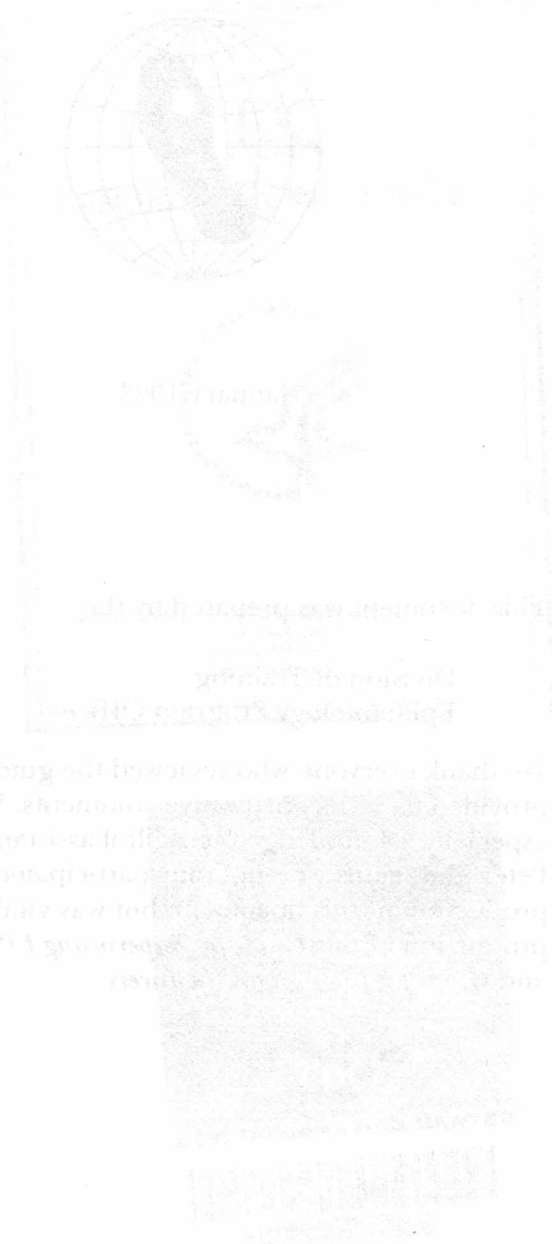
Guidelines for EPI-AID Investigations

January 1993

This document was prepared by the

Division of Training
Epidemiology Program Office

We thank everyone who reviewed the guide and provided us with constructive comments. We especially acknowledge the skillful assistance of Peter M. Jenkins who not only participated in the production of this document, but was vital to the production of our *Guide for Supervising EIS Officers* and *Guide for Incoming EIS Officers.*



FOREWORD

We have come a long way since the first EPI-AID was conducted in 1946. Reflecting the mission of the then Communicable Disease Center, the first EPI-AIDs were epidemiologic investigations of acute infectious disease outbreaks. Today, states and the Centers for Disease Control and Prevention (CDC) address an ever-expanding range of health problems, such as birth defects, cancer and other chronic diseases, maternal and child health, injuries, smoking, and environmental health threats, and today's EPI-AIDs reflect these priorities. Although the majority of EPI-AIDs are still to investigate acute infectious disease outbreaks, an increasing number involve non-infectious diseases and occupational or environmental health concerns.

Participation in an EPI-AID represents an exciting opportunity to obtain first-hand experience in solving many of today's new and complex public health problems. At the same time, it helps to fulfill one of CDC's most important functions—that of assisting states with the attainment of their health priorities. Thus, the EPI-AID is the most visible and dramatic mechanism by which CDC fulfills its mission as the Nation's prevention agency.

This Guidelines document is provided to all CDC personnel involved with EPI-AIDs so that the rationale, mechanics, and processing of EPI-AIDs can be better understood and handled. Our ultimate goal is to facilitate the most important part of the entire process—the actual epidemiologic field investigation.

Willard Cates, Jr., M.D., M.P.H.
Director, Division of Training
Epidemiology Program Office

FOREWORD

Table of Contents

I. Introduction and Purpose 1

II. Overview 3

Definition 3
Use of EPI-AID Funds 4
Approvals and Clearances 4

III. EPI-AID Process 7

IV. Before the EPI-AID Investigation 9

Request for Assistance 9
Approval 9
EPI-AID Number 11
Notifications 11
The EPI-1 Report 12
Travel Arrangements 13
Preparation for the EPI-AID Investigation 14

V. During the EPI-AID Investigation 17

VI. After the EPI-AID Investigation 19

Division of Training Notification 19
Travel Voucher 19
EPI-AID Trip Report 19
OMB Data Collection Reporting Requirements 21
Publications Related to the EPI-AID 21
Information Requests Under Freedom of Information Act (FOIA) 21

Appendices

Appendix 1. Instructions for Preparing and Processing EPI-1 Reports

Appendix 2. Instructions for Preparing and Processing EPI-AID Travel

Appendix 3. Crew Survey Questionnaire

Appendix 4. Passenger Survey Questionnaire

Appendix 5. Example: EPI-AID Trip Report

Appendix 6. Example: Summary Letter as EPI-AID Trip Report

Appendix 7. Emergency Epidemic Investigations Form

I. Introduction and Purpose

The Centers for Disease Control and Prevention (CDC) has gained national and worldwide recognition for its rapid and effective investigations of health emergencies. Speedy assessment of adverse health events and rapid application of prevention and control measures are fundamental to the overall mission of CDC. This is one of the most important ways in which CDC serves to protect the health of the American people.

Because of the difficulty in dealing with the complex and immediate demands created by epidemics and disaster situations, states and foreign nations frequently look to CDC for short-term epidemiologic assistance. CDC has unique epidemiologic expertise in a variety of diseases and conditions, including the investigation of rare conditions and unknown agents. When assistance is requested, CDC makes every effort to respond by dispatching epidemiologic investigators, supported when necessary by specialists in other areas (sanitarians, ventilation engineers, etc.) to participate in epidemiologic field investigations. During these investigations, CDC staff act as consultants to a state (and sometimes local) health department or the health ministry of the host nation, investigating the patterns of disease or injury occurrence, the levels of risk behaviors, the identity of the etiologic agent, the transmission of the condition of concern, and the impact of preventive interventions. The goal is for prevention and control measures to be rapidly instituted.

Within CDC, a formal request for epidemiologic assistance from a state or international health agency is frequently referred to as a request for "**EPI-AID**" assistance. The term, EPI-AID, denotes that a specific administrative mechanism has been invoked to support the field response. Since this mechanism was first used in 1946, over 3,000 EPI-AIDs have been performed.

In 1981, the Epidemiology Program Office (EPO) was established and given primary responsibility for administering and managing EPI-AIDs. In 1991, EPO formed the Division of Training (DT) to better coordinate training in applied epidemiology throughout CDC. Since EPI-AID investigations provide unique training opportunities in the science and practice of epidemiology, especially for Epidemic Intelligence Service (EIS) officers, the responsibility for administering and managing EPI-AIDs now rests with EPO's Division of Training.

The purpose of this document is to acquaint CDC personnel with current policies, guidelines, and procedures related to the EPI-AID process. It reflects changes and revisions since the last issuance of *Guidelines for Reporting Epidemiologic Investigations* (EPI-AIDS) in 1990. Specifically, this document covers the policies and guidelines governing the use of the EPI-AID mechanism and the administrative procedures to follow when responding to requests for epidemiologic assistance, notifying appropriate officials, and conducting and reporting the EPI-AID investigation.

II. Overview

The EPI-AID mechanism is a means by which EIS officers and other CDC staff can provide technical support to requesting organizations for epidemiologic field investigations. This mechanism allows CDC to (1) respond rapidly to public health problems in need of urgent attention, thereby providing an important service to state and other public health agencies; and (2) provide supervised training opportunities for EIS officers (and, sometimes, other CDC staff) to actively participate in epidemiologic investigations.

Definition

The EPI-AID mechanism may be defined operationally as an administrative method that is used to facilitate epidemiologic field investigations by EIS officers, Preventive Medicine Residents (PMRs), and other CDC staff when the conditions detailed below exist:

- Epidemiologic assistance has been requested by appropriate officials of a state, international health agency, or foreign government;
- The request involves a problem of public health importance;
- Timely response is required;
- Epidemiologic methods are primarily required;
- An investigation would contribute to the professional development of an EIS officer/PMR in practical epidemiology;
- Other sources of support are not available; and
- The response is not part of previously planned or ongoing activities being undertaken by the relevant CDC program.

In operational terms, all CDC responses to requests for epidemiologic assistance involving (1) a field investigation of an urgent health problem, and (2) one or more EIS officers should be considered EPI-AIDS. Important exceptions to the above are the National Institute for Occupational Safety and Health (NIOSH) Health Hazard Evaluation (HHE) and the field epidemiologic investigations performed by state-based officers from EPO's Division of Field Epidemiology (DFE). These investigations and the subsequent reporting requirements* serve the same training purposes for EIS officers assigned to NIOSH and DFE as EPI-AIDs for EIS officers assigned elsewhere.

* Guidance on documenting these investigations is contained in the *Hazard Evaluations Procedures Manual* [draft] and the *Division of Field Epidemiology Field Officer Handbook*, respectively.

Use of EPI-AID Funds

The Division of Training, EPO, is responsible for managing funds related to supporting EPI-AID investigations. The funds available each fiscal year for EPI-AIDs are limited within the overall CDC budget. Therefore, EPI-AID resources are not a bottomless pit!

The *general guideline* for the use of EPI-AID funds is as follows:

> EPI-AID funds are used to support travel and per diem of epidemiologic investigators for a period of up to three weeks (four weeks for international investigations). The primary purpose is to support travel costs of EIS officers, PMRs, and medical students participating in CDC's Student Elective Program, not CDC permanent epidemiologic staff.

As noted above, EPI-AID funds are generally intended to support only travel costs associated with an EPI-AID investigation. In exceptional circumstances, these funds can be used for other expenses (e.g., medical supplies and laboratory expenses), but support for costs other than travel must be approved in advance by the Division of Training, EPO. Unauthorized investigation-related expenses will be assumed by the program with lead responsibility for the investigation, and personal expenses will be the responsibility of the individual investigator.

Circumstances under which EPI-AID funds may be used to support additional travellers and expenses other than travel may vary from time to time. Particularly during times of budgetary constraints, travel restrictions, etc., interim guidelines may be issued that limit the number of investigators and the duration of the investigation.

An investigation fitting the EPI-AID definition may be considered an EPI-AID and consequently assigned an EPI-AID number (see Section IV), regardless of whether EPI-AID funds are used. Non-EPI-AID funds include those from a CDC program or an international source. In cases such as these (when an investigation is assigned an EPI-AID number but is not supported by EPI-AID funds), it is expected that all EPI-AID reporting requirements will be fulfilled (see Section VI).

Approvals and Clearances

EPI-AID investigations, like all other epidemiologic field investigations, are subject to certain policies, approvals, and clearances. Most relevant to the conduct of EPI-AID investigations are the following:

Human Subjects Review

Human subjects review by an Institutional Review Board (IRB) may or may not be required, depending on whether the investigation is "research" involving human subjects. It is not always clear when IRB review is required according to various written rules and guidelines. Nonetheless, it is important that the intent and spirit of the

regulations on protection of human subjects be followed. EPI-AID investigations are generally considered to be a response to a public health emergency (rather than research), both to determine the cause and/or extent of a particular, acute, current health problem in a community and also to develop plans for its control. This situation is the public health equivalent of an individual doctor-patient encounter in which the community as "patient" presents with a health problem, and CDC and other health agencies as "physician" are expected to diagnose, via the investigation, and control ("treat") without delay.

Nevertheless, situations arise in which the analogy described above is less clear. When any doubt exists about the need for IRB review, the Human Subjects Review (HSR) contact within the EIS officer's Center/Institute/Office (CIO) should be consulted. In those instances where IRB review is determined to be necessary and yet time is critical (e.g., specimens must be collected within a few days or they would be of little use), the HSR contact person can provide guidance and take steps to expedite the review process. The guide "Protection of the Individual as a Research Subject" (CDC Manual Guide No. 11) is also available and includes helpful information on the basic elements of informed consent.

