

WATER RELATED DISEASE SURVEILLANCE: RELEVANCE TO THE PROTOCOL ON WATER AND HEALTH



CONTENTS



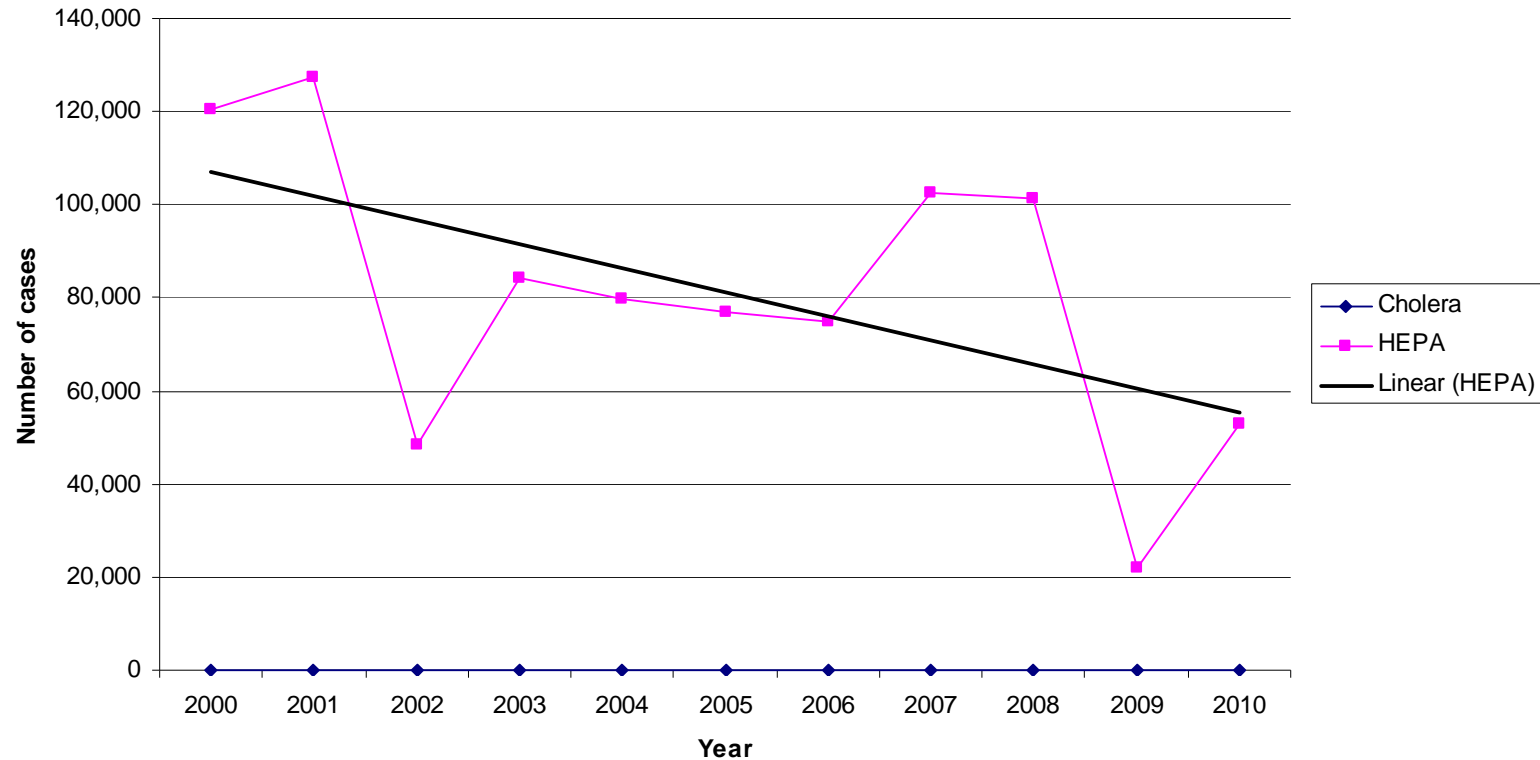
1. Background: WRD situation in Europe
2. Legal obligations: surveillance of WRD
3. Target setting in water related disease surveillance

