

Developing a Standard Operating Procedure for Surveillance



U.S. ARMY PUBLIC HEALTH CENTER



-
- 1. Describe** the elements of effective local surveillance by identifying key processes
 - 2. Know** where to access Service surveillance resources by establishing rapport with essential public health contacts
 - 3. Understand** the value of fundamental standard operating procedures for disease surveillance by providing step-by-step instruction
-

A standard operating procedure (SOP) is a set of **step-by-step written instructions** with the purpose of standardizing complex routine operations. Implementing an SOP can create:

**Consistency
and reliability**

**Greater
efficiency**

**Fewer errors and
better patient care**

**Roadmap for how
to resolve issues**

Documentation of routine processes is critical in public health for consistent follow-up and surveillance.

What is public health surveillance and how are SOPs related to it?

- Public health surveillance is defined as the ongoing, systematic collection, analysis, and interpretation of health-related data essential to planning, implementation, and evaluation of public health practice, closely integrated with the timely dissemination of these data to those responsible for prevention and control
- Goal is to provide information that can be used for health action by public health personnel, government officials, and the public to guide public health policy and programs
- Implementing effective SOPs plays a key role in establishing validated, effective public health surveillance efforts

Air Force:

- SOPs are most often used in larger flights/organizations
 - Are not required
- Public Health surveillance responsibilities and routine operations are typically described in a “**continuity binder**”
 - “On-Call binders” are also commonly used for specific, emergency circumstances

Regardless of the way information is communicated, SOPs and binders should contain standardized, detailed guidance for all key processes/responsibilities.

Using an SOP at your clinic/hospital can **help to reduce gaps** in disease surveillance, which are caused by:

- High turnover of staff
- Change in leadership/lack of Command Leadership support
- Varying interpretations of DoD-wide policies
- A demanding work environment
- Limited resources
- Frequent updates to policies
- Transient patient population
- Providers do not report (depending on Service)
- Changing systems (MHS Genesis)
- CHCS ad hocs/spool reports do not capture everything
- Other unique issues

STANDARD OPERATING PROCEDURE FOR DISEASE SURVEILLANCE

[LOCATION]

Department	
Location(s) Covered by This SOP	
Last SOP Update	
Date SOP Approved	
PM Chief	
Primary Disease Reporter	
Secondary Disease Reporter	
Back-up Disease Reporter	
Disease Reporting Trainer	
Laboratory Phone	
Service Public Health Center Phone	
State Health Dept. Phone	

Purpose: To provide a standardized strategy for ensuring all reportable medical events receive prompt attention and follow-up, and are reported to the appropriate Public Health authorities in a timely manner, as required per policy.

TABLE OF CONTENTS

1. LIST OF REPORTABLE MEDICAL EVENTS (DOD & LOCAL).....	2
2. REQUIREMENT TO REPORT.....	4
3. FINDING & REPORTING NOTIFIABLE DISEASES.....	6
4. OUTBREAK INVESTIGATIONS.....	7
5. EVALUATING DATA QUALITY.....	11
6. CREATING REPORTS.....	12
7. TRAINING NEW STAFF.....	14
8. COVERAGE FOR REPORTING STAFF.....	16

- **Section on Reportable Medical Events (RMEs)**
 - Policy on the requirement to report with sources
 - Updated list of RMEs for Service and state/local public health with sources
 - Contact information for questions
 - Local process for reporting:
 - How to find cases
 - Where to find cases
 - Follow-up of cases
 - Documentation of case finding
 - Contact information for each source
 - How to get access to resources used for case finding

Sample page with DoD and Army policies which outline the requirement to report. (Navy and AF locations should include AF/Navy policies)



Link to the correct DRSi system and contact information for DRSi questions



Contact information for state reporting requirements and questions



REQUIREMENT TO REPORT

Reporting to the Army/Department of Defense:

The reporting of important preventable medical events has long been a cornerstone of public health surveillance rooted in international and national regulations to prevent the introduction, transmission, and spread of communicable diseases. As such, DODD 6490.02E requires the reporting of medical events within the DoD as defined in the 2017 Armed Forces Reportable Medical Events Guidelines and Case Definitions. The requirement to report can be found in the following references:

1. DODD 6490.02E "Comprehensive Health Surveillance"
2. DODI 6490.03 "Deployment Health"
3. Joint Publication 4-02 "Doctrine for Health Service Support for Joint Operations"
4. CJCS Memorandum MCM 0028-07 "Procedures for Deployment Health Surveillance"
5. Army Regulations 40-5 "Medical Services Preventive Medicine"
6. Department of the Army Pamphlet 40-11 "Medical Services Preventive Medicine"

All cases must be reported to the Army Disease Reporting System internet (DRSi).

