Toledo-Lucas County Health Department Standard Operating Procedure

Review / Revision Date:



Original Effective Date:

Infectious Disease SOP—Rubella

Environmental Health

Procedure: 8/2008 7/20/2017 2017.07.013 Maintenance Steward: Epidemiology Supervisor History: ☐ New ☒ Revised ☐ Archived Organizational Scope: ☐ Full Agency ☐ Administration ☐ Community Services ☐ Environmental Health ☐ Health Services Frequency of Review: ☐ Annually ⊠ Biennially ☐ 5 Years □ As Needed ☐ Other: Location: S-Drive: S: → Users → Common → Policies & Procedures Website: www.lucascountyhealth.com/employee-login/ Hardcopy: Environmental Health and Community Services Director's Office Archived Version(s): S:\CSRP\SOGs\Archives **Requisite Signatures** Medical Director X 7/20/20/2 Health Commissioner \times

Director of Environmental Health & Community Services

X



Infectious Disease SOP—Rubella

I. Policy

It is the policy of the Toledo-Lucas County Health Department (TLCHD) to adhere to all state, federal, and local statutes governing the management and case investigation of individual communicable disease cases and outbreaks within Lucas County.

II. Scope

This standard procedure applies to the Infectious Disease Program when investigating one case of rubella (German measles). When an outbreak occurs, call ODH ORBIT. In an outbreak, refer to the "Epi and Surveillance OB Procedure."

III. Purpose

This procedure/process establishes guidelines for acute rubella investigations. Per the Ohio Administrative Code (OAC) 3701-3, acute rubella is a Class A disease and must be reported immediately via telephone according to 3701-3-02, 3701-3-03, 3701-3-04, and 3701-3-05 of the Administrative Code.

IV. Background

The Rubella virus is classified as a togavirus, in the genus *Rubivirus*. In patients with acute rubella, an erythematous maculopapular rash occurs in 50%-80% of those infected. The fine, pink macular rash begins on the head at the hair line, spreads to the trunk and limbs, and fades after 3 days.

Humans are the only reservoir for the rubella virus and the disease occurs worldwide, with greatest prevalence during winter and spring. Transmission of the disease occurs via droplets shed from the respiratory secretions of infected person. It is highly communicable with the period of maximum communicability from one week before to one week after onset of the rash. The incubation period is 12-23 days, usually 14-17 days. Infection generally confers lifelong immunity.

V. Case Definition

A. Clinical Description

- 1. Acute rubella is an illness that has all of the following characteristics:
 - a. Acute onset of generalized maculopapular rash
 - b. Temperature >99°F (>37.2°C), if measured
 - c. Arthralgia/arthritis, lymphadenopathy, or conjunctivitis

B. <u>Laboratory Criteria for Diagnosis</u>

- 1. Isolation of rubella virus OR
- 2. Detection of rubella-virus specific nucleic acid by polymerase chain reaction, OR
- 3. Significant rise between acute- and convalescent-phase titers in serum rubella immunoglobulin G (IgG) antibody level by any standard serologic assay, OR

Infectious Disease SOP— Rubella Effective: 8/1/17

4. Positive serologic test for rubella immunoglobulin M (IgM) antibody

VI. Case Classification

A. Suspected:

1. Any generalized rash illness of acute onset that does not meet criteria for probable or confirmed rubella or any other illness.

B. Probable:

 A case that meets the clinical case definition, has no or noncontributory serologic or virologic testing and is not epidemiologically linked to a laboratory-confirmed case of rubella

C. Confirmed:

1. A case with or without symptoms that is laboratory confirmed OR a case that meets the clinical case definition and is epidemiologically linked to a laboratory-confirmed case.

D. Not a case:

1. This status is not generally used when reporting a case, but may be used to reclassify a report if investigation revealed it was not a case.

For serum specimens (serology testing), complete the Ohio Department of Health Laboratory Microbiology Specimen Submission Form found at: http://www.odh.ohio.gov/pdf/IDCM/frm2530.pdf

The CDC Specimen Submission Form found at: http://www.odh.ohio.gov/pdf/IDCM/frm5034.pdf

For swab specimens, complete the Ohio Department of Health Laboratory Microbiology Specimen Submission Form found at: http://www.odh.ohio.gov/pdf/IDCM/frm2530.pdf

The Wisconsin (WI) VPD Submission Form found at: http://www.odh.ohio.gov/pdf/idcm/frmwivpd.pdf

Please notify the Ohio Department of Health VPD Epidemiology Program at (614) 995-5599 before a specimen is sent to the Ohio Department of Health Laboratory.

An outbreak is defined as 3 or more cases (with at least one laboratory-confirmed case) clustered in space and time. In outbreak settings, active surveillance for rubella should be maintained for at least two incubation periods (46 days) following rash onset of the last case. Two incubation periods allow for the identification of transmission from a subclinical case.

VII. Procedure

The procedure/process of the Infectious Disease Program is to ensure that all cases are investigated in the same format.

When a report is received, a member of the ID team will complete an interview of the contact using the CDC Rubella Surveillance Worksheet, which can be found in S:\CSRP\SOGs\Rubella Acute. Information collected from the form should be entered into ODRS but does not need to be sent to the ODH.