Office of Management and Budget (OMB) Clearance for Data Collection

A common misconception exists that data collection initiated as a result of an EPI-AID does not require clearance by OMB. On the contrary, like other investigations performed by the Federal government, data collection in an EPI-AID requires official clearance by OMB. However, because of the urgent nature of EPI-AID investigations and to expedite the EPI-AID process, CDC has obtained this clearance **in advance** provided that the data collection does not exceed 30 days. Under this approval, CDC is required to document its data collection activities for each EPI-AID **after** the field investigation has occurred. These reporting requirements are discussed in Section VI of this document.

III. EPI-AID Process

The remainder of this document will cover in greater detail the EPI-AID process, from initiation to completion of an EPI-AID. It will describe WHAT steps need to be followed, WHEN they are to occur, and WHO is responsible, as depicted below:

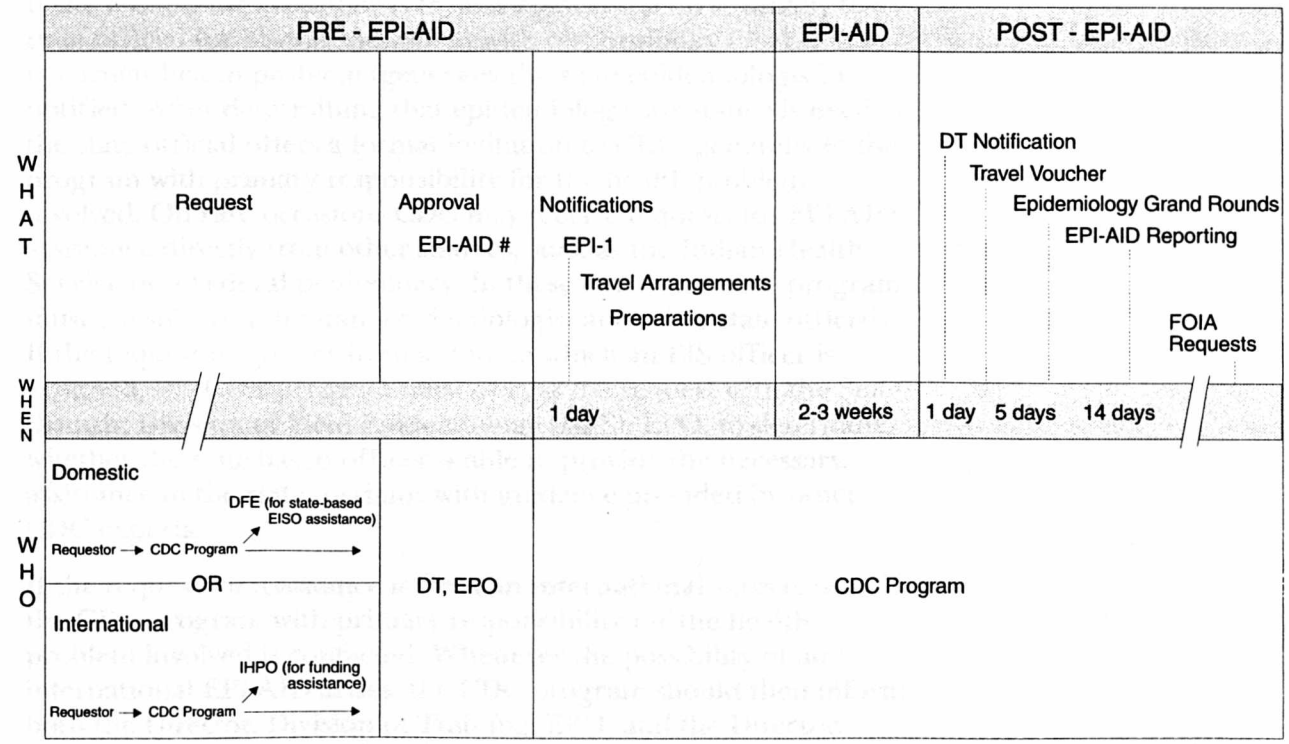


Figure 1. Schematic of the EPI-AID Process

III. ERI-AID Process

IV. Before the EPI-AID Investigation

This section covers the specific procedures to follow for initiating an EPI-AID, obtaining necessary approvals, and preparing for the field investigation.

Request for Assistance

A request for epidemiologic assistance may be initiated by a private or public institution or a private individual. The next steps depend on whether the health problem originates from a domestic or international source.

If the request for assistance is from a **domestic** source, usually the state official (or his/her designee) with responsibility for the particular health problem (generally the state epidemiologist) is notified. After determining that epidemiologic assistance is needed, the state official offers a formal invitation to CDC, generally to the program with primary responsibility for the health problem involved. On rare occasions CDC may receive requests for EPI-AID assistance directly from other sources, such as the Indian Health Service or a Federal penitentiary. In these cases, the CDC program must consult with the state epidemiologist and other state officials. If the request originates from a state to which an EIS officer is assigned, the CDC program must discuss the request with the State Branch, Division of Field Epidemiology (DFE), EPO, to determine whether the state-based officer is able to provide the necessary assistance to the state, perhaps with guidance provided by other CDC experts.

If the request for assistance is from an **international** source, usually the CDC program with primary responsibility for the health problem involved is contacted. Whenever the possibility of an international EPI-AID arises, the CDC program should then inform both the Director, Division of Training, EPO, and the Director, Division of International Liaison, IHPO, as soon as possible. IHPO will provide initial assistance to programs in exploring which of several possible sources of financial support may be available. Sources of funding that should be considered include the government of the host country, WHO or PAHO, USAID, other non-CDC federal funding sources, and other CDC sources of funds. If alternate funds are unavailable, the CDC program may then request assistance through the EPI-AID mechanism.

Approval

Once a request is received and the CDC program (and IHPO in international cases) determine that CDC assistance is needed, the EPI-AID Coordinator should be contacted at 404/639-3182, through whom approval will be obtained. During nonbusiness hours, Division of Training staff should be contacted at home in the

following order: (1) Director, (2) EIS Program Chief, (3) Deputy Director. If none of these individuals is available, the Office of the Director, EPO, staff should be contacted at home in the following order: (1) Assistant Director for Science, (2) Assistant Director, (3) Deputy Director, (4) Director, (5) Assistant Director for Program Operations. Without prior approval from one of these individuals, EPI-AID funds will not be available to support the investigation and any expenses incurred prior to approval will be the responsibility of the program.

Considerations for approval include determining whether an EPI-AID is the appropriate mechanism to provide assistance, the level of support that EPI-AID funds can provide, the individuals involved, supervision, duration of the investigation, etc. In general, the following guidelines apply:

- State-based EIS officers are CDC's first line of epidemiologic assistance in a given state. They and their Atlanta-based DFE supervisors should be notified of impending investigations in their states. The decision about whether the state-based officer will assume primary responsibility or will assist in the investigation should evolve after discussions among the officer, the local supervisor, the Atlanta-based DFE supervisor, and the program that is preparing to respond to the EPI-AID. This improves collegiality, facilitates conduct of the investigation, and allows for local follow-up of the investigation.
- The number of persons supported by an EPI-AID should be appropriate to the size and nature of the investigation. Except under unusual circumstances, no more than one EIS officer can be supported under this mechanism. However, when resources permit, an EIS officer going out on an EPI-AID for the first time can be accompanied by a second-year EIS officer. If the investigation is in a state that has a second-year EIS officer assigned to it, the state-based officer can provide the mentoring function.
- One medical student participating in the Student Elective Program may be approved to join in an EPI-AID investigation if it will provide a good training experience and the student has not participated in a prior EPI-AID.
- Except in extremely unusual circumstances, EPI-AID funds are not available to support CDC (non-EIS, non-PMR) staff who accompany EIS officers on EPI-AIDs.
- The CDC program with expertise in the subject area has responsibility for supervising investigators involved in an EPI-AID. However, if a state-based officer is involved, the CDC program and DFE should discuss and mutually agree on supervisory responsibility.

- The anticipated duration of support should be verbally agreed upon by the Division of Training, EPO, and the relevant CDC program when the EPI-AID investigation is initiated. In general, EPI-AID investigations are of no more than three weeks' duration (four weeks for international investigations).
- If needed, extensions of time spent in the field should be negotiated and approved **in advance**. Keeping in mind that OMB approval for data collection under the EPI-AID mechanism is limited to 30 days, the justification for an extension should be scientifically reasonable and related to immediate problems of public health importance, not long-term program research interests.
- In general, a single trip should be sufficient to complete an EPI-AID. Under extremely unusual circumstances, one follow-up trip can be supported by this mechanism, if the program and the Division of Training, EPO, consider it necessary for the completion of the response to the public health emergency.

International EPI-AIDs have additional requirements for approval. Once approved by the Division of Training, EPO, the CDC program with lead responsibility for the EPI-AID should inform IHPO of who will be investigating the health problem, when the investigator plans to depart, etc. IHPO will then be responsible for notifying and obtaining necessary approvals from appropriate Health and Human Services (HHS), State Department, Agency for International Development, and other international agency officials. For example, State Department clearance is needed whenever government employees travel outside the United States.

EPI-AID Number

When an epidemiologic assistance request is approved as an EPI-AID, the CDC program should request a number from the EPI-AID Coordinator (404/639-3182). A sequential number is assigned to each EPI-AID for purposes of reporting, accountability, and tracking. When requesting an EPI-AID number, please be prepared to provide the EPI-AID Coordinator with the nature and location of the health problem, the principal investigator's name, the officer's supervisor's name, date of departure, and expected date of return. If the proposed investigation is canceled or postponed, please call the EPI-AID Coordinator so that the assigned number can be released.

Notifications

After the Division of Training, EPO, has approved an EPI-AID, certain organizational units should be informed as soon as possible of the investigation.

Regional Office

The CDC program taking the lead on the EPI-AID is also responsible for notifying the appropriate regional office (Director, Division of Preventive Health Services). Since this office is responsible for coordinating CDC programs and other related

programs in the region, they must be aware of any CDC involvement with potential public health emergencies within their jurisdiction.

State Health Department

State governments are responsible for public health in their own jurisdictions. At CDC's request, many states have delegated to the state epidemiologist and other state officials the authority to invite CDC staff to their state. Most requests for epidemiologic assistance are received by CDC from state health officials. In the rare instances when a state official did not request epidemiologic assistance but an EPI-AID was approved (e.g., a cruise ship investigation when state jurisdiction is less clear), the responsible CDC program should notify the appropriate state epidemiologist and other state officials.

The EPI-1 Report

The purpose of the EPI-1 report is to officially inform appropriate individuals (CDC Director, CDC professional staff, and state epidemiologists) of the suspected health problem. The program directing the EPI-AID investigation is responsible for writing the EPI-1 report (usually written by the investigating officer or supervisor), which should be completed and approved before the EPI-AID mission begins. At the time the EPI-1 is prepared, responsibility for writing the summary report of the investigation, called the EPI-AID Trip Report, should be assigned.

Detailed instructions for preparing the EPI-1 and an example of a completed report are contained in Appendix 1.

Format and Content

The EPI-1 report should be short (usually two to three pages), clear, factual, and logically organized. It should also follow a prescribed format. To facilitate completion, a WordPerfect merge document for the EPI-1 has been developed and may be obtained from the EPI-AID Coordinator.

The **nature of the problem** should be brief (one to three sentences). Both the seriousness and urgency of the problem should be evident from the language chosen. Mention of the history leading up to the request or of the request itself is discouraged.

The **sources of invitations** should always include the state official as one of the inviting officials regardless of the initial source of the request.

The **nature and timing of the response** should basically list who went out (and when) to assist in the investigation. To reflect the state's and/or country's lead public health responsibility, an EIS officer is never sent out to "conduct" or "perform" the investigation. Rather, he/she is sent to "assist" or "join in" the investigation.

The **objectives of the EPI-AID mission** should be presented in general terms, such as "to assess the extent of Disease X in the population, identify factors influencing risk, and develop recommendations for controlling the problem." A description of methods or methodology is not necessary and is generally undesirable. (In the real world, study plans often change depending on what is found in the field).

For EPI-AIDs with **co-investigating officers**, the names, titles, and organizational affiliations of all participating EIS officers should be included. Occasionally, EPI-AID requests involve participation of more than one officer and more than one CDC program.

Distribution should list, at a minimum, mailing keys WF-1 (first- and second-year EIS officers); WF-2 (EPO professional staff); WF-3 (CDC professional staff); and ZW (all state epidemiologists). The names, titles, and mailing addresses of all other individuals who are to receive copies of the EPI-1 should appear below the list of mailing keys.