DRSi link: <https://data.nmcphc.med.navy.mil/adrsi/Login.aspx>

Contact the Army Public Health Center for questions on DRSi, Reportable Medical Events, or how to get a DRSi account.

Email:	Service public health command or NEPMU
Phone:	<ul style="list-style-type: none"> • Email address • Phone numbers
Hours:	<ul style="list-style-type: none"> • Hours of operations (if applicable)

Reporting to Your State/Local Public Health:

State Health Department Link: _____

State PH Contact Name: _____ Phone: _____

County Health Department Link: _____

County PH Contact Name: _____ Phone: _____

Up-to-date contact information for each department that is updated regularly to improve communication between departments



Step by step processes for case finding using each data source



FINDING AND REPORTING NOTIFIABLE DISEASES

1. Ensure you and the disease reporting staff/backups have access to all case-finding and reporting systems, such as:
 - a. CHCS ad hoc/spool reports
 - b. AHLTA medical record system
 - c. ESSENCE
 - d. DRSi
2. Establish communication between preventive medicine, laboratory, and public health staff
 - a. Visit the laboratory
 - i. Know what is tested in-house
 - ii. Know what labs, if any, are sent out, and where
 - iii. Work with lab to ensure return test results are seen in CHCS ad hoc/spool reports and DRSi case finding module
 - b. Record the point of contact for the following departments:
 - i. Preventive Medicine: _____
 - ii. Laboratory: _____
 - iii. Public Health: _____
 - iv. DRSi: _____
 - c. Schedule weekly or bi-weekly meetings between departments to discuss any changes in protocol, additions to staff, or other pertinent information
3. Other resources for case finding:
 - a. Sick call logs
 - i. Process for checking sick call logs:
 - 1.
 - 2.
 - b. Laboratory reports
 - i. Process for checking laboratory reports:
 - 1.
 - 2.
 - c. Provider outreach
 - i. Process for provider outreach:
 - 1.
 - 2.
 - d. Chart reviews
 - i. Process for checking chart reviews:
 - 1.
 - 2.
 - e. If no other methods are currently in use, discuss with preventive medicine, the laboratory staff, and/or APHC to determine what else can be done to find cases.
4. Finding cases in CHCS ad hoc/spool reports:
 - a.

Instructions for what to do if the DRSi account is inaccessible and who to contact, and information on why the account may be locked



Instructions on how to gain access to each resource used, with contact information, requirements to gain access, and list of users that have access to that system for new users to ask questions/training

h. If your DRSi account is locked:

i.

- Service public health command or NEPMU
- Email address
- Phone numbers
- Hours of operations (if applicable)

ii. Please note: All DRSi accounts are automatically locked if the user does not log in at least once per 30 days. Accounts are also locked if the DRSi user does not update their HIPAA certification date in their DRSi profile regularly.

8. Daily documentation:

- a. Create a checklist for sources checked each day. Include if the case was investigated, followed-up, and reported to both DRSi and the state/local health department
- b. All reporting staff should have access to this checklist to ensure that there is no duplication of work and all resources are being utilized each day

Case Finding Database	Users at MTF With Access to this Database	POC to Gain Access (As of _____)	Requirements for Access
Disease Reporting System internet		Service public health command	- DD2875 - HIPAA - Cybersecurity
AHLTA			- CHCS Internal Move Inprossing Sheet - HIPAA
ESSENCE			ESSENCE URL
CHCS/ad hoc reports			
<i>(other resources used at this MTF)</i>			

- **Section on Outbreak investigation and follow-up**
 - When to suspect an outbreak
 - How to report an outbreak
 - Summary of investigation steps
 - Responsibilities of each team member in the event of an outbreak
 - What to do following an outbreak investigation
 - Chain of command

Policies on outbreak investigation and reporting



Step-by-step instructions for how to report an outbreak in DRSi. Should also include instructions on how to report an outbreak to local leadership



