

COVID-19 GUIDANCE FOR MONTANA'S INFECTIOUS DISEASE INFORMATION SYSTEM (MIDIS)



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How to Manually Enter a Lab Report



Patient Search

Search Demographics

Last Name:

First Name:

- a. If the patient is not in MIDIS:
 - i. Select "Add New".

Help | Logout

User : Sam Saycich

MIDIS

[New Search](#) | [Refine Search](#)

Add New

- b. If the patient is in MIDIS:
 - i. Select their patient ID.

Test Patient | Male | 01/01/2005 (15 Years)

Summary | Events | Demographics

3. Scroll down to "Lab Reports" and select "Add New".

Test Patient | Male | 01/01/2005 (15 Years) Patient ID: 1009289

Summary | Events | Demographics

Go to: [Investigations](#) | [Lab Reports](#) | [Morbidity Reports](#) | [Vaccinations](#) | [Treatments](#) | [Documents](#) | [Contact Records](#) [Expand All](#) | [Collapse All](#)

Patient Events History

Investigations (0)	Add New	Back To Top
Lab Reports (0)	Add New	Back To Top

4. For “Reporting Facility”, please populate it with where the test is coming from by selecting “Search”. Examples include LabCorp, St. Vincent’s, etc. If you search for a facility and it is not available, you have the option to “Add” a facility. If you have information for ordering facility and ordering provider, please populate it by selecting “Search”.

Patient

Lab Report

[Go to: Order Information](#) | [Test Results](#) | [Lab Report Comments](#) | [Other Information](#)

[Collapse Sections](#)

☒ **Order Information**

[Collapse Subsections](#)

☒ **Facility and Provider Information**

* Reporting Facility:

Clear/Reassign

Reporting Facility Selected:

Valley Medical Services
2425 U.S Hwy 2 E
Kalispell, Montana 59901
406-257-1680

Ordering Facility:

Clear/Reassign

Ordering Facility Selected:

Valley Medical Services
2425 U.S Hwy 2 E
Kalispell, Montana 59901
406-257-1680

Same as Reporting Facility:

☐

Ordering Provider:

Clear/Reassign

Ordering Provider Selected:

Samantha Saycich, MPH
CDEPI
Montana DPHHS, Montana
406-444-0018

5. Populate the following areas:

* Program Area:

General Communicable Diseases

* Jurisdiction:

MISSOULA

☒ Share record with Guests for this Program Area and Jurisdiction

Lab Report Date:

08/01/2020

mm/dd/yyyy

* Date Received by Public Health:

08/04/2020

mm/dd/yyyy

- b. **Jurisdiction:** Where patient resides (ex. Missoula, Lake, Fergus, Carbon)
 c. **Lab Report Date:** The actual date that the report was generated.
 d. **Date Received by Public Health:** The date that the report was entered into MIDIS.

6. Select “Search” next to ordered test.

☐ **Test Results**
[Collapse Subsections](#)
☐ **Ordered Test**

Ordered Test:

7. To Search for a:

- PCR test** (e.g., Abbott ID Now or Cepheid): Type in “94500-6” and select “LONG LIST”.
- ANTIGEN test**: Type in “94558-5” and select “LONG LIST”.
- Select “submit”.

Search For Ordered Test

Test Name:

Search: ☐ Short list, includes local tests
☒ Long list, includes standard (LOINC) tests

8. Select the test you wish to use by clicking on the blue number under “Code”.

Ordered Test Search Results

Search Results

[New Search](#) | [Refine Search](#)

Your Search Criteria: Resulted Test contains ' 94500-6 ' resulted in **1** possible matches.

Code	Test Name	Method	System	Priority
94500-6	SARS-CoV-2 (COVID19) RNA NAA+probe QI (Resp)	PROBE.AMP.TAR	Respiratory	PRTHR

Ordered Test: SARS-CoV-2 (COVID19) RNA NAA+probe QI (Resp) Search Clear

Accession Number:

Specimen Source: ▼

Specimen Site: ▼

Date Specimen Collected: mm/dd/yyyy

Patient Status at Specimen Collection: ▼

Pregnant: ▼

- a. **Accession Number**: also called the specimen number, it is included with every lab report. This will need to be entered from your lab report.
 - b. **Specimen Source**: Nose (Nasal passage)
 - c. **Specimen Site**: Bilateral nares
 - d. **Date Specimen Collected**: Found on lab report
 - e. **Patient Status at Specimen Collection**: If you're not sure, please select "Unknown".
 - f. **Pregnant**: If you're not sure, please select "Unknown".
10. Select "Search" next to "Resulted Test".

☒ Resulted Test

	Resulted Test	Coded Result / Organism Name	Numeric Result	Units	Text Result	Ref Range From	Ref Range To	Status	Result Comments
No Data has been entered.									

* Resulted Test: ▼ Search Clear

11. Follow steps 7-8 again.

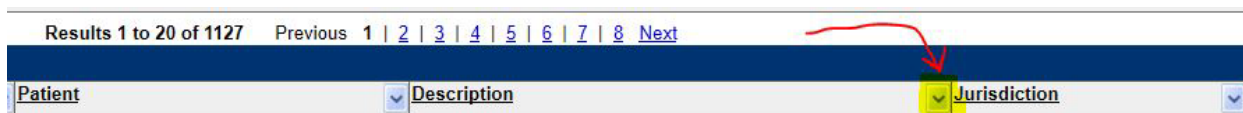
Coded Result:	detected
Numeric Result:	
Units:	
Text Result:	POSITIVE FOR COVID-19
Reference Range From:	Detected
Reference Range To:	Not Detected
Status:	Final
Result Comments:	Manually entered 1/25 by SS.
Add	

- a. **Coded Result:** Detected
 - b. **Numeric Result:** **leave blank**
 - c. **Text Result:** I recommend entering "Positive for COVID-19".
 - d. **Reference Range:** Detected to Not Detected
 - e. **Result Status:** Final
 - f. **Result Comments:** You can add a comment if you'd like.
13. Select "Add".
- a. Select "Submit" if patient already has a previously opened COVID-19 investigation.
 - b. Select "Submit and Create Investigation" if this patient is new and doesn't have an investigation yet.