Situation of WRDs



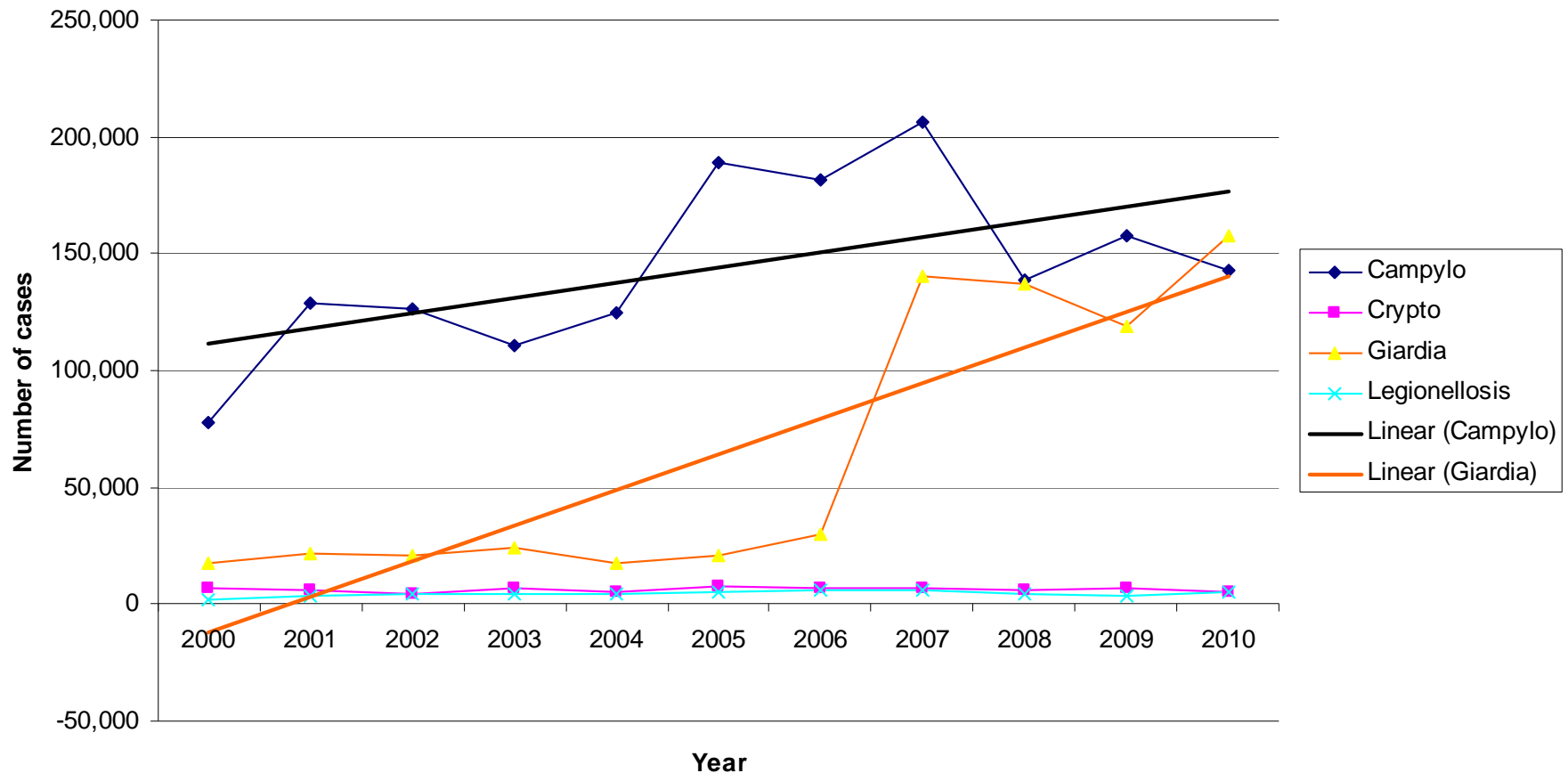
- In the European Region, poor quality drinking-water causes over 13 000 deaths from diarrhoea among children aged 0–14 years (5.3% of all deaths in this age group) each year.
- Countries of central and Eastern Europe and central Asia bear the largest share of the burden.

