MERLIN MEASLES GUIDANCE
Version 2.1
3/10/2015
# VERSION HISTORY

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INTRODUCTION

1.1 Purpose
This guidance document discusses changes made to the measles Extended Data screen and new measles reports added to Merlin after version 14.3. Changes to the Extended Data screen are effective 1/4/15. This document assumes the reader has a Merlin account and is familiar with basic Merlin use. To request access to Merlin, contact the Merlin Helpdesk (Merlin.Helpdesk@FLhealth.gov).

1.2 Key Points
- The Bureau of Epidemiology (BOE) is requesting that all Persons Under Investigation (PUIs) for measles are entered into Merlin within 4 hours of CHD notification.
  - At this time, weekend data entry is not required.
    - Any data gathered on the weekends should be entered into Merlin by 10am Monday morning.
  - Complete as many of the Extended Data questions as possible upon initial notification. As more information is gathered during the investigation, update Extended Data questions.
    - Extended Data questions should be updated by 4pm daily.

1.3 Overview
- Changes have been made to the measles Extended Data screen.
  - Changes include: addition of data fields to more fully capture information for an investigation, including information for persons under investigation and summary information about contacts.
- New measles reports have been added.
  - New measles reports have been added to the analysis tab to provide summaries of the investigation data.

1.4 Definitions
- Person under investigation (PUI): A person under suspicion of having measles but not yet meeting case definition, where specimen submission to the Bureau of Public Health Laboratories has been recommended following BOE consultation.
- Case: A person who meets the confirmed or probable case definitions for measles.
- Unknown: A person who does not meet the case definition or PUI criteria.
Merlin Measles Guidance (V 2.1)

2. GETTING STARTED

Access Merlin ([http://merlin.doh.ad.state.fl.us/merlin/default.aspx](http://merlin.doh.ad.state.fl.us/merlin/default.aspx)).

Search for and select an existing Merlin profile, if available, or create a new profile.

Create a measles record.
Navigate to the measles Extended Data screen.
3 GUIDANCE

3.1 When to Create a Record
- Within 4 hours of CHD notification, measles cases and persons under investigation (PUIs) should be entered into Merlin, regardless of the individual’s residency.

3.2 Person Under Investigation
- If a person is determined to be a PUI (see definition above):
  - Create a measles record
  - Complete the following Extended Data questions (as many as possible as soon as information is known):
    - Symptoms on the Case Symptoms screen under the Case Details menu
    - Questions 2-12 in the Clinical Information section
    - Questions 13 (and all sub-questions) and 14 in the Vaccination History section
    - All questions in the Under Investigation section
    - Travel history on the Travel History screen under the Case Details menu

3.3 Person Under Investigation that Becomes a Case
- If a PUI is later determined to be a confirmed or probable case:
  - Complete the remaining questions on the Extended Data screen, which includes:
    - Questions 15-18 in the Vaccination History section
    - All questions in the Epidemiologic section

3.4 Case
- If a person is determined to be a confirmed or probable case without first being a PUI:
  - Create a case
  - Complete the following Extended Data questions:
    - Symptoms on the Case Symptoms screen under the Case Details menu
    - Questions 2-12 in the Clinical Information section
    - All questions in the Vaccination History section
    - In the Under Investigation section, select “Case” for question 19 and complete questions 24 and 25
    - All questions in the Epidemiologic section
    - Travel history on the Travel History screen under the Case Details menu
3.5 Updating

- Complete as many of the Extended Data questions for the case or PUI as possible upon initial notification.
- As more information is gathered during the investigation, update Extended Data questions.
  - Extended Data questions should be updated by 4pm daily by the respective county health department.
- At this time, data entry on the weekend or after normal business hours during the week is not required.
  - Any data gathered on the weekends should be entered into Merlin by 10am Monday morning by the respective county health department.
  - Any data gathered after normal business hours during the week should be entered into Merlin by 10am the next morning by the respective county health department.
4 EXTENDED DATA SCREEN CHANGES

4.1 Clinical Information

Select the symptoms for the case or person under investigation (PUI) from the Case Symptoms screen under the Case Details menu. The selected symptoms will be displayed on the Extended Data screen for question 1.

- Record all of an individual’s symptoms and onset dates as they become known.
  - Entering an onset date for “Rash” and/or “Generalized, maculopapular rash lasting >= 3 days” is particularly important as the earliest rash onset date is used to calculate the infectious period for the individual in reports.
    - If the rash onset date changes as the investigation progresses, please update it in Merlin.

Questions have been added to more fully characterize rash and fever. Additionally, a question has been included to allow documentation of other differential diagnoses.