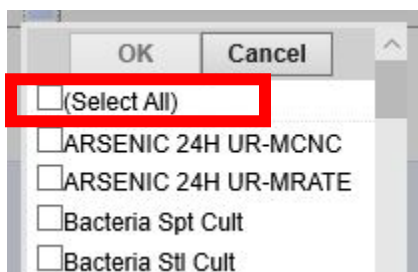
How to Mark Labs as Reviewed in Batches

(If you have a bunch of negative COVID-19 lab results clogging up your queue).

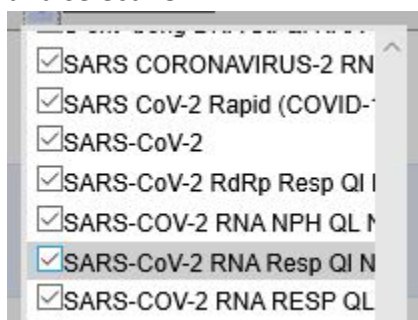
1. From MIDIS home page, go to your “Documents Requiring Review Queue”.

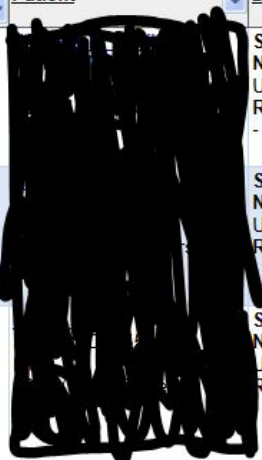


3. Click the check box next to “Select All” to unselect all the diseases included.



4. Scroll down to all the “SARS” testing. Select all SARS tests. Scroll to the top of the drop down and select “OK”.



Transfer Program Area Transfer Jurisdiction Transfer Ownership					
<input type="checkbox"/>	Document Type	Date Received	Reporting Facility/Provider	Patient	Description
<input checked="" type="checkbox"/>	Lab Report E	05/07/2020 6:00 AM	Reporting Facility: MAYO CLINIC DLMP Ordering Provider: NICOLE D LORENZ		SARS-COV-2 RNA RESP QL NAA+PROBE: UNDETECTED Reference Range: (UNDETECTED) - (Final)
<input checked="" type="checkbox"/>	Lab Report E	05/08/2020 6:00 AM	Reporting Facility: MAYO CLINIC DLMP Ordering Provider: SARAH J COUNTS		SARS-COV-2 RNA RESP QL NAA+PROBE: UNDETECTED Reference Range: (UNDETECTED) (Final)
<input checked="" type="checkbox"/>	Lab Report E	05/08/2020 3:00 PM	Reporting Facility: MAYO CLINIC DLMP Ordering Provider: CHARLES SWANNACK		SARS-COV-2 RNA RESP QL NAA+PROBE: UNDETECTED Reference Range: (UNDETECTED) (Final)

6. Select “Mark as Reviewed”.

Home | Data Entry | Merge Patients | Open Investigations

Documents Requiring Review

Mark As Reviewed

7. Select “Negative Lab Result” and select “Submit”. You will still be able to find these lab results if you search for patient name, but now they are out of your queue!

Please select a reason for taking no further action and enter any additional comments that help to explain why no further action is required. This reason will be applied to all the records that have been selected below. Documents that are marked as reviewed will remain on the patient's file, and if previously associated to an investigation will remain associated to an investigation. Select Submit to continue or select Cancel to cancel this action.

* Reason For No Further Action:

Comments:

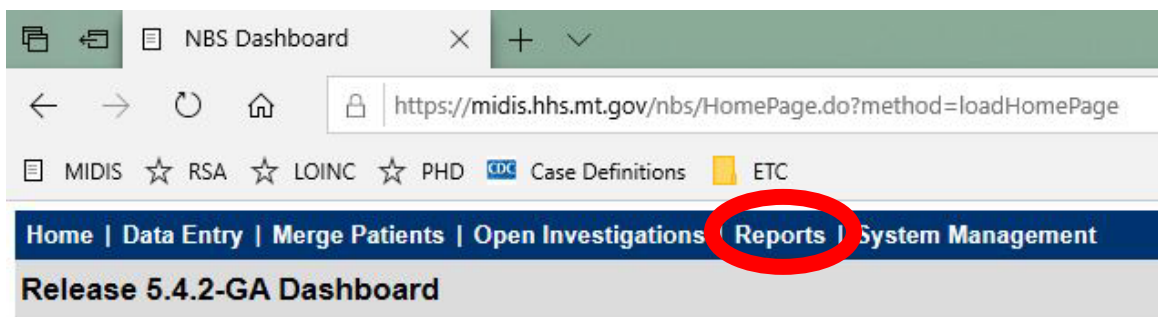
Submit Cancel

Results 1 to 20 of 2061 Previous 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 Next

Mark As Reviewed | Remove All Filters/Sorts

How to Run a Report for COVID-19 Investigations

1. Log into MIDIS
2. Select “Reports” from the menu bar



3. Go to “Public Reports”. It is the second section with red text.
4. Expand “Montana CDEpi Reports” by clicking on the “+” sign.

<input type="checkbox"/> Public Reports	
Expand Subsections	
<input type="checkbox"/> Archived	
<input type="checkbox"/> Default Report Section	
<input checked="" type="checkbox"/> Montana CDEpi Reports	
	Report Title
Run	Basic Case Line List Report
Run	CDC HCV reconciliations
Run	CDC Reconciliation
Run	CDEpi Case Reconciliation- Missing Case Status and Missing Case Notification
Run	COVID Auto-Created Investigations
Run	COVID ELC 2021-2022 Monthly Report
Run	COVID EPI PROFILE
Run	COVID Epi Variant Report
Run	COVID Hospitalizations, Deaths, Breakthroughs, or Reinfections
Run	COVID Investigations Template Report
Run	COVID ECHO Report
Run	COVID Lab Reports
Run	COVID Laboratory Variant Analysis Report
Run	COVID Map Extract
Run	COVID School Report Created 9.11.2021

5. Select “Run” next to “COVID Investigations Template Report”.
6. The Investigation Start Date filter is optional. You can leave this tab blank if you would like.

7. Go to the “Advanced Filter” tab and remove the current filter in “Basic Filters selected plus” by selecting “INV_CASE_STATUS Not Null” and then selecting the “<” arrow to delete it. Add a filter so that you only see test results for your jurisdiction. **IMPORTANT!** If you do not do this step, it will give you all lab test results for COVID for Montana for that specified timeframe and will be VERY difficult to sort out.

