ESP CASE DETECTION ALGORITHM
Chlamydia

Document Version 2.0

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Modification History

Version	Date	Modification	By
2.0	10/16/2017	• Updated documentation format and added ESP Logo and MDPH branding • Updated test of reinfection documentation • Added EPT documentation	DPM/CII
1.4	6/20/2016	Updated recurrence interval and windows for "reportables" from 28 days to 30 days per DPH request.	CII
1.3	10/1/2015	Incorporating review on reportable symptoms by DPH and Dr. Klompas	CII
1.2	9/2015	Updated medication reporting, ICD10	CII
1.1	12/18/2014	Updates to bring in line with current code	CII
1.0		Initial Draft	ESP Working group

Section 1. *Overview*

The purpose of this document is to describe the criteria used to identify and report chlamydia cases from electronic medical records (EMR) using ESP and report them to the Massachusetts Department of Public Health (MDPH).

Section 2. *Criteria used to identify cases using ESP data*

I.   CASE TYPES

This document includes an algorithm to identify incident and recurrent chlamydia cases.

II.   TIME WINDOW

The recurrence interval for chlamydia is 30 days.

III.   CASE CRITERIA

Cases are defined as patients with result "positive" or "detected" or abnormal flag activated for urine, urethral, cervical, or rectal test for chlamydia by culture or nucleic acid amplification test.

IV.   CRITERIA TO REVOKE A CASE

None.

Section 3. *Specifications for reporting diseases/conditions to the Massachusetts Department of Public Health*

I.   INITIAL CASE REPORTING CRITERIA

All cases should be immediately reported to MDPH upon initial detection.

II.   CASE REPORT UPDATE CRITERIA

An updated report should be set to MDPH if a chlamydia medication (see section 4 for details) was prescribed.

Test of Reinfection*
If test of reinfection is configured at a given site, an updated report should be sent to MDPH if a chlamydia test for reinfection with any result (positive, negative, indeterminate) occurs from day 31 through day 180 following the initial positive test.

>   Notes:
>   1.   Only the first chlamydia test from day 31 to day 180 following the result date of the initial positive chlamydia test is reported.
>   2.   The ESP tests associated with chlamydia are used to identify tests of reinfection (see Section 4, Table 1).
>   3.   The result of the follow-up test (positive, negative, indeterminate) is reported.

4. Test of reinfection reporting is in addition to routine, case reporting for the first Chlamydia test. Hence, it is possible that a single positive case may be reported twice: once as a conventional positive Chlamydia case and again as a positive test of reinfection if the patient had a positive Chlamydia within the preceding 180 days. The new positive case in turn needs to be followed for test of reinfection for the next 180 days.

Expedited Partner Therapy (EPT)*

If EPT is configured at a given site, an updated report should be sent to MDPH if

*Only applicable to ESP sites with test of reinfection configuration.

III. DATA TO INCLUDE IN INITIAL REPORTS TO MDPH

Once a patient is identified, gather the following data to generate a report:

A. Demographic

Name	Last, first, middle
Date of birth	yyyy/mm/dd
Social security number	Last 4 digits
Gender	Male / Female
Race	American Indian / Asian / Black / White / Other / Unknown
Ethnicity	Hispanic / Non-Hispanic / Unknown
Address	Line 1, line 2, city, state, zip, country
Phone	xxx-xxx-xxxx
Language spoken	
Medical record number	
PCP	Name, office address, phone number, email

B. Ordering Facility Information

Facility name	
Facility address	Line 1, line 2, city, state, zip
Facility contact person	
Contact person email	
Contact person phone	xxx-xxx-xxxx
Facility phone	xxx-xxx-xxxx

C. Encounter data

Test ordering clinician	Name, office address, phone number, email
Treating clinician	Name, office address, phone number, email

D. Laboratory Results

Date specimen obtained	yyyy/mm/dd
LOINC code of positive test	LOINC (See Table 1 for examples)
Specimen source	Urine, urethra, cervix, rectum
Result	SNOMED

E. Pregnancy

Pregnancy flag active	Yes or No. If EpicCare pregnancy flag active then pregnancy = yes.
Expected date of confinement	=EDC
Number of weeks pregnant	=40 – [(EDC – present date) / 7]

F. Symptoms

If any of the following diagnosis codes (see Table 2, below) or vital sign findings are present in the 14 days preceding or 30 days following the positive culture report then symptoms=yes, otherwise symptoms=no and the following symptoms are reported.

Fever	Diagnosis code or measured temperature >100.4 degrees Fahrenheit
Urethral discharge	
Urethritis	
Vaginitis	
Cervicitis	
Vaginal leucorrhea	
Abdominal pain	
Chlamydia	
Contact with Exposure to STI	
Screening for STIs	

G. Medications

Report all of the medications from the specified chlamydia medications list (see Table 3, below) given at any point from 7 days prior to the lab order date until 30 days after the positive test result date.