Classic water-related diseases in the WHO European region

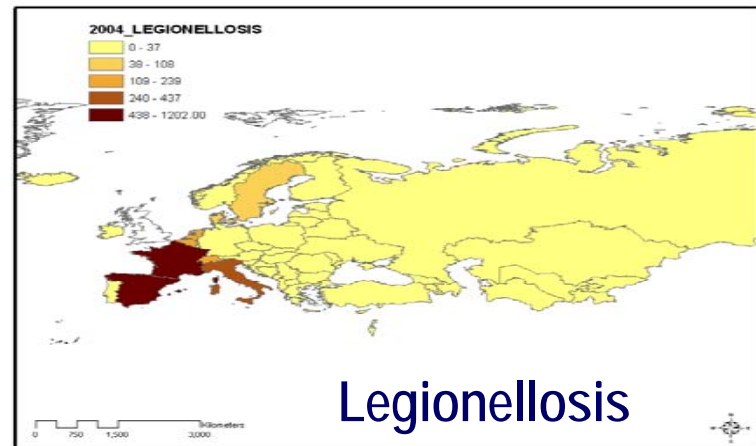
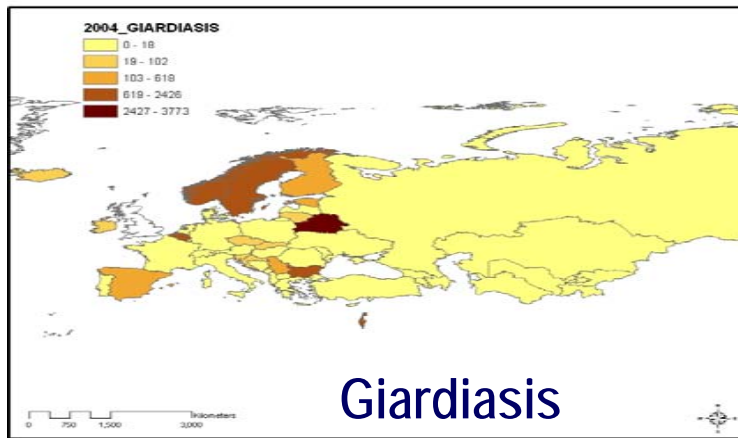
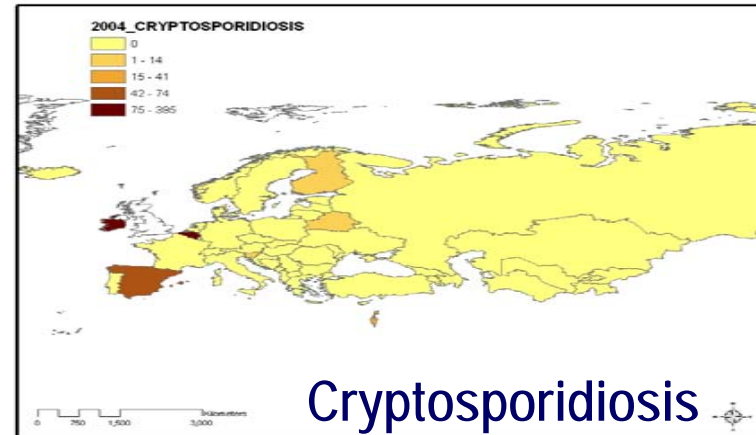
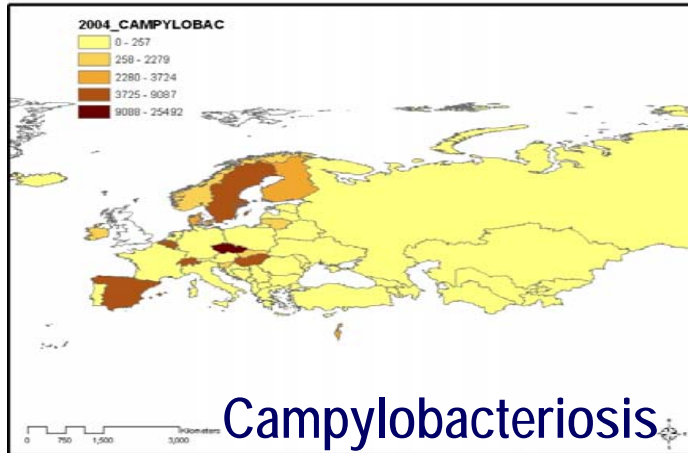


