

COVID-19 MDSS Case Report Form (CRF) Interim Tip Sheet

Introduction

Due to the rapidly evolving nature of the COVID-19 outbreak, MDHHS has worked to make changes to the Michigan Disease Surveillance System (MDSS) case report form (CRF) for Novel Coronavirus – COVID-19. Additions have been made to collect more information regarding symptoms, exposures, contacts, and more.

As the CRF is updated, new fields are intended for use on new cases and are not expected to be completed retrospectively.

Fields within the CRF that are boxed in red are fields that are reviewed for case investigation metrics. This includes race, ethnicity, close contacts, date of first interview, and current interview status.

This tip sheet highlights fields that regional epidemiologists frequently receive questions about. If you have questions about fields that are not included in this tip sheet, please contact your [regional epidemiologist](#).

Investigation Information

- **Onset Date:** If a case does not have an onset date (e.g., asymptomatic case), it should be left blank. In the Clinical Information Section, select 'no' for the field *symptoms present during the course of illness*
- **State Prison Case:** check box only for inmates in Michigan Department of Corrections (MDOC) facilities. Leave unchecked for inmates in county jails and Michigan Department of Corrections employees.
- **Case Disposition:** Select 'inpatient' if it is determined that the patient is hospitalized due to their COVID-19 infection.
 - Note: There are many underlying conditions that may make symptoms more severe, it may be difficult to determine if the person's hospitalization is due to the underlying condition or due to the condition plus COVID-19 infection. If the reason for hospitalization is truly unrelated to COVID-19 infection (e.g., labor/delivery, gunshot wound, car accident, broken bone, pre-surgical etc.), 'outpatient' should be selected for Case Disposition and the "Patient Hospitalized" question in the "Hospital Information" Section should be marked "No." Otherwise, the case should be marked as hospitalized.
 - In the Hospital Information Section, if 'Patient Hospitalized' is 'Yes', then Case disposition must be 'inpatient'
 - The person should remain as "Inpatient" status even after discharge since inpatient status reflects history of COVID-19 infection hospitalization and not current hospital stay.
- **Outbreak Name:**
 - For cases associated with outbreak, assign a specific outbreak ID (e.g., include condition, location/event, month/year). Outbreaks names can be added to individual cases even if not yet considered an outbreak as they can help associate cases with specific settings or events.
 - MDHHS is no longer using generic outbreak names (e.g., WUHAN-19, COVID-19); if a case is not associated with an outbreak, the field can be left blank
 - Refer to the MDHHS SOP for additional information on outbreaks
- **CDC/MI-nCoV-ID:** leave blank, no longer necessary. This field was used in the beginning of the pandemic to indicate cases that were approved for testing.

Investigation Information				
Investigation ID	Onset Date (mm/dd/yyyy)	Diagnosis Date (mm/dd/yyyy)	Referral Date (mm/dd/yyyy)	Case Entry Date (mm/dd/yyyy)
Investigation Status Active	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			<input type="checkbox"/> State Prison Case
Patient Status Alive	Patient Status Date (mm/dd/yyyy)	Case Disposition	Case Updated Date (mm/dd/yyyy)	Case Completion Date (mm/dd/yyyy)
Investigator First Name:	Last Name:		Part of an outbreak?	Outbreak Name
CDC/MI-nCoV-ID	Report date of case to CDC (mm/dd/yyyy)	State of residence	County of residence	

Hospital Information

- **Patient Hospitalized:** If case disposition is 'inpatient' then 'yes' must be selected

Hospital Information				
Patient Hospitalized <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Hospital <input type="text"/>	Hospital City <input type="text"/>	Hospital Record No. <input type="text"/>	Days Hospitalized <input type="text"/>
Hospital Admission Date (mm/dd/yyyy) <input type="text"/>	Hospital Discharge Date (mm/dd/yyyy) <input type="text"/>	Patient Admitted to ICU <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	ICU Admission Date (mm/dd/yyyy) <input type="text"/>	ICU Discharge Date (mm/dd/yyyy) <input type="text"/>
Is/was the patient isolated in the hospital? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Hospital isolation start date (mm/dd/yyyy) <input type="text"/>	Hospital isolation end date (mm/dd/yyyy) <input type="text"/>	Did the patient receive ECMO? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	
Did the patient receive mechanical ventilation(MV)/intubation? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown			Did the patient have an abnormal EKG? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input type="radio"/> N/A - no EKG done	

