



TECHNICAL REPORT

Curricular process guide for EPIET and EPIET-associated fellowships

For use by fellows, coordinators
and training site supervisors

ECDC TECHNICAL DOCUMENT

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For use by fellows, coordinators and training site supervisors



This report of the European Centre for Disease Prevention and Control (ECDC) was coordinated by Yvan Hutin, Head of EPIET in ECDC's Public Health Training Section.

Contributing authors (in alphabetical order)

Katharina Alpers, Katrine Borgen, Sam Bracebridge, Yvan Hutin and Daniela Schmid

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Contents

Abbreviations	iv
Introduction	1
2 Management and governance	2
3 Curriculum	2
3.1 Prerequisites and selection	2
3.2 Duration	3
3.3 Training sites	3
3.4 Introductory course	3
3.5 Other training modules	3
3.6 Annual ESCAIDE conference	3
3.7 Core competencies	4
3.8 Field assignments	4
3.9 International assignments	6
4 Interactions between fellows, supervisors and coordinators	6
4.1 Fellows	6
4.2 Training site supervisors	7
4.3 EPIET/EAP coordinators	8
5 Monitoring progress	8
5.1 Acquisition of core competencies	8
5.1 Monitoring of field assignments	9
5.3 Mid-term review	9
6 Graduation	9
7 External fellowship review	9
8 ECDC extranet	10
9 Additional information	10
Annex 1 Contributions, clearance, affiliation and acknowledgments	11
Annex 2 Outline for the fellowship summary report or portfolio	12

Abbreviations

EAN	EPIET Alumni Network
EAP	EPIET-associated programme
ECDC	European Centre for Disease Prevention and Control
EEA	European Economic Area
EPIET	European Programme for Intervention Epidemiology Training
ETSF	EPIET Training Site Forum
EUPHEM	European Public Health Microbiology Training
FPO	Fellowship Programme Office team (ECDC)
FSC	Fellowship Scientific Coordination team (ECDC)
EU-track	EU-track of EPIET (fellows trained in a country other than their country of origin)
MS-track	Member State-track (fellows trained in their country of origin)
PHT	Public Health Training section (ECDC)
SOPs	Standard Operating Procedures

Introduction

The European Programme for Intervention Epidemiology Training (EPIET) is a two-year fellowship designed to build the core competencies of European Union (EU) public health epidemiologists in communicable disease surveillance and response.*

The primary aim of EPIET is to strengthen the capacity of the workforce in the EU by providing state-of-the-art training in field epidemiology, enabling its fellows to apply epidemiological methods to a wide range of public health problems in Europe and elsewhere. The main emphasis of the programme is on learning through delivery of public health service. As fully-fledged professionals, fellows deliver products that contribute to prevention of disease, death and disability and protect the EU against communicable disease threats.

Some of the programme objectives are:

- To strengthen the surveillance of infectious diseases and other public health issues in Member States and at EU level;
- To develop response capacity for effective field investigation and control at national and community level to meet public health threats;
- To develop a European network of public health epidemiologists who use standard methods and share common objectives;
- To contribute to the development of the community network for the surveillance and control of communicable diseases.

In addition, ECDC sees the programme as a way to set new standards and develop national programmes in field epidemiology.

The fellowship builds competencies through public health assignments at training sites. Participation in the introductory course and subsequent training modules provides the basic induction required to acquire competencies through practice.

EPIET is one of the training activities of the European Centre for Disease prevention and Control (ECDC). ECDC also hosts the European Public Health Microbiology Training (EUPHEM) that works in close collaboration with EPIET. ECDC's Public Health Training section (PHT) hosts and manages the EPIET and EUPHEM programmes. EPIET and EUPHEM training sites contribute resources to the programmes in several ways, including provision of access to field assignments, on-site supervision, engagement in the peer review process during training site visits and facilitation in training modules. EPIET is composed of two administrative tracks: the EU-track and the MS-track. ECDC funds salaries and training modules for EU-track fellows who are assigned in countries other than their own. In the case of MS-track fellows, Member States fund the salaries of fellows undergoing EPIET in their own countries while ECDC funds their participation in training modules.

EPIET works in close collaboration with a number of EPIET-associated programmes (EAPs). EAPs are Field Epidemiology Training Programmes (FETP) run and governed by Member States. In 2014, EAPs included the German Postgraduierenausbildung für Angewandte Epidemiologie (PAE) and Field Epidemiology Training Programmes (FETP) in the United Kingdom, Norway and Austria. EPIET and EAPs run their programmes based on the curricular process described in this guide. In this guide, experts responsible for EAPs are designated as 'EAP-coordinators' even though titles may differ by country (e.g. coordinator, director).

