



PUBLIC HEALTH EMERGENCY PREPAREDNESS (PHEP) GUIDELINES

Understanding PHEP requirements, turn-around-time frames, date definitions, entry, and reports.

Introduction: PHEP Capability 13 Measurements

Per the CDC's Public Health Emergency Preparedness Cooperative Agreement, Performance Measure Specifications and Implementation Guidance, PHEP (Public Health Emergency Preparedness) surveillance is under capability 13 of the PHEP grant. The PHEP measurements are meant to assess the timeliness of case reporting and public health response for selected notifiable conditions. Specifically, the two measurements PHEP attempts to capture are the following:

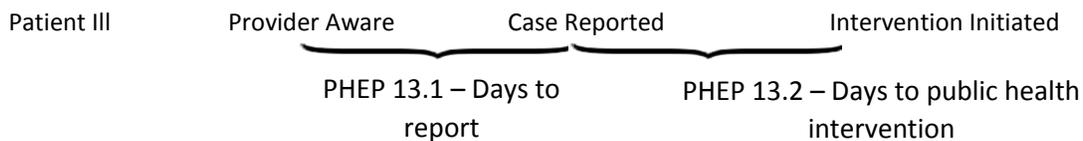
PHEP 13.1: Disease Reporting

Percentage of reports of the selected reportable diseases received by a public health agency within the required timeframe.

PHEP 13.2: Disease Control

Percentage of reports of the selected reportable diseases for which initial public health control measure(s) were initiated within the appropriate timeframe.

In general, events occur in the following order: a person becomes ill (date of onset); they seek medical attention; the provider makes a diagnosis based on symptoms; orders confirmatory testing (and ideally reports the suspected case); or the provider orders a test in order to make a diagnosis, a specimen is collected, a test is done, the result is reported to the physician and ideally the lab and physician report the result to public health; an investigation is initiated; and public health control interventions (PHI) are implemented. The earliest date suspected should reflect the date when the provider has enough information that they are expected to report the infection to public health. Depending on the condition, this may be before or after the test date. Earliest date suspected should precede the date reported. Unless control measures have already been implemented following an earlier epi-linked case, the date of first public health intervention should follow the date of report.



PHEP Capability 13 Measurements: Dates Defined

To measure the timeliness of disease reporting and application of public health intervention, the following variables may be utilized to define case detection by the provider in order to initiate public health follow-up.

Earliest Date Suspected

Earliest Date Suspected should reflect the date when a medical provider, laboratory, school, or other entity first had evidence that a notifiable condition should be reported to public health. It was created for the purpose of measuring whether cases are reported within required time frames. It is not usually the date a person first became ill. *Earliest Date Suspected* is a concept date and the appropriate date to record will vary by both condition and circumstance. The *NBS Data Entry Guide* has condition-specific guidance for entering this date, but for most conditions there is a list of possible dates to choose depending on circumstances and the dates that are available for selection. Below are some examples to assist with interpretation of this date.

Diagnosis by Symptoms

For some conditions the symptoms are enough to suggest the diagnosis and should be reported by the physician at first encounter. An example would be a person with a generalized rash, fever >101° F, and cough, conjunctivitis or coryza which should be reported as a suspected case of measles. You may not have a record of the office visit date, but if a physician orders a measles test, this is evidence that measles was suspected and should have been reported. In this example, the date of specimen collection would coincide with the *Earliest Date Suspected*. If specimen collection is initiated by the public health investigator, date of specimen collection

Diagnosis by Test Result

For other conditions the symptoms are not suggestive of a particular diagnosis unless the person has had a known recent exposure to a specific pathogen. For example, diarrhea is not reportable. In this example the date a lab test is positive for a notifiable condition such as *Salmonella*, *Shigella*, *Campylobacter*, etc., it becomes reportable. Therefore, the date the lab was positive would be the *Earliest Date Suspected*.

The test run date may be used if available (marked with arrow). If not, use the reported date listed by the lab.

