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

Version 4: 1/26/2022

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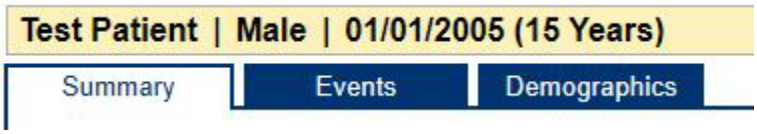
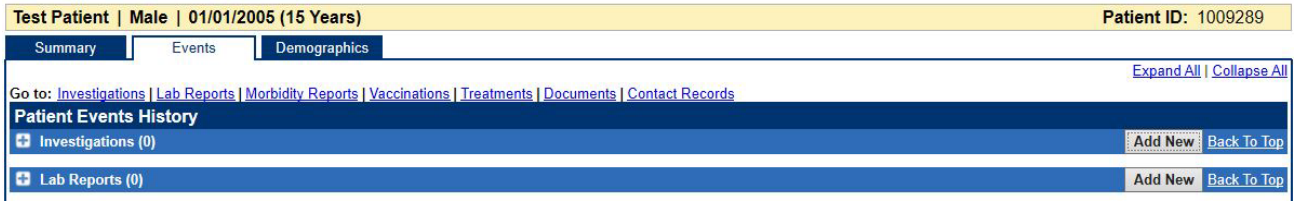
How to Manually Enter a Lab Report

a. If the patient is not in MIDIS:
   i. Select “Add New”.

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



3. Scroll down to “Lab Reports” and select “Add New”.

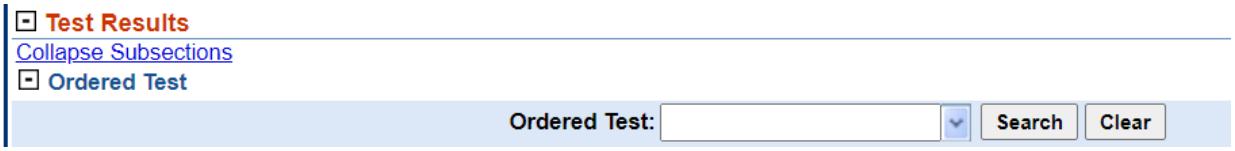


4. For "Reporting Facility", please populate it with where the test is coming from by selecting "Search". Examples include LabCorp, St. Vincent's, etc. If you search for a facility and it is not available, you have the option to "Add" a facility. If you have information for ordering facility and ordering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

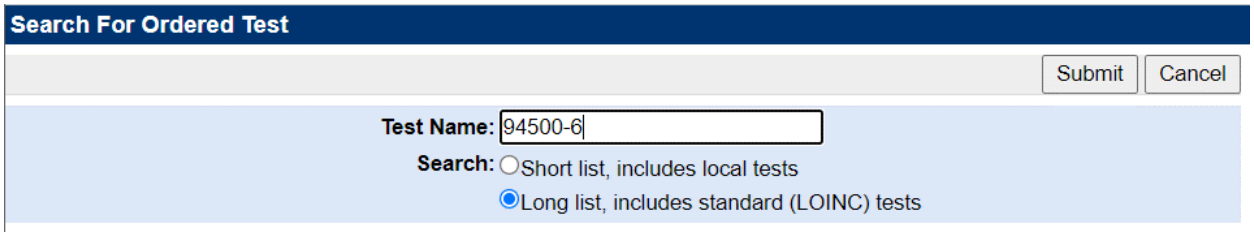
5. Populate the following areas:

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.

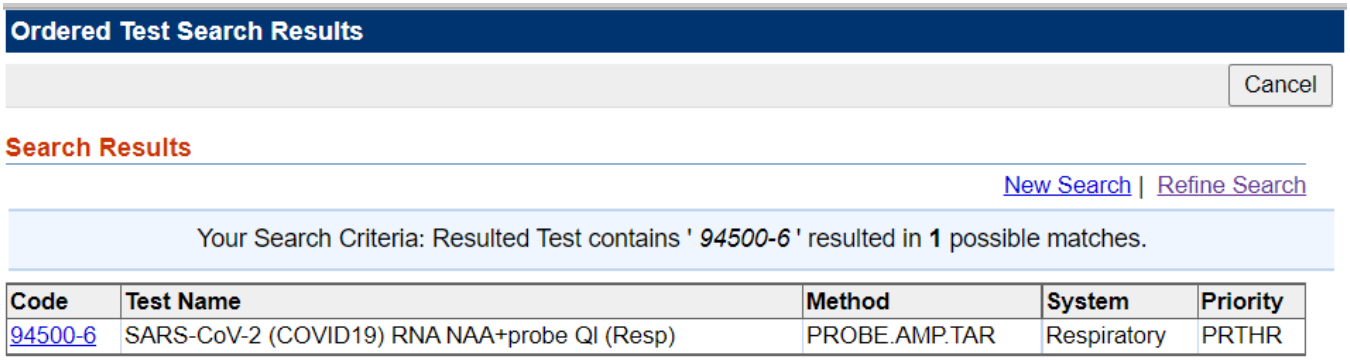
6. Select “Search” next to ordered test.



7. To Search for a:
   a. PCR test (e.g., Abbott ID Now or Cepheid): Type in “94500-6” and select “LONG LIST”.
   b. ANTIGEN test: Type in “94558-5” and select “LONG LIST”.
   c. Select “submit”.



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



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

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

Accession Number: 6xjj343299

Specimen Source: Nose (nasal passage)

Specimen Site: Bilateral Nares

Date Specimen Collected: 08/01/2020 mm/dd/yyyy

Patient Status at Specimen Collection: Unknown

Pregnant: Unknown

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".