Treatment given	Yes or No
Date of treatment	yyyy/mm/dd
Prescription for chlamydia medication	See Table 3. Report drug name, dose, route, and duration.

Section 4. *Codes, laboratory tests, and medications used to identify criteria listed in Section 2 and supplementary reporting information in Section 3.*

I. LABORATORY TESTS

The following is an example of possible chlamydia lab tests and their mappings from test name to LOINC. All tests must be mapped in ESP.

Table 1. Laboratory Test LOINC Mapping

Component Name	LOINC	LOINC Name
CHLAMYDIA TRACHOMATIS CULTURE	6349-5	Chlamydia trachomatis : ACnc : Pt : XXX : Ord : Organism specific culture
CHLAMYDIA GENPROBE DNA	20993-2	C trach DNA XXX Ql Prb
CHLAMYDIA TR DNA	21613-5	C trach DNA XXX Ql PCR
PEDIATRIC URINE CHLAMYDIA	16601-7	C trach DNA XXX Ql PCR
DIRECT CHLAMYDIA/GC DETECTION	36902-5	Chlamydia Trachomatis+Neisseria Gonorrhoeae DNA : ACnc : Pt : xx

CHLAMYDIA TRACH RRNA	4993-2	C trach rRNA XXX Ql Prb

NOTE: the result POSITIVE or DETECTED can be truncated in EpicCare at 7 letters

II.   DIAGNOSES CODES

Table 2. Diagnosis Codes Used to Identify Symptoms

Symptom	Code Type	Code	Description
Fever	N/A	Temperature >100.4	Measured temperature if available, ELSE "fever".
	ICD-9-CM	780.60, 780.6	Fever
	ICD-10-CM	R50.9	Fever, unspecified
Urethral discharge	ICD-9-CM	788.7	Urethral discharge
	ICD-10-CM	R36.0	Urethral discharge without blood
	ICD-10-CM	R36.9	Urethral discharge, unspecified
Urethritis	ICD-9-CM	099.40	Urethritis, nonspecific,
	ICD-9-CM	597.80	Urethritis, unspecified,
	ICD-10-CM	N34.1	Nonspecific urethritis
	ICD-10-CM	N34.2	Other urethritis
Vaginitis	ICD-9-CM	616.10	Vaginitis, unspecified
	ICD-10-CM	N76.0	Acute vaginitis
	ICD-10-CM	N76.1	Subacute and chronic vaginitis
	ICD-10-CM	N76.2	Acute vulvitis
	ICD-10-CM	N76.3	Subacute and chronic vulvitis
Cervicitis	ICD-9-CM	616.0	Cervicitis
	ICD-10-CM	N72	Inflammatory disease of cervix uteri
Vaginal leucorrhea	ICD-9-CM	623.5	Vaginal leucorrhea
	ICD-10-CM	N89.8	Other specified noninflammatory disorders of vagina
Abdominal pain	ICD-9-CM	789.07	Abdominal pain, generalized
	ICD-10-CM	R10.84	Generalized abdominal pain
	ICD-9-CM	789.04	
	ICD-10-CM	R10.32	Left lower quadrant pain
	ICD-9-CM	789.09	
	ICD-10-CM	R10.10	Upper abdominal pain, unspecified
	ICD-10-CM	R10.2	Pelvic and perineal pain
	ICD-10-CM	R10.30	Lower abdominal pain, unspecified
	ICD-9-CM	789.03	
	ICD-10-CM	R10.31	Right lower quadrant pain
	ICD-9-CM	789.00	Abdominal pain, unspec site
	ICD-10-CM	R10.9	Unspecified abdominal pain
Chlamydia	ICD-9-CM	099.54	Chlamydia
	ICD-10-CM	A56.19	Other chlamydial genitourinary infection
Contact with Exposure to STI	ICD-9-CM	V01.6	Contact with Exposure to STI
	ICD-10-CM	Z20.2	Contact with and (suspected) exposure to infections with a predominantly sexual mode of transmission
Screening for STIs	ICD-9-CM	V74.5	Screening for STIs
	ICD-10-CM	Z11.3	Encounter for screening for infections with a predominantly sexual mode of transmission

III.   MEDICATIONS

Table 3. Chlamydia Medications

Treatment
azithromycin 1g PO x 1
azithromycin 2g PO x 1
levofloxacin 250mg PO qd x ≥7 days
levofloxacin 500mg PO qd x ≥7 dyas
ofloxacin 300mg PO BID x ≥7 days
ciprofloxacin 500mg PO (any duration)
doxycycline 100mg PO x ≥7 days
eryrthromycin 500mg PO qid x 7 days
amoxicillin 500mg PO tid x 7 days
EES 800mg PO QID x 7 days
azithromycin 1g PO x 1
azithromycin 2g PO x 1
levofloxacin 250mg PO qd x ≥7 days
levofloxacin 500mg PO qd x ≥7 dyas

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