Clinical Information

- Patient Died:**
 - If the case dies within 30 days of their positive COVID-19 result, please mark 'Yes' in the 'Patient Died' field, along with the Date of Death. Please review this field for accuracy as it has a tendency to be mismarked
 - Note: It is not necessary to continuously follow-up with the case to determine the date of their symptom recovery; any case known to be still alive 30 days after their symptom onset or positive lab date will be included in the recovered case count by MDHHS
- Quarantine during symptom onset:** helps to assess contact tracing efforts and to evaluate the impact of quarantine measures; this data can also contribute to the analysis of community transmission activity

Patient Died <input type="radio"/> Yes (Died) <input type="radio"/> No (Alive) <input type="radio"/> Unknown		Date of Death (mm/dd/yyyy) <input type="text"/>	
At time of symptom onset (or positive test date if asymptomatic), was patient in quarantine because of a possible COVID-19 exposure? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown			
Symptoms present during course of illness? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown			
<i>Information on signs and symptoms</i>			
Fever (subjective or measured) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	If yes, specify highest temperature <input type="text"/>	Scale <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	Chills <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown

- Information on Signs and Symptoms:**
 - Difference between **chills** and **rigors** – **Chills:** feeling cold; **Rigors:** shaking chills, shivering
 - Difference between **shortness of breath (dyspnea)** and **difficulty breathing** – **Shortness of breath:** cannot catch your breath or get enough air in your lungs, grasping for breath or unable to complete a sentence in one breath; **Difficulty breathing:** winded, labored breathing
- MIS-C:** If a case (<21 years of age) is also reported as MIS-C, check 'yes' and enter the MIS-C Investigation ID
- Did Symptoms Resolve and Date:** at the time of last interview, had symptoms resolved / date that symptoms resolved. If still sick, leave blank. There is no requirement for investigators to follow case to update.

Multisystem Inflammatory Syndrome in Children (MIS-C) in patient < 21 years old (If yes, enter case into the MDSS Multisystem Inflammatory Syndrome reporting form) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input type="radio"/> N/A		If yes, MIS-C investigation ID <input type="text"/>
Other clinical signs <input type="text"/>		
Did symptom(s) resolve? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Date symptoms resolved (mm/dd/yyyy) <input type="text"/>	

- Pre-existing Health Status:** check all pre-existing conditions. Disability was added as an option in February 2021

Pre-existing Health Status			
Information on pre-existing conditions (Check all that apply)			
<input type="checkbox"/> No pre-existing or chronic conditions	<input type="checkbox"/> Autoimmune condition	<input type="checkbox"/> Cancer	<input type="checkbox"/> Cardiovascular Disease
<input type="checkbox"/> Asthma/Reactive Airway Disease	<input type="checkbox"/> Chronic Lung Disease/COPD/Emphysema	<input type="checkbox"/> Chronic Renal Disease	<input type="checkbox"/> Diabetes Mellitus
<input type="checkbox"/> Chronic Liver Disease	<input type="checkbox"/> Neurologic Disease	<input type="checkbox"/> Severe Obesity (BMI≥40)	
<input type="checkbox"/> Hypertension	<input type="checkbox"/> Other Immunosuppressive Condition (specify)	<input type="checkbox"/> Psychological/psychiatric condition (specify)	
<input type="checkbox"/> Other Chronic Disease (specify)			
<input type="checkbox"/> Disability (neurologic, neurodevelopmental, intellectual, physical, vision, or hearing impairment) (specify)			

