THE DUBROVNIK PLEDGE
ON SURVEILLANCE AND
PRIORITIZATION OF
INFECTIOUS DISEASES

Report on a WHO Meeting

Bucharest, Romania
21–23 November 2002
ABSTRACT

The Meeting was held to help carry out a project on communicable diseases in the seven countries in south-eastern Europe that signed the Dubrovnik Pledge. Experts from these countries went through a Delphi-like exercise in selecting a prioritized list of diseases to be included in a common surveillance system. The participants formed working groups to develop national plans of action to address problems in developing capacity for infectious disease investigation and diagnosis and developing political support. In addition, they were requested to form national working groups in their countries to assess the discussions held during the meeting, to review national requirements for communicable disease surveillance and to develop plans for future activities. In general, the participants agreed that assigning priorities to communicable diseases was a necessary first step to establishing collaboration on controlling them, and several presented plans for doing so in 2003. They also presented draft plans of action to address issues raised during the meeting, including carrying out prioritization exercises, developing standard case definitions and laboratory methods, reviewing training requirements and establishing political support for initiatives to control communicable diseases.

Keywords
COMMUNICABLE DISEASE CONTROL
COMMUNICABLE DISEASES - epidemiology
EPIDEMIOLOGIC SURVEILLANCE
HEALTH PRIORITIES
LEGISLATION, HEALTH
LABORATORIES
QUALITY CONTROL
INFORMATION SYSTEMS
HEALTH PLANNING
EUROPE
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Preface

Recognizing that communicable diseases continue to be a major source of illness and death, particularly in countries and populations in less favourable socio-economic conditions, Ministers of Health from seven countries in South Eastern Europe established and signed the Dubrovnik Pledge in 2001. The Pledge describes seven projects on health needs for vulnerable groups, including one on strengthening surveillance and control of communicable diseases.

At a meeting of key individuals from each of the seven signatory countries, held in Vlora, Albania from 28 to 30 August 2002, countries described the strengths and weaknesses of existing national disease surveillance systems. Following discussion, a plan of action, describing activities to be carried out over the next 9 to 12 months, was developed. A major component of the plan of action was a proposed meeting to establish a prioritized list of infectious diseases to be included in a common surveillance system and define national priorities for the coming months.

Objectives of the meeting

1. Develop a list of priority diseases for the countries of the Dubrovnik Pledge.
2. Review the needs for revision or adaptation of national legislation and policies on disease surveillance.
3. Review the national and international case definitions for a number of priority diseases and the need to review national guidelines.
4. Review procedures and capacity for investigation, response and feedback at both national and international levels, and to identify needs for carrying out assessments.
5. Review the requirements for Public Health Laboratory diagnostic capacities, quality assurance, network formation and reference systems.
6. Define and obtain agreement on data management and information systems, routine and early warning systems and data exchange formats.
Introduction

The meeting was opened on behalf of WHO by Dr Victor Olsavszky, WHO Liaison Office, Bucharest, and Dr Bernardus Ganter on behalf of the WHO Regional Office for Europe.

Dr Radu Constantiniu, Directorate of International Relations, European Integration and Programmes gave a welcoming address on behalf of the Romanian Minister of Health and Family, Dr Daniela Bartos. Strong commitment from the countries of South Eastern Europe has led to rapid development and substantial progress towards technical implementation of three of the seven regional projects. There is consensus on the link between macroeconomics and progress in providing health services, particularly in the current transition period. Continued efforts are required to ensure integrated regional capacity building, harmonisation of legislative frameworks and upgrading of standards to those required by the European Union. A sub-regional approach to the challenges posed by health care reforms represents the best use of national resources and expertise, and an integrated response is the key to achieving desired improvements in communicable disease control. As such, this project, funded by the Government of France, represents a good example of a WHO-managed activity that will greatly benefit Member States of the Region.

Dr Alexandru Rafila gave a welcoming address on behalf of the Department for Public Health. There have been many new threats to public health in Romania during the past 10 years, mainly associated with declining socio-economic conditions. For example, the incidences of tuberculosis, syphilis and HIV/AIDS have all shown a significant increase. There is a strong need to respond to outbreaks of infectious diseases, and to strengthen the surveillance systems. Since infectious diseases do not respect national borders there must be coordination of activities within the sub-region. An integrated approach will bring added value, and defining the national and regional priorities is the start of the integration process.