In this document, the term 'fellow' refers to EPIET (EU-track and MS-track) and EAP fellows who are recruited into a fellowship administered in accordance with this guide, follow the EPIET curriculum and receive an EPIET diploma upon satisfactory completion of the two-year training course.

Purpose and audience

This guide aims to describe the key principles defining the scientific content of EPIET/EAP for the shared use of:

- Fellows
- Training site supervisors
- EPIET/EAP coordinators.

It also provides references to other documents and standard operating procedures (SOPs) available through the ECDC extranet, including SOPs for the selection of fellows, international assignments, site visits and preparation of abstracts.

* Technical document: Core competencies for public health epidemiologists working in the area of communicable disease surveillance and response in the EU, Jan 2008. Available from http://ecdc.europa.eu/en/publications/Publications/0801_TED_Core_Competerencies_for_Public_Health_Epidemiologists.pdf

EPIET administrative guide

Upon entry into the programme, EPIET provides fellows with an administrative guide detailing the administrative rules and procedures of the EPIET programme (e.g. selection, taking up and ending duty, modules, international assignments, ECDC travel insurance, reimbursements and social media code of conduct). Different versions of the guide are available for the EU and MS programme tracks. EAPs may have their own administrative guides.

2 Management and governance

EPIET is governed by the rules and regulations of ECDC while EAPs are governed by the rules and regulations of the institutes that host them. ECDC and national institutes are subject to their respective governance structure.

The Fellowship Programme Office (FPO) in ECDC's Public Health Training section is responsible for the administrative and logistical aspects of the programme and fellowship. It provides support to the scientific team. EAPs have their own administrative and logistical support.

The Fellowship Scientific Coordination (FSC), also based in ECDC's Public Health Training section, manages the scientific aspects of the curricular process jointly with EAP coordinators/directors. The head of EPIET manages a team of EPIET coordinators based at ECDC and in selected national public health institutes in Europe. EPIET coordinators manage the specific scientific aspects of the programme and help mentor the fellows. EAP coordinators are responsible for EAP fellows.

The National Focal Points for Training advise ECDC's Public Health Training section on training needs at country level. They coordinate expressions of interests from training sites to host fellows in a given cohort.

The EPIET Training Site Forum (ETSF) includes representatives of EPIET and EAP training sites and representatives from Member States without training sites. It also includes the president of the EPIET Alumni Network (EAN), and at least one representative of the fellows. EAP coordinators represent the EAP training sites that are not also EPIET training sites. EPIET and EAPs consult at least once on an annual basis with ETSF to discuss decisions that need to be made for the fellowships.

ETSF tasks include:

- Providing technical suggestions regarding scientific and managerial issues (e.g. administration, communication, training resources and tools, preparation and execution of modules);
- Providing guidance on the prerequisites and training objectives of the fellowship;
- Participating in the recruitment of fellows;
- Engaging in a dialogue with ECDC on the best ways to engage training site supervisors in ECDC activities for the training of senior epidemiologists and the facilitation of EPIET modules;
- Communicating views and suggestions from training site supervisors.

ETSF organises a standing committee consisting of volunteering members of the Forum, with one of them acting as president (renewed every three years). EPIET/EAPs can consult the standing committee who can interact on behalf of the ETSF to advise EPIET/EAPs on various questions for which input is needed at short notice. In return, the standing committee reports back to ETSF on interactions with EPIET/EAPs.

The EPIET Alumni Network (EAN) advises EPIET and EAPs on scientific and managerial aspects of the programme. One member of the EPIET Alumni Network sits on the selection committee for EU-track fellows.

Finally, ECDC's Advisory Forum advises on the strategic direction of the fellowships while the Management Board takes decisions involving resource allocation.

3 Curriculum

3.1 Prerequisites and selection

From a professional background point of view, eligible EPIET candidates need to have:

- A level of post-secondary education attested by a diploma in public health or a related subject, preferably at the level of a Master degree or equivalent;
- At least one year of professional practice in public health or epidemiology;
- A thorough knowledge (B2 minimum) of at least two official languages of the European Union, one of which is English.

The call for applications for EPIET and EAPs specifies the formal eligibility criteria and selection process every year.

