

Task force on Surveillance and early-warning systems

Enzo Funari



Mandate from the First Meeting of the Parties (Geneva, 17-19 January 2007)



- Prepare guidelines on surveillance, outbreak detection and early warning systems, contingency plans and capacity response, taking into account established WHO guidelines for adoption by the Parties at their second meeting;
- Support the guidelines' implementation by providing assistance, upon request, to Parties and non-Parties through in-country missions (up to six missions should be organized in 2008-2009).

Work plans of the Task Force



The Task Force met three times:

- in Rome, Italy, on 24-25 September 2007 and 28-29 April 2009,
- in Durres , Albania, on 11-12 February 2010.

Elaboration of work plans and analysis of the results progressively achieved.

Activities of the TF up to the 2nd meeting of the Parties



- Guidance materials (technical and policy guidelines);
- Assistance and in-country support;
- State of the art on the surveillance systems on WRDs in the WHO European Region;
- Issue of WRDs in rural areas;
- Collaboration with other TFs;
- Participation at the 5th Ministerial Conference on Environment and Health (Parma, 23/2/2010)

TECHNICAL GUIDANCE DOCUMENT ON WATER-RELATED DISEASE SURVEILLANCE

origin, story of their preparation



- Inspired by a WHO public health initiative in Asia, organized by the WHO Collaborating Centre for Health-promoting Water Management and Risk Assessment at the University of Bonn, Germany.
- Multilateral co-operation programme between the WHO Regional Office and the central Asian countries.
- Later on, further developed by this TF.

Approach, contents , aims



- Holistic approach;
- The document reviews the main threats to health related to water services, recalls basic concepts of epidemiology and disease surveillance, and provides guidance on data management and analysis.
- It is in line with the International Health Regulations (2005) which entered into force on 15 June 2007.
- A sort of synthesis of scientific knowledge in the area (basis) but then practical tools to face the possible problems in the area.

Approach, contents , aims



- Aimed specifically at the needs of local laboratories in central Asian countries;
- Also aimed at strengthening cross sectoral activities (water, environment managers and health sector workers).
- In conclusion, the Guidance document is aimed at supporting national efforts towards national and international health security

Scientists, experts involved



Editors:

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- Dr Suzanne Herbst, Executive Director, WHO Collaborating Centre for Health Promoting Water Management and Risk Communication
- R Aertgeerts, WHO Regional Office for Europe

