

Updated August 2022



# Guidelines for using the Michigan Disease Surveillance System (MDSS) for Sexually Transmitted Infections (STIs)

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## Overview of STI Surveillance

- **Reportable conditions include Chlamydia, Gonorrhea, Lymphogranuloma venereum, Chancroid, Syphilis, and Granuloma inguinale.**
- Chlamydia and gonorrhea are the two most common reportable conditions in Michigan and, along with other reportable sexually transmitted infections (STIs) and communicable diseases, often appear as coinfections or repeat infections in the same patient. Correctly managing investigation and patient data in the Michigan Disease Surveillance System (MDSS) is crucial for ensuring adequate treatment of patients and partners as well as reliable epidemiologic data to inform public health interventions. Below is a brief guide for local health department (LHD) staff for managing STI cases within MDSS.
- [Additional STI resources can be found here](#)
- [Additional MDSS resources can be found here](#)

A note about dates in MDSS: Case date, used for surveillance reports and other data products, is calculated first by looking at Onset Date (date of symptom onset OR date of specimen collection); if Onset Date is blank, diagnosis date is used; if both are blank, referral date is used

Red = Required information

Purple = Supplemental information

Green = Note or comment

When referral date is much later than disease onset (specimen date), use **onset date** to correctly date the case.

Diagnosis date cannot come after specimen date or treatment date. It can be left blank.

Investigation ID	Onset Date (mm/dd/yyyy)	Diagnosis Date (mm/dd/yyyy)	Referral Date (mm/dd/yyyy)
Investigation Status New	Case Status <input type="radio"/> Confirmed <input type="radio"/> Confirmed - Non Resident <input type="radio"/> Not a Case <input type="radio"/> Probable <input type="radio"/> Suspect <input type="radio"/> Unknown <input type="radio"/> Non-Michigan Case		
Patient Status Alive	Patient Status Date (mm/dd/yyyy) 08/30/2022	Case Disposition	Case Updated Date (mm/dd/yyyy) 08/30/2022
Date of Death (mm/dd/yyyy)	Investigator First Name:                      Last Name:		Part of an outbreak?

**Case Definitions:**  
A **Confirmed** case is one which has laboratory evidence of infection  
A **Probable** case is one which has symptoms, but no laboratory results  
**Not a Case** indicates that the patient is confirmed not infected

### Patient Information

Patient ID	First	Last	Middle
Street Address			
City	County	State	Zip
Home Phone (###-###-####)	Ext.	Other Phone (###-###-####)	Ext.
Email Address			
Parent/Guardian (required if under 18)			
First	Last		
Phone	Ext.		

In most cases, patient information, including demographics, is reported by the laboratory initially

### Demographics

Preferred Name	Sex at Birth <input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Unknown
Gender Identity <input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Trans to Female <input type="radio"/> Trans to Male <input type="radio"/> Non-binary	
Date of Birth mm/dd/yyyy	Age    Age Units <input type="radio"/> Days <input type="radio"/> Months <input type="radio"/> Years
Race (Check all that apply) <input type="checkbox"/> White/Caucasian <input type="checkbox"/> Black/African American <input type="checkbox"/> American Indian/Alaska Native <input type="checkbox"/> Hawaiian/Pacific Islander <input type="checkbox"/> Asian	

Gender identity may come from provider, EMR, or patient interview

Very little data entry is required on these sections unless the lab report comes in with missing information

# Referral Information

## Person Providing Referral

First  Last  Phone ###-###-#### Ext.

In most cases, referral information is reported by the laboratory initially

## Primary Physician

First  Last  Phone ###-###-#### Ext.  Email

Affiliation

City  County

Information Source:

**Information Source** is the type of facility which diagnosed the STI. **This is required.**

Case ID  First Name  Last Name  Gonorrhea Case  Page 3

# Laboratory Information

Name of Laboratory:  Phone: ###-###-####

**Specimen collection date is required for confirmed cases**

City:  County:  Zip:

Specimen Collection Date: (mm/dd/yyyy)  Lab Result Date (mm/dd/yyyy)