3.2 Duration

The full-time fellowship lasts two years during which fellows work at a training site. While assigned, fellows participate in training modules that do not exceed ten per cent of the duration of the fellowship (up to 10 weeks).

3.3 Training sites

Fellows are placed at training sites that have a mandate to work on communicable disease surveillance, epidemiology and the provision of public health advice at international, national and sub-national levels in the European Union (EU) and EEA (European Economic Area) countries. Whenever a National Focal Point for Training proposes that an institute become an EPIET/EAP training site, EPIET/EAP and the training site mutually assess whether the training site meets EPIET/EAP requirements and whether EPIET/EAP requirements detailed in the curricular process are relevant and acceptable to the training site. To be available as a training site for EPIET/EAP, the institute needs to confirm that it can offer following:

- Access to field epidemiology activities as detailed in the curricular process guide;
- Personal on-site supervision for an average of at least four hours per week during the 23 months of training;
- Adequate work space and communication facilities for the fellow;
- Commitment to share all communication on output, including early drafts, equally between fellow, supervisors and EPIET or EAP coordinators (this communication will always be considered confidential).

Following the initial site appraisal, the training site capacity to supervise fellows is acknowledged. The training site then commits to working with EPIET/EAPs in accordance with the principles described in this guide. Specific guidance for coordinators and supervisors on continuous quality assurance at training sites, site appraisals and site visits is available separately from EPIET and EAPs.

3.4 Introductory course

Shortly after the start of the fellowship, fellows attend an introductory course that provides basic instruction in intervention epidemiology/public health microbiology and aims to inspire strong motivation for fieldwork.

3.5 Other training modules

In addition to the introductory course, fellows attend up to seven weeks of joint training modules organised by EPIET and/or EAPs. This includes an annual 'project review module' focused on peer review of the fellows' output. The content of the modules is tailored to address the competency-based objectives of the programme. The content meets quality assurance standards. Ultimately, modules enable acquisition of competencies by the fellows alongside experiential learning at the training site. Modules are also opportunities to develop the network and engage training site supervisors. Generally, public health emergencies (e.g. outbreak investigations) are of higher priority than modules for fellows when they occur. This may result in a fellow being authorised not to attend a module. EPIET/EAP coordinators make the final decision on an individual basis.

3.6 Annual ESCAIDE conference

Fellows participate at the annual European Scientific Conference for Applied Infectious Disease Epidemiology (ESCAIDE) three times: the year they join the programme, in the middle of the fellowship and upon graduation. At ESCAIDE, fellows have the opportunity to submit abstracts and present their projects. Subject to funding being available, fellows may also submit abstracts and present their work to other international conferences.

3.7 Core competencies

Table 1. Main domains of core competencies for EU public health epidemiologists in communicable disease surveillance response

Category	Area	Domain
Specific for the profession	Public health	1. Public health science
		2. Public health policy
	Applied Epidemiology	3. Risk assessment
		4. Public health surveillance
		5. Outbreak investigation
		6. Epidemiological studies
		7. Infectious diseases
		8. Laboratory issues
		9. Public health guidance
Common to other professions	Biostatistics	10. Probability
		11. Inferential statistics
		12. Sampling
	Applied Informatics	13. Internet
		14. Statistical and other data analysis
	Communication	15. Editing and presentations
		16. Risk communication
		17. Written communication
		18. Oral communication
		19. Use of new technologies
	Management	20. Planning and use of resources
		21. Team building and negotiation
	Capacity development	22. Mentorship
		23. Training
	Ethics	24. Protection of individuals
		25. Confidentiality
		26. Conflicts of interests

The fellowship builds core competencies (Table 1) through facilitating acquisition of knowledge, skills and attitudes. EPIET/EAPs use the core competencies as a reference framework to:

- define the pre-requisites for selecting candidates and the learning objectives to be achieved by the end of the two-year fellowship (with input from ETSF);
- organise and update the curriculum, including modules;
- monitor the progress of fellows' acquisition of competencies and aid the planning of learning activities.

3.8 Field assignments

To acquire competencies, fellows conduct a number of field assignments based on learning needs of the fellow and the public health service needs of the training site. They deliver professional quality products/deliverables. EPIET/EAPs use a number of quality standards to evaluate these products and determine whether field assignments are satisfactory. All products/deliverables of the field assignments are subject to the rules on contributions, authorship, clearance and acknowledgements (Annex 1).

3.8.1 Investigate outbreaks

The aim of the outbreak investigation assignment is to engage in all stages of an outbreak investigation.