The screenshot shows the 'COVID Investigations Template Report' interface. At the top, there are three tabs: 'Basic Filter', 'Advanced Filter' (which is selected), and 'Column Selection'. Below the tabs is a header bar that says 'COVID Investigations Template Report'. Underneath, there's a section titled 'Statements'. In this section, there are three input fields: 'Field:', 'Logic:', and 'Value:'. The 'Field:' field contains 'JURISDICTION_NM', the 'Logic:' field contains 'Contains', and the 'Value:' field contains 'Gallatin'. To the right of these fields is an 'Insert' button. Below the 'Statements' section is a section titled 'Connectors'. It contains a text instruction: 'Click on a button to start or end parenthetical statements and/or click a connector button to include or except statements.' Below this text are four buttons: '(', ')', 'AND', and 'OR'. Below the 'Connectors' section is a section titled 'Advanced Criteria List'. It contains a text instruction: 'Click one or more filters in the text area below to move them up or down or to remove them from the Advanced Filter list.' Below this text is a section titled 'Basic Filters selected plus:'. It contains a text area that now lists 'JURISDICTION_NM Contains "Gallatin"'. A red arrow points from the 'Insert' button in the 'Statements' section to the text area in the 'Basic Filters selected plus' section.

- a. For “Field”, select “JURISDICTION_NM”
 - b. For “Logic”, select “Contains”
 - c. For “Value”, enter in your jurisdiction name in MIDIS. Ex. “Gallatin” or “Ft. Peck”.
 - d. Select “Insert”.
8. All available columns have been selected for the report. If you would like to customize the columns, you can and save it as a new report so you don’t have to go through the customization process again!

9. To move an available column to the selected column tab, select the name of the column and select the single carrot pointing to the right.


Basic Filter
Advanced Filter
Column Selection

COVID Investigations Template Report

Please select the column variables you would like to include in this report. Then move them up or down until they are arranged in the order you would like them to appear when the report is run.



Available Columns:

COVID_ALF_OUTBREAK_NME
COVID_ALF_OUTBREAK_YNU
COVID_ALF_TYPE
COVID_CASE_INTERVIEW
COVID_CASE_INTERVIEW_DTE
COVID_CONTACTS_POSIT
COVID_CORRECTIONAL_NAME
COVID_OUTBRK_ALF_OTHR
COVID_REINF_STATUS
COVID_REINF_YNU



Selected Columns:

JURISDICTION_NM
PATIENT_COUNTY
INV_CASE_STATUS
INVESTIGATION_STATUS_CD
INV_START_DT
ISOLATION_RELEASE_DT
PATIENT_FIRST_NAME
PATIENT_LAST_NAME
PATIENT_DOB
PATIENT_AGE_REPORTED

Sort By:

Sort Order:

Run
Export
Cancel

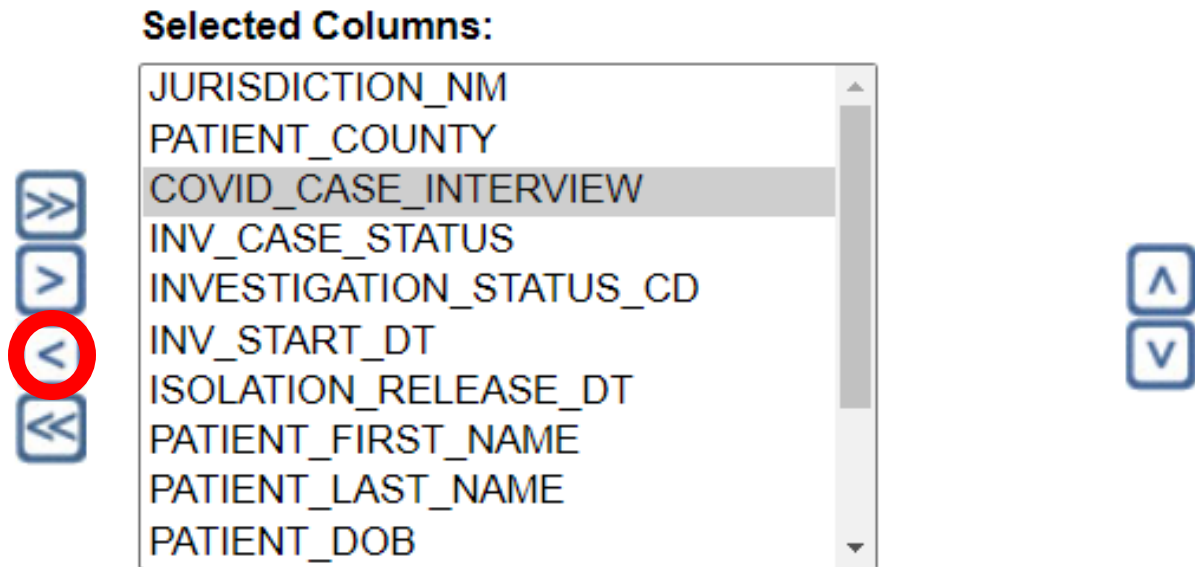
10. You can then move the column up or down in order using the up and down carrot next to the selected columns box.

Selected Columns:

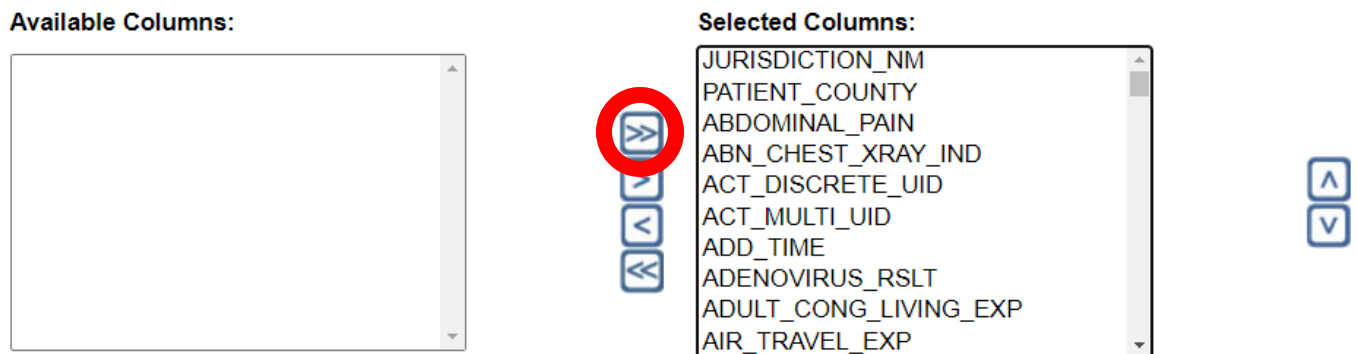
JURISDICTION_NM
PATIENT_COUNTY
COVID_CASE_INTERVIEW
INV_CASE_STATUS
INVESTIGATION_STATUS_CD
INV_START_DT
ISOLATION_RELEASE_DT
PATIENT_FIRST_NAME
PATIENT_LAST_NAME
PATIENT_DOB



11. To remove a selected column from the report, select the name of the column and select the single carrot pointing to the left.



