

**Canadian Field Epidemiology Program
Public Health Agency of Canada
Procedure for Requesting and Undertaking Field Investigations**

Objective:

The purpose of this document is to clarify the role and mechanism for requesting assistance from the Canadian Field Epidemiology Program (CFEP) for provincial, territorial, federal and international partners.

Background:

The Public Health Agency of Canada's CFEP (formerly FETP) was established in 1975 to respond to requests for epidemiologic assistance by provinces, territories and other federal partners. Since 1999, CFEP also responds to an increasing number of international requests. The program is a national resource for outbreak investigation and Field Epidemiology training that builds public health capacity at all levels.

CFEP conducts an annual competition to select the incoming cohort. Successful candidates are either physicians or epidemiologists, most with a public health background (e.g., nursing, veterinarian, public health inspector). Based on available funding and appropriate placement opportunities, up to ten Field Epis are accepted annually for a two year placement; 16-20 are in the program at any given time.

CFEP calls for placements each year to identify suitable work settings for the incoming cohort. Placements are selected based on several factors, one of which is the opportunity for field investigations. Placement settings include federal departments, provincial Ministries of Health and local health units across Canada.

Each Field Epi is assigned a placement supervisor, an alternate placement supervisor and a CFEP supervisor. The CFEP, incoming Field Epi and the placement supervisor sign a trilateral Memorandum of Assignment which outlines some of the roles of each supervisor and practical expectations, including provision of technical resources (e.g., computers, administrative assistance). Regardless of where they are placed, Field Epis are salaried federal public servants ultimately accountable to the CFEP, PHAC.

During their two years, Field Epis must complete eight Professional Experience Guidelines (PEGs), the first of which is to "*conduct at least one field investigation of a disease outbreak or other potentially serious public health problem that requires a rapid response*" (Appendix I).

Field Investigations:

Field Epis can be assigned to field work within the scope of their placement or outside the scope of their placement.

Within their placement, Field Epis are assigned work directly by their placement supervisors. The CFEP is not responsible for the supervision, cost or the outcome of any placement-related investigation, unless specifically asked to assist by the placement supervisors. This assistance may entail CFEP staff supervision, cost-sharing or other Field Epis support, and is treated as a formal EPI-AID as below. CFEP staff must always be informed when the Field Epidemiologist(s) are in the field on placement assignments.

CFEP staff may deploy Field Epis to work on field investigations at the request of other agencies. This document refers to these field investigation requests which extend beyond the scope of a Field Epidemiologist's placement.

Requests for CFEP assistance

Requests for CFEP assistance must come directly to either the CFEP Director or Associate Director (CFEP staff). Such requests must originate from authorized individuals in a given jurisdiction (provincial/territorial level of authority) (see below). CFEP staff will consider all requests regarding any acute outbreak or disease control issue requiring epidemiologic assistance. When CFEP is contacted directly by a local health unit requesting assistance, a teleconference between the requester, the provincial/territorial authority and CFEP will be arranged to discuss the situation and clarify whether a formal EPI-AID is needed. The official request must come from the province/territory to CFEP.

A. Process for requesting CFEP assistance

In Canada

Provincial/Territorial jurisdiction

Historically, requests for assistance from provinces or territories originated from either the provincial/territorial epidemiologist or the Chief Medical Officer of Health. Some provinces now retain specialists in communicable disease, chronic disease and environmental health. The CFEP requires that appropriate provincial or territorial approval is met prior to responding to any request made for federal assistance. For this reason, a list of staff authorized to request EPI-AIDS for their jurisdiction should be compiled by each province and territory, and forwarded to the CFEP office. This list should be updated at least annually or when staffing changes occur.

- All requests for field epidemiology assistance should originate from provincial/territorial staff authorized to request EPI-AIDS for their jurisdiction.
- When requests are received from other sources, CFEP staff will contact the provincial/territorial designate prior to responding.
- CFEP covers all expenses and salary related to the Field Epi's work during the field investigation

Federal jurisdiction

- Requests for field epidemiology assistance from federal divisions, departments or agencies should be directed to the CFEP staff.

Canadian requests for US CDC assistance

The Canadian CFEP was modeled after the United States' Epidemic Intelligence Service (EIS) (Centers for Disease Control (CDC), training program. EIS Officers and Field Epi's have collaborated successfully on international and domestic investigations in hospitals, cruise ships and community settings.