Approval

Draft EPI-1 reports are reviewed and approved by the Division of Training, EPO. The responsible CDC program should send the draft EPI-1 report via E-Mail or FAX to the EPI-AID Coordinator. Because of the need to convey the information to public health officials, the draft EPI-1 report must be submitted to EPO **within 24 hours** of when the EPI-AID number is assigned. The EPI-AID Coordinator will notify the originating office of any needed changes.

After the EPI-1 is approved, the originating office is responsible for (1) preparing the EPI-1 in final form; (2) completing a Request for Printing Services form (CDC 0.103A); and (3) submitting this printing request as soon as possible to the Publications Management Section, Management Services Branch, Management Analysis and Services Office (MASO), Building 1, Room B122 (see Appendix 1). If additional individuals are listed under "Distribution" in the EPI-1, the number of additional copies to be returned to the program for mailing to these individuals should be noted in Item 27 of this form.

Distribution

MASO will print and mail the EPI-1 to the individuals included in mailing keys WF-1,-2,-3, and ZW. The CDC program is responsibile for mailing copies to all persons not included on CDC mailing keys.

Travel Arrangements

When EPI-AID funds are used to support the investigation, certain procedures should be followed to process the travel order. More detailed instructions are provided in Appendix 2.

When the EPI-AID request is approved **during working hours**:

- The EPI-AID Coordinator should be contacted at 404/639-3182 to obtain a travel order number and the appropriate CIO EPI-AID account number.
- The responsible CDC program should prepare the travel order. Unlike other travel prepared by CIOs, however, supporting documents for EPI-AID travel must be prepared manually. NOTE: Modifications to the CDC computerized travel system are now being pilot-tested so that travel performed by one CIO can be authorized and paid by another CIO. Therefore, in the very near future, CIOs will be able to complete EPI-AID travel on-line.
- For purposes of tracking and accountability, the travel order should be sent by FAX to the EPI-AID Coordinator (FAX Number 404/639-2222) as soon as it is typed (and before it has been approved).
- The travel order should be reviewed through usual administrative channels of the CIO prior to obtaining the signature of the authorizing official in the CIO.
- Once approved, **two** copies of the signed travel order should be sent through interoffice mail to the EPI-AID Coordinator (Mailstop CO8).

When the EPI-AID is approved **during nonbusiness hours** and travel must be initiated immediately, the following steps should be taken:

- The airline or other ticket should be purchased with a Diners Club credit card, cash, or Government Transportation Request (GTR). Every effort should be made to obtain the lowest fare possible. Using the Diners Club card will assure the government rate for airfare.
- The government rate for expenses should be requested at all times. To obtain these rates, a Public Health Service identification card must be shown and should be carried at all times.
- The EPI-AID Coordinator and the appropriate CIO Administrative Office should be notified the first workday following departure so that a confirmation travel order can be issued.
- Before departure, if an advance of funds is desired, travellers are encouraged to use their Diners Club card at the nearest automatic teller machine (ATM).

Preparation for the EPI-AID Investigation

Many officers have found it useful to review past EPI-AID reports, *MMWR* ariticles, etc., to help prepare for the EPI-AID. The EPI-AID Coordinator maintains files on all past EPI-AID reports and can assist you in locating relevant documents. In addition, the program itself is usually the best source of background information.

Since EPI-AID funds do not generally support materials and supplies needed for the investigation, careful consideration should be given to such items when packing to avoid purchasing them in the field. Moreover, particularly with international EPI-AIDs, appropriate supplies and equipment may not be available in some countries. Laboratory personnel are excellent resources to help you determine relevant supply and equipment needs.

The need for Human Subjects Review should also be evaluated, as described in Section II. The issue to consider is whether a diagnostic procedure is planned that may be regarded as invasive. IRB approval is not necessarily needed for tests that patients get as part of their usual care, such as those involving collecting blood or other relatively available body fluid.

At the time of preparing for the EPI-AID investigation, data-collection instruments are usually being considered. Whenever questionnaires or other data-collection instruments are used in an EPI-AID, the following statement must be placed on the bottom of the first page of the data collection instrument:

> Public reporting burden of this collection of information is estimated to average X (please complete) minutes per response, including the time for reviewing instructions, search existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer, ATTN: PRA; Hubert H. Humphrey Building, Room 721-B; 200 Independence Ave., SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0008); Washington, DC 20503.

For an EPI-AID investigation aboard a cruise ship, the Crew Survey Questionnaire (Appendix 3) and Passenger Survey Questionnaire (Appendix 4) are highly recommended for use in the EPI-AID. Additional information on how to proceed in a cruise ship investigation may be obtained from the Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, since this Division supervises most cruise ship investigations. Additional information may be obtained from the Special Programs Group, National Center for Environmental Health; this office is responsible for the Vessel Sanitation Program and should be notified about all such investigations. Staff from this program frequently join investigators on outbreak investigations aboard cruise ships.

V. During the EPI-AID Investigation

Upon arrival at the investigation site, the investigating officer should contact state and/or local officials who requested CDC assistance. It is important both to establish rapport with state and local health officials and others involved in the outbreak, as well as to develop lines of communication and expectations concerning the extent and frequency of interaction among the various parties involved. At the conclusion of the investigation, the investigating officer should conduct an exit briefing with the appropriate state/local/ministry officials. This briefing should both summarize the findings of the investigation and detail the recommendations for further action.

CDC supervision is established before the EPI-AID investigation begins. Except when logistically impossible, the investigating officer should call the supervisor daily to discuss investigation progress and plans. In the course of the investigation, the supervisor and officer may determine that additional time in the field is needed to complete the investigation, or that additional costs, such as laboratory expenses, are necessary. Any changes from the agreements made at the time of original approval must be discussed with and approved by the Division of Training, EPO, **in advance**.

If the points of travel change or an extension of more than two days is approved, the travel order will need to be amended (see Appendix 2). EPI-AID travel orders contain a standard statement "Traveler is authorized variation of itinerary of not more than two days at temporary duty point in order to perform official business (REF JFTR U2135A)." This statement is included for administrative purposes only to avoid preparing a travel amendment when extended travel is approved. This statement **does not** replace the requirement to obtain prior approval for extensions of any duration, including one- or two-day extensions.

Occasionally, the investigating officer may remain in the field to conduct other program business or for personal preference. EPI-AID funds will be used only for expenses incurred while conducting investigations approved by the Division of Training, EPO.

V. During the EPI-AID Investigation

Upon arrival at the investigation site, the investigating officer should contact state and/or local officials who requested CDC assistance. It is important both to establish rapport with state and local health officials and others involved in the outbreak, as well as to develop lines of communication and expectations concerning the extent and frequency of interaction among the various parties involved. At the conclusion of the investigation, the investigating officer should conduct an exit briefing with the appropriate state/local/military officials. This briefing should both summarize the findings of the investigation and detail the recommendations for further action.

CDC supervision is established before the EPI-AID investigation begins. Except when logistically impossible, the investigating officer should call the supervisor daily to discuss investigation progress and plans. In the course of the investigation, the supervisor and officer may determine that additional time in the field is needed to complete the investigation, or that additional costs, such as laboratory expenses, are necessary. Any changes from the agreements made at the time of original approval must be discussed with and approved by the Division of Training, CDC, in advance.

If the points of travel change or an extension of more than two days is approved, the travel order will need to be amended (see Appendix 2). EPI-AID travel orders contain a standard statement "Traveler is authorized reduction of itinerary of not more than two days at temporary duty point in order to perform official business (REF JFTR U2135A)." This statement is included for administrative purposes only to avoid preparing a travel amendment when extended travel is approved. This statement does not replace the requirement to obtain prior approval for extensions of any duration, including one- or two-day extensions.

Occasionally, the investigating officer may remain in the field to conduct other program business or for personal pedestrian. EPI-AID funds will be used only for expenses incurred while conducting investigations approved by the Division of Training, EPO.

VI. After the EPI-AID Investigation

Following completion of the investigation, several administrative procedures and reporting requirements must be completed.

Division of Training Notification

At the conclusion of the EPI-AID investigation, the officer should contact the EPI-AID Coordinator immediately upon return. At this time, the officer will be scheduled to provide a two-minute oral update of the investigation at Epidemiology Grand Rounds. At a future date, the officer may be requested to present a more comprehensive report of the methods and results of the investigation as the main presentation at Epidemiology Grand Rounds.

Travel Voucher

Within five working days of return, the travel voucher should be prepared. The original and two copies of both the voucher and receipts should be forwarded to the EPI-AID Coordinator. After review, the EPI-AID Coordinator will forward the voucher to the Assistant Director for Operations, Division of Training, EPO, for approval. The Division of Training, EPO, will then be responsible for forwarding all approved vouchers to the Financial Management Office for payment. More detailed instructions are provided in Appendix 2.

EPI-AID Trip Report

It is important that the inviting local official receive a timely report of the field investigation and that the Division of Training, EPO, receive adequate documentation of EPI-AID field activities. Therefore, within 14 days of the officer's return, the EPI-AID Trip Report should be completed and forwarded to the Division of Training, EPO. This report documents the early findings of the investigation and should describe (1) what was known about the problem at the beginning of the investigation; (2) what was done in the field, including recommendations; and (3) what is pending or planned for the future. It should emphasize the proceedings of the field investigation, should contain the results and recommendations presented in the exit briefing, and is **not** intended to be the final report of the study. A summary letter to the local health official may be substituted for the EPI-AID Trip Report if it contains the items required in the EPI-AID Trip Report. Examples are provided in Appendix 5 and Appendix 6.

Format

While the EPI-AID Trip Report has no required format, a suggested outline is as follows:

- Abstract or summary
- Background of the field investigation

- Methods used in the field
- Results obtained in the field
- Brief discussion of findings obtained in the field (interpretation of results obtained in the field within the context of information available at that time)
- Recommendations made and actions taken in the field
- Future plans (additional analyses, lab studies pending or planned, multivariable modeling, etc.)

Content Considerations

Although the EPI-AID Trip Report is considered an internal document with limited distribution, it may be subject to disclosure under either the Freedom of Information Act (FOIA) or the Privacy Act. Therefore, it is important to keep the following considerations in mind when writing the EPI-AID Trip Report:

- Use of Personal Identifiers – Based on advice from the CDC Office of General Counsel, personal identifiers of persons who are the subject of reports, such as an EPI-AID Trip Report, should not be brought back to Atlanta from the field unless this is necessary for public health purposes. Although data collected in the course of an EPI-AID are considered confidential and normally have limited distribution, they may not be exempt from disclosure under either the FOIA or the Privacy Act. Inadvertent releases of these reports are possible and could constitute an invasion of the subject's privacy. In no case should a subject's name (or means of identifying him/her) be included in a report of an EPI-AID investigation.
- Preliminary Information – If a program wishes to emphasize the preliminary nature of the data and interpretations made, a paragraph may be placed on an EPI-AID Trip Report. An example of possible wording is as follows:

  > This Trip Report summarizes the field component of our EPI-AID investigation. Because of the preliminary nature of this investigation, it is possible that future correspondence, *MMWR* articles, or other published reports may present results, interpretations, and recommendations that are somewhat different from those contained in this document.

Clearance and Distribution

The EPI-AID Trip Report **does not** need formal Division or Center clearance. Rather, it is a memo addressed to the Director, Division of Training, EPO. The trip report should be signed by the EIS officer and routed through the immediate supervisor on the EPI-AID investigation. The EIS officer's primary supervisor (who may or may not be the immediate supervisor on the EPI-AID) should provide guidance in preparing the Trip Report. All CIO reviewing officials should give a high priority to timely review of these reports.

When a summary letter to the local health official is substituted for the EPI-AID Trip Report, a cover memo should be addressed to the Director, Division of Training, EPO, noting that the attached letter is being submitted as the EPI-AID Trip Report (Appendix 6).

The EIS officer should make certain that the state epidemiologist and any other health official who issued the EPI-AID invitation receives a copy of the EPI-AID Trip Report (or summary letter). Distribution of other copies will be the responsibility of the individual program. We urge that the groups included on the EPI-1 receive either this report or a subsequent report of your activities. However, EPO will not distribute any copies of the trip report.