Dr Alexandru Rafila was elected as chairman of the meeting; Dr Verica Ilic as deputy chairperson, and Dr Ray Sanders as rapporteur. A full list of participants is provided in Annex 1.

Progress report on activities to date

Dr Bernardus Ganter

Progress in implementing the plan of action developed following the meeting in Vlora is on track, the only delayed activity being the proposed short course on data management and statistical analysis which is in discussion with CSR Lyon. The current meeting fulfils the requirement to establish a working group to set disease priorities for the project. Representatives from three of the countries are attending the training course in laboratory methods at the WHO Communicable Disease Surveillance and Response Office in Lyon, France. Training of national experts on second-generation HIV/AIDS surveillance has taken place in Zagreb. Assessment visits to at least two countries have to be carried out; Bulgaria has been proposed as one of the countries to be visited but no decision has been made regarding other possible countries. This activity should be completed by May 2003. Training of national surveillance managers using an adapted European Programme on Integration in Epidemiology Training (EPIET) course is being planned and should also be completed by May 2003. Additional resources are expected for this activity.
Establishing a list of priority diseases for the countries of the Dubrovnik Pledge

Dr Massimo Ciotti

Description of the prioritization exercise

To make the best use of limited resources available for public health it is essential to prioritize areas of activity, to allow attention to be focused on key issues that must be addressed in advance of others. Some form of priority setting exercise must be undertaken. Because the outcomes of health care activities are often poorly defined and usually wide-ranging, and perceptions of the value of particular activities and outcomes are subjective and complex, there is no single formula or correct way to set these priorities. Any method used to set priorities must acknowledge the complexities involved, must anticipate at the outset that not everyone will agree with the result, and must be fully transparent and accountable. One approach that has been used with some success is a modified Delphi exercise to set priorities and gain consensus, both within countries and between countries. Variations on this method have been used successfully to prioritize public health activities in Canada, the UK and within the European Union Member States.

A similar approach was used during this meeting to prioritize infectious diseases, clinical presentation and syndromes of potential common interest to countries of the Dubrovnik Pledge. The process involved first establishing a list of infectious diseases. Rather than spending time establishing a consensus list, the current list of communicable diseases used by the European Union1 was taken as the most appropriate starting point. This list is comprised of 53 diseases, clinical presentations and syndromes. A total of eight criteria for assessment of importance were selected:

- Disease impact
- Present burden of ill health
- Potential threat (5–10 years)
- Necessity for immediate public health response
- Low incidence only maintained by public health activities
- Long-term effects on communicable diseases
- Social and economic impact
- Health gain opportunity
- Public concern and confidence.

Application of the prioritization exercise

The questionnaire used for the prioritization exercise is shown in Annex 2. A total of 24 workshop participants were requested to rate each disease against each of the 8 criteria by assigning a score between 1 and 5 for each criterion. A score of 1 indicated low importance and a score of 5 indicated high importance. Across all 8 criteria each disease could therefore score a total of between 8 (low importance) and 40 (high importance).

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An overall mean score across all the eight criteria was created for each disease by summing the score given for each criterion and dividing by the number of people participating in the exercise. Diseases were then ranked according to their mean score across all eight criteria. A 95% confidence interval for each mean score was calculated based on the standard error of the mean.

