



## MEETING REPORT

# Training strategy for intervention epidemiology in the European Union

Uppsala, 12–14 October 2009

## Executive summary

From 12 to 14 September 2009, the European Centre for Disease Prevention and Control (ECDC) held a meeting in Uppsala, Sweden, entitled, 'Strengthening Europe's defences against communicable diseases', at which the Competent Bodies for training scheduled a consultation on the training strategy for intervention epidemiology.

The main objective of the consultation on training was to present and discuss the implementation of the ECDC training strategy. It began with a presentation of the ECDC training strategies and work plan for 2010 and was followed by a discussion by participants, including an invitation to suggest new areas of work. The organisation of courses, design and exchange of training materials supporting the development of national and regional Field Epidemiology Training Programmes (FETPs), the accreditation of field epidemiologists in the European Union (EU) and the development of links with Member State universities, public health schools, and international training networks were ideas addressed at the consultation. The design of an implementation training strategy on intervention epidemiology in Portugal was also presented, as an example from a MS.

In conclusion, the ECDC Work Plan 2010 was supported without major changes. A need to further develop and strengthen the European Public Health Microbiology Training Programme (EUPHEM) and to support the development of new programmes for specific areas of expertise linked to communicable disease prevention and control was expressed. Also, it was surmised that the series of short courses that have been organised on different topics for the support of continuous education of epidemiologists and other public health professionals in the Member States have high added value, allowing networking and exchange of experiences.

Considering the discussion that took place at the meeting, it was further recommended that the role of the competent bodies needs to be further defined by ECDC.

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Stockholm, March 2010

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# 1 Background

In 2005, the European Centre for Disease Prevention and Control (ECDC) developed a multi-annual strategy in order to strengthen capacity for the prevention and control of communicable diseases at the European level. This has since been implemented and is reviewed yearly with the Competent Bodies (CB) for training proposed by the Member States (MS). All training activities are developed and executed as part of the ECDC Strategic Multi-annual Programme 2007–2013, specifically regarding its Target 5 on training:

*'By 2013, ECDC will be the key reference support centre in the European Union for strengthening and building capacity [in Member States] through training for the prevention and control of communicable diseases and diseases of unknown origin'.*

The following three main strategies are required to achieve the training target:

- developing EU capacity on prevention and control of communicable diseases through training;
- developing a network of training programmes and partnerships; and
- creating a training centre function within ECDC.

In the context of the meeting 'Strengthening Europe's defences against communicable diseases' organised by the ECDC in Uppsala, Sweden over 12–14 October 2009, the CB for training in the MS met in individual business sessions. Correspondingly, other CB also had their meetings (e.g. surveillance, communication, threat detection, response and preparedness, and scientific advice). This was the fourth meeting that ECDC held with the public health (PH) authorities responsible for capacity building in the area of field epidemiology.

Since the presentation of the strategy in 2005, the countries and ECDC have achieved the following:

- integration of the European Programme for Intervention Epidemiology Training (EPIET) at ECDC in 2007, allowing for sustained funding and coordination at the EU level, while MS continue providing supervision, host sites, and participation in the EPIET Training Site Forum linked to the CB for training;
- development of core competencies for intervention epidemiologists who work in PH in the EU;
- organisation of courses for epidemiologists and other PH professionals in the EU on the following:
  - introduction to field epidemiology;
  - technical aspects of outbreak investigation;
  - managerial skills for coordinators of outbreak investigations;
  - epidemiological aspects of vaccination;
  - time series analysis;
  - foodborne diseases surveillance and outbreak detection and response; and
  - epidemiological and microbiological aspects of outbreak investigation.
- design of a web-based manual on Field Epidemiology;
- country visits to support the assessment of training resources and needs;
- initiation of a 2 year fellowship for training in European Public Health Microbiology Training Programme (EUPHEM), with training sites and supervision in PH laboratories in MS.

As of September 2009, a total of 803 PH experts from MS have participated in ECDC training modules. Participants have come from all 30 EU/EEA countries. Additionally, most EPIET modules reserve some seats for external participants.