OMB Data Collection Reporting Requirements

As referenced in Section II, whenever data collection occurs in an EPI-AID (which is most of the time), CDC is required to document the data collection activities for each EPI-AID. Therefore, investigators are required to: (1) complete the "Emergency Epidemic Investigations" form (Appendix 7); (2) attach a copy of the survey questionnaire used in the EPI-AID; and (3) submit these two documents to the Division of Training, EPO, as attachments to the EPI-AID Trip Report.

Publications Related to the EPI-AID

Frequently the results obtained from an EPI-AID investigation are later documented in a final report, an *MMWR* article, or journal article. The Division of Training is interested in the final disposition of all investigations related to EPI-AIDs. Therefore, the EIS officer or CDC program should send a copy of all publications related to the EPI-AID investigation to the Division of Training, EPO.

Information Requests Under Freedom of Information Act (FOIA)

Trip Reports and other written reports on the EPI-AID investigation can be released to persons outside CDC when requested under the FOIA. A requestor must make the request in writing to the CDC FOIA Officer for processing. The program conducting the investigation, and not EPO, is responsible for responding to requests for EPI-AID reports. All requests for such documents made to EPO will be referred to the responsible program. This will permit the programs, in consultation with the Office of the General Counsel, to determine what information should be released.

Content
Considerations

OMB Data Collection Reporting Requirements

Publications Related to the EPI-AID

Information Requests Under Freedom of Information Act (FOIA)

Clearance and Distribution

Appendix 1

Instructions for Preparing and Processing EPI-1 Reports

The preparation of an EPI-1 report begins immediately following approval of an EPI-AID and should be completed expeditiously, ideally within two days of when the EPI-AID number is issued. An example of a completed EPI-1 is presented on pages 24-25.

These instructions cover the entire process from preparation to distribution, as follows:

Preparing the Draft EPI-1 Report

Step-by-step instructions for preparing an EPI-1 are provided on pages 26-29. The format for an EPI-1 report is available in a WordPerfect merge document and may be obtained through E-mail from the EPI-AID Coordinator (404/639-3182).

Obtaining EPO Approval

Because of the need to convey the information quickly to public health officials, the draft EPI-1 report must be completed and submitted to EPO for approval within 24 hours of when the EPI-AID number is assigned. The draft EPI-1 should be sent the the EPI-AID Coordinator via E-Mail or FAX (404/639-2222).

Preparing the Final EPI-1 Report

Following approval by Division of Training, EPO, the EPI-AID Coordinator will return the draft EPI-1 to the initiator (via E-Mail or FAX) for corrections, final formatting, and signatures from the appropriate division director(s). In the past, EIS insignia paper was used for the final camera-ready copy. Please note that EIS insignia paper is no longer required.

Preparing and Submitting the Print Request

The Management Analysis and Services Office (MASO) will print the required number of copies of the EPI-1 report. A Request for Printing Services (CDC Form 0.103A) form should be completed; detailed instructions for completing this form are provided on pages 30-31.

The camera-ready copy of the EPI-1 report should be attached to the Request for Printing Services (CDC 0.103A) and delivered to the Publications Management Section, Management Services Branch, MASO, Building 1, Room B122. Same-day processing is possible if your copy and requisition reach them by 3 p.m.

Distribution of the EPI-1 Report

MASO will distribute copies to all individuals included in the Mailing Keys. However, the initiating office is responsible for distributing copies of the EPI-1 report to any additional individuals listed in the Distribution portion of the report.

Appendix 1 (cont'd.)

Example: EPI-1

DEPARTMENT OF HEALTH & HUMAN SERVICES — Public Health Service

Centers for Disease Control and Prevention (CDC)
Atlanta GA 30333

EPI-AID: EPI-93-08-1

DATE: October 19, 1992

TO: Director, Centers for Disease Control and Prevention (CDC)

FROM: Director, Parasitic Diseases Division (DPD)
National Center for Infectious Diseases (NCID)

SUBJECT: Pinworm Outbreak in Day-Care Center

LOCATION: Georgia

Nature of Problem:
On October 15, CDC was notified that staff at a metropolitan day-care center had observed pinworms on nine infants and eleven toddlers in the previous 2 days.

Date Problem First Identified by Requesting Agency:
October 15, 1992

Date of Initial CDC Contact:
October 15, 1992

Initial CDC Contact:
Robert S. Pond, M.D., Epidemiology Activity (EA), DPD, NCID

Caller/Correspondent:
Director of a day-care center in Georgia

Source of Invitation:
Joseph A. Wilber, M.D., State Epidemiologist, Georgia Department of Human Resources (DHR)

CDC Staff Contacted

CIO/Division/Branch/Section	Name/Title
NCID, DPD	Robert L. Kaiser, M.D., Director
NCID, DPD, PDB	Victor C. W. Tsang, Ph.D., Acting Chief
NCID, DPD, PDB, EA	Dennis D. Juranek, D.V.M., M.Sc., Chief
	Robert S. Pond, M.D., EIS Officer
EPO, DT	Willard Cates, Jr., M.D., M.P.H., Director
EPO, DT, EISP	Jean M. Heslin, Program Analyst
EPO, DFE, SB	John M. Horan, M.D., M.P.H., Chief

Appendix 1 (cont'd.)

Example: EPI-1

Page 2 - Director, CDC

Other Persons Contacted

State/Local Health Officials:
J. David Smith, B.S., Assistant State Epidemiologist, DHR
James C. Crutcher, M.D., District Health Officer, District 3/Unit 4, DHR
Patti Lowe, R.N., M.P.H., District Chief of Nursing, District 3/Unit 4, DHR

Regional Office:
Max Pesses, Director, Division of Preventive Health Services, HHS Region IV, was notified on October 19, 1992.

Other (Non-CDC) Federal Officials:
None

Others:
None

Nature and Timing of Response:
Beginning on October 20, Dr. Pond will assist state and local health officials with an epidemiologic investigation of the outbreak.

Anticipated Duration of Field Investigation:
10 days

Branch/Division/CIO Providing Primary Oversight of Investigation:
PDB, DPD, NCID

Branch/Division/CIO Oversight:
None

CDC Supervisor Responsible for Technical Supervision of Investigator and EPI-AID Trip Report:
Dennis D. Juranek, D.V.M., M.Sc.

Objectives of the EPI-AID Mission:
To assist the state in investigating the outbreak and evaluating the effectiveness of control measures.

Robert L. Kaiser

Robert L. Kaiser, M.D.
Director, DPD, NCID

Distribution:
Mailing Keys WF-1, -2, -3; ZW
James C. Crutcher, M.D., District Health Director, District 3/Unit 4, and
Patti Lowe, R.N., M.P.H., District Chief of Nursing, District 3/Unit 4,
Georgia Department of Human Resources, 101 South Perry Street, Lawrenceville, GA 30315
J. David Smith, B.S., Assistant State Epidemiologist, Epidemiology Section, Department of Human Resources, 878 Peachtree Street, N.E., Suite 210, Atlanta, GA 30303-9844

Appendix 1 (cont'd.)

Preparing the EPI-1 Report

DEPARTMENT OF HEALTH & HUMAN SERVICES — Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

EPI-AID : **(1)**

DATE : **(2)**

TO : **(3)** Director, Centers for Disease Control and Prevention

SUBJECT : **(4)**

LOCATION : **(5)**

Nature of Problem: **(6)**

Date Problem First Identified by the Requesting Agency: **(7)**

Date of Initial CDC Contact: **(8)**

Caller/Correspondent: **(9)**

Source of Invitation: **(10)**

CDC Staff Contacted (11)

CIO/Division/Branch/Section	Name/Title
(12)	**(13)**

Appendix 1 (cont'd.)

1. Type the EPI-AID number provided by the EPI-AID Coordinator, Division of Training, EPO.
2. Type the date the EPI-AID number was issued.
3. Type "Director, Centers for Disease Control and Prevention." Note: The EPI-1 report is always addressed to the Director, CDC.
4. The subject is a brief title of the health problem.
5. Type the state or city and state where the urgent health problem exists.
6. Provide a short statement of the problem (1-3 sentences). Both the seriousness and urgency of the problem should be evident from the language chosen. Mention of the history leading up to the request or of the request itself is discouraged.
7. Type the date the requesting agency first identified the problem.
8. Type the date the requesting agency contacted CDC.
9. Type the name of the person contacting CDC.
10. Type the name(s) and title(s) of the person(s) requesting epidemiologic assistance. This is usually a state health official. However, some EPI-AID requests may come from other sources (e.g., Indian Health Service, Federal penitentiary, hospital, cruise ship). In such situations, the CIO responding to the request is responsible for informing the state epidemiologist and seeking concurrence. Regardless of the initial source of the request, in all cases the state epidemiologist must be one of the inviting officials.
11. This section documents all CDC staff contacted about the investigation. Occasionally, EPI-AID requests involve participation of more than one EIS officer (EISO) and more than one CIO. When preparing the EPI-1 report, include names, titles, and organizational affiliations of all participating EISOs.
12. Type in acronym form, e.g., NCID/DBMD/EDB/EDES.
13. Type full name, degrees, and title of all persons contacted.

Appendix 1 (cont'd.)

Preparing the EPI-1 Report

Page 2 - Director, Centers for Disease Control and Prevention

Other Persons Contacted (14)

State/Local Health Officials: **(15)**

Other (Non-CDC) Federal Officials: **(16)**

Others: **(17)**

Regional Office: **(18)**

Nature and timing of Response: **(19)**

Anticipated Duration of Field Investigation: **(20)**

Branch/Division/CIO Providing Primary Oversight of the Investigation: **(21)**

CIO Sharing Oversight: **(22)**

CDC Supervisor Responsible for Technical Supervision of Investigator and EPI-AID Trip Report: **(23)**

Objectives of the EPI-AID Mission: **(24)**

(25)
Signature
Name and Degree(s)
Title
Division, CIO

DISTRIBUTION: **(26)**

Appendix 1 (cont'd.)

14. This section documents all non-CDC persons contacted concerning the EPI-AID investigation.

15. Type names, titles, and locations of all individuals contacted in the state and local health departments.

16. Type names, titles, and locations of all individuals contacted in the (non-CDC) Federal government. If none, type "none."

17. Type names, titles, and locations of all individuals contacted. If none, type "none."

18. Type the name, title, and location of the person contacted in the Division of Preventive Health Services in the appropriate regional office responsible for the area(s) of the country in which the outbreak occurs. In most cases, the Director, Division of Preventive Health Services (or designee) is listed.

19. Provide a brief statement including the name of the EISO assisting in the investigation and when the officer will depart. *Remember: EISOs are "assisting" in, not "conducting," the investigation.*

20. Type in the length of time verbally agreed upon by EPO and the CDC program when the EPI-AID investigation is initiated (usually not to exceed three weeks).

21. Type in acronym form the Branch/Division/CIO accepting primary responsibility for assisting in this investigation, e.g., EDB/DBMD/NCID.

22. Type the acronym of the CIO(s) sharing oversight. If none, type "none."

23. Type the name, title, and location of the person who will supervise the EISO(s) involved in the EPI-AID and provide guidance for writing the EPI-AID Trip Report.

24. Provide a brief statement describing the objectives, e.g., "To identify the cause and risk factors . . ." or "To assess the extent of Disease X in the population . . .".

25. The only signature required is that of the division director of the program responsible for the EPI-AID investigation. The signature block should be typed as it appears in official correspondence. If more than one division is involved, all other division directors' signatures should be included.

26. Type the following mailing keys: **WF-1,-2,-3, ZW**. These mailing keys include all first- and second-year EIS officers, EPO and CDC professional staff, and all state epidemiologists. Below the mailing keys, list the names, titles, and complete mailing addresses of all other persons who are to receive copies of the EPI-AID documents (i.e., those with whom the investigation has been discussed who are not included in the mailing keys).

Appendix 1 (cont'd.)

Preparing the Print Request

Submit to: Management Analysis and Services Office (MASO)
Publications Management Section, Bldg. 1, Rm. B122, [mail stop A18]
This form is to be used for:
Publications and Forms Printing, Graphics, Mailing and Distribution.