**Results of the prioritization exercise**

Results of the ranking exercise across all 8 criteria for the first 15 diseases of highest importance were as follows:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Disease, presentation or syndrome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>2</td>
<td>HIV-infection</td>
</tr>
<tr>
<td>3</td>
<td>Poliomyelitis</td>
</tr>
<tr>
<td>4</td>
<td>Hepatitis B</td>
</tr>
<tr>
<td>5</td>
<td>Influenza</td>
</tr>
<tr>
<td>6</td>
<td>Hepatitis C</td>
</tr>
<tr>
<td>7</td>
<td>Nosocomial infections</td>
</tr>
<tr>
<td>8</td>
<td>Meningococcal disease</td>
</tr>
<tr>
<td>9</td>
<td>Smallpox</td>
</tr>
<tr>
<td>10</td>
<td>Anthrax</td>
</tr>
<tr>
<td>11</td>
<td>Antimicrobial resistance</td>
</tr>
<tr>
<td>12</td>
<td>Transmissible spongiform encephalopathies (vCJD)</td>
</tr>
<tr>
<td>13</td>
<td>Viral haemorrhagic fevers</td>
</tr>
<tr>
<td>14</td>
<td>Salmonellosis</td>
</tr>
<tr>
<td>20</td>
<td>Brucellosis</td>
</tr>
</tbody>
</table>

Analysis of the 95% confidence intervals, an indicator of agreement between participants, showed that there was general agreement on the importance of diseases such as tuberculosis, nosocomial infections and meningococcal diseases, but far less agreement on the relative importance of poliomyelitis, small pox and transmissible spongiform encephalopathy. Scores and 95% confidence intervals for the diseases ranked as the 20 most important are shown graphically in Figure 1.
The data generated could be analysed according to a number of parameters; assessment of rank by present burden of disease, for example, provided the following ranking:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Disease, presentation or syndrome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>2</td>
<td>Influenza</td>
</tr>
<tr>
<td>3</td>
<td>Hepatitis A</td>
</tr>
<tr>
<td>4</td>
<td>Salmonellosis</td>
</tr>
<tr>
<td>5</td>
<td>Chlamydial infections</td>
</tr>
<tr>
<td>6</td>
<td>Antimicrobial resistance</td>
</tr>
<tr>
<td>7</td>
<td>Varicella</td>
</tr>
<tr>
<td>8</td>
<td>Nosocomial infections</td>
</tr>
<tr>
<td>9</td>
<td>Hepatitis C</td>
</tr>
<tr>
<td>10</td>
<td>Pneumococcal infections</td>
</tr>
<tr>
<td>11</td>
<td>Hepatitis B</td>
</tr>
<tr>
<td>12</td>
<td>Meningococcal disease</td>
</tr>
<tr>
<td>13</td>
<td>Shigellosis</td>
</tr>
<tr>
<td>13</td>
<td>HIV-infection</td>
</tr>
<tr>
<td>15</td>
<td>Infections with Haemophilus influenza group B</td>
</tr>
</tbody>
</table>

Ranking according to perception of public concern and confidence produced the following result:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Disease, presentation or syndrome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HIV-infection</td>
</tr>
<tr>
<td>2</td>
<td>Smallpox</td>
</tr>
<tr>
<td>3</td>
<td>Anthrax</td>
</tr>
<tr>
<td>4</td>
<td>Post-vaccine complications (adverse events)</td>
</tr>
<tr>
<td>5</td>
<td>Tuberculosis</td>
</tr>
</tbody>
</table>
Workshop participants discussed results of the ranking exercise, and the causes of bias and anomalies in the results were reviewed. Ideally, after reviewing the results of the exercise a second round of ranking would take place, the participants reassessing scores based on previous discussions. Due to lack of time a second round of ranking was not carried out at the meeting, but experience in the method was obtained by all participants, allowing them to carry out a similar exercise among health-care providers in their own countries.

Assessment of national surveillance and response systems

Dr Katelijn Vandemaele

Strong national surveillance systems are essential for monitoring and rapidly diagnosing outbreaks of infectious diseases that threaten National, Regional and Global health security. However, a number of problems with existing systems have been documented. There are obvious surveillance gaps, due to the absence of appropriate systems in key countries and Regions. Where surveillance systems exist, sufficient response mechanisms are often lacking, including limited capacity to carry out field investigations of reported outbreaks and insufficient resources for responding to epidemics. In many countries there are limitations on the availability of personnel with expertise in field epidemiology and laboratory diagnostics. A further constraint is the lack of integration of surveillance systems established for a single disease or condition and the corresponding heavy reliance on uncoordinated donor response.

