Updated July 2024

MDHHS Michigan Department of Health & Human Services | Bureau of HIV and STI Programs

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

Click to navigate to:

Overview of STI Surveillance

- **Reportable conditions include chlamydia, gonorrhea, chancroid and syphilis.**
- **Reportable chlamydia-related sequelae include lymphogranuloma venereum (LGV) and pelvic inflammatory disease (PID).**
- **Reportable gonorrhea-related sequelae include pelvic inflammatory disease (PID), disseminated gonococcal infection (DGI) and opthalmia neonatorum (neonatal conjunctivitis).**
- 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 gathering 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
- Additional MDSS Resources

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.

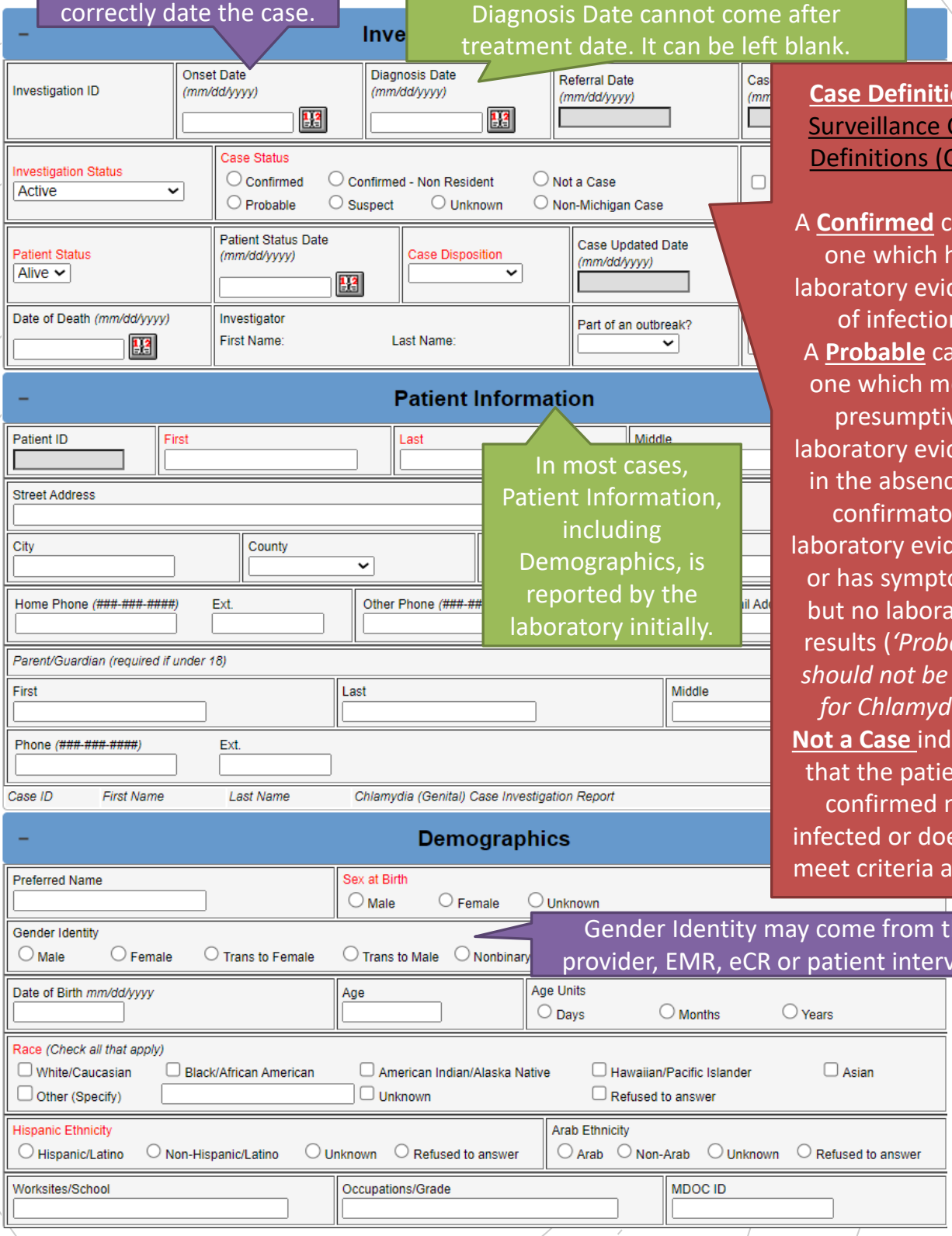
Red = Required information

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 treatment date. It can be left blank.



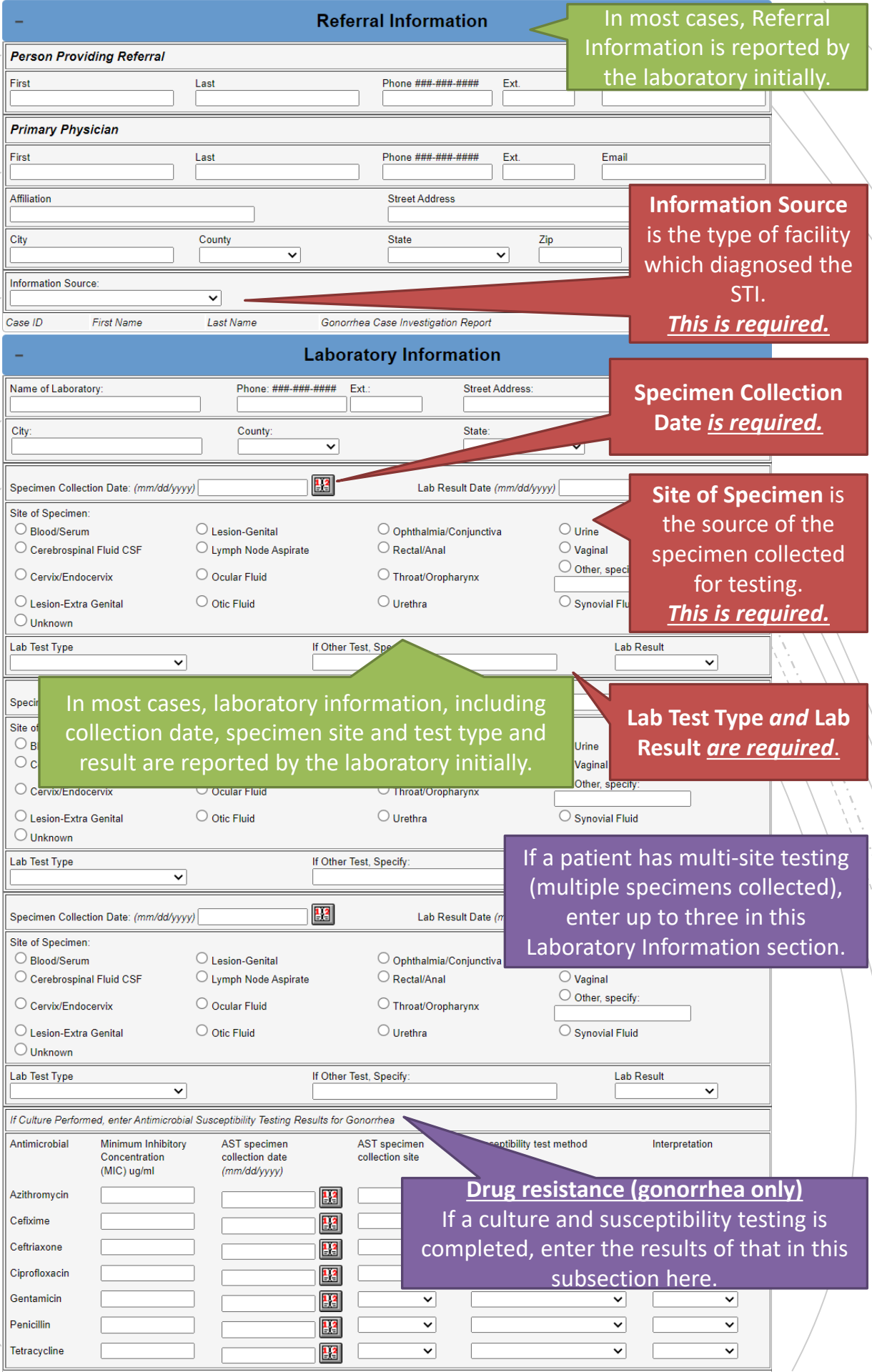
In most cases, Patient Information, including Demographics, is reported by the laboratory initially.

