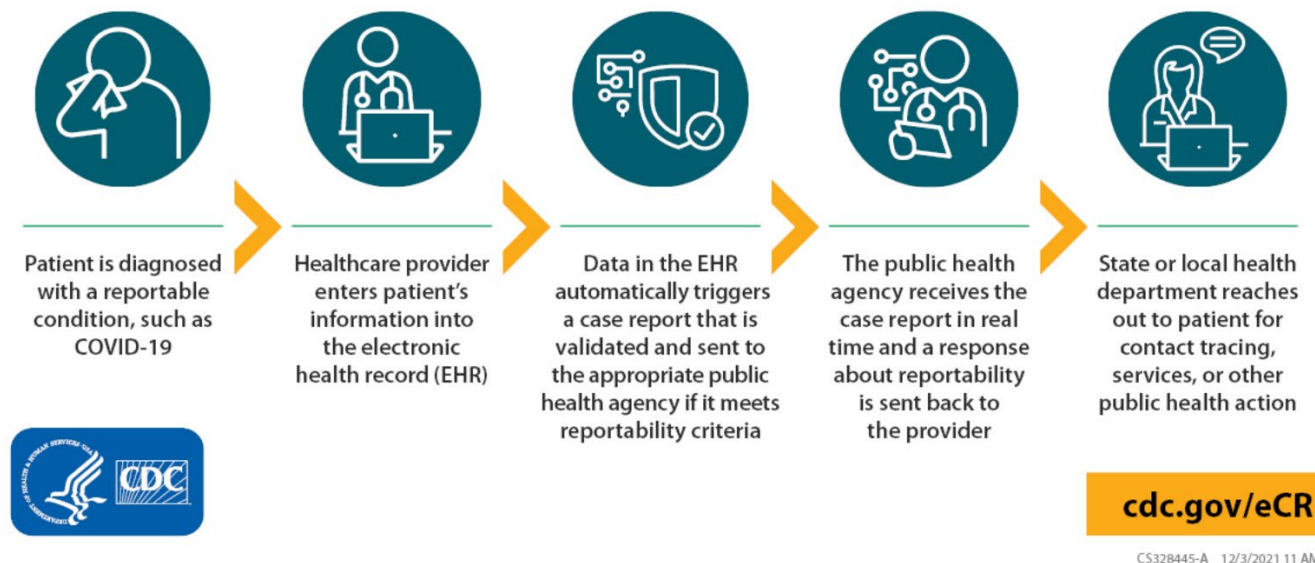


eCR MDHHS Tip-Sheet: Electronic Case Reporting into MDSS

Electronic case reporting (eCR) is the automated, real-time exchange of case report information between electronic health records (EHR) within healthcare facilities and the Michigan Disease Surveillance System (MDSS). It is similar to electronic lab reporting although eCRs are richer messages that contain additional clinical data. For more information about eCR, visit www.cdc.gov/ecr.

HOW DOES ELECTRONIC CASE REPORTING (eCR) WORK?



What types of data are in eCR?

eCR includes a lot of the same identifying information and demographic information that an electronic lab report (ELR) would include. The biggest difference is that since the eCR is sent from an EHR and not from a laboratory system, it doesn't require the presence of a lab result to send. Lab results are likely to be included with it as they are often a requirement to be considered reportable, but not always. eCR may also include treatment information, immunization information, lab history, notes, diagnoses, symptoms, reason for visit, social history or onset information that would be found in an EHR and not in a lab system.

Is every healthcare facility sending eCR?

Not yet. Healthcare facilities need to go through an onboarding process to send eCR messages. Though any healthcare provider using an EHR capable of sending eCR data could onboard, we are actively recruiting hospital systems first. The current facilities (as of 03/25/25) sending eCRs are listed in the table below.