12. To move all available columns over to selected columns for the report, select the double carrot pointing to the right.



13. To remove all selected columns, select the double carrot pointing to the left.

Available Columns:

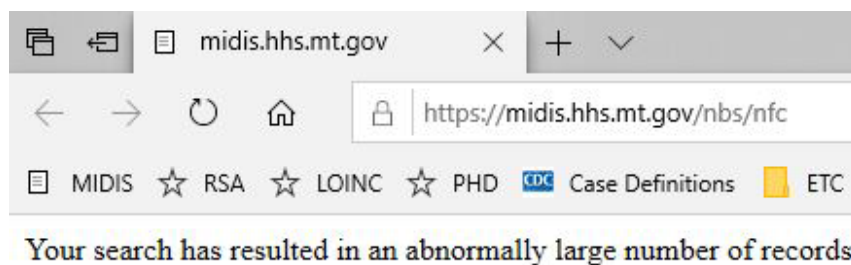
JURISDICTION_NM
PATIENT_COUNTY
ABDOMINAL_PAIN
ABN_CHEST_XRAY_IND
ACT_DISCRETE_UID
ACT_MULTI_UID
ADD_TIME
ADENOVIRUS_RSLT
ADULT_CONG_LIVING_EXP
AIR_TRAVEL_EXP

Selected Columns:

The diagram illustrates a column selection interface. On the left, a list of 'Available Columns' includes JURISDICTION_NM, PATIENT_COUNTY, ABDOMINAL_PAIN, ABN_CHEST_XRAY_IND, ACT_DISCRETE_UID, ACT_MULTI_UID, ADD_TIME, ADENOVIRUS_RSLT, ADULT_CONG_LIVING_EXP, and AIR_TRAVEL_EXP. In the center, a vertical stack of four arrow buttons is shown: a double right arrow (>>), a single right arrow (>), a single left arrow (<), and a double left arrow (<<). The double left arrow button is highlighted with a red circle. To the right of these buttons is an empty 'Selected Columns' box. Further to the right, another vertical stack of two arrow buttons is shown: an up arrow (^) and a down arrow (v).

14. If you selected additional filters and want to **save** this report for your jurisdiction to use later, select “Run” at the top or bottom of the report page.

The screenshot shows the top section of the 'COVID Investigations Template Report' interface. At the top right, there are three buttons: 'Run', 'Export', and 'Cancel'. The 'Run' button is circled in red. Below these buttons is a tabbed interface with 'Basic Filter', 'Advanced Filter', and 'Column Selection'. The 'Basic Filter' tab is selected. Below the tabs is a section titled 'Time' with a sub-header 'Date Filtered By: INV_START_DT'. This section contains two date input fields: 'From:' and 'To:', both with a calendar icon to the right. Below each input field is a placeholder text 'mm/dd/yyyy'. At the bottom right of the interface, there are three more buttons: 'Run', 'Export', and 'Cancel'.



15. Select "Save as New".



The selected report has been run and is displayed in a new window.



*** Indicates a Required Field**

Save this report design as: ☐ Private ☒ Public ☐ Reporting Facility

*** Report Name:** Gallatin COVID Investigations Report

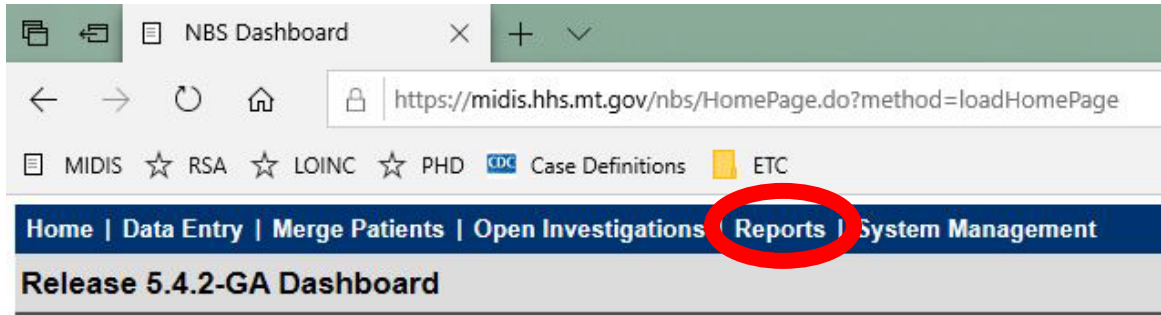
Description:

*** Report Section:** Montana LHJ Reports



How to Run a Report for COVID-19 Lab Test Results

1. Log into MIDIS
2. Select "Reports" from the menu bar



3. Go to "Public Reports". It is the second section with red text.



4. Expand “Montana CDEpi Reports” by clicking on the “+” sign.

<input type="checkbox"/> Public Reports	
Expand Subsections	
<input checked="" type="checkbox"/> Archived	
<input checked="" type="checkbox"/> Default Report Section	
<input checked="" type="checkbox"/> Montana CDEpi Reports	
	Report Title
Run	Basic Case Line List Report
Run	CDC HCV reconciliations
Run	CDC Reconciliation
Run	CDEpi Case Reconciliation- Missing Case Status and Missing Case Notification
Run	COVID Auto-Created Investigations
Run	COVID ELC 2021-2022 Monthly Report
Run	COVID EPI PROFILE
Run	COVID Epi Variant Report
Run	COVID Hospitalizations, Deaths, Breakthroughs, or Reinfections
Run	COVID Investigations Template Report
Run	COVID LTC/ALF Report
Run	COVID Lab Reports
Run	COVID Laboratory Variant Analysis Report
Run	COVID Map Extract
Run	COVID School Report Created 9.11.2021