Resulted Tests and Results	
Resulted Test: HAV IGM SER QL EIA(HEPATITIS A IGM)	
Result(s): REACTIVE(SNOMED)	
Reference Range: NON-REACTIVE	Date/Time: 2014-02-19 19:47:00.0 ←
Interpretation:	Performing Facility: QUEST DIAGNOSTICS-IRVIN
Result Method:	Facility ID: 45D0697943 (FI)
Status: Final	
Test Code(s): 13950-1 (LN LOINC) /55013300 (L LOCAL)	
Result Code(s): 11214006 (SNM SNOMED) /REACTIVE (L LOCAL)	
Result Comments:	

Diagnosis by Epi Link

Other scenarios may occur for the above cases. For example, a public health investigation may be under way for a reported case and a close contact may be identified who does not have a lab test and has not been seen by a medical provider. If the investigator suspects this contact is an epi-linked case and they open an investigation, they should select the date the symptomatic person was identified as the *Earliest Date Reported*, *Earliest Date Reported to County*, and the *Earliest Date Suspected*; select "Other Public Health Entity" for *Reporting Source*; and select "Epidemiologically Linked" for *Confirmation Method*.

Date Earliest Public Health Control Measure Initiated

Earliest Date Control Initiated should reflect the date when the investigating health department first takes actions to mitigate the spread of infection. For the PHEP conditions, the intervention actions and dates should be captured on the case investigation form for *Neisseria meningitidis* and on the *Control Measure Tracking Form* for botulism, Shiga toxin-producing *Escherichia coli* (STEC), hepatitis A, measles, and tularemia. As noted above, except for cases in epi-linked clusters, the date of report should precede *Earliest Date Control Initiated*.

CDC Guidance:

- This performance measure is meant to capture initiation of public health control measures, not completion.
- In general, the intent of this performance measure is not to capture the first phone call to a healthcare provider to discuss a case patient, unless that discussion entails recommendations and/or education regarding specific control measures (e.g., calling a parent and/or a day care center to exclude an infectious child from child care due to *E. coli* or hepatitis A would count).
- If a health department documents timely initiation of either (a) an appropriate control measure, (b) a recommendation for a control measure, (c) a decision not to initiate a control measure, or (c) inability to initiate a control measure despite an effort to do so, this will meet the intent of the measure and count toward the numerator.
- Timeframes are based on calendar days (including weekends and holidays), not business days.

Measurement Targets

Condition	Reporting Time Frame	Control Initiation Time Frame
Botulism, foodborne, wound, and other/unspecified	Immediately	One day
<i>Escherichia coli</i> , Shiga toxin-producing (STEC)	One week	Three days
Hepatitis A, acute	One day	Seven days
Measles (Rubeola)	Immediately	One day
<i>Neisseria meningitidis</i> , invasive (Mening. disease)	Immediately	One day
Tularemia	Immediately	Two days

Quick Reference: PHEP Surveillance Measurement Data Entry Guidelines

The following variables will be utilized to determine if target timeframes have been met for capability measurements once case detection has been defined and public health intervention has been established.

Date of Report: Enter the earliest date any provider (e.g. physician, hospital, school, laboratory) reported the case to any public health department. For epi-linked cases, use date of interview in which the epi-linked case was identified.

Earliest Date Suspected: Earliest Date Suspected should reflect the date when a notifiable condition **first had evidence that it should be reported to public health by a medical provider, laboratory, school, or other entity required to report.** (Note: Earliest Date Suspected should be on or before the earliest date reported. Date of onset should not be used.)

Condition	Earliest Date Suspected
Botulism, foodborne Botulism, wound Botulism, other and unspecified	◇ Clinical diagnosis as evidenced by the date first reported to public health or the date of specimen collection for <i>Clostridium botulinum</i> toxin or culture whichever is earlier; for epi-linked foodborne cases, date of interview in which the symptomatic epi-linked case was identified.
<i>Escherichia coli</i>, Shiga toxin-producing (STEC)	◇ Laboratory confirmation as evidenced by date of first laboratory report with detection of Shiga-toxin or isolation of <i>E. coli</i> O157:H7; for epi-linked cases, date of interview in which the symptomatic epi-linked case was identified.
Hepatitis A, acute	◇ Laboratory confirmation as evidenced by the date of first laboratory report of HAV IgM; for epi-linked cases, date of interview in which the symptomatic epi-linked case was identified.
Measles (Rubeola)	◇ Clinical diagnosis as evidenced by date of physician report or specimen collection date for measles specific test whichever is earlier; for epi-linked cases, date of interview in which the symptomatic epi-linked case was identified.
<i>Neisseria meningitidis</i>, invasive (Mening. disease)	◇ Laboratory confirmation as evidenced by date of first laboratory report of <i>Neisseria meningitidis</i> isolated or detected in a sterile source or purpuric lesion specimen. If appropriate, the date of physician diagnosis based on symptoms and a presumptive lab result of gram negative diplococci may also be used.
Tularemia	◇ Clinical diagnosis as evidenced by physician report or specimen collection date for <i>Francisella tularensis</i> tests.