No.	Health Care Organization (HCO)	Conditions Reported	Comments	Service Area
1	CoreWell Health	COVID19 & MPOX	Spectrum, Beaumont and Lakeview	M I C H I G A N
2	Henry Ford Health	COVID19, MPOX, Chlamydia & Gonorrhea	In parallel validation stage	
3	Hurley Medical Center	COVID19, MPOX, Chlamydia & Gonorrhea	Added March 2025	
4	Michigan Medicine	COVID19 & MPOX		
5	Sparrow Health	COVID19 & MPOX		
6	UM Health West	COVID19 & MPOX		
7	Aspirus Health	COVID19, MPOX, Chlamydia & Gonorrhea	Hospital System with in-state and out of state sites	M U L T I S T A T E
8	OSF HealthCare	COVID19 & MPOX	Hospital System with in-state and out of state sites	
9	Promedica Health	COVID19, MPOX, Chlamydia & Gonorrhea	Hospital System with in-state and out of state sites	
10	Trinity Health	COVID19, MPOX, Chlamydia & Gonorrhea	Hospital System with in-state and out of state sites	
11	Aurora Health	COVID19 & MPOX	Out of state hospital system reporting	
12	Bellin Health	COVID19, MPOX, Chlamydia & Gonorrhea	Out of state hospital system reporting	
13	Bon Secours Mercy Health	COVID19 & MPOX	Ohio HCO with ambulatory practices in MI	A M B U L A T O R Y
14	Hillsdale (Parkview Health)	COVID19 & MPOX	Hillsdale Hospital owned ambulatory practices	
15	Premise Health	COVID19 & MPOX	Ambulatory practices in MI	

What conditions are currently included in eCR?

Currently only COVID-19 and mpox eCRs are being reported. Starting May 12, 2025, Chlamydia and Gonorrhea eCRs will be sent. Viral hepatitis conditions, such as Hepatitis C, and respiratory conditions, such as novel influenza, are also expected to be added in 2025.

What happens when eCRs enter MDSS?

Incoming eCRs are processed just like ELRs. MDSS will search to see if the patient matches existing persons and cases within the system. If not, a new case will be created based on the disease reported in the eCR. If there are potential matches, the eCR will be sent to the dedup queue (Pending Work Queue) for a user to resolve. When an eCR creates a case or is merged into an existing case, the demographic and condition information is added to the case and the remainder of the eCR data is attached to the case in the Notes tab.

How do I dedup eCRs in MDSS?

eCRs in the dedup queue (Pending Work Queue) will have eCR written in the “Type” field (e.g., eCR Patient Dedup) and may have “ECR USER” in the “Added By” field. Eventually, the “Added by” information will become more specific to the sender. Event date is the date of the healthcare visit that triggered the eCR. If there are

multiple visits corresponding to the reportable disease, each visit will generate its own eCR. Multiple updates on a single visit may trigger more than one eCR for that visit and we are taking steps to help limit duplication.

If the person already has a case that corresponds to the reportable disease in the eCR, the eCR should be merged with their existing case according to the condition-specific [dedup guidance](#). If they do not have a case that corresponds to the reportable disease in the eCR, a new case should be created. New cases created by eCR will default to the case status “Unknown.”

Prior to the March 27, 2025, MDSS 8.8 Release, the COVID-19 case status default for eCR-created cases was “Suspect”. After the release, the case status of eCR-created COVID-19 cases will mimic ELR created cases, e.g., cases with an antigen positive result in eCR will be “Probable” and cases with a PCR/NAAT positive result will be “Confirmed”.

Example eCRs in Dedup Queue

Pending Work Queue

Help

Search By

First Name

Last Name

Primary Jurisdiction

Conditions

Type

Added By

ecr user

Filter

Clear

Event Date: The date of an outpatient visit or the admission start date for an inpatient encounter

Displaying results 1-10 of 981 found


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Date Added	Condition	Type	Event Date	Current Owner	Jurisdiction	Added By	
03/17/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	03/17/2025		Macomb County	ECR USER	Resolve
03/18/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	03/12/2025		Luce-Mack-Alger-School	ECR USER	Resolve
03/18/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	03/14/2025		Washtenaw County	ECR USER	Resolve
02/01/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	01/25/2025		Calhoun County	ECR USER	Resolve
02/07/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	02/07/2025		Genesee County	ECR USER	Resolve
02/01/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	02/01/2025		Allegan County	ECR USER	Resolve
02/01/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	02/01/2025		Branch-Hillsdale-St. Joseph	ECR USER	Resolve
02/02/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	01/29/2025		Oakland County	ECR USER	Resolve
02/02/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	02/02/2025		Van Buren-Cass	ECR USER	Resolve
02/02/2025	Novel Coronavirus COVID-19	eCR PATIENT DEDUP - LAB ECRFACILITY	02/02/2025		Detroit City	ECR USER	Resolve

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How should Gonorrhea and Chlamydia eCR cases be deduped?

Once Chlamydia and Gonorrhea eCR cases are added to MDSS, the automatic eCR case merge logic will work similarly to how ELR cases are merged. The key difference is that, for ELR cases, the event date is based on the specimen collection date, while for eCR cases, the event date is based on the visit date (i.e., encounter date). To manually resolve case de-duplication in the Pending Work Queue, you will need to compare the event date from the new data (either eCR or ELR) with the referral date of the existing case, using the 30-day rule for comparison.