Description of the assignment

Fellows will investigate as many outbreaks as possible using the classic 10-step field epidemiology approach:

1. Determine the existence of an outbreak
2. Confirm the diagnosis (in collaboration with the laboratory)
3. Define a case
4. Conduct case finding
5. Generate hypotheses using descriptive findings
6. Test hypotheses with an analytical study (if required)
7. Draw conclusions
8. Compare hypotheses with established facts, conduct additional studies
9. Communicate findings
10. Advise on prevention and control measures.

Upon completion of the fellowship, fellows should have investigated at least one outbreak as a primary investigator. However, an equivalent experience may have been acquired working on more than one outbreak with various levels of responsibility.

Product/deliverable

To complete the outbreak assignment, fellows need to produce at least one final outbreak report or submit a manuscript to a peer-reviewed journal as first author.

3.8.2 Conduct surveillance projects (design, data analysis or evaluation)

The aim of the surveillance assignment is to use information from surveillance systems for action in light of the strengths and limitations of the data.

Description of the assignment

The surveillance project may include:

- designing a new surveillance system, evaluating a surveillance system; or
- analysing data from a surveillance system to generate information for action.

Surveillance data analyses are highly relevant to the surveillance objective. A full discussion of the limitations of the information generated through surveillance will take into account the attributes of the system and therefore may constitute the equivalent of a surveillance evaluation.

Product/deliverable

To complete the surveillance assignment, fellows need to produce at least one final report or submit a surveillance manuscript to a peer-reviewed journal.

3.8.3 Conduct an operational research project

The aim of the operational research project is to master all aspects of the life cycle of an operational research project.

Description of the assignment

Fellows will conduct an operational research project which includes:

- Assessing information needs;
- Framing a research question;
- Formulating epidemiological objectives;
- Outlining the analysis plan;
- Preparing the data collection instrument;
- Collecting data;
- Analysing data;
- Formulating conclusions;
- Proposing recommendations;
- Engaging stakeholders in next steps (for example, further research and public health recommendations.)

Research projects involving human subjects that require ethical committee clearance must be subject to these procedures, in accordance with the rules and regulations of the training site.

Product/deliverable

To complete the research assignment, the fellows need to deliver products documenting their involvement in all aspects of operational research. Because research may take more time than the duration of the fellowship, this may be done through more than one project (e.g. writing a protocol for a study that will be implemented by others and analysing data in order to write a paper using data generated with a protocol written by others).

3.8.4 Train public health professionals

The aim of the training assignment is to develop and use learning tools.

Description of the assignment

Fellows will use instructional design techniques to participate in epidemiology training activities, both in teaching institutions and in the field. This may include:

- Preparing learning activities (e.g. lecture, case study, others);
- Conducting learning activities (e.g. lecture, case study, others).

Product/deliverable

To complete the teaching assignment, the fellow needs to produce a new learning tool and a report documenting reflection on the training activities conducted (e.g. results of the evaluation, summary of the instructional design process).

3.8.5 Written and oral scientific communication

The aim of the scientific communication assignment is to communicate effectively with other public health professionals.

Description of the assignment

Fellows will communicate with the scientific community by:

- Submitting abstracts at an international, peer-reviewed, English-language conference (e.g. ESCAIDE, TEPHINET)*;
- Submitting an English-language article to a peer-reviewed, indexed journal (scientific communication in other languages is welcome, but at least one article in English is required to ensure input from the coordination team and demonstrate that fellows can express themselves in written English).

Product/deliverable

To complete the scientific communication assignment, the fellows need to:

- Submit at least one abstract to ESCAIDE (as first author);
- Give at least one oral presentation at an international, peer-reviewed, English-language conference (e.g. ESCAIDE or TEPHINET, as first author)[†];
- Submit at least one manuscript cleared by EPIET/EAPs to a peer-reviewed journal (as first author, preferably open-source indexed in Medline).

3.9 International assignments

Optional international assignments may be offered to fellows who are on track with their acquisition of competencies and their field assignments (See SOPs on International Assignments). In some cases, international assignments offer opportunities for fellows to acquire competencies or to conduct field assignments that would otherwise not be available at their training site.