Case Definitions:
Surveillance Case Definitions (CDC)

A **Confirmed** case is one which has laboratory evidence of infection.
A **Probable** case is one which meets presumptive laboratory evidence in the absence of confirmatory laboratory evidence, or has symptoms, but no laboratory results (*'Probable' should not be used for Chlamydia*).
Not a Case indicates that the patient is confirmed not infected or does not meet criteria above.

Gender Identity may come from the provider, EMR, eCR or patient interview.

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


Referral Information
In most cases, Referral Information is reported by the laboratory initially.
Person Providing Referral
First
Last
Phone ###-###-####
Ext.
Primary Physician
First
Last
Phone ###-###-####
Ext.
Email
Affiliation
Street Address
City
County
State
Zip
Information Source:
Information Source is the type of facility which diagnosed the STI. This is required.
Case ID
First Name
Last Name
Gonorrhea Case Investigation Report
Laboratory Information
Name of Laboratory:
Phone: ###-###-####
Ext.:
Street Address:
City:
County:
State:
Specimen Collection Date is required.
Specimen Collection Date: (mm/dd/yyyy)
Lab Result Date (mm/dd/yyyy)
Site of Specimen:
Blood/Serum
Lesion-Genital
Ophthalmia/Conjunctiva
Urine
Cerebrospinal Fluid CSF
Lymph Node Aspirate
Rectal/Anal
Vaginal
Cervix/Endocervix
Ocular Fluid
Throat/Oropharynx
Other, specify:
Lesion-Extra Genital
Otic Fluid
Urethra
Synovial Fluid
Unknown
Site of Specimen is the source of the specimen collected for testing. This is required.
Lab Test Type
If Other Test, Specify:
Lab Result
In most cases, laboratory information, including collection date, specimen site and test type and result are reported by the laboratory initially.
Lab Test Type and Lab Result are required.
If a patient has multi-site testing (multiple specimens collected), enter up to three in this Laboratory Information section.
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
Interpretation
Azithromycin
Cefixime
Ceftriaxone
Ciprofloxacin
Gentamicin
Penicillin
Tetracycline
Drug resistance (gonorrhea only)
If a culture and susceptibility testing is completed, enter the results of that in this subsection here.

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)

Opthalmia 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

Treatment information is *required.*

Has patient been treated for THIS infection?
○ Yes ○ No ○ Unknown

If yes, date of treatment: *(mm/dd/yyyy)*

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* | *Go*

Partner Treatment contains information about partners of the probable or confirmed case. For more information about expedited partner therapy, or EPT, visit STI Information for Providers, Local Health Departments and Other Organizations.

Case Management Data

Method of Case Detection is the reason the patient presented for testing. ***This is required.***

Pregnancy status *is required* for females.