### Site of Specimen:

- Blood/Serum
- Cerebrospinal Fluid CSF
- Cervix/Endocervix
- Lesion-Extra Genital
- Unknown
- Lesion-Genital
- Lymph Node Aspirate
- Ocular Fluid
- Otic Fluid
- Ophthalmia/Conjunctiva
- Rectal/Anal
- Throat/Oropharynx
- Urethra
- Other, specify:
- Synovial Fluid

**Specimen site is the source of the specimen collected for testing. This is required.**

Lab Test Type  If Other Test, Specify:

**Lab Test Type and Result are required.**

Specimen Collection Date: (mm/dd/yyyy)  Lab Result Date (mm/dd/yyyy)

### Site of Specimen:

- Blood/Serum
- Cerebrospinal Fluid CSF
- Cervix/Endocervix
- Lesion-Extra Genital
- Unknown
- Lesion-Genital
- Lymph Node Aspirate
- Ocular Fluid
- Otic Fluid
- Throat/Oropharynx
- Urethra
- Urine
- Vaginal
- Other, specify:
- Synovial Fluid

If a patient has multi-site testing (multiple specimens collected), enter up to two in this section

Lab Test Type  If Other Test, Specify:  Lab Result

Specimen Collection Date: (mm/dd/yyyy)  Lab Result Date (mm/dd/yyyy)

### Site of Specimen:

- Blood/Serum
- Cerebrospinal Fluid CSF
- Cervix/Endocervix
- Lesion-Extra Genital
- Unknown
- Lesion-Genital
- Lymph Node Aspirate
- Ocular Fluid
- Otic Fluid
- Throat/Oropharynx
- Urethra
- Other, specify:
- Synovial Fluid

Lab Test Type  If Other Test, Specify:  Lab Result

## If Culture Performed, enter Antimicrobial Susceptibility Testing Results for Gonorrhea

Antimicrobial	Minimum Inhibitory Concentration (MIC) ug/ml	AST specimen collection date (mm/dd/yyyy)	AST specimen collection site	Susceptibility test method	Interpretation
Azithromycin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Cefixime	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ceftriaxone	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ciprofloxacin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Gentamicin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Penicillin	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tetracycline	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Drug resistance (gonorrhea only)**  
If a culture and susceptibility testing is completed, enter the results of that here.

Case ID  First Name  Last Name  Gonorrhea Case  Page 4

**Clinical Information**  
 This section is used to mark any sequelae of infection as well as patient history of STIs.

## Clinical Complications

Signs and Symptoms:

Gonorrhea-related sequelae present?

Pelvic inflammatory disease (PID)

Disseminated gonococcal infection (DGI)

Ophthalmia neonatorum (neonatal conjunctivitis)

Select diagnosis if applicable

STD History:

Patient has history of Gonorrhea infection?

 Yes

 No

Patient has Chlamydia co-infection?

 Yes

 No

Patient has Syphilis co-infection?

 Yes

 No

This can be based on MDSS Person History or the patient's medical record

## Treatment Information

Has patient been treated for THIS infection?

 Yes  No  Unknown

Treatment information is required

Specify DRUG/DOSAGE (Check all that apply):

### RECOMMENDED TREATMENT

Ceftriaxone (Rocephin) 500mg IM

Ceftriaxone 1g IV or IM for 7 days

(recommended treatment for Disseminated Gonococcal Infection)

### ALTERNATIVE TREATMENTS

Both medicines must be given together

Gentamicin (Garamycin), 240mg IM

Azithromycin 2g orally as a single dose

OR

Cefixime (Suprax), 800mg oral

If chlamydia test is positive, or result is unknown, ALSO treat with

Doxycycline (Vibramycin) 100mg orally 2 times per day for 7 days

Azithromycin (Zithromax) 1g

### OUTDATED and INCORRECT TREATMENTS

Ceftriaxone (Rocephin) 250mg IM

Other or Unspecified Treatment (specify):

Treated by Provider (report contact information only if different than primary provider)

First:

Last:

Phone: ### ###-####

Ext.:

Email:

Street Address:

City:

County:

State:

Zip:

## Partner Treatment

Partner will be notified by:

 Patient

 Health Department

 Other:

Number of partners treated by:

In person at Health Department:

In person at Private Provider:

Not treated:

Treated by Expedited Partner Therapy (EPT):

Unknown Treatment:

Case ID

First Name

Last Name

**Partner Treatment** contains information about partners of the probable or confirmed case. For more information about Expedited Partner Therapy, or EPT, visit our website: [www.Michigan.gov/hivSTI](http://www.Michigan.gov/hivSTI)

## Case Management Data

**Method of case detection** is the reason the patient presented for testing. ***This is required.***

**Pregnancy status** is required.

**HIV status** is required.

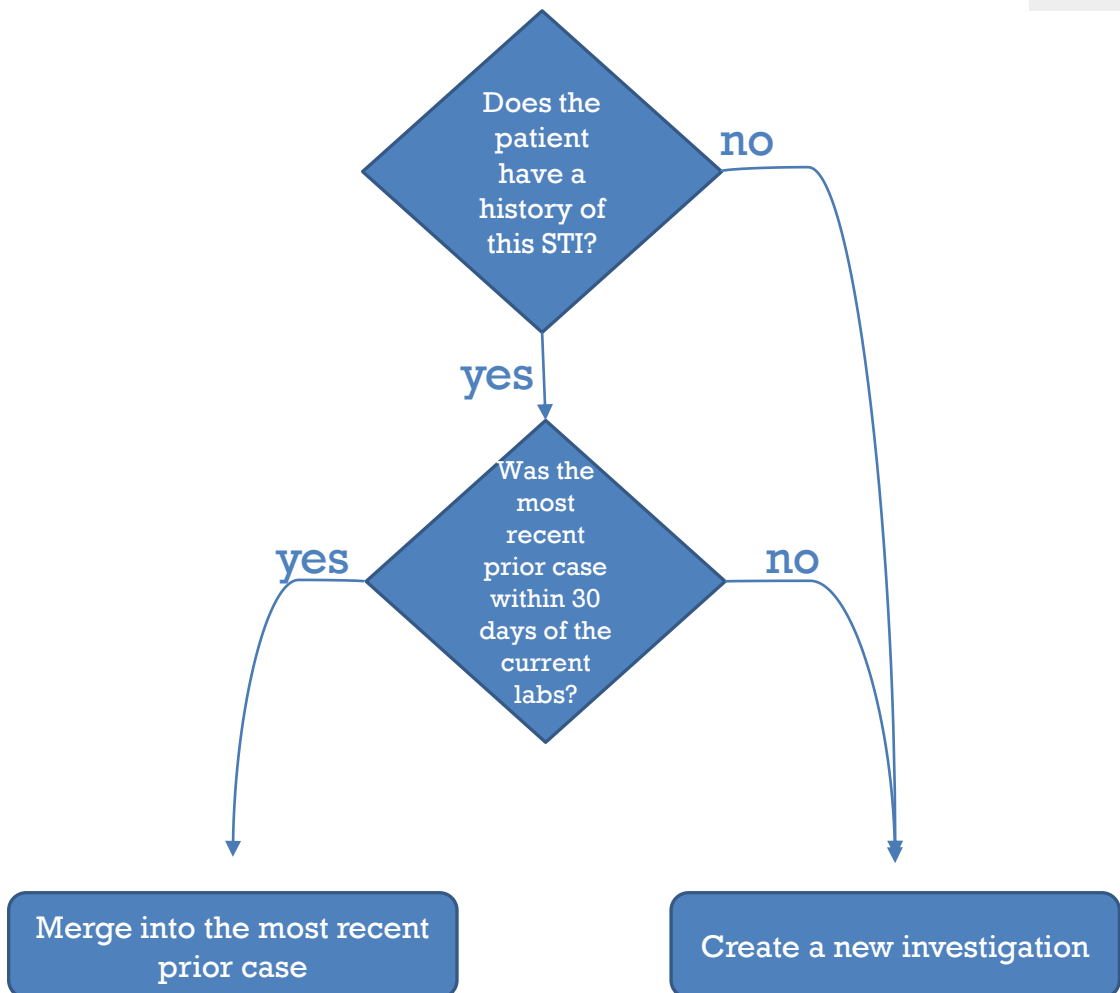
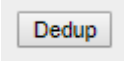
Patient risk is calculated by answers to the **Sex with Male** and/or **Sex with Female** questions which ***are required.***

Additional case management data should be completed whenever available. This helps characterize transmission patterns and population characteristics used to inform prevention efforts.