Significant progress in the fight against classic water-related diseases such as cholera, hepatitis A and others

Emerging water-related diseases in the European region



Emerging diseases are mostly reported in Western Europe



Legal obligations: Water-related Disease Surveillance



- Protocol on Water and Health
- Surveillance and the International Health Regulations (2005)

Legal obligations: Protocol on Water and Health



Art 6 § 2

- Set targets on the reduction of the scale of outbreaks and incidents of water-related diseases
- **Art 8:** comprehensive national and/or local surveillance and early-warning systems
 - (i) Identify outbreaks or incidents
 - (ii) Disseminate information to the public
 - (iii) Provide information in alarm situations
 - (iv) Recommend preventive actions
 - (v) Develop contingency plans

International Health Regulations



- **Aim:** to prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide.
- Develop, strengthen and maintain **core public health capacities** for surveillance and response.
- **By 15 June 2012**, surveillance and response capacity are expected to be implemented.

Results 2007 - 2010



http://www.euro.who.int/_data/assets/pdf_file/0009/149184/e95620.pdf

http://www.euro.who.int/_data/assets/pdf_file/0011/149186/e95619.pdf

- Policy and technical guidance materials
 - English available
 - Russian available November 2011
- Support countries in the implementation of water-related disease surveillance

Two types of targets



- **General:** strengthening of the water-related disease surveillance system to develop a solid **evidence base** for target setting. This includes inclusion in appropriate general (CISID) and specific (ENHIS) monitoring databases
- **Specific:** conducting **direct health interventions** in combination with improved water and sanitation and hygiene measures

Types



- Vaccine-preventable diseases (VPD)
 - Rotavirus
 - Hepatitis A
 - Typhus
 - Cholera