Infectious Disease SOP— Rubella Effective: 8/1/17

A. Outbreak Response

1. Call ODH ORBIT at 614-995-5599 for guidance

B. Public Health Investigation Process

- 1. ODRS:
 - a. Check to see if the patient is entered into ODRS. If not, enter the patient into ODRS
- 2. Investigation
 - a. Case investigation should start as soon as possible following notification.
 - b. Contact the patient's provider and/or hospital to obtain demographic information, symptoms, date of onset of symptoms, pertinent test results, immunization status, immunization dates, and travel history.
 - c. The epidemiologist will determine, in consultation with ODH vaccine preventable disease division if the laboratory results and /or clinical symptoms indicate a suspect, probable or confirmed case. False positive test results can occur in individuals with other viral illnesses or rheumatoid factor.
 - d. Once the provider and/or hospital ICP has been contacted call the patient/parent and complete the interview.
 - e. Provide education from the fact sheet on the IDCM website at http://www.odh.ohio.gov/pdf/IDCM/ rubella.pdf. This information is also located in S:\CSRP\SOGs\Rubella Acute.
 - i. If no one answers, leave a message requesting a call back.
 - ii. Mail an informational letter requesting a callback.
 - iii. Continue to attempt phone contact with the patient for three more times in the span of 48 hours after the informational letter was sent.
 - iv. Travel history 14-23 days prior to symptom onset and clinical history shall be reviewed as well as pregnancy and immunization status. Contacts of the case who are pregnant should be identified if possible
 - v. After interview is completed, ask the patient/parent whether they would like more information. If they express an interest, ask what the best method to deliver the information would be (e.g. e-mail, mail, etc.)

3. Treatment

- a. There is no specific therapy for this disease.
- 4. Isolation/Follow Up Specimens
 - a. Ohio Administrative Code (OAC) 3701-3-13 (T) states: "a person with rubella shall be isolated, including exclusion from school or child care center, for seven days after the onset of the rash."
- 5. Prophylaxis
 - a. Ohio School Requirement: All children entering school must have received two doses of MMR (measles, mumps, rubella) vaccine. All three vaccine components must have been received to meet this vaccination requirement.
- 6. Contacts (Exclusion)

Infectious Disease SOP— Rubella Effective: 8/1/17

a. Immunization after exposure will not necessarily prevent infection or illness resulting from that exposure, but may protect against any subsequent exposure and is therefore recommended. Passive immunization with immune globulin (IG) will not prevent the disease and is not indicated.

7. Notification

- a. Notify TLCHD contacts immediately after investigation with patient (in sequential order)
 - i. Supervisor of Epidemiology
 - ii. Director of Community Services and Environmental Health
 - iii. Medical Director
 - iv. Health Commissioner
- b. Public health recommendations and interventions will be shared with the public by the PIO or to specific individuals within 6 hours of identification of the agent as determined by ODH and supervisory staff at the local health department. An OPHCS alert will be distributed within 12 hours of a positive test result as determined by supervisory local health department staff and ODH.

8. Documentation

- a. Enter information into ODRS as it is obtained.
- b. Include a note documenting investigation, education, and intervention.

Sample: Spoke with mother by phone on [date]. EDUCATION: Reviewed disease facts, transmission, and symptoms. DISEASE COURSE: Client has history of [medical conditions] and started [symptoms] on [date]. Started [treatment] on [date]. HOUSEHOLD: HH contacts include [relationships]. All are [asymptomatic/symptomatic] [Include information about sensitive settings for HH contacts]. OCCUPATION: [job] TRAVEL HISTORY: [Include information about travel history within the past 2-3 weeks]. MAILING: Mailed fact sheet and cover letter to home address.

c. Include a note for each occupation, activity, or other notification and any actions taken.

Closing a case

a. Ensure that all available information is entered into ODRS before closing. Close case and print record. Staple with investigation sheet and any related documents and file in the appropriate file drawer for the current year located in the CSRP office.

VIII. Appendices

None

IX. Reference/Investigation Forms

- A. Acute rubella Disease Factsheet is located in S:\CSRP\SOGs\Rubella Acute.
- **B.** For additional information please refer to the ODH IDCM at http://www.odh.ohio.gov/pdf/IDCM/acute rubella.pdf

X. Maintenance

A. Review

- 1. The Infectious Disease standard operating procedures are to be reviewed every other year or as needed to ensure compliance with both agency and accreditation standards.
- 2. If guidance/recommendations from the Centers for Disease Control, Ohio Department of Health or law changes regarding this infectious disease, TLCHD will follow the most up-to-date guidance and adjust the SOP(s) as needed.

B. Revision

- 1. All changes made to this SOP are to be noted on the **Record of Change.** Substantial changes will require renewed signatures from all applicable parties. This includes changes to the intent, scope, procedures, or policy statement.
- 2. Changes in style, format, grammar or minor error correction will not require renewed signatures but must be indicated on the Record of Change.

Record of Change (Required for all procedures)

Date of Change	Changes Made By	Changes Made/Notes	Approved By
Change	iviace by		