissions
  – Concentrations
  – People’s mobility and activities
• Difficult to identify a gold standard
• Residential information often used
What health endpoints?

• Need to consider broad spectrum
  – Short- and long- term
  – Severe (mortality, cancer, hospital admission) and less severe (respiratory conditions)
  – Mostly a-specific

• Strong competing determinants involved
  – Occupational vs environmental
  – Lifestyle
  – Predisposition
  – Quality of health care
Broader assessments needed

• Vulnerability to accidents
• Exposure mixes
• Economic dimension
• Cross-sectoral work required

→ Health impact assessment (HIA)
→ Strategic Environmental Assessment (SEA)
Conclusions

• Rich available methodology for analysis
• Literature is sparse
• Consolidate methodology
• Integrate better across disciplines (eg, biomonitoring)
• Invest in more participatory HIA type approaches
• Strengthen international collaboration
THANK YOU FOR YOUR ATTENTION