The CFEP should be the first choice for epidemiologic assistance in Canadian jurisdictions. If for some reason it is determined that American assistance is required (i.e. technical expertise in a specific domain not otherwise available in Canada):

- All requests for EIS Officer(s) by a Canadian jurisdiction must be routed through the appropriate provincial/territorial designate.
- The provincial/territorial designate will contact the CFEP staff.
- CFEP staff will contact the CDC EIS Director, make the request and formalize the invitation to come to Canada.
- When EIS officer(s) participate in Canadian investigations, Canadian Field Epi(s) usually be co-investigator(s).

Outside Canada

Since 1999, the CFEP has provided some second year Field Epi's with an international experience of varying duration. The CFEP prefers to assign only one Field Epidemiologist to an international assignment at any given time to ensure sufficient domestic coverage.

Types of international assistance:

1. GOARN: Canadian Field Epi's have responded to the World Health Organization's Global Outbreak and Alert Response Network (GOARN) requests for assistance. GOARN has been in operation since April 2000. Currently, The Public Health Agency of Canada (PHAC)'s GOARN contacts are the Director Generals of the Centre for Emergency Preparedness and Response (CEPR) and the Centre for Infectious Disease Prevention and Control (CIDPC).
 - GOARN requests assistance from PHAC.

- Requests for assistance are forwarded to CFEP staff through the PHAC contacts.
 - CFEP staff assess the request as below.
 - CFEP may offer Field Epidemiologist(s) to GOARN, through the PHAC contact.
 - CFEP covers salary; additional costs are negotiated with GOARN.
2. STOP: CFEP has participated in the Stop Transmission of Polio (STOP) initiative since 1999. STOP missions are usually of three months duration. The Canadian Public Health Association (CPHA), through the Canadian International Immunization Initiative, collaborates with WHO and CDC in this effort and coordinates all Canadians interested in these assignments. In 2002, measles was added to the eradication effort.
- CFEP staff poll second year Field Epis for interest in STOP missions.
 - CFEP forwards their names to CPHA.
 - CPHA will cover travel, accommodation and other costs; CFEP covers salaries for those accepted.
3. The CFEP is increasing its international profile through participation in the global Network for Training Programs in Applied Epidemiology and Public Health Intervention (TEPHINET). Established in 1999, TEPHINET provides a venue for all field-based training programs to share training materials and expertise. Canadian Field Epis have earned respect from their colleagues around the world for high quality investigations. WHO or TEPHINET can request assistance for various missions, including assessments of surveillance activities, immunization safety practices, teaching short courses in applied epidemiology, etc.
- WHO or TEPHINET requests are directed to CFEP staff.
 - CFEP staff assess the request as below.
 - CFEP forwards names directly to WHO/TEPHINET.
 - CFEP usually covers salary costs; additional costs are negotiated with the international partners.
4. Other federal agencies involved in international assistance (e.g., Canadian International Development Agency) or non-governmental organizations (NGO) may request CFEP assistance.
- These requests are directed to CFEP staff.
 - CFEP staff assess the request as below.
 - CFEP forwards names directly to the agency/NGO.
 - CFEP usually covers salary; additional costs are usually covered by the requesting agency.

B. Assessing requests

CFEP staff triage each request. In assessing any request, the CFEP considers priority areas for PHAC, placement requirements, overall fit to the CFEP professional experience guidelines (i.e. learning opportunities) and individual Field Epi's skills, personal suitability, language skills and areas of interest. Situations requiring an immediate response will take priority.

Requests originating from or directed to a department/agency which are merely understaffed will not merit the same response as opportunities for applied epidemiology activities in the field.

- A field supervisor must be identified to provide supervision and support to the Field Epi in the field. The field supervisor's main roles are to ensure the Field Epi has the resources s/he needs to conduct the investigation, provide guidance/context about the existing infrastructure and general supervision (e.g., authorizes days off). Field supervisors often have the overall lead for the investigation (local Medical Officer of Health), and may or may not provide epidemiological guidance. Field Epi's will also have a CFEP or other PHAC staff supervise their activities from Ottawa.
- CFEP staff will consider the best fit of the Field Epi(s) to the investigation, including the need for Field Epi's to fulfill their PEGs. Requests for specific Field Epi(s) or specific qualifications (e.g., physicians) will be considered; deployment of trainees is the CFEP staff's decision.
- Once the Field Epi(s) has/have been designated, CFEP staff will negotiate their deployment from their regular placement with their placement supervisor(s).