HIV Status *is required.*

Patient exposure factors are calculated by answers to the **sex with male** and/or **sex with female** questions which ***are required.***

Method of Case Detection:
- Screening
- Self-referred
- Patient Referred Patient
- Health Department Referred Partner
- Other

Is the patient pregnant? (women only) Yes No Unknown

eHARS Number

Case Sampled for Enhanced Investigation Yes No Unknown

eHARS Transmission Category

HIV Status: HIV Positive HIV Negative Equivocal HIV Test Did Not Ask

Has the patient had sex with a male within the past 12 months?			sed to Answer	Did Not Ask
Has the patient had sex with a female within the past 12 months?			sed to Answer	Did Not Ask
Has the patient had sex with an anonymous partner within the past 12 m			sed to Answer	Did Not Ask
Has the patient had sex with a person known to him/her to be an IDU wit			sed to Answer	Did Not Ask
Has the patient had sex while intoxicated and/or high on drugs in the pas			sed to Answer	Did Not Ask
Has the patient exchanged drugs or money for sex within the past 12 months?	Yes	No	Refused to Answer	Did Not Ask
Has the patient had sex with a person who is known to be an MSM within the past 12 months? (women only)	Yes	No	Refused to Answer	Did Not Ask
Has the patient engaged in injection drug use within the past 12 months?	Yes	No	Refused to Answer	Did Not Ask
Receptive sex?	Yes	No	Refused to Answer	Did Not Ask
Insertive sex?	Yes	No	Refused to Answer	Did Not Ask

During the past 12 months, which of the following injection or non-injection drugs have been used? *(select all that apply)*
- Crack
- Cocaine
- Heroin
- Methamphetamines
- Nitrates/Poppers
- Erectile Dysfunction Medications (i.e. Viagra)
- Other

Has the patient been incarcerated within the past 12 months?	Yes	No	Refused to Answer	Did Not Ask
Does the patient have a history of ever having an STD prior to this STD diagnosis?	Yes	No	Refused to Answer	Did Not Ask
Has the patient ever met sex partners through the Internet in the last 12 months?	Yes	No	Refused to Answer	Did Not Ask

Total number of sex partners in the past 12 months? *(enter 888 for refused, 999 for unknown)*

Insurance status: Public Insurance Private Insurance Uninsured

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

Electronic Case Reporting

Electronic Case Reporting for STIs

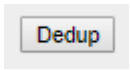
Electronic case reporting (eCR) is the automated, real-time exchange of case report information between electronic health records (EHR) within healthcare facilities and MDSS. eCR is similar to electronic lab reporting (ELR) although eCRs are richer messages that contain additional clinical data. If an eCR is present within an investigation, you will find it as an attachment in the 'Notes'.