Recognizing the many problems facing countries in rationalizing their disease surveillance systems, WHO has produced a generic set of guidelines for assessing national systems (Protocol for the Assessment of National Communicable Disease Surveillance and Response Systems. Guidelines for Assessment Teams. WHO/CDS/CSR/ISR/2001.2). The approach brings together all those in a country who have responsibility for the surveillance of communicable diseases, with the aim of formally assessing the national disease surveillance systems to strengthen them, using an integrated or multi-disease approach. This assessment should lead to an agreed prioritized plan of action for bringing about improvements in system performance that address gaps identified during the assessment. The objectives of the assessment are:

1. To obtain baseline information for implementing a coordinated, multi-disease approach to disease surveillance that allows measurement of progress made in surveillance strengthening efforts.

2. To determine country needs for strengthening the surveillance system for communicable disease prevention and control.
3. To identify gaps and opportunities in performing the core and support functions of surveillance, and assessing the resources available for these.

4. To enable the development of a prioritized action plan, based on the assessment findings.

It must be borne in mind that the process of planning and implementing a surveillance assessment takes time. In general, it takes approximately six months from initial planning to carrying out the field assessment and producing a preliminary report. Post-assessment workshops, development of a Plan of Action and implementation of that plan will take more time.

The following aspects of national surveillance systems should be considered for assessment:

1. **Priority diseases**
   Surveillance should ideally centre on priority diseases within the country. Many countries engage in the surveillance of a very large number of diseases. The number of diseases under surveillance continually increases, but the need for this surveillance is often not assessed. Often the collection of data is confused with surveillance, which in this context should be considered to be definition. Any assessment of national surveillance should examine all the entities under surveillance and ask the question “is this activity a priority?”

2. **Structure**
   The organization of the surveillance and response systems should be described at the central, intermediate, district, health facility levels and the community level where appropriate. The relationship between the different levels should be described and discussed, together with the resources that are used for activities at these levels.

3. **Processes and capacity for surveillance and response**
   For each priority disease or group of diseases, the capacity to carry out core and support functions of surveillance and response should be reviewed. The procedure for information flow should be described and its use for public health action assessed. The capacity of the national surveillance system is determined by the ability of the system to monitor priority health events adequately. The core activities and support functions of the surveillance system will be assessed at all levels of health care (central, regional/provincial, district or equivalent, health facility). The core activities include detection (identifying cases and outbreaks), registration, confirmation (epidemiological and laboratory confirmation), reporting (early warning and routine), analysis and interpretation, response, feedback, and evaluation and monitoring. These activities are made possible by a number of support functions that lead to better performance of the core surveillance activities and these should also be assessed.

4. **Output**
   The assessment will provide information on the effectiveness and efficiency of the system in monitoring communicable diseases for prevention and control. System simplicity, flexibility, completeness, sensitivity, timeliness, and representativeness should all be considered. The output of the system should be able to reflect whether or not the system is achieving its objectives.

5. **Integration/Co-ordination/Synergy**
   Integration refers to the co-ordination of all surveillance activities and of the support functions common to all control programmes (e.g., data collection, training, and supervision) while leaving follow-up actions to the different specific intervention
programmes. Many functions in the surveillance of most communicable disease are similar and as such offer opportunities for integration. The level of integration/synergy in the national surveillance system can affect the performance, cost and sustainability of the system.

6. Laboratories

Laboratories are essential to disease surveillance and most epidemiological surveillance systems require a laboratory component for confirmation. These serve both for the routine confirmation of clinical syndromes and for rapid confirmation of the causative agent in outbreaks. Assessment of the laboratory capacity, in terms of availability, functionality and level of sophistication, should be undertaken to determine the most appropriate role of the laboratory at a given level for effective surveillance.

7. Communications

Good communication systems are critical for effective surveillance. In some countries, communication offices are available at varying levels of the health care system, with strategic plans, emergency media response plans and trained staff.

To date, assessments have been carried out in Moldova and Romania, and several strengths and weaknesses were identified through the assessment process. Opportunities for, and threats to, effective and efficient disease surveillance and control systems were also identified. These related to core surveillance activities such as data collection and transmission, data analysis, feedback and supervision, epidemic preparedness and response to outbreaks. The structures, organization and resources necessary for effective surveillance, such as training, communication, guidelines and laboratory services, were also assessed. Activities, results and conclusions from the assessment carried out in Romania are described in the final report of the assessment team, *Assessment of the National Surveillance System for Infectious Diseases*, published by the Romanian Ministry of Health and Family.