5. Find “COVID LAB REPORTS” and select “Run”.

<input type="checkbox"/> Public Reports	
Expand Subsections	
<input checked="" type="checkbox"/> Archived	
<input checked="" type="checkbox"/> Default Report Section	
<input checked="" type="checkbox"/> Montana CDEpi Reports	
	Report Title
Run	Basic Case Line List Report
Run	CDC HCV reconciliations
Run	CDC Reconciliation
Run	CDEpi Case Reconciliation- Missing Case Status and Missing Case Notification
Run	COVID Auto-Created Investigations
Run	COVID ELC 2021-2022 Monthly Report
Run	COVID EPI PROFILE
Run	COVID Epi Variant Report
Run	COVID Hospitalizations, Deaths, Breakthroughs, or Reinfections
Run	COVID Investigations Template Report
Run	COVID LTC/ALF Report
Run	COVID Lab Reports
Run	COVID Laboratory variant Analysis Report
Run	COVID Map Extract
Run	COVID School Report Created 9.11.2021

6. A screen will show up with three tabs: basic filter, advanced filter, and column selection.

The screenshot displays the 'COVID Lab Reports' interface. At the top, a navigation bar includes links: Home | Data Entry | Merge Patients | Open Investigations | Reports | System Management | Help | Logout. The 'Reports' tab is active. The user is identified as 'User: Sam Saycich'. The MIDIS logo is in the top right corner. Below the navigation bar, there are three tabs: 'Basic Filter', 'Advanced Filter', and 'Column Selection'. The 'Basic Filter' tab is selected and highlighted with a red oval. To the right of the tabs are three buttons: 'Run', 'Export', and 'Cancel'. Below the tabs, the section is titled 'COVID Lab Reports'. Underneath, there is a 'Time' section. The 'Date Filtered By' is set to 'Lab_Added_Dt'. The 'From' date is '12/17/2020' and the 'To' date is '12/17/2020'. Both date fields have a calendar icon to their right. Below the date fields, the format 'mm/dd/yyyy' is displayed. At the bottom right, there are three buttons: 'Run', 'Export', and 'Cancel'.

7. Adjust the date filter on the “Basic Filter” tab to account for when you’re looking for lab results.

8. Go to the “Advanced Filter” tab and add a filter so that you only see test results for your jurisdiction. **IMPORTANT!** If you do not do this step, it will give you all lab test results for COVID for Montana for that specified timeframe and will be VERY difficult to sort out.

COVID Lab Reports

Statements

Field: Logic: Value:

Connectors

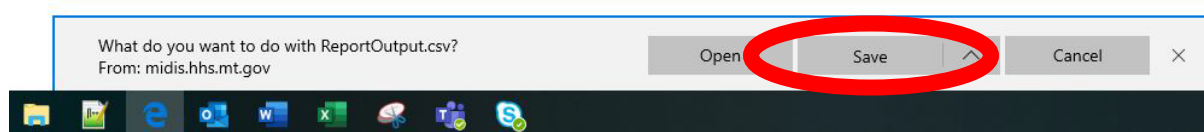
Click on a button to start or end parenthetical statements and/or click a connector button to include or except statements.

Advanced Criteria List

Click one or more filters in the text area below to move them up or down or to remove them from the Advanced Filter list.

Basic Filters selected plus:


- b. For “Field”, select “JURISDICTION_NM”
 - c. For “Logic”, select “Contains”
 - d. For “Value”, enter in your jurisdiction name in MIDIS. Ex. “Gallatin” or “Ft. Peck”.
 - e. Select “Insert”.
9. Go to “Column Selection” tab. This report already comes with columns selected, but if you would like to add more, select a column from “Available Columns”, select the “>” to move it over to “Selected Columns”, and then use the up and down arrows to adjust based on where you want it in your report.
10. Select “Export”. A window will appear asking you if you would like to open the file or to save it. Select “Save” and save to your computer.



What to Do If You Get an Out of State or Out of Jurisdiction Lab Report

My Queues

- Open Investigations (2251)
- Approval Queue for Initial Notifications (814)
- Updated Notifications Queue (241)
- Rejected Notifications Queue (5)
- Documents Requiring Security Assignment (69)
- Documents Requiring Review (677)
- Messages Queue (0)
- Supervisor Review Queue (43)

Mark As Reviewed				
<input type="checkbox"/> Document Type	Date Received	Reporting Facility/Provider	Patient	Description
<input type="checkbox"/> Lab Report	08/05/2020 6:04 AM	Reporting Facility: LABCORP Ordering Provider: DEBBIE PAULSEN		SARS coronavirus 2 RNA: Detected Reference Range: (Not Detect) - (Final)

Lab Report Comments

Add Comment

There is no information to display

Add Comment: This patient has an address in Tempe, Arizona. Please transfer.

Submit Cancel

5. Scroll to the top of the lab document and select “Transfer Ownership”. Change the **jurisdiction**

Home | Data Entry | Merge Patients | Open Investigations | Rep

View Lab Report

Patient ID: [REDACTED] Observation ID: [REDACTED]

Mark as Reviewed Transfer Ownership

to where the lab needs to go:

- a. IF THE LAB NEEDS TO GO **OUT OF STATE**: Please transfer to **Out of State**.
- b. IF THE LAB NEEDS TO GO TO **ANOTHER JURISDICTION**: Please transfer to **MTDPHHS**.

COVID-19 Data Priority Key

Priority 1: Map Data

These variables are required to count a case on your county map. You can find these variables on the “Patient Info” tab and “Case Info” tab.

Patient Info Tab

1. First Name
2. Last Name
3. Date of Birth
4. Current Sex
5. State
6. County

Case Info Tab

7. Jurisdiction
8. Investigation Start Date
9. Date Patient Was Released from Isolation (used to switch a case from active to inactive on COVID map)
10. Investigation Status (required to “close” a case)
11. Was the patient hospitalized for this illness?
12. Admission Date (can leave blank if 13 is no)
13. Discharge Date (can leave blank if 13 is no)
14. Did the patient die from this illness?
15. Date of Death

16. Is this case associated with an Adult Congregate Living Facility (nursing, ALF, LTC, etc.)?
17. If yes, what is the name of the Adult Congregate Living Facility?
18. What is the facility type?
19. If yes, is this case a staff member or resident?
20. School/University/Childcare Center Exposure:
21. School/University County:
22. COUNTY: What is the name of the school/university?
23. Case Status
24. Does this case meet case definition for breakthrough case?
25. Was breakthrough determined by: positive test > 14 days after vaccine series and/or CDEpi Consult
26. Symptoms Present During Course of Illness
27. Date of Symptom Onset

Priority 2: Grant Data

We use this data to report grant metrics to the CDC every month. If you can get it in the investigation, it helps us immensely, but if you’re in a surge, don’t worry about it! You can find these variables at the top of the “Case Info” tab.