Curricula for short workshops addressing MS experts and the related training materials were developed for the detection and assessment of acute public health events and for the development of public health programmes for prevention and control of seasonal influenza.

In summary, key aspects of ECDC's work in training include the following : the organisation of courses; the design and exchange of training materials; supporting the development of national and regional Field Epidemiology Training Programmes (FETPs); the accreditation of field epidemiologists in the EU; and the development of links with MS universities, PH schools, and international training networks.

## 2 Scope and purpose

The main objective of the consultation on training was to present and discuss the implementation of the ECDC training strategy, the specific objectives of which included the following:

- agreeing on priority activities for 2010:
  - expansion of EPIET and EPIET-associated training programmes in field epidemiology;
  - development of core competencies for PH microbiologists and continuation of the two year programme for PH microbiologists (EUPHEM) associated with EPIET;
  - continuation and consolidation of residential courses for professionals working in epidemiology and PH services in MS, and follow-up of courses and modules by workshops or other means;
  - development of an online field epidemiology manual and related resources;
  - design of case studies that reflect PH lessons learnt in the EU and worldwide;
  - support countries in assessment of training resources and needs, development of national or regional field epidemiology training programs (FETPs), exchange of experts for epidemiological research projects or field investigations, etc.
- discussing the role of the CB in training activities delivered by ECDC (e.g. short courses, country training strategies, “train the trainer”, etc) with regard to the following:
  - coordination between ECDC and all CB regarding training for selection of candidates for ECDC short courses and coordination with other competent bodies (response, surveillance);
  - strengthening the training of the trainer when delivering ECDC training;
  - supporting MS in developing their strategies for capacity building and workforce strengthening in communicable disease control.

## 3 Methodology

The consultation began with a presentation of the ECDC training strategies and work plan for 2010 and was followed by a discussion by participants, including an invitation to suggest new areas of work.

The design of an implementation training strategy on intervention epidemiology in Portugal was also presented, as an example from a MS.

The agenda of the consultation, list of participants and papers for the working groups are in the appendices of this report.

## 4 ECDC training strategy: views from the Member States

After the presentation of the ECDC strategy and planned training activities for 2010, participants representing the CB for training discussed the training needs of MS in the area of intervention epidemiology. The discussion is summarised below.

Training is considered a very useful area of ECDC to support the MS. Creating and organising training has real added value. Nevertheless, important aspects of capacity building are not only to develop materials but also to agree on similar standards.

Participants suggested two main ways of advancing in the implementation of the ECDC training strategy: mapping the needs and priorities of the Member States, and facilitating the sharing of experiences.

Clearly differentiating between training and education in the MS was suggested. National teaching is done in different levels: public health institutes (applied training), universities (academic education) and laboratories (microbiology). Strengthening interaction and partnership is a need and ECDC can support building bridges between these levels. Participants of this meeting acknowledged the challenge of clearly defining the added value of applied epidemiology training versus academic education.

Particular attention was given to the EPIET, the FETPs associated to EPIET, and the European Programme for training of public health microbiologists (EUPHEM). It was clear that there is a need to broaden the scope of action to train not only field epidemiologists, but also other key professionals in public health (e.g. microbiologists).

The language barrier in the EU is important. The command of English may differ for professionals of some countries and age cohort. Particularly important will be reaching the regional level, and for this the training materials may need to be translated so that they can be used in national training sessions.

The selection process of participants for courses is sometimes a quite complex process, as there may be different institutions that need to be involved depending on the topic of the training. There are also different views about the role of ECDC and the national CB for training and other fields; some CB expressed the preference that ECDC make the final selection, based upon clear criteria. Others preferred to have more control over the selection of candidates to train in ECDC courses. ECDC therefore will consider adapting to the selection procedure that would allow both options, depending on the preference of the respective MS.