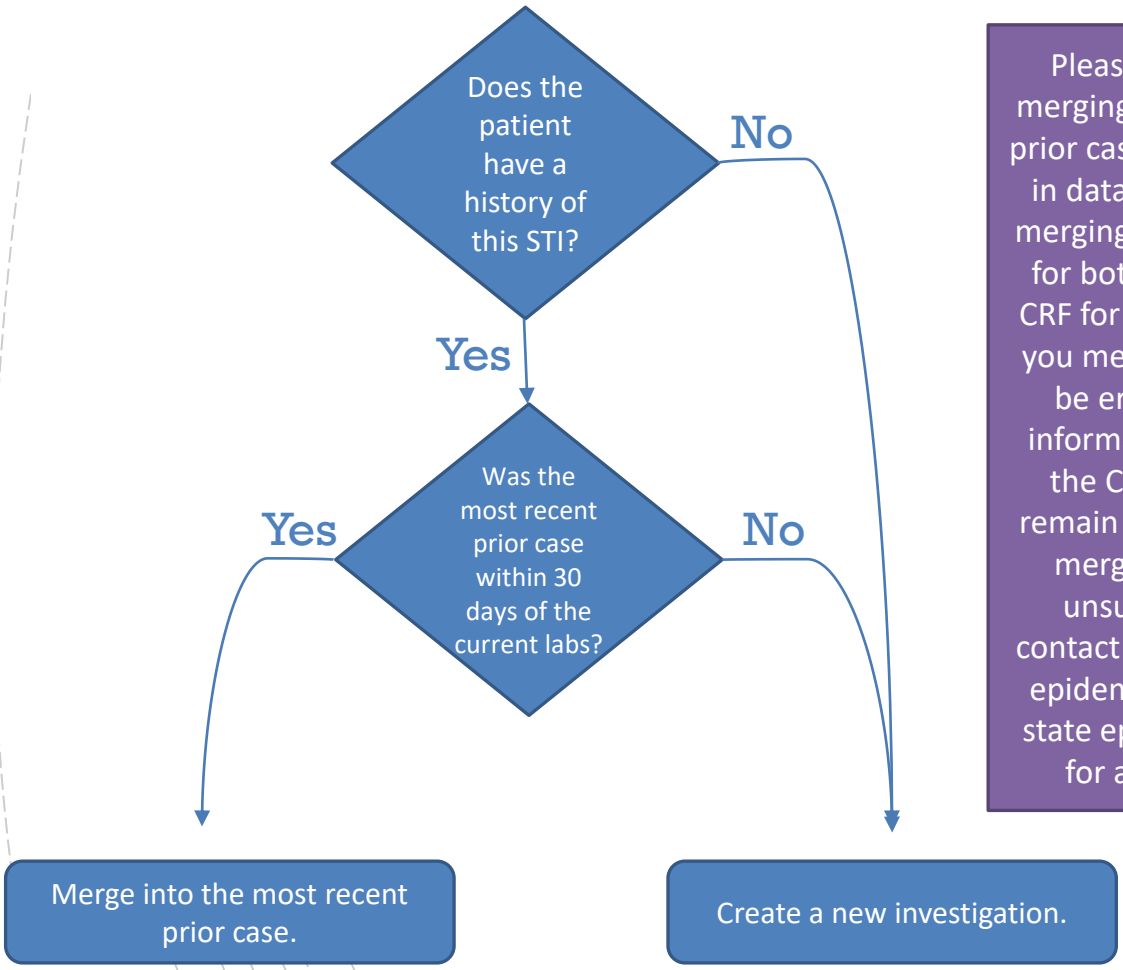
- **Relevant information that may be found within an eCR:**
  - Identifying information and demographic information, including email address, address history, secondary name, guardian information (etc.)
  - Treatment information
  - Immunization information
  - Lab history
  - Care notes
  - Diagnoses
  - Signs and symptoms
  - Sex and gender information
  - Social determinants of health information
  - Pregnancy status

A note about eCRs in MDSS: Data provided within an eCR must be manually transferred to the appropriate fields within the investigation, including fields within the CRF. In most instances, the eCR should accompany an ELR, but not always. Always refer to CDC Surveillance Case Definitions. Additional eCR resources: eCR-MDSS-Tip-Sheet.pdf (Michigan.gov); Electronic Case Reporting (eCR) (CDC). Please contact your regional epidemiologist or a state epidemiologist with questions around eCR.

Chlamydia and Gonorrhea De-Duplication

- If resolving patient de-duplication in **the Pending Work Queue**, many STI labs (and eCRs) will be merged into patients with a history of disease investigations, and it is necessary to determine if the current lab (or eCR) 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 (lab) or event date (eCR), if the new lab (or eCR) for the same reportable condition is less than 30 days from the previous lab, **merge into the existing or previous report.**
  - If the new lab (or eCR) for the same reportable condition is more than 30 days from the previous lab (or eCR), **create a new case.**
- **Cases may be de-duplicated at any time using the "Dedup" button.**





Please note that merging a case into a prior case could result in data loss. Before merging, review CRFs for both cases. The CRF for the case that you merge away will be erased; copy information over to the CRF that will remain following the merge. If you're unsure, please contact your regional epidemiologist or a state epidemiologist for assistance.

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.

Contact Information for BHSP Staff

Use SHOARS to request data, materials or technical assistance.

Prioritizing STI Follow-up

Recommendations for Prioritizing STI Follow-up

Understanding that STIs 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.

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.

For STI prevention materials or technical assistance, visit Michigan.gov/SHOARS.