When to suspect an outbreak may have more specific information unique to your location



OUTBREAK INVESTIGATION AND REPORTING

1. **When and how to report an outbreak:**
 - a. Per Army policy, all suspected outbreaks or disease clusters are required to be reported to DRSi immediately
 - i. Army Regulation 40-5 "Medical Services Preventive Medicine"
 - ii. DODD 6490.02E "Comprehensive Health Surveillance"
 - b. **To report a new outbreak to DRSi:**
 - i. Log into DRSi
 - ii. Click "Enter/Edit Outbreak Report(s)"
 - iii. Click "Enter New Outbreak Report"
 - c. The information available will change daily throughout the course of any outbreak investigation. Update this case report in DRSi as often as possible to keep all parties informed. When the investigation is complete, check "YES" in the outbreak report asking "Final Report". Hit submit.
 - d. **If the investigation finds there was no true outbreak:** Answer all questions in the outbreak report and describe how it was determined there was no outbreak. Hit submit.
 - e. **To edit an existing outbreak report in DRSi:**
 - i. Log into DRSi
 - ii. Click "Enter/Edit Outbreak Report(s)"
 - iii. Enter the date you entered the report (either exactly or approximately) in the "Date of Report" start and end date filters
 - iv. Select "Get Outbreak Report(s)"
 - v. The outbreak report will show up below. Click the Edit icon on the far right to open the report.
 - vi. A new window will open. After editing the information in the MER, select the "Submit" button.
 - vii. You can update outbreak reports as frequently as needed.
2. **When to suspect an outbreak**
 - a. If multiple cases of the same disease type with onset dates within the incubation period of that disease are found
 - i. Ex: five cases of Campylobacteriosis with onset dates within 3-5 days of each other.
 - b. A case with an infectious disease mentions several people in their unit/worksites are experiencing similar symptoms
 - i. Ex: "Ten other people in my unit also have diarrhea right now"
 - c. More cases are occurring than would be expected
 - i. Ex: Very rare diseases, like meningococcal disease, warrant an outbreak investigation if even one confirmed case is found.
 - d. Know your location's baseline!
 - i. Outbreak definition: the occurrence of more cases of disease than would be expected
 - ii. Baseline definition: The approximate number of cases that would be expected at any given time of the year, in that particular geographic region, for that particular population

Overall summary of investigation steps to demonstrate the complexities of an outbreak investigation



Outline what team members should be involved in an outbreak investigation and what their responsibilities are. May encompass multiple departments/commands/etc



Instructions for after an outbreak investigation has been completed.



Reminder to check CDC outbreaks



6. Summary of investigation steps:

- a. Prepare for field work
- b. Establish the existence of an outbreak
- c. Verify the diagnosis
- d. Establish the case definition
- e. Define and identify cases
- f. Perform descriptive epidemiology
- g. Develop hypothesis
- h. Evaluate hypothesis
- i. Implement control and prevention measures
- j. Communicate findings



These steps do not occur in this order. Many steps will happen simultaneously.

DO NOT ATTEMPT TO PERFORM AN OUTBREAK INVESTIGATION ALONE.

DO NOT CONTACT CDC.

7. Responsibilities in the event of an outbreak:

- a. Medical director will:
 - i.
 - ii.
- b. Preventive Medicine will:
 - i. Provide clinic HCP with case information
 - ii. Provide medical director and APHC with updates
- c. Clinic health care providers will:
 - i. Create line lists for new cases
 - ii. Interview all cases with investigation form
 - iii. Notify PM and APHC of any suspected outbreaks
 - iv. Report all cases to DRSi (if etiologic agent is an RME) and also submit an outbreak report
 - v.
 - vi.
 - vii.
- d. Regional Health Command will:
 - i. Provide assistance as needed
 - ii.
- e. Army Public Health Center will:
 - i. Provide assistance as needed
 - ii.

8. After an outbreak investigation is closed:

- a. Complete outbreak report in DRSi
- b. Write After Action Report summarizing cases, investigation, findings, and response
- c.
- d.