Epidemiologic Information

- **COVID-19 strain/variant:** Select the appropriate variant strain type from the drop-down menu. ‘Suspected’ should be used to denote variant cases among contacts of confirmed variant cases (epi-links).
- **Residence at time of onset:** indicate type of residence the case was staying at the time of onset or positive test – this helps determine number of people that may have been exposed. If the case was residing in a dormitory, select Other and write in ‘dormitory’.
- **High-risk setting:** indicate whether case lives or works in a high risk setting and complete fields for the type of facility. Additional facility types have been added based on prior case reports and to better characterize the role of congregate settings

What best describes where the patient was staying at time of illness onset (or at time of positive test for asymptomatic individuals)?			
<input type="radio"/> Acute care inpatient facility	<input type="radio"/> Apartment	<input type="radio"/> Assisted living facility	<input type="radio"/> Homeless shelter
<input type="radio"/> House/single family home	<input type="radio"/> Group home	<input type="radio"/> Long term care facility	<input type="radio"/> Mobile home
<input type="radio"/> Nursing home	<input type="radio"/> Outside, in a car, or other location not meant for human habitation		<input type="radio"/> Motel
<input type="radio"/> Rehabilitation facility	<input type="radio"/> Unknown	<input type="radio"/> Other (specify)	<input type="radio"/> Correctional Facility
Does the patient live or work in a high-risk or congregate living facility?		If yes, is patient:	If yes, name of facility:
<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		<input type="radio"/> Resident <input type="radio"/> Employee <input type="radio"/> Unknown	<input type="text"/>
Location of facility (address):			
Street Address	City	State	Zip
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Type of facility:			
<input type="checkbox"/> LTC/skilled nursing	<input type="checkbox"/> Federal prison	<input type="checkbox"/> Juvenile justice facility	
<input type="checkbox"/> Acute care inpatient facility	<input type="checkbox"/> Rehabilitation facility	<input type="checkbox"/> Group home	
<input type="checkbox"/> Assisted living	<input type="checkbox"/> MDOC prison	<input type="checkbox"/> Foster care setting	
<input type="checkbox"/> Homeless shelter	<input type="checkbox"/> County jail	<input type="checkbox"/> Other (specify)	

Exposure Information

- **Exposure source:** Helps identify cases with a known exposure and cases with no known exposure for the purposes of evaluating transmission patterns; It is important to understand if cases are associated with a close contact or with an outbreak, and if associated to an outbreak, what kind. Reviewing the percent of cases with a known exposure can help assess the level of community transmission
 - For cases who are a healthcare, community, or household contact to confirmed case(s), include the MDSS ID of the source case(s)
 - For outbreaks with secondary transmission to household members or others outside the outbreak setting, select ‘case is a household contact’ and not ‘case is associated with a known cluster or outbreak’
 - If exposure source cannot be identified, select ‘Source of case’s COVID-19 infection is unknown’
- **Outbreak category:** select the category from the drop down that best describes the outbreak, refer to the outbreak section of the SOP for additional information.

Exposure Source (check all that apply)

Case is associated with a known cluster or outbreak If checked, outbreak name or MDSS ID(s)

Select the category that best describes the outbreak:

Other, specify

Case is a health care contact to a known COVID-19 lab-confirmed case-patient If checked, contact MDSS Investigation ID(s)

Case is a community contact to a known COVID-19 lab-confirmed case-patient If checked, contact MDSS Investigation ID(s)

Case is a household contact to a known COVID-19 lab-confirmed case-patient If checked, contact MDSS Investigation ID(s)

Source of case's COVID-19 infection is unknown (no other exposure sources checked above)

- **Exposure Information:** to capture exposure information, select all locations/events that the case attended during the 14 days prior to illness onset (or positive test result) until the start of isolation.

Exposure Information - In the 14 days prior to illness onset (or positive test result) until the date of isolation, did the patient visit/attend any of the following? Check all that apply. If patient visited one location on multiple dates, only list the location once.

Date of 14 days prior to onset (or positive test collection date) (mm/dd/yyyy)  Date of isolation (mm/dd/yyyy) 

LTC/SNF/assisted living/adult day care/group home

Jail/prison/detention center

Shelters/settings that provide services for people experiencing homelessness

Healthcare (e.g. inpatient, outpatient, dental practices, dialysis, etc.)