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Table of contents



2. HEALTH RISKS FROM MICROBIAL PATHOGENS

2.2. Diarrhoeal diseases

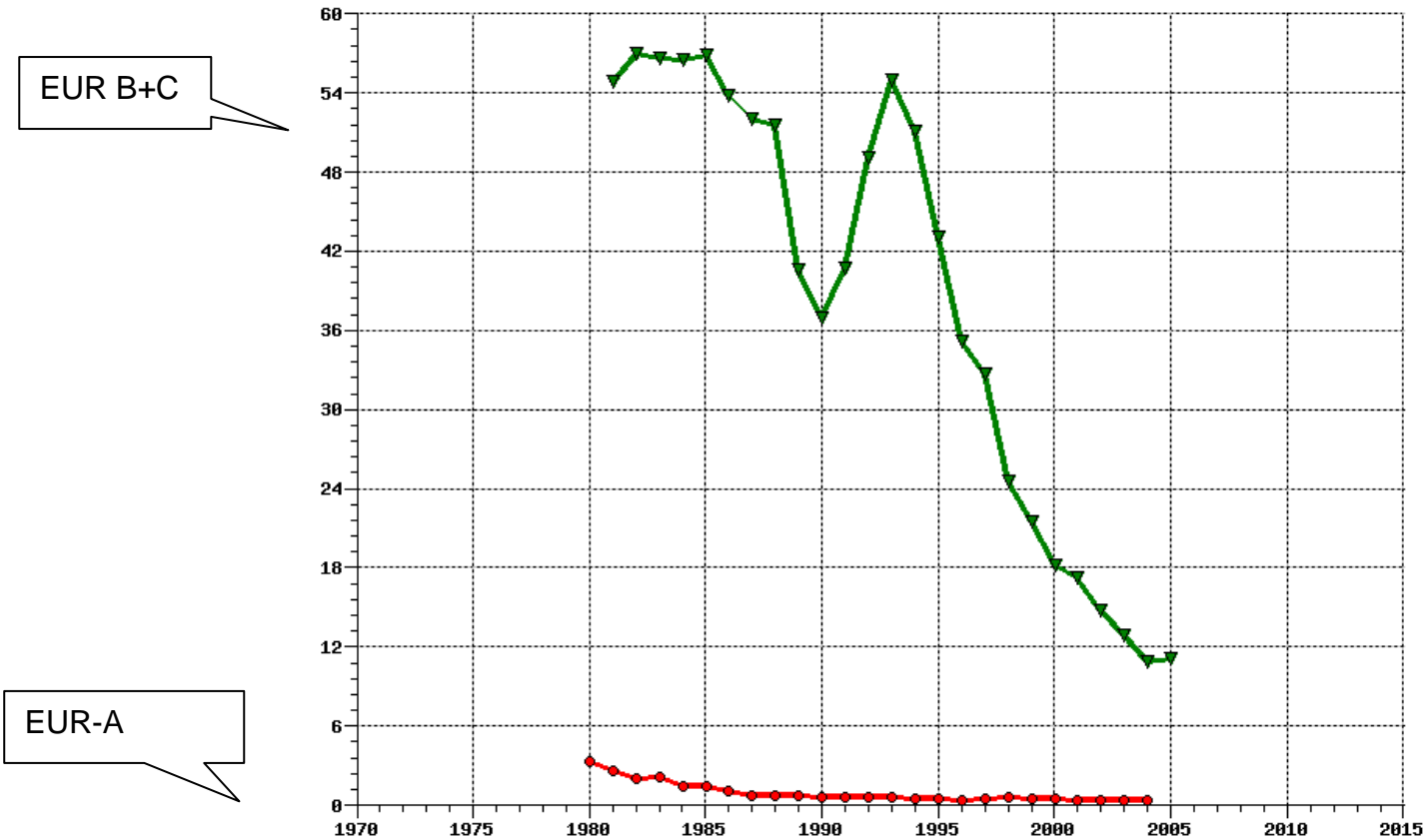
2.3. Bacteriological pathogens

2.4. Viral diseases – viral hepatitis a

2.5. Protozoan diseases

2.6. Diseases of high local importance

Figure 1-2 SDR diarrhoeal disease below 5 y of age (Source: WHO Health for All)



While mortality data are surely the most striking, morbidity figures show that water-related diseases continues to be a serious problem in the European region, hampering sustainable development and imposing prohibitive economic costs.

Table of contents



3. HEALTH RISKS FROM CHEMICALS

3.1. Basic chemical considerations

3.1.3. Basis for calculating the guideline values

3.2. Selected parameters

Table of contents



4 HEALTH RISKS IN THE WATER SYSTEM

4.1 Vulnerability of the resource

4.2 Water treatment

4.3 Vulnerability in the distribution system

4.4 Water safety plans WSP

4.5 Point of use treatment

Table of contents



5. ESSENTIAL EPIDEMIOLOGY

5.1 Basic definitions

5.2 Basic study designs

5.3 Sources of errors in epidemiological studies

5.4 Specific methodological challenges of conducting epidemiological studies

Table of contents



5.5 Detection, investigation and reporting of disease outbreaks

5.5.1 Preparation

5.5.2 Response

5.5.3 Trigger event

5.5.4 Acute reaction

5.5.5 Analysis

5.5.6 Normalisation

5.5.7 Final report



Table of contents

6. ESSENTIAL SURVEILLANCE

6.1 General

6.1.1 Why specific surveillance for water-related disease?

6.1.2 Approaches for waterborne disease surveillance

6.2 Setting up a national surveillance system

6.2.1 Introduction

6.2.2 Data collection

6.2.3 Data management and analysis

6.2.4 Information flow

6.2.5 Information use

Table of contents



6. ESSENTIAL SURVEILLANCE

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6.3 Evaluating a surveillance system

6.3.1 Evaluation criteria

6.3.2 Process evaluation criteria

6.4 Summary

WRDs surveillance systems



Provide many added values as they:

- identify the diseases transmitted by water;
- define/estimate the burden of WRDs;
- identify communities where there are problems with waterborne disease;
- promote intervention measures to control and prevent WRDs ;
- target resources toward areas with priority needs;
- assess the effectiveness of the implemented water and sanitation interventions in reducing diseases.

WRDs surveillance system in developing countries



Examples:

- Information on incidence of typhoid fever: need for targeted vaccine campaigns in specific geographic locations.
- Information on epidemic and endemic giardiasis and cryptosporidiosis: need for water filtration processes because chlorination is not very effective against these pathogens

WRDs surveillance system in developing countries



- Information on outbreaks of waterborne disease in adequately treated piped water supplies: intrusion problems in the water distribution system and need for booster chlorination systems in the distribution system or additional water treatment on a household level.
- high prevalence of helminth infections: need for improvements in sanitation and increased water availability for hand washing.