<b>Method of Case Detection:</b>			
<input type="radio"/> Screening	<input type="radio"/> Self-referred	<input type="radio"/> Patient Referred Patient	
<input type="radio"/> Health Department Referred Partner	<input type="radio"/> Cluster Related	<input type="radio"/> Other <input type="text"/>	
<b>Is the patient pregnant?</b> (women only)		eHARS Number <input type="text"/>	
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Unknown	
<b>Case Sampled for Enhanced Investigation</b>		eHARS Transmission Category <input type="text"/>	
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Unknown	
<b>HIV Status:</b>			
<input type="radio"/> HIV Positive	<input type="radio"/> HIV Negative	<input type="radio"/> Equivocal HIV Test	<input type="radio"/> Did Not Ask
<b>Has the patient had sex with a male within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Has the patient had sex with a female within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Has the patient had sex with an another partner within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Has the patient had sex with a partner within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Has the patient had sex with a partner within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Has the patient had sex with a partner within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Has the patient had sex with a partner within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Has the patient engaged in injection drug use within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Receptive sex?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Insertive sex?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>During the past 12 months, which of the following injection or non-injection drugs have been used? (select all that apply)</b>			
<input type="checkbox"/> Crack	<input type="checkbox"/> Cocaine	<input type="checkbox"/> Heroin	<input type="checkbox"/> Methamphetamines
<input type="checkbox"/> Nitrates/Poppers	<input type="checkbox"/> Erectile Dysfunction Medications (i.e. Viagra)		<input type="checkbox"/> Other <input type="text"/>
<b>Has the patient been incarcerated within the past 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Does the patient have a history of ever having an STD prior to this STD diagnosis?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Has the patient ever met sex partners through the Internet in the last 12 months?</b>			
<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Refused to Answer	<input type="radio"/> Did Not Ask
<b>Total number of sex partners in the past 12 months? (enter 888 for refused, 999 for unknown)</b> <input type="text"/>			
<b>Insurance status</b>			
<input type="radio"/> Public Insurance	<input type="radio"/> Private Insurance	<input type="radio"/> Uninsured	

# Chlamydia and Gonorrhea De-Duplication

- If resolving patient de-duplication in **the Pending Work Queue**, many STI labs will be merged into patients with a history of disease investigations and it is necessary to determine if the current lab represents a new infection or should be merged into a previous investigation ID.
- By CDC case definitions, multiple diagnoses of an STI in one patient must be at least 30 days apart. To decide when to merge investigations versus creating a new one, use these guidelines:
  - By specimen collection date, if the new lab for the same reportable condition is less than 28 days from the previous lab, **merge into the existing or previous report**
  - If the new lab for the same reportable condition is more than 28 days from the previous lab, **create a new case**
- **Cases may be de-duplicated at any time using the “Dedup” button**



# Syphilis De-Duplication

- Syphilis case de-duplication will be completed by MDHHS STI Epidemiology and surveillance staff. **Local health departments should leave these to be reviewed by MDHHS staff or investigated by disease interventions specialists (DIS) by clicking "defer" in the pending work queue.**
- Syphilis patients can be matched to existing MDSS patients by local health departments as part of the “Patient Dedup” work type in the pending work queue.



[Click for contact information for BHSP Staff](#)

[Click for SHOARS platform to request data, materials, or technical assistance](#)



## Recommendations for prioritizing STI Follow-up

Understanding that sexually transmitted infections are the most common reportable conditions, it may be necessary for local health departments to prioritize case reporting variables and patient follow-up based on available staff and other resources

For STI prevention materials or technical assistance, go to [www.michigan.gov/SHOARS](http://www.michigan.gov/SHOARS)

- 1. Focus on health department STI clinic patients.** Use records from your own clinic to complete case details for all cases diagnosed in house.
- 2. Prioritize pregnant females,** especially verification of treatment when a patient is known to be pregnant.
- 3. Prioritize co-infected patients** who have gonorrhea/chlamydia co-infections to double the return on your efforts in terms of disease transmissions prevented.
- 4. Prioritize extra-genital infections** when noted in the lab report as these patients may benefit from additional testing and/or PrEP referrals.
- 5. Prioritize repeat infections** (as seen in the MDSS person history) to offer partner testing or EPT as well as prevention counseling.
6. Additional considerations based on local data and knowledge will also be critical in surveillance and prevention.