A topic considered to be linked to the selection of participants is the national strategy for capacity building. During the meeting, many CB noted that they were unaware of an explicit strategy for building the workforce for prevention and communicable disease control. It was agreed that such an explicit strategy would facilitate and guide the selection and prioritisation of national experts to train in ECDC courses. In addition, this strategy would ideally identify competence gaps in certain areas within the current workforce, which is relevant input for the planning of new ECDC training activities in the near future. ECDC offers to support Member States that wish to develop a specific strategy for capacity building of the workforce for communicable disease prevention and control.

Accreditation of training activities is an area that is gaining growing importance, particularly when considering the implementation of the Bologna process\* and the expectations of new generations of professionals.

The relevance of promoting the contributions of PH institutes to ECDC training activities, as well as the need to increase the communication between the different Competent Bodies, was raised.

The training of trainers is also a key area that needs to be supported and strengthened.

In conclusion, the following approaches are expected to be augmented: regular correspondence among CB; organisation of training activities, offering training materials to be used nationally; networking at the national level; and further exchange of national training strategies.

## 5 Development of a training programme in a Member State—Portugal

Professor José Luís Castanheira from the Direcção Geral de Saúde (DGS) in Portugal, presented the Portuguese perspective for the training of epidemiologists. Training needs are related to an increasing awareness of the importance of epidemiology for evidence-based decisions in public health, and the need to improve its understanding and practice. Portugal contributed with a total of five alumni to the EPIET during the cohorts 1 to 6; it stopped between 2002 and 2006.

Since 2008, Portugal has contributed with a training site for EPIET fellows. The 11<sup>th</sup> EPIET Scientific Seminar, Menorca, October 2006 and the visit from ECDC in January 2008 were important milestones. EPIET Alumni have contributed to the proposal for the Programme of Epidemiological Special Studies (*Ciclo de Estudos Especiais em Epidemiologia* (CEEE)) that was approved in Sept 2009 and whose objective is to improve the practice of field epidemiology in health services, mainly in the PH unit of Aggregate Health Centres (*Agrupamentos de Centros de Saúde* (ACES)). It is a two-year programme based on the EPIET model. The programme seeks to facilitate the integration of epidemiologists in specific units. The potential recognition of other programs (mainly EPIET) is one of its goals. It represents a bridge not only between public health and epidemiology, but also between epidemiological practice and academic education. Its goals include the following: to update the training of the leaders of epidemiology teams at ACES/PHU; to improve the network for CD surveillance; and to increase the quality of the practice of field epidemiology.

\* The Bologna Declaration of June 1999 set out a vision of a European Higher Education Area by 2010, in which students could choose from a wide range of high quality courses and profit from smooth recognition procedures. One important goal of the Bologna process is creating a European Higher Education Area by 2010, where students can benefit from smooth recognition procedures. This will increase quality and at the same time facilitate mobility of learners and professionals. For an update on the process, more information can be found at [http://ec.europa.eu/education/higher-education/doc/bologna09\\_en.pdf](http://ec.europa.eu/education/higher-education/doc/bologna09_en.pdf).

Participants in the programme are assigned to an epidemiology unit—DGS/ Direcção de Serviços de Epidemiologia e Estatísticas de Saúde (DSEES)—supervised by the senior staff in the DSEES and managed by the head of the Department of Epidemiology (DEPI). Work is done on a team that includes EPIET alumni.

Some of the remaining challenges of this programme include its ability to draw upon alumni experience, optimising efforts and initiatives, implementing partnerships—mainly with Universities—and developing PH resources.

The following is a list of some essential questions that remain: Should an assessment tool for training needs be developed? Could a modular and flexible program, tailored to personal needs, be promoted? Is compulsory participation in an introductory course necessary? Could the exchange of fellows between different programmes be organised? Should the training be combined with e-learning?

Dr Castanheira finished his presentation by reminding the audience of the richness of diversity in the EU and the need for the harmonisation of common objectives. Such willing coordination would be preferred to enforcing strict uniformity in all countries, which may likely have different requirements and perceptions. This harmonisation would incorporate a consensus on concepts and methods, and elicit agreement on criteria for selecting participants and facilitators, common curricula and supervision (coordination) from ECDC.