Table of contents

7. DATA MANAGEMENT AND ANALYSIS USING GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

7.1 Introduction to gis

7.2 Application of gis to waterborne disease
epidemiology

7.3 Example: gis-supported epidemiological
confirmation of the first waterborne
giardiasis outbreak in germany



Technical guidelines

- The draft version of the publication is available at
http://www.unece.org/env/documents/2010/wat/MP_WH/wg/unofficial_docs/Info_1_Technical_Guidance_WRDS.pdf
- 157 pages, 18 tables, 22 figures

Policy guidelines



- Elaborated by TF and external experts;
- Aimed to respond to the need for a short guidance on the main challenges facing policy makers who are tasked with the organization or improvement of health systems, and need to pay particular attention to water-related diseases.
- In situations where safe access to water is not ensured, political authorities should be aware of the consequences, which are not limited to the disease (sustainable development is hampered and economic costs are prohibitive).

Co-authors



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Contents

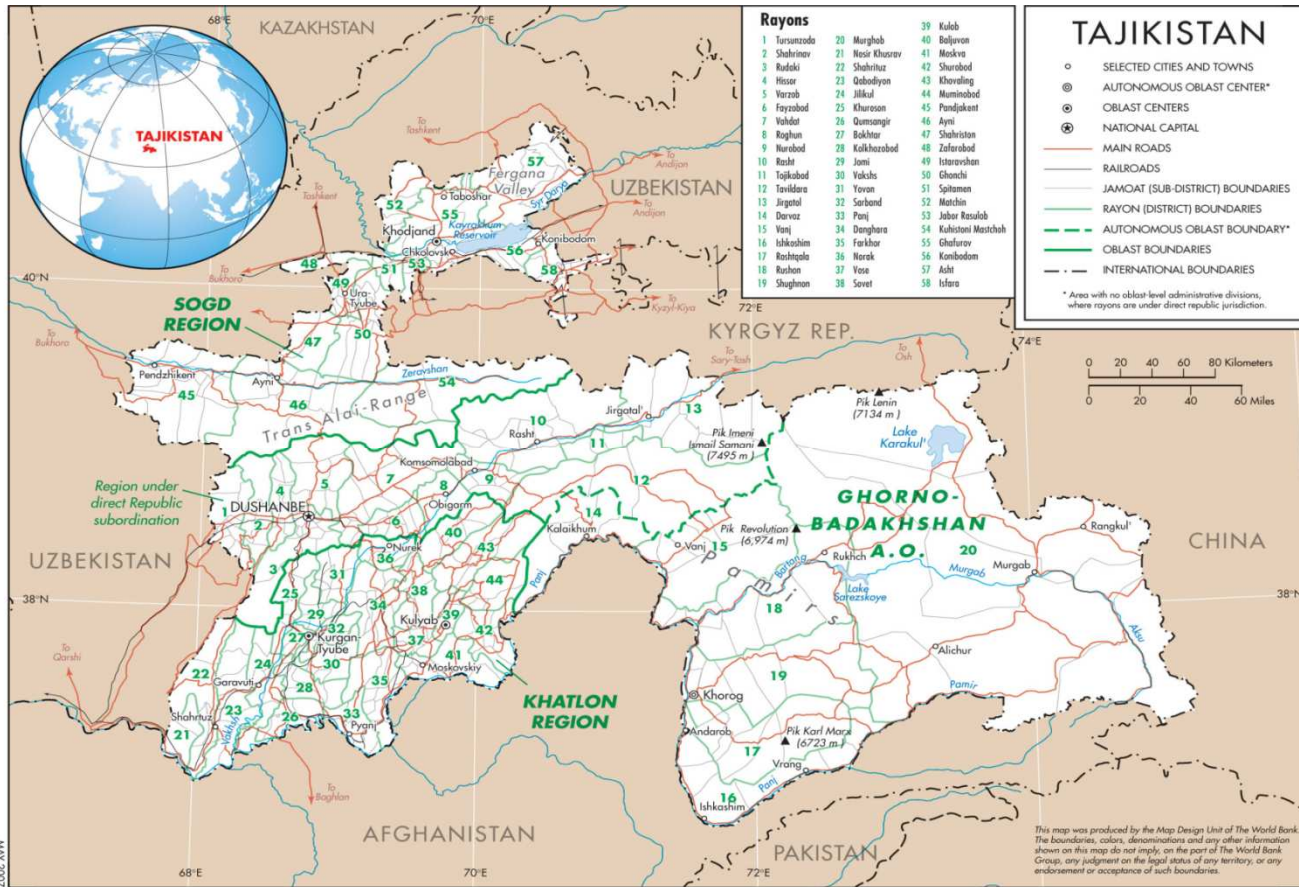
- I. The problem
- II. Water safety plans
- III. Legal obligations with regard to disease surveillance
- IV. Surveillance system for water-related diseases
- V. How to set up an essential surveillance system for water-related diseases (OMT)
- VI. How a water-related disease surveillance system should work in practice
- VII. How to evaluate a surveillance system for water-related diseases
- VIII. National examples