- **Question 2:** Record the number of days of rash at the time of completing the survey.
- **Question 12:** List the other diagnoses that the medical practitioner is considering at the time of report.
4.2 Vaccination History
Questions have been added to capture how many total doses of measles-containing vaccine were administered to the case or PUI prior to illness onset and how the vaccination status and dose number for the case or PUI were obtained.

- **Question 13, Sub-question 1**: If the case or PUI has ever received measles-containing vaccine, select the total number of doses prior to illness onset in the first sub-question under question 13.
- **Question 14**: If the vaccination status of the case or PUI is known (whether they have or have not ever received measles-containing vaccine), complete question 14 to provide context.

4.3 Under Investigation

- **Question 19**: Indicate whether the person was a probable or confirmed case or a person under investigation (PUI) at the initial time of CHD notification.
  - If a PUI is later determined to be a case or if the case is marked for deletion, the response to this question should remain “Person under investigation.”

- **Question 20**: Indicate the current rule out level of suspicion for the PUI. In the event that a PUI is ruled out as not a case, this response should be changed to “None (ruled out).”
• **Question 21**: Indicate if specimen submission to BPHL was recommended for the PUI.

![Question 21 Image]

• **Questions 22 and 23**: Once serology or PCR testing has been initiated for the PUI, complete all applicable parts of questions 22 and 23.

![Questions 22 and 23 Image]

• **Questions 24 and 25**: Complete question 24 and 25 on exposures for the Case or PUI.

![Questions 24 and 25 Image]

**Note**: The remaining questions do not need to be completed until the person is determined to be a confirmed or probable case.
4.4 Epidemiologic
Questions have been added to document the case’s activity history and exposure settings for contract tracing.

NOTE: The Epidemiologic section only needs to be completed if the person is a confirmed or probable case.

- **Question 28:** Record the case’s activity history for 18 days before rash onset to 7 days after rash onset (Day 0 is the rash onset date) in order to identify potential exposures and to gather information needed for contact tracing.

- **Question 29:** Record exposure settings where contacts were identified, and the number breakdown of contacts for a confirmed case.

NOTE: These numbers should be updated daily as more information is gathered during the investigation.
Merlin Measles Guidance (V 2.1)

- For each setting the total number of exposed (i.e., contacts) identified should be entered into the “Number of potentially exposed identified” field.
- “Number of exposed reached” + “Number of exposed not reached” = “Number of potentially exposed identified.”

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<tbody>
<tr>
<td>Number of exposed reached:</td>
<td></td>
</tr>
<tr>
<td>Number reached with evidence of immunity:</td>
<td>7</td>
</tr>
<tr>
<td>Number reached with no evidence of immunity:</td>
<td></td>
</tr>
<tr>
<td>Number reached with unknown immunity:</td>
<td></td>
</tr>
<tr>
<td>Number reached with suspected measles:</td>
<td></td>
</tr>
<tr>
<td>Number of exposed not reached:</td>
<td>1</td>
</tr>
</tbody>
</table>

- “Number of reached with evidence of immunity” + “Number reached with no evidence of immunity” + “Number reached with unknown immunity” = “Number of exposed reached.”
- The “Number reached with suspected measles” should not exceed the “Number of exposed reached.”

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<thead>
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<tbody>
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<td>Number of exposed not reached:</td>
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5 NEW REPORTS
Under Analysis tab, two new measles specific reports have been added under Event Specific Reports.

- **Measles Contact Investigation Summary**
- **Measles Case/PUI Investigation Summary**

5.1 Measles Contact Investigation Summary
The Measles Contact Investigation Summary generates a report of the contacts for the confirmed measles cases during the current event year.

- On the report selection criteria page, select a county or group of counties to run the report.
- Edit the information in the Custom Header box to make your own report title.
For each confirmed case, the report displays all the exposure settings where contacts were identified and the count breakdown for the contact investigation.

5.2 Measles Case/PUI Investigation Summary
The Measles Case/PUI Investigation Summary generates a multi-table report of measles confirmed and probable cases and persons under investigation (PUI) during the current event year.

- On the report selection criteria page, select a county or group of counties to run the report.
- Edit the information in the Custom Header box to make your own report title.
• Table 1 displays the residency status for the confirmed and probable cases.
• Table 2 displays the case status breakdown by residency.
• Table 3 displays the outcome statuses for PUIs.
• Table 4 displays the serology and PCR testing statuses for PUIs.

5.2.1 Drilldown functionality
The Measles Case/PUI Investigation Summary contains drilldown functionality. Clicking on a number in the report will generate a list line of the cases or PUIs included in that count.