REQUEST FOR PRINTING SERVICES

(SEE INSTRUCTIONS ON BACK OF COPY 9)

FY (7) | Program Code (8-9) | JOB NUMBER (1-2) (3-6): B 9301
Log No. (Graphics)

1. REQUISITION DATE: 10/19/92
2. REQUESTED DELIVERY DATE:* 10/19/92 MUST
3. ORIGINATING OFFICE & DIVISION: C/I/O NCID; Div PDP, PDB (F22)
4. INFORMATION CALL: Ken Zangwill; Ex: 2215
5. APPROVED BY: (Signature and Title)
Ann H. Wiman, Director, Administrative Svcs.
6. JOB TITLE:
EPI-93-08-1
Pinworm Outbreak in Day-Care Center
7. EXPLAIN HOW THIS MATERIAL WILL BE USED:
Information for professional personnel

8. ☒ NEW: ☒ Camera Ready Copy (CRC) Attached
9. ☐ REVISION: ☐ Prepare NEW CRC
10. ☐ RERUN: ☐ Revise CRC
11. PREVIOUS JOB No.:
12. ☐ REPRINT Original Photos Submitted

13. PRINT: ☐ One Side ☐ Head to Head ☒ Both Sides ☒ Head to Foot
14. FINISH: (Check appropriate boxes) ☐ Book ☐ Pamphlet ☒ Single Sheets ☐ Sets ☐ Assemble ☐ Pad ☐ Shrink Wrap ☐ Staple ☐ Perforate
15. QUANTITY: Keys + X
16. No. of Sheets Submitted with Requisition: 2
17. SIZE: 8-1/2 x 11
FOLD TO: ____ x ____
18. OTHER INSTRUCTIONS:

(complete item 19 for PUBLICATIONS only)

19.	Grade or No.	PAPER Color	Weight	INK Color	PMS No.
Text	Offset	White		Black	
Cover					

(complete items 20-24 for FORMS only)

20. CDC FORM No.: (present) / NEW:(Forms Mgmt.)
21. METHOD OF ENTRY: ☐ Hand ☐ Typewriter
22. OMB No.: Exp. Date:
23. PROTOCOL NUMBER:

24.	Grade or No.	PAPER Color	Weight	INK Color	PMS No.
Original					
Copy 2					

CRC Due at Control Desk:

Graphics In	Graphics Out	Plant In	Plant Out (10 12)	Procurement In	Procurement Out

☐ Procure ☐ Inhouse ☐ Quick Copy ☐ Black Trims
☐ Make New CRC ☐ Revise CRC ☐ CRC Attached
☐ Single ☐ Saddle ☐ Side ☐ Dummy Layout ___ up
Show Proof To _____ Ext. _____

GRAPHICS ☐ A ☐ B ☐ Computer File No. _____
Emp.: _____ Date: _____
(Please initial log book when assigned)

TYPESETTING: ☐ Inhouse ☐ Procured
Out _____ Requested: _____ Received _____

PROOFING: No. Finished Pages _____

	1st	2nd	3rd
Called			
Pick up:			
Returned			

APPROVED: (Customer Signature) _____ Date _____

PRESSROOM

Group 1 or 2	Plates Made: Emp. No		Itek			Metal		
22	23	24	25	26	27	28	29	30

Press No.	Page Size Code		Emp. No.		Plates Run: Itek			Metal			Production Units					
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

FINISHING:
☐ Assemble w/other materials
☐ Saddle Stitch
☐ Side Stitch ☐ Perfect Bind
☐ Acco Fastener

DISPOSITION OF REPRODUCIBLES
Camera Copy: ☐ Return to Orig. ☐ File ☐ Destroy
Plates: ☐ File ☐ Destroy
Negatives: ☐ File ☐ Destroy

WAREHOUSE REPLENISHMENT ONLY

Prefix (1 3)	Number (4 7)	Replenishment Amount (30 36)	Area	Location Row	Sec.

COMMENTS:

25. PROGRAM CHARGES: (complete item 25 for both PUBLICATIONS and FORMS)

	(1) Rec. Type	(2 7) Effective Date Mo Da Yr	(8 10) Transaction Code	(11) Rev. Code	(12) Modifier	(13 15) Doc. Ref Code	(16 25) Original Document Number	(26 28) Doc. Ref Code	(29 38) Other Document Number	Geo Code	FY	(41 47) CAN	(48 51) OBJ Code	(52 63) ($) Amount	(64) F/NF	(95-100) P/C/D Code
1	2	10/19/92	050	1	3	213				1	3	921 xxxx	241R		2	
2	2		050	1	3	213				1			241R		2	

26. MAILING LIST DISTRIBUTION: (Specify Keys)
WF-1, -2, -3; ZW

27. DELIVER TO: (Name, Address, Ext., & Mail Stop)
Distribution, MASO, Mailstop A23
x copies to Jane Doe (F22)

CLEARANCE	Signatures	Date	Copies
Information			
Forms Mgmt.			
Privacy Act			
OMB Clearance			
Human Subjects			
Production			

CDC 0.103A (Formerly CDC 0.103 and CDC 0.747) REV. 3-89 *Specific Instructions (Item 2)

Copy 1(original): Publications Management Section (Permanent File)

Appendix 1 (cont'd.)

1. This date is the same as that of the EPI-1 report.
2. This is the same date as 1. above. Type "**MUST**" behind the date in the space provided.
3. Type the name of the responsible branch/section and CIO division, including a mailstop code.
4. Type the name and telephone extension of the person to call if MASO has questions about the information on the request.
5. Type the name and title of the CIO administrative officer.
6. Type the EPI-1 report number and subject.
7. In this space, type "**Information for professional personnel.**"
8. Check two boxes: **New** and **Camera Ready Copy**.
9. No information required.

12.
13. Check two boxes—**Both Sides** and **Head-to-Foot**.
14. Check one box—**Single Sheets**.
15. Type in the word "**keys**" and the number of extra copies needed to distribute to individuals listed in the EPI-1 report who are not on the Mailing Keys.
16. Type "**2**" or "**3**". The EPI-1 should be no more than two to three pages in length.
17. Type "**8-1/2**" x "**11**".
18. No information required.
19. Type "**offset**" for Text-Grade or No.
    Type "**white**" for Text-Paper Color.
    Type "**black**" for Text-Ink Color.
20. No information required.
21. No information required.
22. No information required.
23. No information required.
24. No information required.
25. On Line 1, under Effective Date, type in the same date as in Item 1.
    On Line 1, under CAN, type the CAN number for the responsible CIO.
26. Type "**WF-1,-2,-3; ZW.**"
27. Type "**Distribution, MASO, Mailstop A23**" and the number of extra copies requested in Item 15. above, to the person designated to mail copies to those individuals listed in the Distribution section of the EPI-1 report, and the mailstop code (e.g., 10 copies to Jane Doe, Mailstop X01).

Appendix 2

Instructions for Preparing and Processing EPI-AID Travel

These instructions are provided to assist CDC staff in preparing EPI-AID travel documents when EPO funds are being used. The travel order, including all travel arrangements (airline tickets, hotel accommodations, etc.) and the travel voucher are prepared by the traveler's CIO. Unlike other travel prepared by CIOs, however, supporting documents for EPI-AID travel must be prepared **manually** using a Travel Order HHS-1 (Rev. 7/89) form and a Travel Voucher Standard Form 1012 (Rev. 10-77).

NOTE: Modifications to the CDC computerized travel system are now being pilot-tested so that travel performed by one CIO can be authorized and paid by another CIO. Therefore, in the very near future, CIOs will be able to complete EPI-AID travel on-line.

Preparing the Travel Order

Instructions for preparing an EPI-AID travel order are provided on pages 34-35. These instructions highlight the requirements specific to an EPI-AID; guidance on completing other sections of the travel order can be obtained from the administrative office in the traveler's CIO.

Preparing a Confirmation Travel Order

A confirmation travel order must be prepared when the traveler is required to travel before a regular travel order can be prepared (after normal business hours or on weekends). The instructions for completing a confirmation travel order are the same as that for a regular travel order with the following exceptions:

- Type "CONFIRMATION" in the upper left corner preceding "TRAVEL ORDER."
- In item 10, complete the statement "Traveler was directed by (name) on (date) to perform official travel from (originating city and state) to (destination city and state) and return." Complete the remainder of item 10 as required (purpose of travel, authorization for taxis, etc.).

Processing the Travel Order

- After the travel order is typed (and before it has been approved), FAX a copy of the unsigned travel order to the EPI-AID Coordinator (FAX Number 404/639-2222) for purposes of tracking and accountability.
- Prior to obtaining the signature of the authorizing official in the CIO, the travel order should be reviewed through usual administrative channels of the CIO.
- After signatures are obtained, two copies of the travel order should be sent through interoffice mail to the EPI-AID Coordinator (Mailstop C08).
- Distribute copies of the signed travel order as follows:
  - Original to traveler.
  - Blue and white tissue copy to Financial Management Office, Mailstop E12.
  - Yellow tissue copy for advance of funds, if applicable.
  - Green tissue copy to be retained by the office preparing travel for submission with the travel voucher.
  - Pink, salmon, and gold tissue copies are for CIO use.

Preparing the Travel Amendment

An amendment to the original travel order must be prepared when the points of travel change **or** an extension of more than two days is approved. [When a travel extension of one to two days is approved, the statement in item 10 "Traveler is authorized variation of itinerary of not more than 2 days at temporary duty in order to perform official business (REF JFTR U2135A)" waives the requirement for a travel amendment]. Complete only those items which reflect a change, as follows:

- In the upper left corner, check [ ] Amendment, and type "1, 2, 3" etc. in No. ___ to indicate whether this is the 1st, 2nd, 3rd amendment, etc.
- Item 3. Type the amount increased or decreased, if applicable (i.e., when the change in points of travel or duration of travel affect the estimated cost).
- Item 8 and Item 9. Type the revised dates of travel, if applicable.
- Item 10. List each change separately; for example, type

  "Amend item 3 as shown."
  "Amend item 8 as shown."
  "Amend item 9 as shown."
  "Increase/decrease funds in item 14 as shown."

  Item 14, Column 52-63. Type the amount increased or decreased, if applicable.

  Item 14. Column 65-79. Type "INCREASE" or "DECREASE" corresponding to the amount in Column 52-63.

Preparing and Processing the Travel Voucher

- When the traveler returns, a Travel Voucher (Standard Form 1012) should be completed. Guidance for completing the voucher can be obtained from the administrative office in the traveler's CIO.
- The traveler should sign the voucher and forward to the EPI-AID Coordinator **within 5 working days of return** the following: the original voucher and two copies, the original receipts and one copy, and the green tissue copy of the travel order.
- After review, the EPI-AID Coordinator will forward the voucher to the Assistant Director for Operations, Division of Training, EPO, for approval.
- The Division of Training, EPO, will then be responsible for forwarding the approved voucher to the Financial Management Office for payment.

Appendix 2 (cont'd.)

Preparing the EPI-AID Travel Order

DEPARTMENT OF HEALTH AND HUMAN SERVICES

TRAVEL ORDER

☒ Original ☐ Amendment No. _____ ☐ Cancellation
(See HHS Travel Manual, Part 3, for Detailed Instructions)

1 TRAVEL ORDER NO: E_____

2 APPROPRIATION NO: 75_0943

3 ESTIMATED COST*

	TO DHHS	TO OTHERS
TRAVEL	$_____	$_____
PER DIEM	_____	_____
OTHER	_____	_____
TOTAL	$_____	$_____

4 NAME AND POSITION OR RANK: Name of Traveler
EIS Officer or Medical Elective Student

5 SSAN:

6 CONSTITUENT/BUREAU/DIVISION/REGION:

7 PRESENT OFFICIAL STATION:

8 APPROX DATE OF DEPARTURE:

9 APPROX DATE OF RETURN:

10 ITINERARY AND PURPOSE OF TRAVEL *(Show city, state or country, dates and reasons—use continuation sheet if necessary)*

FROM: City, State to City, State, and return.

PURPOSE: EPI-__-__. To assist State and local health department officials investigate an outbreak of . . . .

Use of local transportation facilities, including taxis, is authorized when advantageous to the Government and justified on the voucher. Traveler is authorized variation of itinerary of not more than 2 days at temporary duty in order to perform official business (REF JFTR U2135A).

NOTICE: TRAVELERS ARE RESPONSIBLE AND LIABLE FOR UNUSED GTR'S — TICKETS RECEIVED UNTIL THEY HAVE BEEN PROPERLY ACCOUNTED FOR ON A TRAVEL VOUCHER OR RETURNED TO THE AGENCY.