4 Interactions between fellows, supervisors and coordinators

4.1 Fellows

Fellows in training are considered to be competent professionals and as such, they are expected to:

- Work as part of the team at the training site and meet the professional standards expected of other staff members;
- Anticipate their work plan;
- Comply with deadlines issued by the training site or the fellowship, including deadlines for submission of abstracts and manuscripts for review and clearance (Annex 1);
- Share all early drafts in a spirit of peer review and quality improvement with training site supervisors and coordinators;
- Revise drafts as many times as necessary and share with coordinators until quality standards are met;
- Upload all final products (e.g. final reports, submitted abstracts and manuscripts) to ECDC's extranet to document their achievements in the form of an 'e-portfolio';
- Make themselves available for public health emergencies;
- Comply with scientific, administrative and logistical requirements, as communicated by EPIET/EAP coordinators, the Fellowship Programme Office and EAP programme offices.

* For international conferences, fellows first notify their coordinator of their intention to submit an abstract well in advance of the abstract submission deadline (approximately one month before – see details in the separate guidance for fellows and supervisors.) They then submit a first draft of the abstract no later than four weeks for the submission deadline. One coordinator and a second reviewer subsequently assist with the abstract preparation work. For more information see the guidance document on the extranet.

[†] If a fellow is successful in having a poster accepted but is not invited to give an oral presentation then an oral presentation can be given in an alternative setting (e.g. national conference) to complete this assignment (upon approval by coordinators on a case-by-case basis).

All activities carried out by the fellows must comply with the administrative regulations and codes of conduct that apply to the training site.

4.2 Training site supervisors

Role of the supervisor

A primary training site supervisor is the person who has the main responsibility for the fellow. However, fellows must be assigned at least one other project-specific supervisor. Overall, a fellow should benefit from approximately four hours of interaction* with training site supervisors (i.e. primary and project supervisors) every week, allowing for some variation, depending on fellows and supervisors. The primary supervision functions may be shared among more than one individual, depending on the size of the training site.

The primary training site supervisor provides on-site, local, day-to-day supervision, including:

- Assessment of training needs;
- Facilitation of learning activities;
- Facilitation of access to field assignments;
- Monitoring of a work plan to ensure that all field assignments are completed;
- Review of progress towards acquisition of core competencies;
- Supervision of projects;
- Guidance for scientific production (e.g. protocols, data collection instruments).

All supervisors agree to ensure that early drafts of reports are shared (confidentially) with coordinators in a spirit of peer review, continued learning and quality improvement.

Training site supervisors further contribute to EPIET/EAP through:

- Participating in visits to other training sites[†];
- Teaching on the introductory course and at modules[†]
- Participating in EPIET/ETSF meetings
- Reviewing EPIET-related documents
- Participating in supervisor training courses (e.g. summer school).

Site visits

Training sites actively hosting fellows are visited by one EPIET/EAP coordinator and one supervisor from another training site. These visits take place at least every two years. The aim of the site visit is to optimise interaction between the fellow, the supervisor and the coordinator. The specific objectives of the site visits are to review:

- Training environment, including logistical and administrative aspects;
- Supervision of the fellow on-site and at the programme office level;
- Progress in the field assignments;
- Technical quality of the products and reports;
- Support needs of the supervisors.

Site visits may be used to review the acquisition of the core competencies if required.

Detailed SOPs for site visits are available on ECDC's extranet.

* For example, review of activities or written materials, meetings, phone conversations, contribution to wider discussions.

Subject to opportunities: ECDC pledges to make every effort to offer at least one of these activities to each primary training site supervisor.

[†] Subject to opportunities: ECDC pledges to make every effort to offer at least one of these activities to each primary training site supervisor.

4.3 EPIET/EAP coordinators

ECDC and institutes hosting EAPs develop and maintain job descriptions for the EPIET/EAP coordinators. These job descriptions are detailed in the framework partnership agreement according to which ECDC collaborates with national institutes for scientific coordination. However, from the point of view of the fellowship curricular process, the role of EPIET/EAP coordinators^{*} includes:

- Provision of scientific reviews for the fellows' scientific production within a specific deadline (Table 1)[†];
- Monitoring of progress in terms of acquisition of core competencies and progress in field assignments to ensure graduation within the timeframe;
- Provision of advice, counselling and tutoring with respect to work at the training site;
- Facilitating exchanges of information among fellows;
- Responding or identifying appropriate respondents to queries from fellows;
- Identifying and addressing issues arising between training site supervisors and fellows.