9. Checking the Centers for Disease Control and Prevention National Outbreak Website

- a. Check the CDC national and international outbreak website frequently
- b. <https://www.cdc.gov/outbreaks/index.html>
- c. Post outbreaks around the clinic to make health care providers and patients aware of recalls and outbreaks to watch out for
- d. Consider these outbreaks while interviewing cases in regular disease follow-up

Provide resources for how the DRSi data can be evaluated



Instructions for what to do if a report is requested to be edited in DRSi (from APHC, NEPMU, USAFSAM, etc)

Depending on the location, other methods that are used to evaluate data quality of reports entered in DRSi



EVALUATING DATA QUALITY

1. **Timeliness report**
 - a. The timeliness report evaluates what percentage of reports submitted to DRSi are reported within two days of the diagnosis date.
 - b. This report is processed and distributed by APHC.
 - c. For an updated report of your MTF's timeliness metric, contact Service public health command number on page 5.
2. **Completeness report**
 - a. A completeness report evaluates how many potential RMEs are reported to DRSi. Laboratory data from HL-7 is used and compared against cases reported to DRSi.
 - b. This report is not regularly produced, but APHC can create one for your MTF by request. Contact the disease epidemiology division using the email address or phone number on page 5.
3. **Ad hoc emails to disease reporting staff from** Service public health command
 - a. DRSi surveillance staff at APHC routinely review all medical event reports submitted to DRSi. Someone from APHC may contact someone from the reporting staff to edit a MER or to get more information.
 - i. **If a MER requires editing**
 1. The email should include the MER Case ID and the requested edit to be made
 2. Log into DRSi
 3. Click "Enter/Edit Medical Event Report(s) by Reporting Unit"
 4. A new window will open.
 5. Click "Add/Remove" across from the "Case ID" filter
 6. Enter the Case ID from the email
 7. Click "Get Medical Event(s)"
 8. The MER will show up as a line below the filters. Scroll over to the right and click the Edit icon
 9. A new window will open with the MER. Edit the information as requested in the email and click "Submit"
 10. APHC will be notified of this change from DRSi and will review the changes the following day
4. Other

Depending on your location, you may need to create weekly, monthly, annual reports on DRSi disease trends. Provide step-by-step instructions on how to do this. Include how often this is expected to be done and what the end result should look like.

CREATING REPORTS

There are multiple methods for pulling data from DRSi, and there are also modules built within the system that can create reports for you. However, these reports are not currently reliable and are not currently recommended. The most reliable method for creating a weekly, monthly, yearly, etc report of disease trends at your location is to create the report yourself.

1. **Creating an STI report**
 - a.
 - b.
 - c.
 - d.
2. **Creating a Weather-Related Illness Report**
 - a.
 - b.
 - c.
 - d.
3. **Creating a Gastrointestinal Illness Report**
 - a.
 - b.
 - c.
 - d.
4. **Other**

- **Training new staff and established staff responsibilities**
 - Disease reporting staff
 - New employees
 - Regular trainings scheduled for existing and back-up staff
 - Materials to provide all new trainees
 - Sexually Transmitted Infections (STI) follow-up staff
 - Labs to be ordered
 - Guidance for children
 - Guidance for sexual abuse victims
 - STI care management
 - Weather-related illness follow-up
 - Other as needed

Setting up new disease reporting staff



Scheduling or establishing training sessions with APHC (if Army), NEPMU (Navy), USAFSAM, disease reporting mentor, etc.



Materials to provide to new trainees



TRAINING NEW STAFF AND ESTABLISHED RESPONSIBILITIES

1. **Disease Reporting Staff**
 - a. Sign the DD2875 form and submit to the APHC email address on page 5 for processing
 - i. DRSi accounts typically take 1 – 3 days to process. Call the phone number on page 5 if the request takes more than 3 days to process
 - ii. Do not fax the DD2875 form. These forms can only be received via email.
 - iii. Account processing can be expedited if the supervisor digitally signs the DD2875 form.
 - b. Schedule a DRSi training session
 - i. With APHC
 1. Email the Disease Epi division on page 5 to schedule a DRSi training session. These sessions typically take ~1 hour, or can take as long as needed. Topics covered can include:
 - a. Reportable medical event case definition background
 - b. Reporting cases in DRSi
 - c. Using the outbreak module
 - d. Pulling data from DRSi
 2. These sessions cannot cover information that is specific to the individual MTFs. Individual MTF processes must still be covered by a trainer at the MTF
 - ii. With an experienced user at the MTF
 1. Schedule a training session with an experienced Disease Reporting staff member within (___) days of gaining access to DRSi
 2. Topics to cover during training must include:
 - a. Reportable medical event case definitions
 - b. Reporting cases in DRSi
 - c. Reporting cases to the local/state health department
 - d. Using the outbreak module in DRSi
 - e. Pulling data from DRSi (if applicable)
 - f. Case follow-up
 - g. Documentation processes
 - h. Expectations for the new hire from the Preventive Medicine Chief and MTF leadership
 - i. Resources for new hires to ask questions, get more training
 3. The trainer will help to enter cases with the new hire until the new hire feels comfortable with this task. The trainer will review cases submitted by the new hire until the cases have been entered and followed-up appropriately.
2. **Materials to Provide New Trainees**
 - a. A digital and physical copy of the 2017 Armed Forces Reportable Medical Events Guidelines and Case Definitions
 - i. A physical copy can be provided to your MTF by APHC. Contact the disease epi unit via phone or email on page 5
 - b. A copy of this Standard Operating Procedure with up to date contact information filled in
 - c. MTF-specific policies/guidelines
 - i.
 - ii.
 - iii.