11 SPECIAL AUTHZTN

TRAVEL BY PRIVATELY OWNED AUTO IS AUTHORIZED ON MILEAGE BASIS RATE SPECIFIED BELOW FOR: ☐ EMPLOYEE AND/OR ☐ DEPENDENTS

___¢ PER MILE AS MORE ADVANTAGEOUS TO GOVT ___¢ PER MILE NOT TO EXCEED COMMON CARRIER COSTS ___¢ PER MILE NOT TO EXCEED COSTS BY GOVT-OWNED AUTO

☐ GSA AUTO ☐ AUTO RENTAL UNDER GSA CONTR ☐ OTHER *(Specify below)*

☐ EXCESS BAGGAGE ☐ REGISTRATION FEE

11A CHANGE OF STATION

TRANSPORTATION OF ☐ DEPENDENTS ☐ H/H GOODS & PERS. EFFECTS

☐ TEMPORARY QTRS ☐ RESIDENCE TRANSACTIONS ☐ TEMPORARY STORAGE

☐ HOUSE HUNTING TRIP ☐ MISC. EXP. ALLOWANCE ☐ OTHER *(Specify)*

HHS 355: ☐ SIGNED ☐ NOT REQUIRED

12 TRAVEL & PER DIEM IS AUTHORIZED IN ACCORDANCE WITH DHHS POLICY AND

☐ FTRs ☐ JTR'S ☐ OTHER *(Specify)*

PER DIEM: ☐ NONE ☐ IN U.S. ☐ OUTSIDE U.S. ☐ VARYING RATES PER ABOVE REGS.

RATE $_____ ☐ LODGINGS PLUS ☐ ACTUAL EXPENSE ☐ FIXED

13 FOREIGN TRAVEL

TO BE PERFORMED FOR *(DHHS, UN, etc.)*: CDC

EXPENSES TO BE PAID BY: CDC

SECURITY APPROVAL GRANTED FOR TRAVEL OF

☐ 90 DAYS OR LESS ☐ OVER 90 DAYS DATE _____

RESPONSIBLE FOR SECURITY CLEARANCE OF TRAVELER ASSUMED BY

14 ACCOUNTING DATA *(See HHS Acct'g Manual & Acct'g Code Book)*

1 RECORD TYPE	2-7 EFF DATE	8-10 TRANSACTION CODE	11 REVERSE CODE	12 MODIFIER	ORIGINAL OBLIGATION 13-15 DOC REF CODE	ORIGINAL OBLIGATION 16-25 DOCUMENT NO	OTHER DOCUMENTS 26-28 DOC REF CODE	OTHER DOCUMENTS 29-38 DOCUMENT NO	39 GEO CODE	40 FISCAL YEAR	41-47 COMMON ACCOUNTING NO	48-51 OBJ CLASS CODE	52-63 AMOUNT DOLLARS & CENTS	64 FED/NON FED	65-79 VENDOR/ CUSTOMER CODE (PRIMARY RECIPIENT)	95-100 PAYMENT COLLECTION DOC	101-106 PPBS 101-106 CATEGORY	101-106 PPBS 107-108 ACTIVITIES	109 CASE #
2	__/__/__				130	E_____				_	921____	21.__		1					2
2																			
2																			
2																			

15 NAME AND TITLE OF OFFICER RECOMMENDING ABOVE TRAVEL

AUTHORITY IS HEREBY GRANTED TO PERFORM TRAVEL AND TO INCUR SUCH EXPENSES AS MAY BE NECESSARY UNDER THE CONDITIONS SET FORTH ABOVE

TITLE _____

AUTHORIZED BY _____ DATE _____

* To be completed by Office Initiating Travel Order. Other Accounting Data to be Completed by Fiscal/Accounting Office

HHS-1 (REV. 7/89) **TRAVELER**

Appendix 2 (cont'd.)

1. A travel order number can be obtained by contacting the EPI-AID Coordinator at 404/639-3182. The travel order number consists of seven characters. The first character, E, identifies the travel order as being associated with an EPI-AID investigation, the next two characters identify the current fiscal year, and the last four characters are assigned by the EPI-AID Coordinator.
2. The appropriation number is a seven-digit number that remains the same each year with the exception of the third digit that changes each fiscal year. In FY 1993, the appropriation number is "7530943; in FY 1994, type "7540943, etc."

3-9. Self-explanatory; see CIO administrative office if assistance is needed.

10. For itinerary, complete the following statement "FROM (originating city and state) TO (destination city and state), and RETURN" and type in the space provided.

For Purpose, type the EPI-AID number assigned by the EPI-AID Coordinator. This number identifies the specific EPI-AID investigation and is used for programmatic tracking purposes. This number is **not** the same as the EPI-AID Travel Order No. listed in item 1. After typing the EPI-AID number, continue with a brief statement describing the purpose of the travel.

After Purpose, type "Use of local transportation facilities, including taxis, is authorized when advantageous to the Government and justified on the voucher. Traveler is authorized variation of itinerary of not more than 2 days at temporary duty in order to perform official business (REF JFTR U2135A)."

11-13. Self-explanatory; see CIO administrative office if assistance is needed.

14. Complete **only** the columns listed below:
Column 2-7, Eff. Date: type the date the travel order is prepared.
Column 16-25, Document No.: type the same entry as in item 1. Travel Order No.
Column 40, Fiscal Year: type the last digit of the fiscal year, e.g., type "3" for FY 1993.

Column 41-47, Common Accounting No.: type the appropriate CAN below that identifies the traveler's CIO.

NCCDPHP	9210426
NCID	9210427
NCEH	9210428
NCPS	9210429
PHPPO	9210430
IHPO	9210431
NIOSH	9210433
NCHS	9210446
NCIPC	9210450

Column 48-51, Obj. Class Code: type "21.11" if travel is domestic; type "21.12" if travel is international.

Column 52-63, Amount Dollars & Cents: type the total amount that needs to be obligated for this travel. This amount is **usually** the sum of estimated Per Diem and Other expenses listed in item 3, since the cost for airfare, when arranged through SATO, is obligated separately. However, this amount is the cost of transportation added to Per Diem and Other listed in item 3, when transportation is not arranged by SATO, such as when the traveler uses a privately-owned vehicle (POV) **OR** Government Transportation Request (GTR), Diners Club card, or cash during nonbusiness hours or weekends.

15. Self-explanatory; see CIO administrative office if assistance is needed.

Appendix 3

CREW SURVEY QUESTIONNAIRE [1]

CDC USE ONLY
CODE = 2[1]
ID = _____ (2-6)

Dear Crew Member:

The U.S. Public Health Service is conducting a survey of the health status of passengers on this vessel. To assist us, please answer the following questions:*

1. Name Last (7-16) First (17-24)	2. Age (25-26)	3. Sex (27) Circle one: 1 Male 2 Female	4. Nationality (28-47)	5. State (48-50)

6. Cabin Number (85-90)	7. Number of persons in your cabin (91-92)	8. What is your rating or occupation? (104-123)

9. Were you ill with vomiting or diarrhea (3 or more loose or watery bowel movements in a 24-hour period) during this cruise? (124)

Circle One: 1 Yes 2 No 3 Not Sure

If yes, please answer (a) through (e).

(a) Which of these symptoms did you experience? (Circle "Yes", "No", or "Not Sure" for each symptom):

	1	2	3		1	2	3
Diarrhea	Yes	No	Not sure (125)	Headache	Yes	No	Not sure (129)
Vomiting	Yes	No	Not sure (126)	Fever	Yes	No	Not sure (130)
Abdominal Cramps	Yes	No	Not sure (127)	Blood in Stools	Yes	No	Not sure (131)
Nausea	Yes	No	Not sure (128)	Sore Throat	Yes	No	Not sure (132)
				Muscle Aches	Yes	No	Not sure (133)

(b) When did your symptoms begin? (Give date and time and circle a.m. or p.m.)

Date ___/___/___ (134-139) **Time** _____ (140-143) **a.m.** **p.m.**
MO DA YR

(c) Were you seen by the ship's medical staff during the cruise? (144)

Circle One: 1 Yes 2 No 3 Not sure

(d) Are you still ill? (145)

Circle One: 1 Yes 2 No 3 Not sure

(e) If your illness is over, how many days were you ill?

_____ Number of days ill (146-147)

10. Did you miss work because of your illness?

Circle One: 1 Yes 2 No (149) **If yes, how many days did you miss?** _____ (150-151)

11. What is the source of the water you drink? (152)

Circle One: 1 Tap only 2 Bottled only 3 Both 4 Never drink water

12. If you were ill, what do you think caused it?

*PROTECTION OF PRIVACY INFORMATION

Public Law 93-579 entitled the Privacy Act of 1974 requires that individuals asked to furnish information such as that requested in this form be informed of the purpose for collecting such information and what the information will generally be used for.
The following information is accordingly provided:

Authority: The Centers for Disease Control, an agency of the Department of Health and Human Services, is authorized to solicit the information requested in this form under the authority of the Public Health Service Act, Section 301, 361 (42 U.S.C. 241,264).

Purpose and Uses: The information requested will be used to implement appropriate control measures if any health problems are identified, and may be shared with federal, state and local health authorities. An accounting of such disclosures will be made available to you upon request.

Effects of Non-Disclosures: Your disclosure of the requested information is voluntary, and no penalty will be imposed if you choose not to respond. However, if you do not fill out the questionnaire, it wil be more difficult for us to determine the health status of the persons on this cruise.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

CDC 75.12A (f. 4.410B)
REV. 9-91

FORM APPROVED
OMB NO. 0920-0008

Appendix 4

PASSENGER SURVEY QUESTIONNAIRE (1)

CDC USE ONLY
CODE = 1 (1)
ID = _____ (2-6)

Dear Passenger:

The U.S. Public Health Service is conducting a survey of the health status of passengers on this vessel. To assist us, please answer the following questions:*

1. Name Last (7-16) First (17-24) | **2. Age** (25-26) | **3. Sex** (27) Circle One: 1 Male 2 Female

4. Address

Street _____ City _____ State _____ (48-50) Zip _____ (51-59)

Country _____ (60-79) Telephone Number: (area code) _____ _____

5. At which port did you board the ship? (80-84)

6. Cabin Number (85-90)

7. Number of persons in your cabin (91-92)

8. Dining Table Number (93-98)

9. Sitting (99) Circle One: 1st 2nd 3rd

10. Circle the average number of glasses of ship's water you drank per day (100-101) (If you were ill, circle the average per day **before** you became ill)

0 1 2 3 4 5 6 or more

11. Circle the average number of beverages containing ice you drank per day (102-103) (If you were ill, circle the average per day **before** you became ill)

0 1 2 3 4 5 6 or more

12. Were you ill with vomiting or diarrhea (3 or more loose or watery bowel movements in a 24-hour period) during this cruise? (124)

Circle One: 1 Yes 2 No 3 Not Sure

If yes, please answer (a) through (f).

(a) Which of these symptoms did you experience? (Circle "Yes", "No", or "Not Sure" for each symptom):

	1	2	3		1	2	3
Diarrhea	Yes	No	Not sure (125)	Headache	Yes	No	Not sure (129)
Vomiting	Yes	No	Not sure (126)	Fever	Yes	No	Not sure (130)
Abdominal Cramps	Yes	No	Not sure (127)	Blood in Stools	Yes	No	Not sure (131)
Nausea	Yes	No	Not sure (128)	Sore Throat	Yes	No	Not sure (132)
				Muscle Aches	Yes	No	Not sure (133)

(b) When did your symptoms begin? (Give date and time and circle a.m. or p.m.)

Date ___/___/___ (134-139) **Time** _____ (140-143) **a.m.** **p.m.**
MO DA YR

(c) Were you seen by the ship's medical staff during the cruise? (144)

Circle One: 1 Yes 2 No 3 Not sure

(d) Are you still ill? (145)

Circle One: 1 Yes 2 No 3 Not sure

(e) If your illness is over, how many days were you ill?

_____ Number of days ill (146-147)

(f) Were you confined to your cabin by your illness? (148)

Circle One: 1 Yes 2 No 3 Not sure

13. If you were ill, what do you think caused it?

*PROTECTION OF PRIVACY INFORMATION

Public Law 93-579 entitled the Privacy Act of 1974 requires that individuals asked to furnish information such as that requested in this form be informed of the purpose for collecting such information and what the information will generally be used for. The following information is accordingly provided:

Authority: The Centers for Disease Control, an agency of the Department of Health and Human Services, is authorized to solicit the information requested in this form under the authority of the Public Health Service Act, Section 301, 361 (42 U.S.C. 241,264).