Case Info Tab

1. Was the case interview completed?
2. If yes, what date was the case interview completed? (can leave blank if 1 is no)
3. Was the patient interviewed within 24 hours of identification?
4. Total number of contacts
5. How many contacts were notified within 24 hours?
6. How many contacts were tested for COVID-19 within 14 days?
7. How many identified contacts tested positive for COVID-19?
8. Investigator
9. Date Assigned to Investigation
10. Date of Report
11. Earliest Date Reported to County
12. Earliest Date Reported to St

Priority 3: Epi-Curve Data

Patient Info Tab

1. Middle Name
2. Suffix
3. Country of Birth
4. Is the Patient Deceased
5. Deceased Date
6. Marital Status
7. Street Address 1 and 2
8. City
9. Zip
10. Country
11. Home Phone
12. Work Phone
13. Cell Phone
14. Ethnicity
15. Tribal Affiliation
16. Race

Case Info Tab

17. What is the current status of this person?
18. Report date of case to CDC
19. Date of First Positive Specimen Collection
20. Did the Patient Develop Pneumonia?
21. Did the patient have another diagnosis/etiology for their illness?
22. Did the patient have an abnormal chest X-ray?
23. Did the patient have an abnormal EKG?
24. Hospital Name
25. Correctional Facility
26. What is the name of the correctional facility?
27. Is the patient part of a cluster of COVID-19 individuals?
28. What is the name of the COVID-19 cluster?
29. Is the patient a HCW?
30. Workplace Exposure Information
31. Did the patient travel domestically?

32. Did the patient travel internationally?
 33. Did the patient have contact with another COVID-19 case?
 34. Household contact
 35. Community contact
 36. Healthcare contact
 37. Community even/mass gathering
 38. Exposure to a cluster of patients with severe acute lower respiratory distress of unknown etiology.
 39. Unknown exposure in the 14 days prior to illness onset.
 40. Which would best describe where the patient was staying at the time of illness onset?
 41. Where was the disease acquired?
 42. Transmission mode
 43. Detection mode
 44. Confirmation method
 45. Confirmation date
 46. Is this a case of reinfection of COVID-19?
 47. Was reinfection status determined by: positive PCR test > 3 months after initial and/or CDEpi Consult
 48. MMWR Week
 49. MMWR Year
 50. Control Measures Implemented Date
 51. Patient Lost to Follow-Up?
 52. Was variant sequencing performed?
 53. Variant sequencing performing laboratory name
 54. Please enter the resulted variant in the following format: X.#.# or similar nomenclature
 55. What category does this variant currently fall in?
- ### COVID Tab
56. Symptoms
 57. Pre-Existing Conditions

COVID-19 Vaccine Breakthrough Case Investigations

Objective

Investigate SARS-CoV-2 infections among people who received COVID-19 vaccine to identify trends or clustering in patient characteristics, the administered vaccine, or the infecting virus.

Case definition

U.S. resident who has SARS-CoV-2 RNA or antigen detected on respiratory specimen collected ≥ 14 days after completing the primary series of an FDA-authorized COVID-19 vaccine.

Exclusion criteria

SARS-CoV-2 RNA or antigen detected on a respiratory specimen collected < 45 days before the most recent positive test.

Screening questions to assess if case meets vaccine breakthrough investigation criteria

1. Received full primary series of an FDA-authorized COVID-19 vaccine (e.g., two doses of the Pfizer or Moderna mRNA vaccine)?
 - a. **If YES, proceed to question #2**
 - b. Stop if:
 - i. No documented or reported COVID-19 vaccination
 - ii. Received incomplete primary series of COVID-19 vaccine (e.g., 1 dose of Pfizer or Moderna mRNA vaccine)
 - iii. Received a COVID vaccine that is not FDA-authorized
2. Respiratory specimen collected ≥ 14 days after receiving the last dose of an FDA-authorized COVID-19 vaccine tested positive for SARS-CoV-2 RNA or antigen?
 - a. **If YES, proceed to question #3.**
 - b. Stop if:
 - i. No COVID-19 laboratory test result
 - ii. Only a negative or equivocal test result
 - iii. Only a positive result on another test type (e.g., antibody)
 - iv. Only a positive result on another specimen type (e.g., serum)
 - v. Positive specimen was collected < 14 days after receiving the last dose of the COVID-19 vaccine

3. Known positive test for SARS-CoV-2 RNA or antigen on a respiratory specimen collected <45 days prior to the most recent test?
 - a. **If NO or UNKNOWN, proceed with case investigation on the next page.**
 - b. Stop if:
 - i. Documented SARS-CoV-2 RNA or antigen detected on a respiratory specimen collected <45 days before the most recent positive test.

Steps for initiating a COVID-19 vaccine breakthrough case investigation

1. Request the clinical or public health laboratory hold any residual specimens from the positive COVID-19 test (respiratory specimen, RNA extract, or viral isolate).
2. Report the available case data to MIDIS, per normal procedures.
 - a. Attach vaccination records through either the imMTrax query or through manual entry of the vaccine.
3. Contact CDEpi at 406-444-0273 to report the possible case. A decision to send the specimen to CDC will be determined by DPHHS.
 - a. When requested, forward the specimen to the Montana Public Health Laboratory for further analysis.
4. CDC may request further information regarding the case. CDEpi may reach out for missing information or other information necessary to investigate the case.

Vaccination Query for Covid-19 Case Investigations

The Montana Immunization Information System (imMTrax) can be queried while using MIDIS to enter cases of reportable disease. This capability is helpful to determine vaccine status of a patient without having to separately look up vaccination status in imMTrax and manually enter the result.

The recommended browser to perform this function is Internet Explorer. Using Google Chrome will cause query buttons to disappear on occasion.

Getting Started

Enter your investigation for 2019 Novel Coronavirus (COVID-19) into the patient's file.

- Enter the required fields. It's ok if you don't have all of the information at first. Please see the MIDIS COVID-19 data key to see what fields are required.
- Submit the investigation to save your changes.
- Remain in the investigation for the next step (do not exit to the patient file).