Policy guidelines

- The draft version of the publication is available at http://www.unece.org/env/documents/2010/wat/MP_WH/wg/ece_mp_wh_wg_1_2010_L.1_policy%20guidelines_WRDs_Final.pdf
- 22 pages, 2 figures

Assistance and in-country support



**Tajikistan 4-11
November 2008.**

**WATER SUPPLY,
SANITATION AND
HEALTH IN
TAJIKISTAN.**

**The Protocol on
Water and Health
as a basis for a
holistic approach.**

**by R.Aertgeert, E.
Funari , O. Shmoll,
P. Studer.**

Task force on Surveillance and early-warning systems – Slide 26

Second session of the Meeting of the Parties to the Protocol on Water and Health

(Bucharest, Romania, 23 – 25 November 2010)

Questionnaire on Surveillance systems of WRDs



- Aimed to assess the current capacity of water-related disease surveillance systems in the European Region.
- 16 countries replied to the questionnaire: data used for elaborating a specific report, then a manuscript.
- With the limit due to the small number of countries that replied, the analysis of this data allowed to identify main gaps to be filled with future activities.

Integration of the activities with other TFs



Guidance on Water Supply and Sanitation under Extreme Weather Events: participation at the elaboration of these guidelines, with specific reference to coastal areas (chapter)

Fifth Ministerial Conference on Environment and Health (23 February 2010)



- The Task Force attended the Ministerial Conference with a special session on the importance of water-related diseases and the challenges of water-related disease surveillance in the European region during the preparatory day.
- Also was present to share the strategic objectives



Proposal for future activities

Proposal to structure the activities of the TF around three main areas of work:

- water-related disease surveillance, outbreak detection and contingency planning
- capacity building and
- follow-up to the 5th Ministerial Conference on Environment and Health.

The Task Force also intends to co-operate actively with the Task Force on Indicators and Reporting and with the cross-cutting issue on small scale water supply systems.

Method of work



- The Task Force will use electronic communication means to the fullest extent possible.
- In addition, one yearly meeting of the Task Force will be organized to assess progress and co-ordinate work programmes.

Water-related disease surveillance, outbreak detection and contingency planning



- The Task force should assist countries in improving their surveillance systems with the final aim to reduce the burden of WRDS.
- One of the main tools will be concrete guidance documents on priority setting in water-related diseases (priority diseases, critical situations: identification, how to face them, etc.).
- The Task Force will support the implementation of the international health regulations IHR(2005), assist in country emergency preparedness and alert & response operations relevant to water-related diseases.

Water-related disease surveillance, outbreak detection and contingency planning



- The Task Force will co-operate with the specialized units of the WHO Regional Office for Europe, particularly Centralized Information System for Infectious Diseases (CISID) and European Environment and health Information System (NHIS).
- The implementation of the activities will benefit from specialized advice from different units/divisions of the WHO Regional Office for Europe, in addition to the support of the Joint Secretariat as follows.

Capacity building



The Task Force shall develop a general training programme on Surveillance of water-related diseases, outbreak detection and contingency planning in consultation with the network of specialized institutes of higher learning that have been designated as WHO collaborating centres.

Follow-up to the 5th Ministerial Conference on Environment and Health (Parma, 10 - 12 March 2010)



- The Task Force will produce a number of short awareness-raising papers on the important health effects of chemicals on human health.
- Amongst the topics are: endocrine disruptors, persistent organic chemicals, pesticides, seafood safety (also in relation to algal toxins).
- Collaboration with WHO experts ...

Cross-cutting issues



- Small-scale water supply systems
- The Task Force will work with the work stream on small scale water supply systems and, in particular, support targeted surveillance programmes in areas served by small scale water supply and sanitation systems.
- (fragility, microbial contamination, weak surveillance systems)

Targets, Indicators and Reporting



The Task Force shall support the work of the Task Force on Indicators and Reporting, particularly through the implementation of expert missions to ensure data quality in national monitoring programs.

Organization of the Task Force



- The TF should be structured in working groups dealing with the different items: experts and representatives from Parties are welcome
- Suggested items: specific WRD outbreaks and high disease incidence, nitrate, pesticides, lead, arsenic, seafood safety, endocrine disrupting chemicals, etc.
- Approach: prepare specific short, practical guidance documents but also assist countries in order to be effective in solving problems and reducing the burden of WRDs.