C. EPI-AID approval

If the CFEP staff approve the request for Field Epi(s), a formal EPI-AID is established.

- Terms of Reference including supervision, activities and estimated time in the field are outlined by the Field Epi with input from the CFEP supervisor and the person requesting the EPI-AID (see Appendix II). It is understood that a normal part of any epidemiologic inquiry is the scientific testing of hypotheses which may not be apparent at the outset.
- The EPI-AID will be entered into the CFEP database.
- The EPI-AID will be communicated to the appropriate persons/agencies by the CFEP office. An email with subject line "Field Epi on the Move" will be sent to Field Epi's, CFEP staff, PHAC staff (including as appropriate Director(s) General, Regional representatives, media relations and communications staff), the

placement supervisor, field supervisor, the requester and other participating persons/organizations (CMOH and Provincial Epis). The nature of the EPI-AID and role of the Field Epi(s) in the investigation (Appendix III) will be included in this note.

- The field supervisor is responsible for ensuring local approval for the investigating Field Epi(s) or team (including ensuring access to buildings, medical records, etc. as required).

D. In the field

Field Epis typically spend two to three weeks in the field assisting in the investigation. The amount of time varies according to the extent and scope of the problem and the defined roles. Multiple trips may occasionally be necessary in some complex or protracted investigations.

The Field Epi's role in the field is to support and help coordinate the epidemiological investigation of the outbreak. S/he is not expected to conduct the whole investigation but rather to provide technical expertise and advice as well as to permit more efficient communication with other PHAC experts.

- The Field Epi(s) reports to CFEP staff within 24 hours of arriving in the field. Once established in the field, the Field Epi will communicate with the CFEP office as required, but at least once a week.
- The Field Epi(s) will regularly report to all parties involved in the investigation, including the province/territory. Outbreak teleconferences and reports may help update all partners.
- Field Epi(s) will not be the official media spokespersons. Indeed, Field Epis are discouraged from speaking to the media during an investigation. Field Epis must dedicate themselves to the field work, without the distraction of formulating media messages or preparing for interviews. The media spokesperson is usually designated locally. If requested, PHAC will identify a program-specific person as the official federal spokesperson for any given topic. If the media want to profile the Field Epi's role in the investigation, such requests must be screened by the CFEP office and PHAC Media Relations office.
- Before leaving the field, the Field Epi(s) will prepare a preliminary report describing their activities in the field, using the Terms of Reference as a template. This report must be reviewed and approved by the CFEP supervisor prior to its distribution. In some situations, this may be an oral report.
- Before leaving the field, if further investigation is required or data are pending (e.g., laboratory test results, contact tracing), a local/provincial/territorial staff person will be designated to follow up.

- The CFEP recognizes that local public health authorities are ultimately responsible for epidemiological field investigations conducted within their jurisdiction. For the purposes of the federal Privacy Act, PHAC will not collect personal information during an investigation. Field Epi's may do so on behalf of the local/provincial/territorial authority; data collected during an investigation are the property of the local/provincial/territorial public health authority.

E. Return to placement

- Within two weeks of completing the field investigation, a trip report will be submitted to the CFEP supervisor (see Appendix IV). The approved report will be forwarded to the field supervisor.
- The approved trip report will be forwarded to the requesting agency/person and other partners for comments by those participating in the investigation.
- The final trip report will be forwarded to the requesting agency/person, with a copy to CFEP office for inclusion in the EPI-AID database.
- Additional laboratory results, epidemiological data and analysis may be separate document(s) from the trip report.
- Additional publications (e.g., CCDC, peer-reviewed articles, conference posters and/or presentations) are part of the Field Epi's PEGs. These will be drafted by the Field Epi, circulated and approved separately from the trip report. Authorship will usually be negotiated with the partners as early as possible during the investigation.
- Occasionally, limited media contact may be requested after the Field Epi has left the field. All contact with the media must be approved by the PHAC Media Relations office and CFEP staff.

F. Availability of service

CFEP services are subject to the availability of qualified Field Epi's.

After hours and weekend requests should be directed to the PPHB Duty Officer at 1-800-545-7661.