Manage Associations

Home | Data Entry | Merge Patients | Open Investigations | Reports

View Investigation: 2019 Novel Coronavirus (COVID-19)

↓

☐ Manage Associations
 ☐ Create Notifications
 ☐ Share Document

[Redacted] Female [Redacted] (32 Years)

Investigation ID: [Redacted]

Investigation Status: Open

Investigator: [Redacted]

Click the **MANAGE ASSOCIATIONS** button at the top left corner. This is the same button you use to attach laboratory reports.

Tip: MANAGE ASSOCIATIONS is NOT visible when you are editing a record. The investigation must be open but not in edit mode.

Click the Query Registry Button (Midway on the Screen)

Vaccinations

Date Administered	Vaccine Administered	Vaccination ID
Nothing found to display.		

Query Registry

Add Vaccination

Query Information

Demographics

Search Criteria

Last Name:

First Name:

Middle Name:

Date of Birth:

Current Sex: Female

Street Address:

City:

State:

Zip:

Phone:

Maternal & Birth Information

Mother's Last Name:

Mother's First Name:

Mother's Maiden Name:

Multiple Birth Indicator:

Birth Order:

Submit Query

Cancel

- The demographic information entered into the case investigation will auto populate in the query page.
- Verify that the name and date of birth are correct.

Attach the Vaccine to the Case Investigation

Search Results

[Return to Search Results](#)

Female | (32 Years) Registry Patient ID:

Results 1 to 1 of 1

<input type="checkbox"/>	Provider	Date Administered	Vaccine Administered	Lot Information	Information Source
<input checked="" type="checkbox"/>		12/28/2020	Vaccine Type: COVID-19, mRNA, LNP-S, PF, 100 mcg/0.5 mL dose Dose Number: 1	Lot #: 025J20-2A	New immunization record

Results 1 to 1 of 1

- Individuals who are active and have consented in imMTrax will be searchable through this method. Those who have not consented or who are not active will not appear on this screen.
- You can sort vaccine records by clicking the small arrows in the column headers.
- You can attach multiple vaccine records at one time, such as in an individual who has received both doses of vaccine for COVID-19.
- Click the import selected records button to attach the record. Click Cancel if no records are available.
- *If you do not see a record on someone you are certain has been vaccinated, check the spelling of the query. It will auto-populate the name and DOB from the investigation, but if there is a spelling error, you may not be able to find the vaccine record without correcting the information. This may also be true of individuals who have changed their name since the last time they were vaccinated.*

Verification Screen

The screenshot displays a web application interface for verifying patient records. At the top, a yellow banner shows patient details: [Redacted] Female [Redacted] (32 Years) and Registry Patient ID: [Redacted]. A link "Return to Search Results" is in the top right. Below the banner, it says "Results 1 to 1 of 1". A table with columns: Provider, Date Administered, Vaccine Administered, Lot Information, and Information Source. The first row is selected with a checkbox. A modal dialog box titled "Message from webpage" is open, asking for confirmation to import selected records. The dialog text reads: "If you continue with the Import Selected Records action, the selected vaccinations will have individual Vaccination Events created and become associated to the current Investigation. Select OK to continue, or Cancel to not continue." There are "OK" and "Cancel" buttons at the bottom of the dialog. In the background, "Import Selected Records" and "Cancel" buttons are visible on the right side of the table.

<input type="checkbox"/>	Provider	Date Administered	Vaccine Administered	Lot Information	Information Source
<input checked="" type="checkbox"/>		12/28/2020	Vaccine Type: COVID-19, mRNA, LNP-S, PF, 100	Lot #: 025J20-2A	New immunization record

- Click OK if you wish to attach the record. The record will now be visible on the supplemental info tab in the Case Investigation for this patient.
- Click Cancel if you do not wish to attach it.

To Delete a Vaccination from an Investigation

Vaccinations

	Date Administered	Vaccine Administered	Vaccination ID
<input type="checkbox"/>	10/19/2020	influenza, injectable, quadrivalent, preservative free	INT10373066MT01

Query Registry Add Vaccination

Treatments

Treatment Date	Treatment	Treatment ID
Nothing found to display.		

Add Treatment

Documents

Date Received	Type	Purpose	Description	Document ID
Nothing found to display.				

Print Submit Cancel

- Uncheck the box next to the vaccine date administered and click Submit. This dis-associates the vaccine from the investigation.
- Open the vaccination record link in Date Administered. Click the delete button the upper right. It will remove the vaccine information from the investigation but will not delete anything from imMTrax. Press Submit to save the change.

View Vaccination: Influenza, Injectable, Quadrivalent, Preservative Free

Print **Delete** Close

Female	Patient ID:
Created: 01/08/2021	By: Magdalena Scott
Last Updated: 01/08/2021	By: Magdalena Scott

* Indicates a Required Field

Patient **Vaccination**

Vaccination [Collapse Subsections](#) [Back to top](#)

Vaccination Administered

Please note: Record ALL doses of EVERY vaccine given. Record all information that is known, even data on vaccine doses administered beyond the recommended guidelines.

Vaccine Event Information Source: New immunization record
 Vaccine Administered Date: 10/19/2020
 Age At Vaccination: 33
 Age At Vaccination Unit: Years
 Vaccination Anatomical Site: Left Deltoid

Administered By

Vaccination Given By Provider:
 Vaccination Given By Organization: BIGHORN VALLEY HEALTH CENTER CAMPUS
 1223 CENTER AVE
 HARDIN, Montana 59034
 * Vaccine Type: influenza, injectable, quadrivalent, preservative free
 Vaccine Manufacturer: SmithKline Beecham
 Vaccine Expiration Date:
 Vaccine Lot Number: N549A
 Dose Number: 5

Merging in MIDIS

If you would like permission to merge patient files and investigations in MIDIS, please email the MIDIS lead with CDEpi or call 406-444-0273.

Notes About Merging:

- This is a PERMANENT process! Once you merge a patient file, it CANNOT be undone or reversed. The only way to fix it is to manually print out all investigations and lab reports in the file that was merged, sort them out by where they need to go, and then manually create a new patient file and re-enter all their information that wrongly went into the other file. After that, you have to email CDEpi to have someone here “delete” everything out of the other file that shouldn’t be in there.
- Double check every file before merging it. Sometimes, it’ll look like two files need to be merged, but verify that it isn’t a father/son or SR/JR situation. Other situations we run into at the state are twins with similar names. Please be very careful before proceeding with a merge.
- If you merge two investigations into one, all the data from the investigation that you select NOT to keep is lost unless you manually put it in the investigation that is being kept. There is no way to recover this data.