Table 2. Standard timeline to be expected in terms of feedback by EPIET/EAP coordinators to fellows on written scientific products/documents

Scientific products/documents	Feedback by coordinators (working days)
Manuscripts, protocols	10
Intermediate products [‡]	5
Abstracts or presentations, 28–4 days before submission deadline	5
Abstracts or presentations, 14–7 days before submission deadline	2
Abstract or presentations, a week before submission deadline	1

EPIET/EAP coordinators conduct scientific reviews and communicate their feedback to both the fellow and the supervisors in an open, tactful and frank peer-review spirit. They may also assist in the identification of third parties/subject matter experts who may provide additional contributions. When fellows do not hear from the coordinator by the deadline, they first send a reminder. If the issue is not sorted out within two working days, EPIET fellows notify the head of EPIET and EAP fellows in accordance with the SOPs of their programme[§].

5 Monitoring progress

5.1 Acquisition of core competencies

EPIET/EAPs monitor the acquisition of core competencies each year (against an initial assessment conducted before the introductory course, at 12 months and during the exit evaluation) using tools structured on the basis of ECDC's core competencies. Competencies are documented on the basis of experience and quantified on a scale of 0 (Unaware) to 4 (Master). The approach places fellows at the centre of the process..

The initial assessment involves the following:

- The fellow initiates the process through a self-assessment;
- The training site supervisor provides input on this self-assessment during an interview;
- Fellow and training site supervisor document the assessment on the basis of the fellow's experience and scientific production (e.g. theoretical exposure through academic degrees or projects and products included in the fellowship portfolio);
- Fellow and training site supervisor share the output with the coordinator.

^{*} For an optimum learning/working environment, fellows require a training site supervisor and a coordinator. Hence, EAP coordinators must make arrangements to ensure that the functions of training site supervisor and coordinator do not overlap (e.g. exchange of the coordinator function with other EPIET/ EAP coordinators).

[†] Fellows and coordinators anticipate and plan for their respective absences (e.g. leave).

[‡] For example, questionnaires, analysis listing, tables and figures.

[§] EAP coordinators are responsible for identifying second level referral mechanisms to address such delays within their programmes.

5.1 Monitoring of field assignments

EPIET/EAPs monitor progress in the completion of the field assignments by means of the fellowship summary report (outline available in Annex 2), or equivalent tools (EAPs) structured in accordance with the field assignments. The format remains flexible provided that it tracks progress in the activities. Fellows update their fellowship summary report and discuss it with their supervisor regularly (i.e. on a monthly basis for EPIET), highlighting new developments (e.g. using tracked changes enabling the fellowship summary report to be compared with the version from the previous month). Fellows then send their fellowship summary report to the front line coordinator and upload a new copy on the extranet (leaving the previous copies for reference). The monthly update of the report is an opportunity for the fellow and the coordinator to touch base, review progress and update a work plan. If required, three-way teleconferences may be arranged to ensure that the supervisor, coordinator and fellow share the same understanding of the situation. At the end of the fellowship, the fellowship summary report is edited into a 'fellowship portfolio' that reflects the overall experience of the fellowship and documents achievements. This fellowship portfolio focuses on deliverables (e.g. abstracts). Publications and communications publicly available are referenced in Vancouver format at the end of the document (see checklist on ECDC's extranet which is available to fellows, supervisors and coordinators). Upon completion of the fellowship, ECDC uploads all portfolios onto its Internet site.

5.3 Mid-term review

EPIET/EAP coordinators conduct a mid-term review after the first year of the fellowship by means of a telephone conference with the fellow and his/her supervisor. The objective is to review:

- Acquisition of core competencies;
- Progress in field assignments;
- Training needs for the second year of fellowship.

Upon completion of the mid-term interview, the coordinator and the supervisor evaluate confidentially how the fellow is doing with respect to the field assignments. Consensus during the review determines whether the fellow is (1) ahead, (2) on track, (3) in need of follow-up or (4) at risk. Fellows requiring follow-up are offered additional reviews at 15 and 18 months so that they can benefit from additional guidance to complete the field assignments.

6 Graduation

EPIET/EAP coordinators and supervisors conduct a confidential exit interview with the fellows a few weeks before the end of the fellowship. During this interview, coordinators assess whether competencies were acquired and whether field assignments were completed with deliverables that meet EPIET/EAP quality standards. Following the exit interview, the finalised, edited and cleared fellowship portfolio is made public and uploaded on the ECDC website. Upon completion of the exit interview, EPIET/EAP coordinators decide whether or not the fellow may proceed with graduation. Fellows who complete the 24-month full-time training period and comply with graduation criteria receive a diploma. Fellows who leave the fellowship more than four weeks before term, or do not comply with the training objectives do not receive a diploma. EPIET/EAP coordinators may grant unpaid extensions of up to six months for a fellow to complete any of the graduation requirements (e.g. submission of a manuscript).