## 6 Role of the Competent Bodies for training

The role of the CB is not yet completely clear. For example, it is necessary to determine if they are seen as bodies for scientific exchange, official MS representatives or both.

Terms of reference are still missing and the participants in this meeting would like ECDC to define these roles.

Still, the participants brainstormed on what the potential roles would be and the following areas of interest were considered useful:

- the selection of participants for ECDC training activities should include the following people:
  - experts at starting epidemiologic career;
  - senior experts, who may attend these activities under the “training the trainers” mandate (use their knowledge and skills for delivering analogical courses in their respective countries); and
  - a selection of trainers for “train the trainer” activities.
- establishing criteria for recognition of ECDC training activities (modules) in relation to national training activities (e.g. share curricula, pedagogical team qualifications/composition);
- translating and delivering training in national languages;
- emphasising the contribution of national experts in ECDC training activities (in terms of expertise, to avoid unnecessary dependence on private companies) by offering grants;
- sharing experiences about training activities beyond ECDC MS collaborations;
- identifying all trained experts; these experts should contribute to further training in the MS;
- participation in twinning activities that have added European value;
- communicating with other CB within the country, with the Ministries of Health and the regional levels;
- ensuring frequent contact between CB for training from different MS (web-based communication); and
- having CB for training define and communicate training needs to ECDC (orientation of ECDC training strategy).

## 7 Conclusions

After the discussion of the ECDC training strategy, the ECDC Work Plan 2010 was supported without major changes.

In addition to the consolidated programmes like EPIET, there is a need to further develop and strengthen the EUPHEM and to support the development of new programmes for specific areas of expertise linked to communicable disease prevention and control.

Also, it was deduced that the series of short courses that have been organised on different topics for the support of continuous education of epidemiologists and other public health professionals in the Member States have high added value, allowing networking and exchange of experiences.

The roles of CB for training are considered valuable yet require further specification, such as developing terms of reference.

## 8 Recommendations

Considering the discussion that took place at the meeting, the role of the competent bodies needs to be further defined by ECDC. Nevertheless, the initiation of several relevant activities in each country was considered appropriate and includes the following:

- identifying key partners in communicable disease prevention and control;
- identifying common problems and goals among those partners, related to the workforce of experts; and
- defining a country specific strategy for capacity building and workforce strengthening.

The participants expressed the need for a dedicated time and place for the meeting of CB for training, apart from the global meeting of all CB. Some other recommendations included the following:

- The EPIET site forum should also be part of the meeting of CB for training, avoiding organising it in a separate time or location as it is an important working section of the CB for training.
- ECDC should offer continuous communication with the CB for training throughout the year.

ECDC should draft terms of reference and ensure continuity in the representation of the CB.

## Appendix 1: Agenda of the consultation

### Tuesday, 13 October 2009

- 15:15–15:30** Training strategy for intervention epidemiology in the European Union  
Denis Coulombier
- 15:30–15:45** Presentation of the ECDC training strategy and proposed WP 2010  
Arnold Bosman
- 15:45–17:45** Group discussion on priorities 2010

### Wednesday, 14 October 2009

- 09:30–10:00** Training strategy of Portugal  
Jose Luis Castanheira
- 10:00–11:30** Presentation of the ECDC training strategy and proposed WP 2010, ECDC  
Arnold Bosman
- 12:00–12:15** Feedback in plenary  
Andreas Gilsdorf