Appendix I

Professional Experience Guidelines

Potential placements should identify activities to develop the Field Epi's competencies in applied epidemiology. The Professional Experience Guidelines (PEGs) encourage the development of critical competencies in epidemiologic process, communication and professionalism. These guidelines are similar to those used in FETPs around the world. The CFEP requires all Field Epis to complete eight PEGs during their two years:

- Conduct at least one field investigation of a disease outbreak or other potentially serious public health problem that requires a rapid response. This can be infectious or non-infectious in nature, and should involve direct contact with persons affected. The Field Epidemiologist will become proficient in the conduct of outbreak investigations by assuming increasing responsibility for such field studies. Second year Field Epis often have the opportunity to supervise junior trainees in the field.
- Design, conduct, and interpret an epidemiologic analysis of a new or existing database. Make appropriate public health recommendations based on the results of the analysis. The data set should be of sufficient size and complexity to allow assessment of potential confounders or effect modifiers.
- Design, implement, revise or evaluate a public health surveillance system. Each Field Epidemiologist must evaluate the surveillance of a health event pertinent to their placement. The proposed evaluation plan and the results of the evaluation will be presented during the CFEP fall courses. For this learning objective, Field Epis should not design a hypothetical surveillance system. The learning in this exercise comes from being able to assess the public health impact or contribution of an existing surveillance system to the 'real world'.
- Submit a paper for publication to a peer-review journal.
- Publish an article in a non-peer reviewed scientific forum.
- Give an oral presentation at a PHAC-sponsored seminar (e.g., Surveillance Workshop, CFEP Seminar series).
- Present at a national or international scientific conference.
- Respond appropriately to written or oral public health inquiries from the public, government officials, or other health professionals. Participate in the preparation of ministerial briefings and responses to media inquiries.

Appendix II

EPI-AID Terms of Reference

Field Epidemiologist(s)

Date

Date request received by CFEP:

Location:

Outbreak Leader:

Date of arrival in the field:

Anticipated time in the field:

Supervisor (field):

Supervisor: (PHAC):

Supervisor (CFEP)

Background :

Risk factors identified to date:

Anticipated role(s):

- To develop case definition(s)
- To assist *** identify the agent(s) causing the outbreak
- To assist *** in determining the extent of the outbreak
- To develop and apply case finding methodology
- To organize and interpret data collected to date/To provide a descriptive epidemiologic summary of data collected to date
- To determine whether the cases in *** and *** are related/epi-linked
- To assist **** identify the source of the agent
- To determine the optimal control measure(s)
- To provide recommendations for disease control interventions
- To assist in setting up a case-control/cohort/cross-sectional study
- To co-author publications arising from the investigation

Partners:

These objectives will be fulfilled in collaboration with...

e.g., Division of ****, CIDPC, PHAC OR *** Branch, PHAC;
provincial or territorial Ministry of Health; local health unit.

Appendix III Field Epi on the Move

To: listserv
cc: Immunization Division/HC-SC/GC/CA@HWC, Enteric Diseases Division/HC-SC/GC/CA@HWC, ,
media contact/HC-SC/GC/CA@HWC

Subject: Field Epi on the move

Please 'Reply to All' to send your reply to the list

Hi everyone,

At the request of Dr. ****, Deputy Medical Officer of Health for the province, *****,
Field Epidemiologist, will be deployed to the city of ***** on June 26, 2002 to
assist in the investigation of E. coli 0157:H7.

Fifty laboratory-confirmed and 16 suspect cases have been reported in the
province from June 4 to 24, 2002. Of the lab-confirmed cases, twenty are
children attending the same day care, which was closed on June 20, 2002. Four
children have been hospitalized, two with Hemolytic Uremic Syndrome (HUS). No
deaths have been reported. The Field Epidemiologist will assist the outbreak
management team in data collection and analysis to identify the source of the
bacterium.

xxxxxxx
Canadian Field Epidemiology Program
Public Health Agency of Canada

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| CFEPP/The PHAC PCET/Santé Canada |
| Send messages to: FETP@listserv.hc-sc.gc.ca |
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Appendix IV

Trip report

Cover page

Title of the investigation

Name of Field Epi

CFEP PHAC

Trip report

Dates of the investigation

Draft #

Introduction

- How the outbreak was identified and initial response
- How CFEP got involved

Background

- Info about the agent (e.g., transmission, infectiousness)
- Info about the disease (e.g., symptoms, complications)

Methods

- Case definitions
- Case finding/Contact tracing
- Risk factor/exposure questionnaire
- Laboratory testing
- Environmental investigation
- Case control/cohort study
- Data analysis

Results

Same categories

Discussion

- Discussion of results
- Limitations

Conclusions

Recommendations

Acknowledgements

References

Appendices

- Tables/figures/maps/graphs