7 External fellowship review

EPIET and EAP seek advice annually from a panel of external reviewers consisting of one training site supervisor, one ECDC expert involved in public health practice, one board member of the EPIET Alumni Network (EAN), one director of a TEPHINET-affiliated Field Epidemiology Training Programme, one representative from a European Public Health School and one former EPIET coordinator. The external review panel evaluates the fellowship portfolios and other documents reflecting processes for the outgoing cohort, six months after its graduation. They use standardised criteria (i.e. checklists and assessment for public health relevance) to assess the graduation decisions formulated by EPIET/EAP coordinators and make internal recommendations in the form of a short report to the EPIET/EAP coordinators and to the head of ECDC/PHT for quality improvement of the programme.

8 ECDC extranet

Fellows, training site supervisors, coordinators and the Fellowship Programme Office team have access to the ECDC training extranet which provides a platform for sharing relevant documents and other information.

The extranet platform has pages that are visible to all members, such as the extranet training homepage. Each fellow has a folder with his/her name. During the fellowship, fellows upload all finalised documents (e.g. protocols, reports, abstracts, presentations and manuscripts) in their respective personal folders. The products uploaded on the extranet constitute an e-portfolio that documents whether or not the fellow meets the criteria necessary for graduation. Hence, it needs to contain all final versions of the field assignments. In addition, fellows upload their fellowship summary report every month on the extranet. During the fellowship, these fellowship summary reports are accessible to all fellows in training, training institute supervisors, and coordinators. ECDC offers to host the fellowship summary reports prepared by the EAPs for their graduates on the ECDC website.

9 Additional information

For additional information, EPIET fellows, training site supervisors and coordinators may read the ECDC document on core competencies available on the ECDC website and the EPIET SOPs and administrative guides available from ECDC's extranet.

Annex 1 Contributions, clearance, affiliation and acknowledgments

Contributions

EPIET/EAPs refer to the 'Uniform Requirements for Manuscripts Submitted to Biomedical Journals' (http://www.icmje.org/urm_main.html) for contributions and authorship.

Authors must meet all of the following criteria:

- Substantial contributions to concept and design, acquisition of data, or analysis and interpretation of data;
- Drafting or revision of the article for important intellectual content;
- Final approval of the version to be published.

Authors must have participated sufficiently in the work to take public responsibility for appropriate portions of the content. Other persons should be mentioned as contributors, usually in the acknowledgments. If one of the EPIET/EAP coordinators qualifies for authorship, they may be included. If not, the front line EPIET/EAP coordinator would usually meet criteria for acknowledgments and should be mentioned, as appropriate. Acknowledgements and authorship need to be approved by all persons included.

Clearance and technical green light for scientific communications (including late breakers and rapid communications)

Fellows first seek institutional clearance from their training site for all publications.

Fellows who are first authors must also obtain a technical green light for all published products resulting from their fellowships (e.g. manuscripts, abstracts, book chapters) with their front line coordinator. The request must mention where the product will be submitted. For all abstracts, and for other products, if the front line coordinator feels it is necessary, input, opinions and advice can be requested from a second reviewer. In that situation, the green light of both will be necessary. The front line coordinator will consult with the coordinator team to ensure that the journal or conference proposed is appropriate (e.g. Medline indexed, reputable). If there is any doubt, ECDC will provide assistance to check the credentials of a proposed journal or conference.

EPIET/EAP technical green light is sought after approval of the training site supervisor and institutional clearance from the training site. In the event of disagreement regarding scientific content, the opinion of the training site supervisor will prevail. Scientific products that have not been approved by EPIET/EAP may not be published under the EPIET affiliation and will not count as field assignments for the fellowship. If such incidents occur, they should be discussed afterwards by the training site and EPIET/EAP since they go against the spirit of the collaboration with EPIET/EAP.

Fellows who are co-authors must obtain technical green light for the product with their front line coordinator before submission. When planning submissions, fellows must take into account the time required for the green light process and cannot set deadlines for submission on their own initiative. Rapid communications require prior consultation between the fellow, the training site supervisor and the coordinator so that the team can agree to work together by the deadline before any commitment is made with any journal. Work conducted with another organisation (e.g. WHO), requires institutional clearance from the other organisation. ECDC clearance is not required for EPIET/EAP fellows, unless an ECDC staff member is a co-author.