How-To Merge Patient Files

1. Find the patient files that you want merged and write down their patient ID’s. You’ll want to make sure that you search MIDIS on the home screen for any other possible variations that the patient might have in MIDIS. Try a vague search of just the first three letters of the patient’s first and last name to see if there are other files with misspellings or try just searching by the date of birth to see if there’s a file that swapped the first and last name.
2. Go to “Merge Patients” in your menu bar.
3. Select “Manual Search”.



4. Enter in the patient ID's that you want merged with a space, comma, or semicolon between them. Select "Submit"

Advanced Search Options

SSN:

Patient ID(s): (Separate IDs by commas, semicolons, or spaces)

ID Type:


ID Value:

Telephone:

Ethnicity:

Race:

5. Select the checkbox next to the first "Surviving Patient ID". The box next to it in the "Merge" column will automatically be selected as well.

Merge Candidate List User: Sam Saycich 

[New Search](#) | [Refine Search](#)

Your Search Criteria: Patient ID Equals '5078607 5082083' resulted in 2 possible matches.

To compare records, check 2 candidates in the Compare column.
To merge records, check 2 or more candidates in the Merge column.

Compare	Full Name	Age/DOB/Sex	Address	Telephone/ID	Merge	Surviving Patient ID
<input type="checkbox"/>	Legal	14 Years	Home - House	Home - Phone	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 5078607
<input type="checkbox"/>	Legal	14 Years	Home - House	Home - Phone	<input type="checkbox"/>	<input type="checkbox"/> 5082083

- Select any additional patients that need to be merged into the first patient record by checking the box in the “Merge” column. When you are done selecting all additional records that need to be merged, select “Merge”.

Merge Candidate List
User: Sam Saycich
MIDIS

[New Search](#)
[Refine Search](#)

Compare Merge Cancel

Your Search Criteria: Patient ID Equals '5078607 5082083' resulted in 2 possible matches.

To compare records, check 2 candidates in the Compare column.
To merge records, check 2 or more candidates in the Merge column.

Compare	Full Name	Age/DOB/Sex	Address	Telephone/ID	Merge	Surviving PatientID
<input type="checkbox"/>	Legal	14 Years	Home - House	Home - Phone	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 5078607
<input type="checkbox"/>	Legal	14 Years	Home - House	Home - Phone	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5082083

Compare Merge Cancel

How-To Merge Investigations

- Go into the “Events” tab of the patient file. Select the two checkboxes next to the investigations that need to be merged into one. Select “Compare”.

Female
Patient ID:

Summary Events Demographics

[Expand All](#)
[Collapse All](#)

Go to: [Investigations](#) | [Lab Reports](#) | [Morbidity Reports](#) | [Vaccinations](#) | [Treatments](#) | [Documents](#) | [Contact Records](#)

Patient Events History

☒ Investigations (2)

	Start Date	Status	Condition	Case Status	Notification	Jurisdiction	Investigator	Investigation ID	Co-Infection ID
<input checked="" type="checkbox"/>	02/24/2022	Open	2019 Novel Coronavirus (COVID-19)	Confirmed	COMPLETED			CAS10935600MT01	
<input checked="" type="checkbox"/>	02/24/2022	Closed	2019 Novel Coronavirus (COVID-19)	Confirmed	COMPLETED			CAS10934564MT01	

- When the next screen pops up, select “Show Differences Only”. This will show you what fields are different between the two. Select the file that appears to be the most correct as the “Surviving Record”. Select “Merge”.

Compare Investigations

User : Sam Saycich MIDIS

☐ Show Full Record
 ☒ Show Differences Only

Go to: [Patient Information](#) | [Investigation Information](#) | [Reporting Information](#) | [Clinical](#) | [Epidemiologic](#) | [General Comments](#) | [Signs and Symptoms](#) | [Medical History](#) |

2019 Novel Coronavirus (COVID-19) (01/24/2022) ☐ Surviving Record
 2019 Novel Coronavirus (COVID-19) (01/24/2022) ☒ Surviving Record

Female		Patient ID:	Male		Patient ID:
Investigation ID: CAS10935600MT01	Created: 01/24/2022	By: ELR LOAD	Investigation ID: CAS10934564MT01	Created: 01/24/2022	By:
Investigation Status: Open	Last Updated: 01/25/2022	By:	Investigation Status: Closed	Last Updated: 01/25/2022	By:
Investigator:	Case Status: Confirmed	Notification Status: COMPLETED	Investigator:	Case Status: Confirmed	Notification Status: COMPLETED

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☒ Patient Information [Back to top](#)

[Collapse Subsections](#)
[Collapse Subsections](#)

☒ Name Information
 ☒ Name Information

First Name:		First Name:	
Last Name:		Last Name:	

☒ Other Personal Details
 ☒ Other Personal Details

Current Sex:	Female	Current Sex:	Male
Marital Status As Of Date:		Marital Status As Of Date:	01/24/2022
Marital Status:		Marital Status:	Single, never married

☒ Ethnicity and Race Information
 ☒ Ethnicity and Race Information

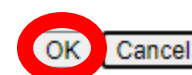
Does this case have any tribal affiliation?:	No	Does this case have any tribal affiliation?:	
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- MIDIS will give you a chance to adjust any information you need to by comparing the two files again. Select “Show Differences Only” again. Enter in any information you need and select “Submit”.
- A pop-up window will show with a warning about how merging is permanent. Select “OK” if you are confident that everything is correct.

If you continue with the Merge action, the selected investigation records will be merged into a single investigation record.

- All associated event records (lab reports, morbidity reports, vaccinations, treatments, case reports, contact records, and interviews) will move to the surviving investigation.
- All attachments and notes will move to the surviving investigation.
- A new 'version' of the surviving investigation will be recorded with the 'last updated by user' as the user who performed the merge and the 'last updated by date' as today's date.
- If a notification exists for the surviving investigation, a re-send will be triggered.
- The 'losing' investigation will be indicated as 'LOG_DEL' in the system.
- If a notification exists for the 'losing' investigation, an updated notification will be triggered with a case status of 'Not a Case'.
- Merging of investigations is final and cannot be reversed.**

Select OK to continue or Cancel to not continue.



CDEpi MIDIS Help Desk

Need extra assistance? Have unanswered questions? Looking for additional trainings?

Call CDEpi at 406-444-0273!