Purpose and Uses: The information requested will be used to implement appropriate control measures if any health problems are identified, and may be shared with federal, state and local health authorities. An accounting of such disclosures will be made available to you upon request.

Effects of Non-Disclosures: Your disclosure of the requested information is voluntary, and no penalty will be imposed if you choose not to respond. However, if you do not fill out the questionnaire, it wil be more difficult for us to determine the health status of the persons on this cruise.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

Public reporting burden of this collection of information is estimated to average 3 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to PHS Reports Clearance Officer; ATTN: PRA; Hubert H. Humphrey Bldg., Rm. 721-B; 200 Independence Ave., SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0008); Washington, DC 20503.

CDC 75.12B (f. 4.410C)
REV 9-91

FORM APPROVED
OMB NO. 0920-0008

Appendix 5

Example: EPI-AID Trip Report

DEPARTMENT OF HEALTH & HUMAN SERVICES — Public Health Service

MEMORANDUM

Centers for Disease Control
Atlanta GA 30333

Date: April 28, 1992

From: EIS Officer
Meningitis and Special Pathogens Branch, DBMD, NCID (C09)

Subject: EPI-AID Trip Report: Gastroenteritis on the Cruise Ship Regent Sun (Epi 92-42)

To: Willard Cates, Jr., M.D., M.P.H.
Director, Division of Training, EPO (C08)
Through: Assistant Director for Science, NCEHIC
Director, Division of Bacterial and Mycotic Diseases, NCID
Chief, Enteric Diseases Branch, DBMD, NCID RT
Chief, Epidemiology Section, EDB, DBMD, NCID RT
Chief, Meningitis and Special Pathogens Branch, DBMD, NCID

BACKGROUND

On March 13, 1992, Michael Trubenbacher, Operations Manager, Regency Cruises, contacted Donald W. Turner, Staff Sanitarian, Vessel Sanitation Program, Special Programs Groups, NCEHIC, to report diarrheal illness on the cruise ship Regent Sun. Eighteen (3.7%) of 482 passengers and one (0.2%) of 418 crew members were reported to have visited the ship's infirmary because of gastroenteritis.

The ship was on a 7-day voyage in the Caribbean from March 8 to March 15, 1992, beginning and ending in San Juan, Puerto Rico. Ports of call included St. Lucia, Martinique, Dominica, St. Kitts, and St. Thomas. It was scheduled to arrive in San Juan on March 15 for passenger disembarkation. On March 14, Kenneth M. Zangwill, M.D., EIS Officer, Meningitis and Special Pathogens Branch, Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, and William A. Bower, epidemiology elective student, traveled to St. Thomas, U.S. Virgin Islands, to meet the cruise ship Regent Sun and conduct an investigation along with Mr. Turner.

METHODS

Epidemiologic Investigation

On March 14, the ship's infirmary logs were reviewed for visits for gastrointestinal illness during the cruise. The peak onset of illness was March 12. Standard CDC passenger and crew questionnaires were distributed, and a supplementary questionnaire requesting information regarding food eaten on board ship March 9-11 and during an offshore excursion to St. Lucia on March 10 was included with all passenger questionnaires. A case was defined as vomiting or diarrhea (three or more loose or watery stools in a 24-hour period) in a passenger or crew member with onset any time during the cruise. Controls included passengers who reported no such illness during this cruise.

A follow-up telephone survey of persons who took the offshore excursion to St. Lucia (including guides and food handlers from the local excursion company) was conducted on March 21-22, 1992. Information regarding foods eaten, other activities, and clinical severity of illness was obtained. Other information regarding the preparation and handling of food served on this excursion was sought.

Descriptive analysis was based on the entire passenger data set. Analytic studies were performed in a case-control fashion with three randomly chosen controls per case.

Vessel Sanitation Inspection

A vessel sanitation inspection was conducted and included evaluation of the water supply, refrigeration, food storage and handling, general sanitation, and structural and equipment maintenance. Water purification equipment and records were reviewed and water samples collected.

Laboratory Investigation

Rectal swabs, whole stools, and blood samples were collected from ill and well passengers and crew members 24-72 hours after onset of symptoms. Rectal swabs were placed in Cary-Blair transport medium. All specimens were refrigerated and transported to CDC.

RESULTS

Descriptive Epidemiology

Three hundred eight (64%) of 482 passengers and 400 (96%) of 418 crew members returned the questionnaire. Fifty-six passengers (18% of returned questionnaires) and 12 crew members (3% of returned questionnaires) reported illness meeting the case definition. Symptoms reported by more than 50% of ill passengers included diarrhea, abdominal cramping, nausea, headache, fever, and myalgia (Table 1). Twenty-four (43%%) ill passengers visited the ship's infirmary, and 26 (53%) were confined to their cabin because of illness. The mean duration of illness was 6.2 days. Two passengers were hospitalized after disembarkation.

The mean age of ill passengers was 44 years (range 16-74). Attack rates did not differ by sex. Twenty-nine (52%) ill passengers and 10 (83%) ill crew members were female. No apparent association with cabin location was noted. The reported onset of illness peaked on March 11 and 12 with rapid decline thereafter (Figure 1). Of 56 passengers who became ill, 44 (79%) took an excursion to St. Lucia on March 12. In addition, three of six guides on this excursion became ill.

Analytic Epidemiologic Investigation

A case-control analysis of passengers revealed that participation in an excursion to St. Lucia on March 10 was associated with illness (odds ratio [OR] = 33.8, 95% confidence interval [CI] = 13.5, 86.9, $p = 10^{-7}$). This excursion is a regular weekly offering to Regent Sun Caribbean cruise patrons. It includes a land tour of various sites in the island and snorkeling in a cove that communicates with the Atlantic Ocean.

A lunch buffet, catered by a private St. Lucia restaurant, was served on a catamaran during the excursion. Cohort analysis of passengers who took this trip revealed that consumption of the potato salad was associated with the development of illness (relative risk [RR] = 2.0, p = 0.01). The median time from this meal to onset of symptoms was 34-36 hours. Snorkeling and swallowing at least one mouthful of water while snorkeling during this excursion were not associated with illness. Eating lunch on board ship on March 10 was highly protective (OR = 0.06, CI = 0.0, 0.1, $p = 10^{-7}$). Having breakfast on the ship on March 9, 10, and 11, as well as lunch on March 11, was also protective for development of illness. No other meals served on the ship from March 9 to 11 or other foods served at the St. Lucia excursion meal were significantly associated with illness (Tables 2, 3).

No significant difference was found in the mean number of glasses of the ship's water or iced beverages consumed by ill and well passengers.

The illness that afflicted passengers and crew who did not take the St. Lucia excursion was different from that which affected excursion participants. Ill passengers who took the St. Lucia excursion had a longer duration of illness (mean 7.8 vs. 2.6 days, $p < 10^{-5}$) and significantly different symptom complex than ill passengers who did not take the St. Lucia excursion (Figure 1). No significant secondary spread was evident between ill excursion participants and other ill persons.

Comparison of ill passengers who did not take the St. Lucia excursion and healthy passengers did not reveal an association with a specific meal served on the ship nor with the mean number of glasses of ship's water or iced beverages consumed.

Vessel Sanitation Inspection

The operation of the food and water systems on the Regent Sun was found to be in compliance. Some deficiencies in the structure and equipment of this ship were noted, but general operations of this ship were also found to be in compliance.

Laboratory Investigation

Nine of 13 rectal swab samples from ill passengers grew *Shigella sonnei*. This isolate was sensitive to standard antibiotics. All of these isolates were from persons who took the St. Lucia excursion. Swabs from 10 control persons did not yield *Shigella*, *Salmonella*, *Campylobacter*, *Vibrio*, or *Bacillus cereus*. No samples of any food served on the excursion were available for culture. No coliform bacteria were detected in the ship's water.

DISCUSSION

The etiologic agent responsible for the outbreak of diarrheal illness on the Regent Sun was *Shigella sonnei*. It was transmitted via a meal served on an offshore excursion to St. Lucia on March 10, 1992. The potato salad served in that meal was the most likely vehicle.

The breakfast meals noted to be protective for illness likely represent the active schedule of the generally younger ill passengers who took the St. Lucia excursion and who would, therefore, be more likely to miss breakfasts.

This meal served on the catamaran was provided by a privately owned restaurant on the island of St. Lucia. All food reportedly was prepared the day of the excursion, stored in coolers on the catamaran, and eaten approximately 4-5 hours later, buffet style. The potato salad was served from a large, shallow tray, and the majority of persons who are reported that it was of ambient temperature.

Shigella species are infrequently reported as the etiologic agent in cruise ship outbreaks (1), and *S. sonnei*, specifically, has not been previously reported in this setting. Although the implicated organism is not commonly found, the vehicle, potato salad, was implicated in 20% of all foodborne outbreaks of shigellosis reported to CDC form 1983 to 1987 (2).

Preparation of potato salad requires extensive handling of ingredients. Separation of the dry ingredients from the mayonnaise combined with inadequate refrigeration and a low inoculum of *Shigella* necessary for transmission (3), may have allowed for transmission of the organism through consumption of the potato salad.

No food handler who may have been ill before the St. Lucia trip was reported among the catamaran crew or from the food handling staff of the catering restaurant. The Caribbean Epidemiology Center epidemiologist in Trinidad was informed of the outbreak. He will inquire further about ongoing shigellosis on St. Lucia.

RECOMMENDATIONS

1. Private caterers used by cruise ship companies should be held to the same food handling and preparation standards as the cruise ship, and if that is not possible, consideration should be given to avoiding the use of private caterers.

2. All passengers of the cruise ship should be notified of the cause of this outbreak and informed of appropriate therapeutic and preventive measures.

3. Any food handler with a gastrointestinal illness should be excused from duty until the illness has resolved.

4. The importance of handwashing for prevention of gastrointestinal illness should be reinforced, particularly among food handlers.

5. Surveillance for gastrointestinal illness should continue with daily reports (including zero cases) to the Sanitation and Vector Control Activity in Miami for the voyage beginning March 15, 1992.

6. The recommendations outlined in the vessel sanitarian's report should be implemented.

Kenneth M. Zangwill, M.D.

REFERENCES

1. Addiss DG, Yashuk JC, Clapp DE, Blake PA. Outbreaks of diarrhoeal illness on passenger cruise ships, 1975-1985. Epidemiol Infect 1989;103:63-72.

2. Black RE, Craun GF, Blake PA. Epidemiology of common-source outbreaks of shigellosis in the United States, 1961-1975. Am J Epidemiol 1978;108:47-52.

3. Levine MM, DuPont HL, Formal SB, Hornick RB, Takeuchi A, Gangarosa EJ, Snyder MJ, Libonati JP. Pathogenesis of *Shigella dysenteriae* (Shiga) dysentery. J Infect Dis 1973;127:261-270.