Primary or secondary school/College or university outside of home (e.g. classroom, dorms, boarding schools, before/after school programs, etc.)

Childcare/Youth programs (e.g. daycares, day/overnight camps, extracurricular activities, sports programs, etc.)

Agricultural/food processing/migrant camp (e.g. farm, meat packing, hatchery, etc.)

Shared transportation (airplane, train, bus, etc)

Restaurant/bar

Social gathering (e.g. birthday party, graduation party, wedding, funeral, etc.)

Community event/mass gathering (e.g. concert, rally, protest, parade, etc.)

Sporting event or practice (as audience or player)

Gym or exercise class

Grocery store or retail

Other Community exposure (e.g. nail/hair salon, spa, public beach/pool, etc.)

Workplace outside of home other than types listed above (e.g. manufacturing, construction, office-building, etc.)

Exposure to animal with confirmed or suspected COVID-19

Other, (may include previously listed categories if more than 3 unique places were visited)

None of the above

Additional notes regarding exposure information:

- **Travel:**
 - For cases with international or domestic travel, please provide the arriving and departing flight information for any flights that occurred during the case's infectious period (beginning 48 hours prior to onset date (or positive result date if asymptomatic). Flight number & seat numbers are also crucial for contact tracing efforts
 - Travel by other mass conveyances (e.g., bus, train) should be documented in the case's notes tab (not shown)

Travel to non-U.S. country? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown			
If yes, list all travels to <u>non-U.S. countries</u>			
Country	Date of Arrival (mm/dd/yyyy)	Date of Departure (mm/dd/yyyy)	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Travel to <u>states and U.S. cities</u> outside of home state? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown			
If yes, list all travels to <u>states and U.S. cities</u>			
U.S. States	U.S. Cities	Date of Arrival (mm/dd/yyyy)	Date of Departure (mm/dd/yyyy)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Day or Overnight Travel <u>within Michigan</u> ? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown			
If yes, list all travels <u>within Michigan</u>			
Location	Date of Arrival (mm/dd/yyyy)	Date of Departure (mm/dd/yyyy)	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Travel on cruise ship or vessel as passenger or crew member <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown			
If yes, specify name of ship:	Port of call:	Dates of travel, From (mm/dd/yyyy)	To (mm/dd/yyyy)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Travel via airport/airline <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown			
If yes, Name of Airline	Flight Number	Flight Seat Number	Date of Flight (mm/dd/yyyy)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- **High Risk Referral:** This section is important for referring cases from MDHHS Case Investigators back to the Local Health Department. If a case has a high risk, select 'yes' along with the reason from the drop-down menu.

Case is a high-risk referral <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	High-risk referral reason: <div style="border: 1px solid black; padding: 2px;"> <input type="text"/> </div>			
Other reason for high-risk referral or additional information: <input type="text"/>	<div style="border: 1px solid black; padding: 2px;"> Congregate setting (dorm, jail, long term care, schools, foster care, etc.) Health care worker (nurses, EMT, etc.) Large groups (sports teams, weddings, large workplaces) School-aged children attending in-person classes Death Travel on airplanes Other </div>			
Case is requesting a return to work letter <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown				
Case ID	First Name	Last Name	Nov	Page 7

Vaccine History

- The section is to be used to document information for COVID-19 vaccine only, not other routine vaccinations.
- Note: vaccine information can be retrieved from the Michigan Care Improvement Registry (MCIR) if an exact match of last name, first name, and date of birth is found. This can be done through the button in the Notes Tab.