 Automatic patient deduplication completed successfully.

eCR Information		
Date Received	Assigned Condition	Event Date
03/11/2025	Chlamydia (Genital)	03/07/2025

Patient Information				
ID	First Name	Last Name	Sex	Date of Birth

Existing Investigations						
Case Status	Investigation Status	Disease	Referral Date	Investigator	Jurisdiction	
Unknown	New	Chlamydia (Genital)	03/08/2025	ASHER, KATILYN A	Muskegon County	Matches Existing
Confirmed	Completed	Chlamydia (Genital)	07/17/2014	DAVIS, TONYA R	Kent County	Matches Existing
Confirmed	Completed	Chlamydia (Genital)	09/10/2018	HARTL, BRIAN	Kent County	Matches Existing

Create New Defer Help

In the screenshot above, notice the eCR information Event Date is 03/07/25 and the Referral Date of the existing case is 03/08/25. Since this is less than 30 days, you can merge it into the matching Chlamydia case by clicking on the **Matches Existing** button. If the new eCR or ELR, is more than 30 days from the existing case's Referral Date, then create a new case by clicking on the **Create New** button at the bottom of the form.

All about Dates in MDSS table:

The table below denotes how and where the dates are transferred from the eCR messages to MDSS:

Messenger	Date Label (with location)	Derived From	Related Dates in MDSS
ELR	Event Date (dedup queue)	Specimen collection date	Collection Date (Lab Reports tab)
eCR	Event Date (dedup queue)	Encounter/Visit date for the patient	Event Date (Notes tab)
ELR	Date Added (dedup queue)	Date when the Lab sent the data to MDSS	Lab Report Date
eCR	Date Added (dedup queue)	Date when the HCO sent the data to MDSS	Date Sent to PH (Notes tab)
eCR	Add Date (Notes tab)	MDSS case created date (once resolved from dedup queue) or when the case was added to an existing case	Date Received (dedup resolve step) & Case Entry Date
ELR	Lab Report Date (Lab Reports tab)	Date when the Lab sent the data to MDSS	Date Added (dedup queue)
eCR	Date sent to PH (Notes tab)	Date when the HCO sent the data to MDSS	Reported Date & Date Added (dedup queue)

How do I view the eCR?

The eCR is attached to the case under the Notes tab, in the Electronic Documents section. When you click View, a pop-up window titled ECR Viewer will appear that contains the data.

Previous Case Notes (Ascending):						
<div> <div>Add Date: The date when the eCR was added to a case in MDSS</div> <div>Date Sent to PH: The date that the eCR was sent by the HCO</div> <div>Event Date: The date of an outpatient visit or the admission start date for inpatient encounter</div> <div>To see the full list of reasons, click on the hyperlink in the Reportability Reason field</div> <div>Encounter Type: Provides the setting type of the encounter i.e., ambulatory, inpatient, emergency, etc.</div> </div>						
Electronic Documents						
Add Date	Date Sent to PH	Event Date	Sender	Reportability Reason	Encounter Type	View
10/25/2024	10/25/2024	10/25/2024	ECRFACILITY	Detection of Influenza A o...	Hospital Encounter (IMP)	View

What is the “Reportability Reason(s)?”

The reportability reason shows what criteria in a specific eCR event matched the condition rules and why the eCR was assigned the specific condition. These particular rules are selected by the MDHHS program area to meet the CDC case definition, as closely as possible. Data elements used include diagnosis, problems, lab results, age, and hospitalization, for example.

How do I navigate the eCR Viewer?

You can choose to either open each section of the eCR Viewer individually or expand them all by using the Collapse/Expand all button on the right side of the screen. You can see more of the patient’s details by clicking on the dark blue Patient Details button.

Example of eCR Viewer Page in MDSS

Initial Public Health Case Report				Back to MDSS	Download XML
Patient	Hfhfive Cpoetest	Date of Birth	May 21, 1975	Sex	♀Female
		Encounter Date	May 21, 2024, 08:25:00 -0400	Facility	HFHN HENRY FORD HOSPITAL
Patient Details					
Encounter	Results Section				
Problem Section	Social History				
Medications Administered	History of Present Illness				
Reason for Visit	Immunizations	Plan of care note			
Assessments	Vital signs	Admitting Diagnoses			

[Table of Contents](#)
[Collapse/Expand all](#)
[Show selected](#)
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What kind of data can I find in each section of the eCR?