In response to the recommendations from the assessment team attempts have been made to identify clear surveillance responsibilities at every level. The government would like to nominate key individuals at local, regional and central levels to take responsibility of essential components of the surveillance system. Attempts are also being made to improve the capacity for rapid response by making use of support provided through the European Union’s Phare project. The primary task will be to improve the capacity of the National Reference Laboratory, and then to improve laboratory capacity and performance at lower levels. It is appreciated that current funding levels will not allow completion of all planned activities, but it is hoped that the core of the system can be created, and this can be used as a demonstration to attract more funds to complete the programme. Inclusion of private partner involvement in the plan may prove to be essential in achieving full implementation.

**Early Warning Systems**

Dr Dragan Jankovic

“**ALERT SERBIA**” represents a good example of an early warning system for detecting outbreaks of infectious diseases. A disease surveillance system has existed in Serbia for many years, but assessment of the system revealed several impediments to effectively providing rapid alert of disease outbreaks. Significant problems included:

- Too many diseases on the notifications list
Inappropriate case definitions in use
Too much information being collected
Considerable delays in reporting
Communication problems between peripheral and central levels
Information not used for action at local level
No routine analysis of data
No feedback of results
Limited capacity for field investigations
No opportunity to learn from past experience.

The ALERT SERBIA system was developed to address these problems, by supporting and strengthening the existing system, rather than by replacing it. ALERT uses a syndromic approach to disease surveillance, and is designed to function in the time interval between the start of a disease outbreak and the start of targeted epidemiological investigations. The system relies upon weekly aggregated reporting of 11 clearly defined syndromes by reporting units and sub-units, with weekly feedback to reporting units. Weekly reporting and analysis makes data rapidly available, allowing timely decision making for action. To date in Serbia only four districts are using the system, but it is intended to expand its use in 2003.

A similar system has been in place in Albania for the past four years and is now implemented throughout the country. Although a great deal of preparation and training was initially needed to establish syndromic reporting, the system is now established and working well. Timely reports are currently received from approximately 70% of the country. As with any surveillance system, there is a need to balance sensitivity against specificity. Syndromic surveillance is of lower specificity, but the higher sensitivity should allow more rapid recognition of outbreak events. It is essential, however, that rapid syndromic reporting should work in parallel with existing disease-specific reporting systems, effectively providing an impetus upon which field epidemiological investigations can be launched. It is also essential that data collected through a syndromic reporting system be assessed locally, and that all clusters of cases or unexpected events be reported immediately, rather than waiting for weekly reporting of aggregate data.

Conclusions, recommendations and plans of work developed by the working groups

Based on area of expertise and experience, meeting participants were assigned to one of four working groups. The four groups were:

1. Investigation/Epidemiological capacity
2. Information Systems
3. Laboratory
4. Political Support.

A list of participants in each working group is provided in Annex 4. Each group met for between two and three hours to discuss the results and implications of the prioritization exercise and to
develop work plans for the next stage in developing an integrated communicable diseases surveillance system. Major conclusions and recommendations from each of the working groups are provided below.

**Investigation/Epidemiological capacity**

- Outbreaks of communicable diseases requiring investigation clearly occur in countries of the Dubrovnik Pledge; some are detected, some are investigated but information may not be shared within and across borders, and some may not be detected or investigated. Recent examples of outbreaks of diseases include trichinosis, viral haemorrhagic fever, anthrax, Q fever, and Brucellosis.
- There is a need to reinforce epidemiological capacity at the primary level, where the action takes place. District epidemiologists and general practitioners should be a source of information about and for the surveillance system.
- There is a need for more computers in the field, and appropriate software for use on those computers.
- There is also a need for more training courses, in epidemiology, use of computers and data management.
- There should be improved information exchange, particularly through existing networks, such as the CCEE-Baltic Network, and WHO networks. The WHO web site should be updated more frequently.
- Bilateral cooperation, with staff from one country visiting another country to review practices, should be encouraged.