FIGURE 1. Outbreak of gastroenteritis among crew and passengers aboard a cruise ship, by date of onset and boarding location --- United States, March 8--15, 1992

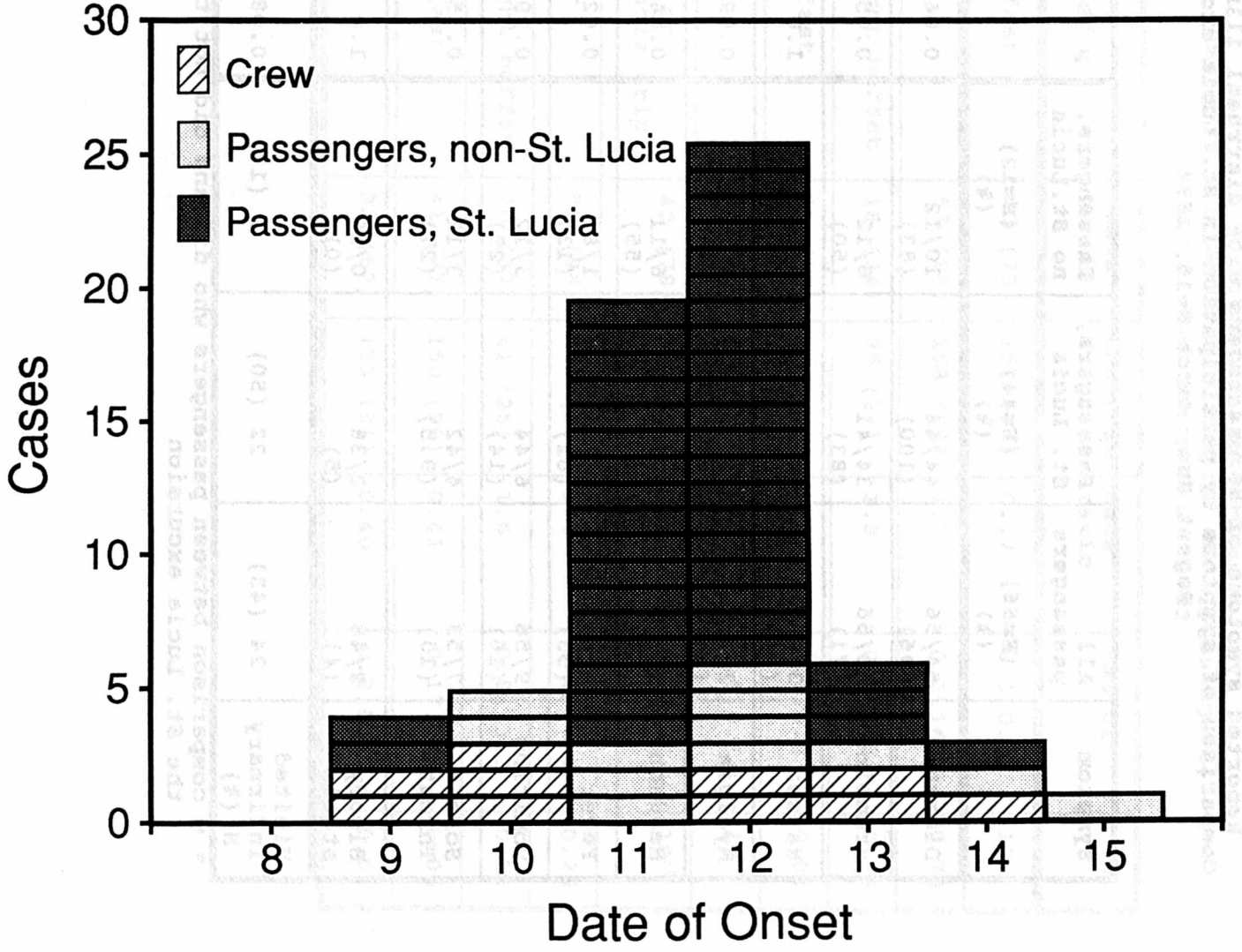


Table 1

Reported symptoms of 56 passengers with diarrheal illness Comparison of symptoms by participation in St. Lucia excursion Regent Sun, March 8-15, 1992

Symptom	All passengers (N=56) (%)	Passengers, St. Lucia (N=44) (%)	Passengers, no St.Lucia (N=12) (%)	p value*
Diarrhea	54/56 (96)	44/44 (100)	10/12 (83)	0.04
Cramping	40/56 (71)	34/41 (83)	6/12 (50)	0.05
Nausea	36/56 (64)	28/44 (64)	8/12 (67)	1.0
Myalgia	28/55 (51)	25/43 (58)	3/12 (25)	0.09
Headache	29/55 (53)	23/44 (52)	6/11 (55)	0.84
Fever	25/47 (53)	24/39 (62)	1/8 (13)	0.02
Vomiting	9/56 (16)	6/44 (14)	3/12 (25)	0.39
Sore Throat	7/53 (13)	4/42 (9.5)	3/11 (27)	0.15
Bloody stools	2/48 (4)	2/38 (5)	0/10 (0)	1.0
Visited infirmary N (%)	24 (43)	22 (50)	2 (17)	0.08

* = comparison between passengers who did and did not take the St. Lucia excursion

Table 2

Selected meal exposures among 56 ill passengers and 169 well passengers, Regent Sun, March 9-11, 1992

Exposure and date	Cases N (%)	Controls N (%)	Odds ratio	95% CI	p
Breakfast 3/9	40 (73)	157 (94)	0.17	0.1,0.4	10^{-7}
Lunch 3/9	53 (96)	158 (94)	1.7	0.3,16.2	0.73
Midnight buffet 3/9	18 (34)	35 (21)	1.8	0.9,3.7	0.13
Breakfast 3/10	41 (76)	154 (95)	0.30	0.1,0.8	0.01
Lunch 3/10	12 (22)	137 (85)	0.06	0.0,0.1	10^{-7}
Lunch on St. Lucia trip 3/10	42 (78)	14 (9)	33.8	13.5,86.9	10^{-7}
Dinner 3/10	52 (96)	165 (99)	1.6	0.02,4.6	0.26
Midnight buffet 3/10	20 (37)	41 (25)	1.6	0.81,3.3	0.19
Breakfast 3/11	41 (77)	150 (90)	0.41	0.17,1.0	0.05
Lunch 3/11	32 (62)	133 (81)	0.40	0.2,0.8	0.01

Table 3

Food exposures among passengers on St. Lucia Excursion, March 10, 1992

St. Lucia lunch	Ill N=44 N (%)	Well N=15 N (%)	Relative Risk	95% CI	p
Baked Chicken	39 (89)	13 (87)	1.1	0.64,1.7	1.0
Potato salad	40 (91)	9 (60)	2.0	0.94,4.4	0.01
Rice dish	38 (88)	10 (67)	1.5	0.83,2.5	0.12
Cole slaw	32 (82)	8 (53)	1.3	0.87,1.9	0.21
Cake	21 (49)	7 (47)	1.0	0.75,1.4	0.82
Fruit juice	17 (44)	4 (27)	1.1	0.85,1.5	0.60

Appendix 6

Example: Summary Letter as EPI-AID Trip Report

DEPARTMENT OF HEALTH & HUMAN SERVICES — Public Health Service

MEMORANDUM

Centers for Disease Control
Atlanta GA 30333

Date: September 25, 1992

From: EIS Officer
Epidemiology Section, Viral and Rickettsial Zoonoses Branch, Division of Viral and Rickettsial Diseases, NCID (G13)

Subject: EPI-AID 92-87 Trip Report

To: Willard Cates, Jr., M.D., M.P.H.
Director, Division of Training, EPO (C08)
Through: Chief, Epidemiology Section, VRZB, DVRD, NCID

The attached memo was submitted to local officials before leaving Siler City, North Carolina, on EPI-AID 92-87. I am submitting it as my EPI-AID Trip Report.

Mary Jane Schmidt, M.D.

Attachment

Appendix 6 (cont'd.)

To: John Shaw, Health Director, Chatham County

From: Mary Jane Schmidt, M.D., Centers for Disease Control

CC: R.A. Meriwether, M.D., North Carolina State Health Dept.
Steve Pickard, M.D., North Carolina State Health Dept.
Sue Fields, R.N., Chatham County Health Dept.

Preliminary Report to Chatham Co. Health Dept
Rocky Mountain Spotted Fever Outbreak, Bear Creek, North Carolina
Investigation Dates: 9/1 - 9/12/92
Report Date: 9/12/92

BACKGROUND: In mid-August 1992 a sibling pair in Bear Creek, North Carolina became ill with Rocky Mountain Spotted Fever (RMSF). One child died and the other required ICU hospitalization. Four other persons in the community, including two children in day care with the index cases, were said to have symptoms consistent with RMSF. Because clustering of tick-borne disease is unusual, especially in a day care setting, the Chatham County Health Department in cooperation with the North Carolina State Health Department and the Centers for Disease Control (CDC) decided to investigate.

INDEX CASES: First the diagnoses of the index cases were confirmed. Hospital records at UNC Chapel Hill Memorial Hospital were reviewed. Both children had skin biopsy specimens which were positive for RMSF by direct immunofluorescence, a highly specific test. In addition, specimens will be taken to CDC in Atlanta for PCR (polymerase chain reaction) analysis.

REPORTED RELATED CASES: Family and day care contacts were interviewed and those who had been ill were tested for RMSF IgG antibody by the state lab. One of the two ill children in the day care had a positive titer of 1:64. Three probable cases in the same limited area at the same time are unusual. However, of the original sibling pair, only one child attended the day care; so no single area of outdoor exposure could be established for the three cases, and the report of a day care cluster was not substantiated.

SEARCH FOR ADDITIONAL CASES: To determine whether the area was experiencing a more widespread increase in incidence, additional cases in the community were sought in several ways.

1. Word of mouth: Because of community concern many cases were brought to the attention of the health department by simple word of mouth. Fourteen people who had been ill were interviewed and questionnaires regarding symptoms, tick exposure, and outdoor activity were completed. Serum specimens were obtained on 12 of 14. One child, who was unrelated to the index cases, had been diagnosed with RMSF by his local physician (acute titer 1:64 on 8/27). A convalescent titer was drawn on this child.

2. Physician survey: All primary care physicians in Chatham County were contacted and asked if they had diagnosed any cases of RMSF since July 1. No additional serologically confirmed cases were identified. Most physicians treated empirically with tetracycline if fever or headache and history of tick bite were present. None felt that they had seen more possible RMSF cases this summer than in previous summers, although several reported they were seeing

more patients for tick removal than in the past.
Three possible cases were identified. One had a negative antibody titer, one had equivocal titers, and one has titers pending.

3. Emergency room record review: The Chatham Hospital ER log was reviewed for the period from July 1 to September 4. Five patients had discharge diagnoses of possible RMSF or fever with rash. Charts were reviewed on these five patients, and when possible they were interviewed. None were confirmed to have RMSF.
The Sanford Hospital in adjoining Lee County reported that they routinely checked IFA titers on suspected cases and that no positive titers had been detected. A log was not available for review, but the head nurse did not remember any cases in which RMSF had been highly suspected.

GENERAL COMMUNITY SURVEY: In order to better define the community in which these cases were occurring, and to document possible additional RMSF cases, a survey was conducted at the church where one of the index case children had attended vacation Bible school two weeks before his illness. On Sunday September 6, 28 families filled out a household information questionnaire. Individual questionnaires were competed on 61 persons in these families. Serum was obtained for RMSF antibody testing on 54 persons.

ENVIRONMENTAL ASSESSMENT: Tick populations were assessed in several ways. Tick drags were attempted in three locations, but because the season of maximal tick activity was almost over no ticks were found. Alternative methods were employed.

1. Pet dogs of confirmed cases, possible cases, and selected community survey households were evaluated. Dogs have previously been identified as potentially useful sentinel animals for human RMSF. Live ticks were pulled from 10 dogs and blood specimens for RMSF antibody testing were obtained on 20 dogs.

2. Small mammal trapping was done on three consecutive nights at three sites, and two nights at a fourth site. Three of these areas were homes or play areas of known cases and one was the home of a family who had been well. The following were obtained for blood testing and tick removal: 3 house mice, 7 field mice, 6 rats, 4 opossums, and 1 raccoon.

3. One deer carcass was examined, but no ticks were found.

FOLLOW-UP: Serologic testing should be complete by September 16. Data from cases, possible cases, and the community survey will be compiled and analyzed to compare with serologic results. A more complete report should be available by October 15, although final analysis of all data and animal specimens may take several months longer.

Appendix 7

Example: Emergency Epidemic Investigations Form

OMB No. 0920-0008

EMERGENCY EPIDEMIC INVESTIGATIONS

EPI-AID NO.: _____

TITLE OF INVESTIGATION: _____

_____

USED FOR THE FOLLOWING PURPOSE:

_____

_____

_____

_____

_____

_____

_____

_____

DATE OF INVESTIGATION: BEGINNING: _____ ENDING: _____

_____

Complete this section for each instrument used during the investigation

_____

DATA COLLECTION METHOD

☐ PERSONAL INTERVIEW ☐ TELEPHONE

☐ MAIL ☐ OTHER (please specify):

_____

A. DESCRIPTION OF RESPONDENTS (i.e., individuals, households, physicians, state and local government, etc.)

_____

B. ESTIMATED NUMBER OF RESPONDENTS:

_____

C. NUMBER OF RESPONSES PER RESPONDENT (i.e., one time only, once a week for 2 weeks, 6 times, etc.)

_____

D. BURDEN PER RESPONSE (i.e., time taken for a respondent to complete the data collection instrument)

_____

TOTAL ANNUAL BURDEN (Multiply B X C X D):

_____

PROJECT OFFICER:

Name: _____

Title: _____

CIO : _____

Phone: _____