Encounter Details: Date and time of the encounter, encounter type, what department and care team saw the patient, and diagnoses associated with the encounter

Results: Lab results, including diagnostic testing, such as a COVID-19 PCR test

Problem List: Active and resolved health problems, may include pregnancy status information

Immunizations: Any immunization records included in the EHR

Social History: May include information such as pregnancy status, sexual orientation and gender identity, (SOGI)and social determinants of health (SDOH).

Reason for Visit: The patient’s chief complaint as well as additional details regarding the patient’s symptoms or other reasons the patient sought healthcare

Medications Administered: Any medications administered during the encounter

History of Present Illness: May include additional diagnoses or symptoms regarding the patient’s present illness

Plan of care note: Upcoming encounters, such as specialist or primary care appointments

Assessments: Assessments completed during the encounter

Vital signs: Can include information such as height, weight, blood pressure, and pulse

Admitting Diagnoses: Diagnosis that the patient is admitted under (will only include information if the patient was admitted)

Why are some of the results in red bold text?

When reviewing the Results section of the eCR you will see abnormally interpreted lab results with a flag such as “A” for abnormal or “H” for high, etc., in red bold text to help make the information stand out and easily findable.

Results Section

Order Number: 887621597.1

CLIAID: 23D0379883

Lab name: MERCY CAMPUS MUSKEGON MI (MCMU) HOSPITAL LAB

Component	Value	Ref Range	Test Method	Analysis Time	Performed At	Pathologist Signature
SARS-COV-2 Screen	POSITIVE (A)	Negative	LAB MOLECULAR DIAGNOSTICS METHOD	09/19/2024 2:02 AM EDT	MERCY CAMPUS MUSKEGON MI (MCMU) HOSPITAL LAB	
Specimen (Source)	Anatomical Location / Laterality	Collection Method / Volume	Collection Time	Received Time		
Swab	Both anterior nares / Unknown	Non-blood Collection / Unknown	09/19/2024 1:30 AM EDT	09/19/2024 1:35 AM EDT		

Will MDSS receive an eCR each time the medical record is updated? How does that work for inpatient encounters where the medical records are frequently updated?

After the initial eCR is sent to MDSS, there may be additional versions of the encounter added to the case. Only one additional version will be added to MDSS every twenty-four hours. This is to balance the need for updated information without overburdening health department staff with deduplication.

Will data from the eCR, like lab results, automatically transfer into the MDSS Case Report Form?

No. Due to the way deduplication is currently handled, transferring information into the Case Report Forms and Lab Reports tab is difficult. This is expected to change in future releases.

How can I find cases that were created by an eCR?

There is an option in the New Search tab, using the Advanced button, that allows a user to search for eCR created cases. Note: this search finds cases in which an eCR **created** the case; the search will not include existing cases that an eCR was added to, if you need assistance with that, contact your Regional Epidemiologist for tips or email the eCR Team at MDHHS-eCR@michigan.gov.

How to Search for eCR-created Cases

Cases	Name of Saved Search <input type="text"/>	Default Search <input type="checkbox"/>
New Case	Investigation ID : <input type="text"/>	Case Status : Confirmed Confirmed-Non Resident
New Aggregate Cases	Investigation Status : Active Canceled	
Searches	Load Investigation ID List: <input type="button" value="Choose File"/>	
New Search	Patient First Name : <input type="text"/> Patient Last Name : <input type="text"/> Patient ID : <input type="text"/>	Select the search criteria of interest (e.g., condition, time frame, geography)
New Aggregate Search	Investigator First Name : <input type="text"/> Investigator Last Name : <input type="text"/> Investigator Userid : <input type="text"/>	
Disease Specific Search	Reportable Condition : Mumps Nontuberculous Mycobacterium Norovirus Novel Coronavirus COVID-19	Disease Group : AIDS/HIV COVID19/MIS Carbon Monoxide Poisoning Foodborne
Search Field Records	Outbreak : <input type="text"/>	
Case Definitions	<input type="radio"/> AND <input checked="" type="radio"/> OR	
Alert Rules	Case Notes Search : <input type="text"/>	
Blank Forms	Date Criteria	
User Profile	Onset Date (mm/dd/yyyy): <input type="text"/> to <input type="text"/>	Referral Date (mm/dd/yyyy): <input type="text"/> to <input type="text"/>
User Directory	Entry Date (mm/dd/yyyy): <input type="text"/> to <input type="text"/>	Birth Date (mm/dd/yyyy): <input type="text"/> to <input type="text"/>
	MMWR Week (ww-yyyy): <input type="text"/> to <input type="text"/>	
	Geographic Criteria	
	Primary Jurisdiction <input type="checkbox"/>	
	Local Health Jurisdiction : Allegan County Barry-Eaton Bay County Benzie-Leelanau	County : Alcona Alger Allegan Alpena
	Region : 1 2 North 2 South 3	Facility : ACA_INTERNS ADVOCATE AURORA ALLEGAN GENERAL HOSP ANY LAB TEST NOW
	<input type="button" value="Search"/> <input type="button" value="Save & Finish"/> <input type="button" value="Advanced"/> <input type="button" value="Batch Update"/> <input type="button" value="Case Assignments"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