**Information Systems**

- All members of the group need to use standard case definitions. There are some national case definitions, but in general the European Union definitions probably represent the most appropriate since several countries use them already and others will need to adopt them prior to integration into the Union.
- The following were identified as diseases of regional importance and should be the object of surveillance:
  - Meningitis
  - Haemorrhagic fevers
  - Malaria
  - Anti-microbial resistance
  - Poliomyelitis
  - Salmonellosis
  - West Nile fever.
- There is a need to discuss how this list of priority diseases can be used to improve surveillance and integrate, with the larger network of CCEE-Baltic countries. All of the countries of the Dubrovnik Pledge already belong to the CCEE-Baltic Network with the exception of Moldova, but the main activity of this network is currently restricted to information sharing on outbreaks. A request should be made to the CCEE-Baltic Network
to include Moldova in their information-sharing platform and give access to more people in the country.

- The countries of the Dubrovnik Pledge share an epidemiological culture, and greater integration in training of surveillance personnel is welcome. Training is required both in developing early warning systems and routine surveillance. There is a need for an integrated training of trainers to increase involvement of clinicians in surveillance activities. Contact with EPIET should be maintained and build on there experience in this field.

- There is already a planned informatics course to be held in Skopje, and this should proceed under coordination of the Former Yugoslav Republic of Macedonia.

- A forum for information exchange, beyond simple data exchange, should be established. Performance criteria for reporting systems must be established, and establishing a forum would be a useful means to achieving this end.

**Laboratory**

- A wealth of human and institutional resources in public health services already exists in the region, and all countries have existing systems for public health laboratory diagnosis. Any proposed changes must respect the existing laboratory systems; they must also respect existing national public health legislation and the complex history of the region.

- Countries of the region established their laboratories and laboratory diagnostic systems many years ago, and in several cases these have not been updated and modernized to meet current requirements. To update services additional funding support is required, but there is a general shortage of funding, both for upgrading and refurbishment and for ongoing service provision.

- Although all countries have national performance standards for their laboratories, many were established several years ago, and do not reflect current national and international laboratory performance and quality assurance requirements. New, common, performance standards are now required. These standards should reflect both local and national disease control requirements, and international surveillance and reporting requirements.

- A potential solution to current problems is development of a sub-regional public health laboratory network. This network would promote common methodologies and standards, quality control and quality assurance schemes, and standardised laboratory information management and reporting.

- Laboratories in the region are currently capable of providing diagnostic services for all of the diseases listed in the priority setting exercise, however, priorities clearly need to be set, and this should be done firstly at national level by the public health services.

- The following proposals were advanced:
  - WHO should establish a descriptive listing of recommended methods for laboratory diagnosis of priority diseases, making use of expertise provided by WHO Collaborating Centres and international public health laboratory centres. This should be done as soon as possible and be completed by the end of 2002.
  - Each country should create national groups of experts, including representatives from laboratory, epidemiology and public health management services, to determine national laboratory diagnostic requirements.
- WHO should distribute the listing of recommended methods to key experts in each country for comment and discussion within countries. Professor Todor Kantardijev, National Centre of Infectious and Parasitic Diseases, Bulgaria, has agreed to coordinate this activity.
- Following full exchange of views on the WHO recommended laboratory methods, a meeting of key experts (two or three per country) should be held to endorse the chosen methods, set performance standards and develop a plan of action for implementation.

**Political Support**

- Donors are available to provide funding support to develop and update communicable disease surveillance systems, and greater efforts should be made to share information and experiences between countries on the best ways to approach different donors. It would be helpful to establish a common list of all donor requirements and regulations that need to be considered when applying for international support. Romania will make available details of its experience with the EU Phare project.
- All countries should define their own national priorities for disease control surveillance and complete a prioritization exercise.
- Each country should nominate a person or body that will advocate on behalf of disease surveillance requirements with national authorities.
- All countries should be adhering to international public health legislation, but several countries lack local expertise in this field. Each country should nominate an expert to be trained in such legislation.