- Establish an up-to-date resource for who the primary, secondary, tertiary, etc. disease reporters are to be prepared in the event of the primary reporter taking leave or changing positions, new preventive medicine leadership, etc.
 - If your MTF/location does not have a established back up for disease reporting who is regularly trained, do this immediately
- Provide a command notification chain that is frequently updated as needed so new and existing employees are notifying everyone needed in the event of a public health emergency

Write what the location is.
This sheet should be hung
somewhere visible in the
office/clinic



Disease reporting primary
and back-ups as needed



Command notification chain.
Include your Service public
health command (as needed)
or NEPMU. Ask your local
leadership and Service public
health command for details



COVERAGE FOR REPORTING STAFF		
Reporting coverage for _____		
Last update: ____/____/____		
Position Title	Disease Reporting Rank	Name
	Primary	
	Secondary	
	Tertiary	
	Back-up	
Preventive Medicine Chief		
COMMAND NOTIFICATION CHAIN		
In the event of an urgent public health emergency, below is the command notification chain:		
<ol style="list-style-type: none"> 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 		
(Fill out the chain above. Include the Army Public Health Center and the Regional Health Command within the command notification chain. Include titles, names, and phone number. Update periodically)		

- 1. Try to assess current and potential problems**
- 2. Have your leadership review your SOP for completeness**
- 3. Ask your Service public health center for an additional review to ensure all policies outlined are up to date and accurate**
- 4. Test the process**
- 5. Update the SOP frequently!**
 - Review the information in the SOP every month/quarter/year (depending on your location) to ensure all information is complete and up-to-date
 - Include a “Last Update: Month/Year” in the header or footer of the SOP
- 6. Provide a copy of the SOP to all existing and incoming staff**

- Army: APHC – Disease Epidemiology Division
Aberdeen Proving Ground – MD
COMM: (410) 436-7605 DSN: 584-7605
usarmy.apg.medcom-aphc.mbx.disease-epidemiologyprogram13@mail.mil
- Navy: NMCPHC Preventive Medicine Programs and Policy Support Department
COMM: (757) 953-0700; DSN: (312) 377-0700
Email: usn.hampton-roads.navmcpubhlthcenpors.list.nmcphc-threatassess@mail.mil
Contact your cognizant NEPMU
NEPMU2: COMM: (757) 950-6600; DSN: (312) 377-6600
Email: usn.hampton-roads.navhosporsva.list.nepmu2norfolk-threatassess@mail.mil
NEPMU5: COMM: (619) 556-7070; DSN (312) 526-7070
Email: usn.san-diego.navenpvntmedufive.list.nepmu5-health-surveillance@mail.mil
NEPMU6: COMM: (808) 471-0237; DSN: (315) 471-0237
Email: usn.jbphh.navenpvntmedusixhi.list.nepmu6@mail.mil
NEPMU7: COMM (int): 011-34-956-82-2230 (local): 727-2230; DSN: 94-314-727-2230
Email: NEPMU7@eu.navy.mil
- Air Force: Contact your MAJCOM PH or USAFSAM/PHR
USAFSAM / PHR / Epidemiology Consult Service
Wright-Patterson AFB, Ohio
COMM: (937) 938-3207 DSN: 798-3207
usafsam.phrepiservic@us.af.mil