Click **ADVANCED** to display a second page with additional search options

Cases	Name of Saved Search <input type="text"/>	Default Search <input type="checkbox"/>
New Case	NETSS ID : <input type="text"/>	Age : <input type="text"/> to <input type="text"/>
New Aggregate Cases	Age Unit : Days Months	Zip : <input type="text"/>
Searches	Include Aggregates <input type="checkbox"/>	
New Search	City : <input type="text"/>	
New Aggregate Search	Sex : Female Male	Race : American Indian or Alaska Native Asian
Disease Specific Search	Ethnic Group : Hispanic or Latino Not Hispanic or Latino	Arab Ethnic Group : Arab Non-Arab
Search Field Records	Investigation Closure Date (mm/dd/yyyy): <input type="text"/> to <input type="text"/>	Outcome : Died Survived
Case Definitions	Case Update Date (mm/dd/yyyy): <input type="text"/> to <input type="text"/>	Hospitalized : Yes No
Alert Rules	Travel History : <input type="text"/>	
Blank Forms	Specimen ID : <input type="text"/>	
User Profile	Case Referral Source	
User Directory	Search Electronic Laboratory Reporting (ELR) created cases <input type="checkbox"/>	
	Search Manual Entry created cases <input type="checkbox"/>	
	Search Electronic Case Reporting (eCR) created cases <input checked="" type="checkbox"/>	Uncheck everything except "Search Electronic Case Reporting (eCR) created cases"
	Search Electronic Death Registration System (EDRS) created cases <input type="checkbox"/>	
	Referring Criteria	
	Affiliation : <input type="text"/>	
	Laboratory Name : <input type="text"/>	
	Physician First Name : <input type="text"/>	
	Physician Last Name : <input type="text"/>	
	Michigan Department Of Corrections	
	MDOC ID : <input type="text"/>	
	<input type="radio"/> Exclude MDOC cases <input checked="" type="radio"/> Include MDOC cases <input type="radio"/> Only MDOC cases	
	Geographic Criteria	
	Geographic Extent : <input type="text"/> x: <input type="text"/> y: <input type="text"/> to x: <input type="text"/> y: <input type="text"/>	
	<input type="button" value="Search"/> <input type="button" value="Save & Finish"/> <input type="button" value="Batch Update"/> <input type="button" value="Case Assignments"/> <input type="button" value="Basic"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>	

How can I find cases with eCRs that weren't necessarily created by an eCR?

You can find cases that have had an eCR added by completing a "User Audit Search" in the Administration tab. The User Audit Search is specific to MDSS Administrator access level.

How to Search for Cases with eCRs:

Case Investigation **Administration** **System Administration** **Messages** **Reports** **Logout**

Users

User Audit Search

Admin Searches

Pending Work Queue

Lab Holding Area

Unmerge Patients

Administrative Reports

PEG Status Report

Field Record Report

Interview Record Report

Completeness Report

Name of Saved Search

Case Information

Reportable Condition :
Nontuberculous Mycobacterium
Norovirus
Novel Coronavirus COVID-19

Disease Group : *Select the criteria of interest (e.g., condition, case status)*
AIDS/HIV
COVID19/MIS
Carbon Monoxide Poisoning
Foodborne

Case Status :
Confirmed-Non Resident

Investigation Status :
Canceled

Audit Log Criteria

Audit Action Type : *Multi-select all three:*
Add Case Electronic Lab
Add Case eCR
Add Document
Add Electronic Lab

*1. Add Case eCR
2. ECR Case Auto-Merged
3. eCR Case Merged*

User in Audit Log :
AARONK1206
ABBOSHN2016
ABBOTTH0922

Date Criteria

Audit Date (mm/dd/yyyy): to *Add an Audit Date range to narrow the search.*

Search **Save & Finish** **Cancel** **Help**

I think this eCR was sent incorrectly because I don't see anything reportable about it. What should I do?

Review the Reportability Reason (provided next to the eCR in the Notes tab) to help determine why it was reported. If it appears to be an error, please email MDHHS-eCR@Michigan.gov or your Regional Epidemiologist and include the MDSS Investigation ID with a description of the issue.