Vaccine History

Vaccinated? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown				
Vaccination doses prior to illness onset <input type="text"/>				
Was the patient vaccinated per ACIP Guidelines? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown				
If not vaccinated per ACIP guidelines, what was the reason?				
<input type="radio"/> Foreign Visitor	<input type="radio"/> Immigrant	<input type="radio"/> Lab evidence of previous disease		
<input type="radio"/> MD diagnosis of previous disease	<input type="radio"/> Medical contraindication	<input type="radio"/> Missed opportunity in medical setting		
<input type="radio"/> Parent/Patient forgot to vaccinate	<input type="radio"/> Parent/Patient refusal	<input type="radio"/> Parent/patient report of previous disease		
<input type="radio"/> Parent/Patient unaware of recommendation	<input type="radio"/> Philosophical objection	<input type="radio"/> Religious exemption		
<input type="radio"/> Too Young	<input type="radio"/> Vaccine record incomplete/unavailable	<input type="radio"/> Unknown		
<input type="radio"/> Other, specify <input type="text"/>				
Vaccine Type	Administered Date	Dose Number	Lot Number	Manufacturer
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Case Reporting	Address History	Demographics	Referrer	Lab Reports	Notes	Map	Audit	Person History
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Patient THOMPSON, BARBARA Locked by REIMINKB (BETHANY G REIMINK)

New Note:

Previous Case Notes (Ascending):

Case Documents		
Date	Name	Description
	MCIR Vaccine Retrieval	MCIR Vaccine Removal
		Attach New Document

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Contact Information

The screenshot shows a form titled 'Contact Information' with three identical contact entry sections. At the top, there are two checkboxes: 'Subject has no close contacts' and 'Subject refused to provide contacts'. Each contact entry section includes the following fields:

- Name of Contact* (First, Last, Middle):** First Name, Last Name, Middle Name.
- Phone Number*:** Phone Number, Phone Type (dropdown), Onset Date.
- Age (Yrs):** Age, Symptomatic? (dropdown).
- Relationship to Case*:** Relationship to Case (dropdown), Last Contact Date.
- Does Contact live or work in a high-risk setting?:** Does Contact live or work in a high-risk setting? (dropdown).
- County Health Department*:** County Health Department (dropdown).
- Gender:** Gender (dropdown).
- Guardian Name (First, Last):** G. First Name, G. Last Name.
- Email:** Email.
- Is Minor:** Yes (radio), No (radio).
- Notes:** Notes.
- Critical infrastructure worker:** Critical infrastructure worker (checkbox).

At the bottom of the form, there is a button labeled 'Add 5 more Contacts'.

- If a case has no close contacts or refuses to provide information, select the appropriate checkbox.
- Individual contacts may be listed in the CRF. The form allows for 25 contacts, but more may be added in increments of 5 (up to 50).
 - Name, phone number, Relationship to case and county Health Department are required fields.
 - If phone number is unknown, enter 555-555-5555.
 - While 'last contact date' is not required, this information is vital to contact tracing and follow-up
 - If contact lives or works in a high-risk setting, select appropriate option in the drop-down menu
 - Refer to Traceforce Contact Tracing Guidance Documents for additional information.
 - If the contact's age is not given by case, then the Is Minor question must be completed. Form changes will not be allowed to save until this question is answered.

Other Information

The screenshot shows a form titled 'Other Information' with the following fields:

- Local 1:** Local 1
- Local 2:** Local 2
- Date of First Interview Attempt mm/dd/yyyy:** Date of First Interview Attempt mm/dd/yyyy
- Current Interview Status:** Current Interview Status (dropdown)
- Name of Person interviewed:** Name of Person interviewed
- Relationship to patient:** Relationship to patient
- Date of interview mm/dd/yyyy:** Date of interview mm/dd/yyyy
- Submitted by:** Submitted by
- Date submitted mm/dd/yyyy:** Date submitted mm/dd/yyyy
- Health Department:** Health Department (dropdown)
- Phone Number:** Phone Number (###.###.####)
- Ext.:** Ext.

- **Local 1:** this field is available for Local Health Departments to assign and use at their own discretion. If you do not have a local use for that field, leave blank.
- **Local 2:** if participating in MiCOVIDAlert app notifications, enter the client's MiCOVIDAlert Validation pin here. If your LHD is not participating or the client does not have MiCOVIDAlert app, leave field blank.
- **Date of first interview:** date that the investigator genuinely attempts outreach to the case
- **Current interview status:** select status of interview (provides details to potential barriers of case follow-up)
- **Date of Interview:** Indicate date that the investigator has talked to case or proxy and was able to document some information in the case report form