## Appendix 2: List of participants

Country	Name	Institution
Bulgaria	Vladimirova Nadezhda	National Centre of Infectious and Parasitic Diseases
Czech Republic	Jozef Dlhy	National Institute of Public Health
Estonia	Kadai Martin	Ministry of Social Affairs
France	Brigitte Helynck	Institut de Veille Sanitaire
Germany	Andreas Gilsdorf	Robert Koch Institute
Greece	Takis Panagiotopoulos	National School of Public Health
Italy	Antonio di Caro	National Institute for Infectious Diseases "L.Spallanzani"
Lithuania	Ašoklienė Loreta	Ministry of Health
Netherlands	Jeannette de Boer	National Institute for Public Health and the Environment
Portugal	Jose Luis Castanheira	Direcção-Geral de Saúde
Romania	Florin Popovici	Institute of Public Health Bucharest
Slovakia	Zuzana Krištúfková	Slovak Medical University
Slovenia	Petra Svetina Sorli	National Registry of Tuberculosis
Spain	Ángeles Rodríguez Arenas	Centro Nacional de Epidemiología ISCIII
EU	Arnold Bosman	Preparedness and Response Unit, ECDC
EU	Denis Coulombier	Preparedness and Response Unit, ECDC
EU	Vladimir Prikazsky	Preparedness and Response Unit, ECDC
EU	Carmen Varela Santos	Preparedness and Response Unit, ECDC



# Appendix 3: Role of the Competent Bodies for training (working paper)

## Introduction

ECDC's mission to strengthen preparedness and response capacity for communicable diseases is complementary with that of the MS. Therefore the role and responsibilities of the ECDC CB for training, as well as their coordination with the rest of CB, are to be defined and developed accordingly.

## Objectives

With the goals of brainstorming and agreeing on the roles of the CB for training, ECDC would like to ask the participants to address the following objectives during this consultation:

- discuss an improved procedure for selection of participants in short courses to strengthen MS capacity, including coordination with other competent bodies;
- propose an exchange of experiences among countries regarding their national training strategies, dissemination of ECDC tools for resources, and needs assessments;
- address the need to strengthen the "train-the-trainer" approach; and
- brainstorm about other potential roles of the CB for training, and mechanisms for continuous collaboration and information exchanges.

## Methods

- Presentation on training strategy from Portugal.
- Group brainstorming with MS and ECDC moderators and participants.
- Feedback in plenary session.

## Background documents

- Training strategy for intervention epidemiology in the EU.
- Report of short courses and other ECDC training activities.

## Item 1: Improved procedure for selection of participants in short courses

The group is invited to discuss the plausibility of the following procedures for the selection of participants in MS courses:

1. ECDC informs the CB about training for the title and scheduled time, place, agenda, target audience of the course and number of participants.
2. The information about the course is published on ECDC's website and on the websites of the institutions that are the CB for the training.
3. Potential participants register online and fill in a survey where they state their previous skills, the reason why they applied for the course and how the course correlates to their daily job.
4. ECDC and all CB for training in the country evaluate every applicant, awarding points to each. The applicants with the most points will be selected for the course.
5. ECDC creates a list of participants and proceeds to invite them.

## Item 2: Propose the exchange of experiences among countries regarding their national training strategies, and the distribution of ECDC tools

Activities aimed at strengthening the workforce for communicable disease control through training require awareness of human resource qualitative ('what competencies?') and quantitative ('how many?') needs. A structured approach would require a strategy for workforce development, including the qualitative and quantitative needs and a timeline. Such a strategic overview at the Member State level could guide ECDC more effectively towards specific activities.

The group is invited to discuss how countries can develop their own training strategies and suggest ways for ECDC to provide support for these initiatives.

Some questions to consider regarding ECDC tools include the following: Are the tools (like the core competencies for field epidemiology or the questionnaire for resource and needs assessment) developed by ECDC known? What would be the best way of exchanging experiences? Workshops? Teleconferences? Exchange of experts in country visits?

### **Item 3: Address the need to strengthen the “train-the-trainer” approach**

When training epidemiologists and other PH professionals in the MS, it may be possible to include a “train the trainer” component in the courses so that similar activities could be organised at the national level.

What could ECDC do to develop this approach? Could participants in ECDC courses be invited to express their interest in organising teaching at the national level? How could ECDC support them?

### **Item 4: Brainstorm about other potential roles of the Competent Bodies for training, and mechanisms for continuous collaboration and exchanges of information**

Are there important roles for CB training that have not been considered yet?

Will it be sufficient to meet annually in this type of meeting of CB? Would it be preferable to meet by committees for specific technical issues?