Affiliation and acknowledgements

In addition to the affiliation of the training site, fellows must use the fellowship affiliations (EPIET or EAP) for all scientific communications. The acknowledgments section must contain the source of the fellowship funding (European Programme for Intervention Epidemiology Training, European Centre for Disease Prevention and Control or the name of the EAP). Posters or oral presentations must include the EPIET or EAP logo. EAP fellows may use both EPIET and EAP affiliation and/or logos if they wish, in accordance with the recommendations of EAP coordinators.

IMPORTANT: Contributions, clearance, affiliation and acknowledgment rules must be strictly applied for fellowship-related work, both before and after graduation. Contact the coordinator team for specific guidance.

Annex 2 Outline for the fellowship summary report or portfolio

{First Name} {Last name}

Background

Pre-fellowship short biography

Prior to EPIET/EAP, {First name} {Last name} (Summarise your experience and education in two or three lines).

EPIET/EAP assignment

On {date}, {First name} {Last name} was assigned to {Unit}, {Institution}, {City}, {Country}. (Describe assignment in a few lines).

Fellowship projects

Surveillance project(s)

Title of first surveillance project {Add second and other projects as necessary}

- Summarise the project in four or five lines or cut and paste the text of the abstract if an abstract is available (no need to copy the title twice, no need to include authors/affiliations).
- Status: {Summarise the status using ONE of the following keywords: 'Planned', 'Protocol written', 'Data collected', 'Data analysed', 'Report drafted', 'Completed'}
- Involvement: specify the involvement of the fellow in the project (e.g. primary investigator, other)

Summary of routine surveillance activities

- Summarise the experience in four or five lines in terms of (a) type of activity (e.g. quality control of surveillance data, trend control, outbreak detection algorithm) (b) own role (c) any relevant findings/outcomes.

Outbreak(s)

Title of first outbreak investigation {Add second and other outbreaks as needed}

- Summarise the outbreak in four to five lines or cut and paste the abstract if an abstract is available (no need to copy the title twice, no need to include authors/affiliations).
- Status: (as above)
- Involvement: specify the involvement of the fellow in the project (e.g. primary investigator, other).

Research

Title of the first research project {Add second and other projects as needed}

- Summarise the project in four to five lines or cut and paste the abstract if an abstract is available (no need to copy the title twice, no need to include authors/affiliations).
- Status: (as above)
- Involvement: specify the involvement of the fellow in the project (e.g. primary investigator, other)

Scientific communication

- XX posters and the place where they were presented.
- XX oral presentations and the place where they were given.
- XX manuscripts drafted, XX manuscripts submitted, XX manuscripts accepted and XX manuscripts published.

Teaching experience

Summary of the first teaching experience {Add second and other teaching experience as needed}

- Summarise the teaching experience in four-or five lines in terms of (a) target audience (e.g. undergraduate students, nursing student, doctoral level students), (b) subject, (c) duration of the activity, (d) learning approach used and/or any other relevant element.
- Involvement: specify the involvement of the fellow in the project (e.g. lead, assistant, other)

International mission(s) [if applicable]

Summary of the first international mission

- Summarise international missions in four-to-five lines or use an abstract if available (no need to copy the title twice, no need to include authors/affiliations).
- Status: (as above)
- {Add second and other international missions as necessary}.

Others

Add details/additional information as necessary.

Next steps

Outline future professional aspirations/goals, or replace by post-fellowship plans if known (two-to-three lines)

References – List of publications and communications

1. First reference in Vancouver format {Add cross reference in the text where the abstract is mentioned}
Example of journal citation in Vancouver: Russell FD, Coppel AL, Davenport AP. In vitro enzymatic processing of radiolabelled big ET-1 in human kidney as a food ingredient. *Biochem Pharmacol* 1998 Mar 1;55(5):697-701.
2. Second reference in Vancouver format {Add cross reference in the text where the abstract is mentioned}
Example of book citation in Vancouver: Lodish H, Baltimore D, Berk A, Zipursky SL, Matsudaira P, Darnell J. *Molecular cell biology*. 3rd ed. New York: Scientific American; 1995.
3. Third reference in Vancouver format {Add cross reference in the text where the abstract is mentioned}
Example of conference proceedings citation in Vancouver: Kimura J, Shibasaki H, editors. Recent advances in clinical neurophysiology. *Proceedings of the 10th International Congress of EMG and Clinical Neurophysiology*; 1995 Oct 15-19; Kyoto, Japan.