Date Earliest Public Health Control Measure Initiated: Enter the earliest date any public health control measure was initiated as recorded on the case investigation for *Neisseria meningitidis* (meningococcal disease) or on the PHEP Surveillance Control Measure Tracking Form for adult botulism, *E. coli* (Shiga toxin-positive), Hepatitis A, measles, and tularemia. If addendum is not available, utilize information from the case investigation records.

Condition	Date Earliest Public Health Control Measure Initiated
Botulism, foodborne Botulism, wound Botulism, other and unspecified	<ul style="list-style-type: none"> ◇ Contact IDCU to discuss case, anti-toxin request, and/or specimen collection ◇ Interview patient or household member to collect exposure history of foods or wound and others with potential symptoms. ◇ Arrange collection of suspected foods and/or contact IDCU to arrange for testing of food specimens.
<i>Escherichia coli</i>, Shiga toxin-producing (STEC)	<ul style="list-style-type: none"> ◇ Interview patient to educate and/or identify of potential source of infection, risk factors, transmission settings, or close contacts ◇ Consult with patient’s day care, school, work place, or residential facility to identify source of infection and/or recommend control measures ◇ Investigate possible food sources by arranging specimen collection and/ or contact IDCU to arrange for testing of food specimens. ◇ Educate contacts on exposure, symptoms, and measures to avoid disease transmission including recommended exclusion from school or work.

<p>Hepatitis A, acute</p>	<ul style="list-style-type: none"> ◇ Provide medical provider with prophylaxis recommendations, isolation precautions ◇ Interview patient to educate and/or identify of potential source of infection, risk factors, transmission settings, or close contacts ◇ Educate contacts on exposure, symptoms, and measures to avoid disease transmission including recommended exclusion from school or work. ◇ Recommend or administer chemoprophylaxis as indicated. ◇ Institute work and daycare restrictions/exclusions for cases or suspect cases ◇ Consult with patient’s day care, school, work place, or residential facility to identify source of infection and/or recommend control measures ◇ Coordinate with environmental health to conduct environmental investigation of food establishment/daycare ◇ Work with appropriate agency to eliminate source of exposure ◇ Coordinate press releases and prophylaxis clinics as needed for prevention
<p>Condition</p>	<p>Date Earliest Public Health Control Measure Initiated</p>
<p>Measles (Rubeola)</p>	<ul style="list-style-type: none"> ◇ Contact medical provider to discuss precautions and recommendations ◇ Arrange collection of specimens and notify IDCU of expected arrival time and tracking number. ◇ Interview patient to educate and identify of potential source of infection, transmission settings, and close contacts. ◇ Consult with patient’s day care, school, work place, or residential facility to identify source of infection and/or recommend control measures ◇ Educate contacts on exposure, symptoms, and measures to avoid disease transmission including recommended exclusion from school or work. ◇ Recommend or administer chemoprophylaxis as indicated. ◇ Collect detailed travel history and coordinate contact notification with IDCU. ◇ Contact exposed persons in jurisdiction to advise of exposure and control measures. ◇ Initiate active surveillance and prophylaxis in exposed populations as needed. ◇ Initiate press release as needed.

<p><i>Neisseria meningitidis</i>, invasive (Mening. disease)</p>	<ul style="list-style-type: none"> ◇ Confirm symptomatic individuals are placed on droplet precautions until 24 hours after effective antibiotic treatment ◇ Review high risk exposures with medical provider ◇ Interview patient or surrogate for contact tracing ◇ Work with school, daycare, or long term care facility to identify and notify close contacts ◇ Recommend or administer chemoprophylaxis as indicated. ◇ Initiate quarantine as needed. ◇ Educate contacts on risk, transmission, and symptoms. ◇ Request hospital or laboratory to forward the isolate to the DSHS lab
<p>Tularemia</p>	<ul style="list-style-type: none"> ◇ Provide medical provider with disinfection precautions for suspected cases ◇ Alert laboratory personnel when tularemia is suspected so procedures can be conducted in recommended biosafety level conditions ◇ Educate laboratory personnel regarding select agent requirements for <i>Francisella tularensis</i> isolates ◇ Interview patient to educate on measures to avoid disease transmission and/or identify of potential source of infection ◇ For suspected outbreaks or intentional exposures initiate bio-terrorism response procedures as needed, initiate active case finding, alert medical community, and/or conduct field studies

Note: Initiation of a control measure refers to the first substantive activity by public health staff to prevent or control the spread of disease. This performance measure is meant to capture initiation of public health control measures, not completion.