**Conclusions, recommendations and plans of work developed by the national discussion groups**

Representatives from each country were requested to form national groups to assess discussions held during the meeting, review their own country requirements for communicable disease surveillance and develop plans for future activities. Major conclusions and recommendations from each of the working groups are provided below.

**Albania**

- Existing national legislation on communicable disease surveillance and preventive measures should be revised and further updated.
- Criteria and practice of priority setting should be made known to the Ministry of Health.
- Consensus should be established on the priorities of communicable disease surveillance by carrying out the priority setting exercise.
- There should be strengthening of the existing surveillance system through improved detection and establishing appropriate case definitions. Required activities include periodic retraining of primary and secondary levels staff, and improvements in data collection and analysis at district and national levels.
Further feedback should be provided through publication of an epidemiological bulletin by the Institute of Public Health.

There need to be further improvements in epidemiological investigation of outbreaks, and in outbreak preparedness and response.

Improved capacity building of epidemiologists in all areas of the country is required.

There is a need for strengthening of laboratory capacity for confirmation of cases. Standard laboratory methods and quality control and assurance systems should be introduced under the leadership of the Institute of Public Health.

Improvements are needed in establishing regular exchange of information and experience with other countries in the region.

**Bosnia and Herzegovina**

- The Ministry of Health and other authorities with interests in public health should be informed of the expectations for communicable disease surveillance.
- Consideration should be given to reviewing the communicable diseases reporting/notification forms with a view to standardization within the region.
- The current list of notifiable diseases should be reviewed and standardized within the region.
- Standard case definitions should be established for use in the country.
- Current public health legislation should be reviewed.
- Training and re-training of data providers and epidemiologists should be undertaken, and a system of mandatory feedback of epidemiological data be established.
- An assessment of current microbiological services should begin as soon as possible.

**Bulgaria**

- There should be a national meeting of experts in the first half of 2003 to review and analyse surveillance activities and to carry out a priority setting exercise.
- An updating of the list of notifiable diseases and adoption of the EU case definitions should take place as a matter of urgency. The activity should include review of early warning activities and diseases subject to international agreements and regulations.
- There should be an updating of standards in microbiology and laboratory procedures in light of the newly accepted case definitions.
- There should be a meeting in January 2003 of national and international experts for exchange of information on public health legislation, as national laws are currently under revision.
- An assessment of the National Surveillance System should be conducted in 2003.
- Provision of training and computers is required for the first reporting level (Hygiene and Epidemiology Inspectorates) to ensure they are capable of participating in a new information exchange network to be created with the support of WHO.
- Training of trainers, in both microbiology and virology, is required.
Additional funding is required to implement new methods, introduce new standards and adopt appropriate quality control and quality assurance systems.

Provision should be made for appropriate external quality control of microbiology laboratories.

**Croatia**

- Public health legislation is currently under revision to meet expected EU requirements.
- There is a requirement for training of first level health care staff (GPs and others) in communicable disease surveillance and reporting systems.
- There is also a need for more training courses, in epidemiology, use of computers and data management.
- There should be a meeting of staff from the national public health laboratories to discuss critical issue facing the laboratory network, including licensing issues.

**Republic of Moldova**

- The first priority is to complete the current immunization campaign for measles and rubella, and to implement a surveillance system for these diseases.
- The National surveillance system should be strengthened by provision of new computing equipment for the preventive medicine institutions, together with training for institution staff.
- Work should begin on communicable diseases priority setting.

**Romania**

Romania now has the opportunity to take into account the assessment of communicable diseases surveillance that was made in 2001. The Ministry of Health intends to:

- Establish a National Plan of Action on communicable diseases.
- Define the national priorities on communicable diseases, to list them and to group them in specific categories.
- Introduce the EU case definitions for communicable diseases.
- Revise the policy and registration for public health laboratories, upgrading accreditation and quality control standards and introducing surveillance for anti-microbial resistance.