- Neglected Diseases (NTD)
 - Helminth infections

Direct health interventions - VPI

- Rotavirus infections

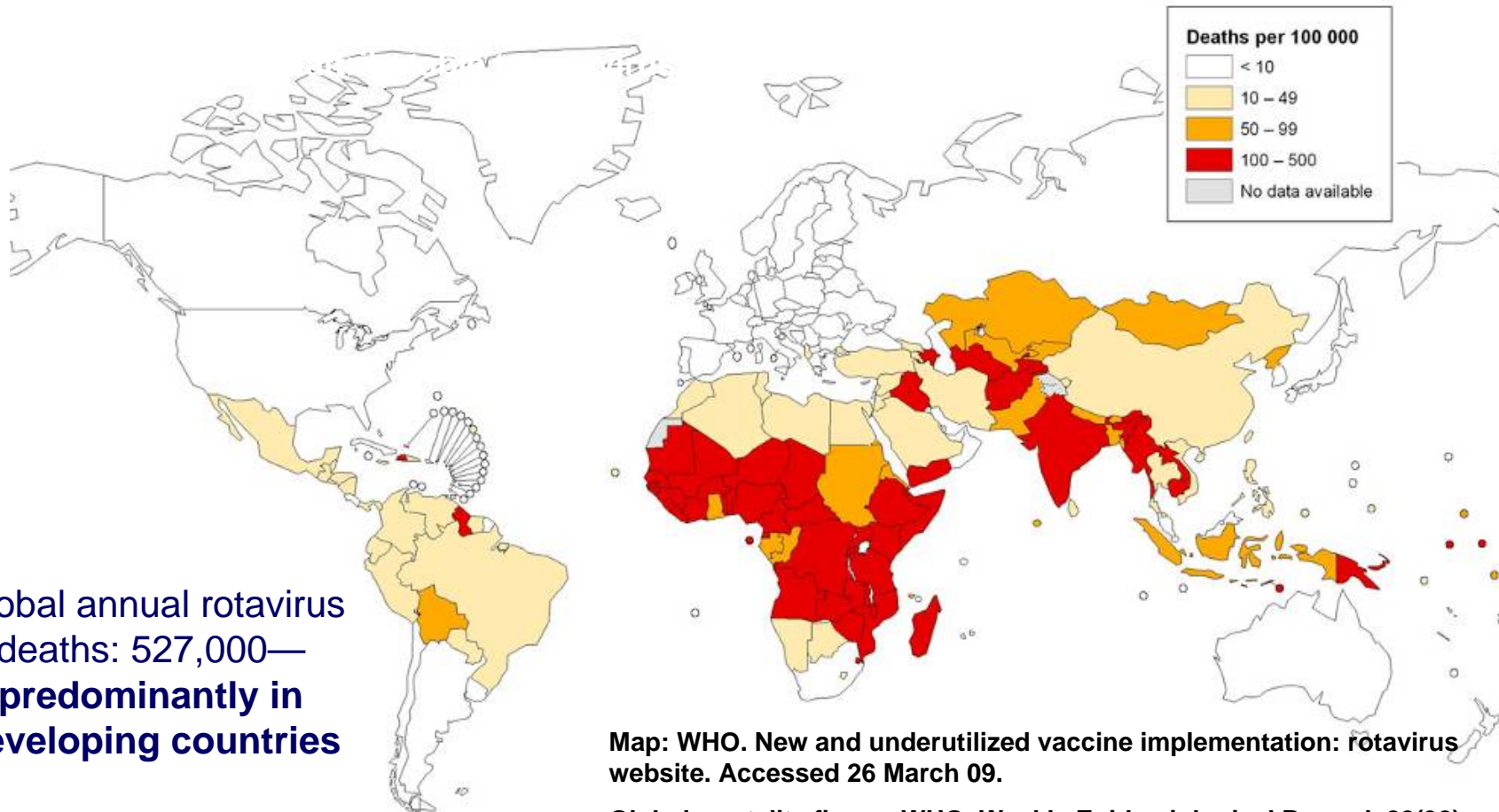
- Impact



- over 70,000 hospitalizations in EU
 - one of the main causes of diarrhoeal disease in young children
 - Median cost € 1417 per case (EU)

- SAGE recommends inclusion of rotavirus vaccination of infants to all national immunization programmes

From 1999 – 2009: Over 5 Million Children Died from Rotavirus Disease

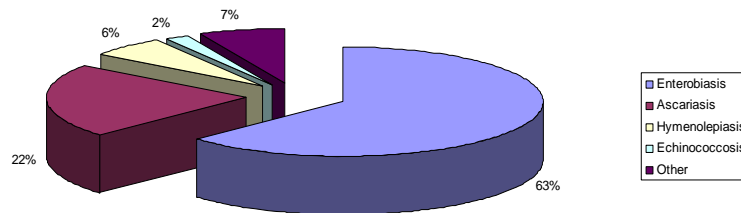


Global annual rotavirus deaths: 527,000—
predominantly in
developing countries

Map: WHO. New and underutilized vaccine implementation: rotavirus website. Accessed 26 March 09.

Global mortality figure: WHO. Weekly Epidemiological Record. 82(32).

Direct health intervention - ND



- Locally high contribution to infectious pathology
- Local burden 35 – 40,000 infections recorded
- 61 – 79% of children infected
- Cheap treatment – challenging logistics