••In general, the intent of this performance measure is *not* to capture the first phone call to a healthcare provider to discuss a case patient, unless that discussion entails recommendations and/or education regarding specific control measures (e.g., calling a parent and/or a day care center to exclude an infectious child from child care due to *E. coli* or hepatitis A would count).

••If a health department documents timely initiation of either (a) an appropriate control measure, (b) a recommendation for a control measure, (c) a decision not to initiate a control measure, or (c) inability to initiate a control measure despite an effort to do so, this will meet the intent of the measure and count toward the numerator.

PHEP Report Instructions

The following outlines the steps and explains the fields used for the PHEP Quality Assurance (QA) report. Local health Departments are encouraged to run this report monthly in order to correct any discrepancies.

Report Instructions

1. Log into NEDSS and go to the reports menu.
2. Select “**Public Reports**”.
3. Select the report titled “**PHEP Reporting Assessment Data BP 4**”.
 - a. Please note: all necessary PHEP conditions, filters, and column selections are defaulted – no changes need to be made to the report. To run report, see “[Exporting the Report](#) below”.
 1. The following are the defaulted column sections. *Note: the items **highlighted in yellow** are manually added columns you enter in Excel containing necessary formulas.* Case Status
 2. Person Local Id
 3. Investigation ID2
 4. Investigator Name
 5. Condition
 6. Jurisdiction
 7. Earliest Date Suspected
 8. Date First Reported
 9. Report To County Time
 10. Report To State Date
 11. **Earliest Report Date**
 - a. Formula: =MIN(H2:J2)
 - b. This displays the earliest date from: Date First Reported, Report to County, or Report to State Date.
 12. Earliest Date Control Initiated
 13. Event Date
 14. Investigation Start Date
 15. Investigator Assigned Date
 16. OnSet Date
 17. Diagnosis Date
 18. Report Source Type
 19. Notification Date
 20. First Notification Sent Date
 21. First Notification Date
 22. **TAT Suspected to Report**
 - a. Formula: =DATEDIF(G2,K2,"D")
 - b. This calculates and displays the number of days from Earliest Date Suspected to Earliest Report Date.

23. **Reported In/Out of Range**

- a. Formula: Varies by number of days for initiation.

PHEP Condition	Formula
Botulism:	=V2<=1
HAV:	=V2<=7
STEC:	=V2<=3
Measles:	=V2<=1
N. Mening:	=V2<=1
Tularemia	=V2<=2

24. **TAT Reported to EDPHI**

- a. Formula: =DATEDIF(K2,L2,"D")
b. This calculates and displays the number of days from the Earliest Report Date to the Earliest Date Control Initiated.

25. **EDPHI In/Out of Range**

- a. Formula: See 23. "Reported In/Out of Range" for each condition.
b. This field displays "TRUE" for all investigations completed within timeframes, and FALSE in red for any investigations out of the timeframe.

PHEP Condition	Formula
Botulism:	=V2<=1
HAV:	=V2<=7
STEC:	=V2<=3
Measles:	=V2<=1
N. Mening:	=V2<=1
Tularemia	=V2<=2

26. **Days Event Date to Suspected**

- a. Formula: =DATEDIF(M2,G2,"D")
b. This field calculates and displays the number of days from Event Date to Earliest Date Suspected.
c. Event Date is defined by Date used to filter the investigations from the NBS user interface. It is derived based on the following hierarchy:
i. Onset Date
ii. Diagnosis Date OR
iii. The earliest of the following dates:
1. Earliest date received by the county/local health department
2. Earliest date received by the state health department
3. Investigation start date

Exporting the Report

1. Select "EXPORT".
2. When Asked "Do you want to open or save this file"? Select Save.
 - a. Save CSV (defaulted file type).
 - i. Once "Download Complete" pop-up box appears, Select Open

Formatting the Data

1. Expand the width of all of the columns in your spreadsheet/document.
 - a. To do so: with the spreadsheet selected, double click between any two columns
 - b. Filter the Rows.
 - ii. Select Row 1, and then select the "Data Menu".

- iii. Now select “Filter”.

Saving the File in Excel Format

1. Go to File, select Save As
 - a. Change the file type to Microsoft Excel Workbook (.xls)
 - i. Select “SAVE” and close.

Reviewing Data

1. Review all dates and number of days calculated.
2. Correct any discrepancies as needed in NEDSS.

For questions, concerns, or issues with the report data – please contact Ashley Rodriguez at 817-264-4639 or via email at Ashley.Rodriguez@dshs.state.tx.us