**The Former Yugoslav Republic of Macedonia**

- There is a need to create new national legislation on communicable diseases, including enlargement of the list of notifiable diseases and introduction of new vaccines (hepatitis B and HiB)
- There should be an assessment of laboratory capacities and harmonization of diagnostic methods with those used in other countries.
- A priority setting exercise should be run and standard case definitions adopted.
• An early warning system for outbreaks should be established. For this to occur support will be required for new computers.
• Responsibilities of Sanitary Inspectors in food and health control activities should be clarified.
• The national surveillance database should be assessed and updated to meet the international information exchange requirements.
• Training in the use of computers and computer software is required.

Yugoslavia

• The first priority is to refer the conclusions and recommendations from this and previous meetings to higher national authorities.
• The political implications in delay of accepting EU standards in surveillance and laboratory activities should be underlined.
• Suggestions will be made to adopt international disease priority listings, case definitions, laboratory diseases and outbreak management protocols at national level.
• An assessment of national laboratory capacity will be proposed.
• An outbreak early warning system, similar to the ALERT system, will be proposed for introduction.
Annex 1

PROGRAMME, SCOPE AND PURPOSE

PROGRAMME

Wednesday, 20 November 2002

Arrival and Registration

Thursday, 21 November 2002

Opening ceremony

09.00
- Minister of Health
- WHO – Spokesman /Spokeswoman
- Selection of Chairman/Rapporteur

09:45 – 10:30 Background on Prioritization exercise
10:30 – 11:00 Coffee break
11:00 – 12:30 Prioritization Exercise
12:30 – 14:00 Lunch break
14:00 – 15:30 Continuation
15:30 – 16:00 Coffee Break
16:00 – 17:30 Continuation
**Friday, 22 November 2002**

9:00 – 10:30  Work groups (6 groups)

10:30– 11:00  Coffee break

11:00 – 12:30  Work groups

12:30 – 14:00  Lunch break

14:00 – 15:30  Work groups

15:30 – 16:00  Coffee break

16:00 – 17:30  Presentation of conclusions and recommendations

**Saturday, 23 November 2002**

09:00– 12:30  Conclusions of the meeting and next steps
SCOPE AND PURPOSE

It is recognised that communicable diseases continue to be a major source of illness and death globally. This is especially true in countries and populations in less favourable socio-economical circumstances. During the Health Ministers Forum on meeting the health needs of vulnerable populations in South East Europe this was discussed. All seven Ministers of Health signed the Dubrovnik Pledge, which includes seven projects on the health needs for vulnerable groups, one of them being to strengthen the surveillance and control of communicable diseases.

During the first meeting of the focal points for the project of strengthening the infectious disease surveillance systems in the seven countries of the South-East Europe, during 28–30 August 2002, in Vlora, Albania, all countries made a presentation on the current strengths and weakness of the national surveillance systems. During the workgroup sessions a plan of action was prepared, which details the activities to be carried out in the next 9–12 months. All activities are related to the common goal of strengthening national surveillance capacities and shall be initiated by a workshop to define a list of priority infectious diseases as seen by the national experts invited from the countries. The workshop will follow a methodology employed earlier in several member states.

Objectives of the meeting:

1. To develop a list of priority diseases for the eight countries of the Dubrovnik Pledge.
2. To review the national and international case definitions for a number of priority diseases as defined by the group.
3. To describe procedures of investigation and laboratory confirmation as well as requirements for Public Health Laboratory capacities in relation to the list of priority diseases.
4. To define and agree on a data exchange format as well additional input for the planned training and country assessments as described in the work plan of the Vlora Meeting in Albania.
Annex 2

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Annex 3

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4. Dr Borislav Josifovski
5. Dr Angel Kunchev
6. Dr Mihail Vas. Magdei
7. Dr Adriana Pistol
8. Dr Alexander Sallaband
### Questionnaire for Priority Setting Exercise

**Public concern and confidence**

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<tr>
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<th>Average</th>
<th>S.D. of Mean</th>
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<td>Average</td>
<td>S.D. of</td>
<td>Mean Rank</td>
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<td><strong>Measles</strong></td>
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<td><strong>Echinococcosis</strong></td>
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<td><strong>Infection with Enterohaemorrhagic E.coli</strong></td>
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THE DUBROVNIK PLEDGE
ON SURVEILLANCE AND
PRIORITIZATION OF
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Report on a WHO Meeting

Bucharest, Romania
21–23 November 2002