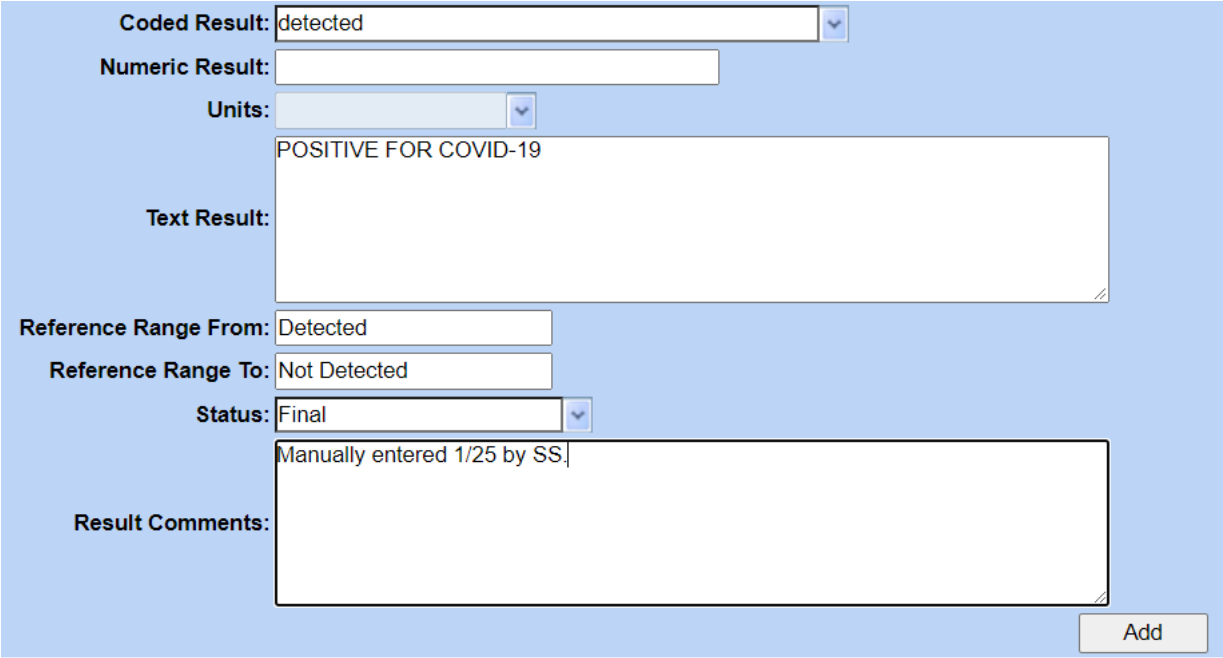
10. Select "Search" next to "Resulted Test".

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.



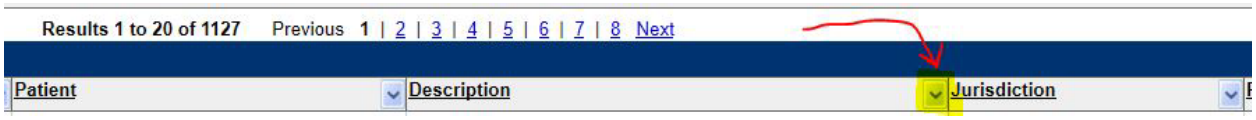
a. **Coded Result**: Detected
b. **Numeric Result**: **leave blank**
c. **Text Result**: I recommend entering "Positive for COVID-19".
d. **Reference Range**: Detected to Not Detected
e. **Result Status**: Final
f. **Result Comments**: You can add a comment if you'd like.

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.

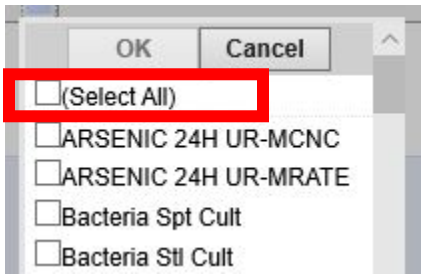
How to Mark Labs as Reviewed in Batches

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

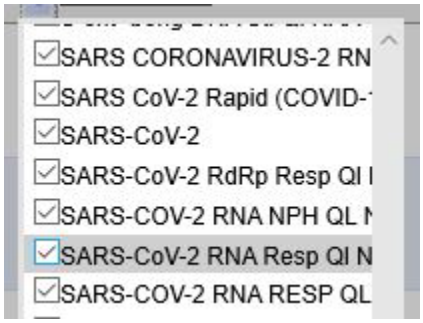
1. From MIDIS home page, go to your "Documents Requiring Review Queue".



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

Document Type	Date Received	Reporting Facility/Provider	Patient	Description
Lab Report E	05/07/2020 6:00 AM	**Reporting Facility:** MAYO CLINIC DLMP **Ordering Provider:** NICOLE D LORENZ	[redacted]	**SARS-COV-2 RNA RESP QL NAA+PROBE:** UNDETECTED **Reference Range:** (UNDETECTED) - (Final)
Lab Report E	05/08/2020 6:00 AM	**Reporting Facility:** MAYO CLINIC DLMP **Ordering Provider:** SARAH J COUNTS	[redacted]	**SARS-COV-2 RNA RESP QL NAA+PROBE:** UNDETECTED **Reference Range:** (UNDETECTED) (Final)
Lab Report E	05/08/2020 3:00 PM	**Reporting Facility:** MAYO CLINIC DLMP **Ordering Provider:** CHARLES SWANNACK	[redacted]	**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: Negative Lab Result

Comments:

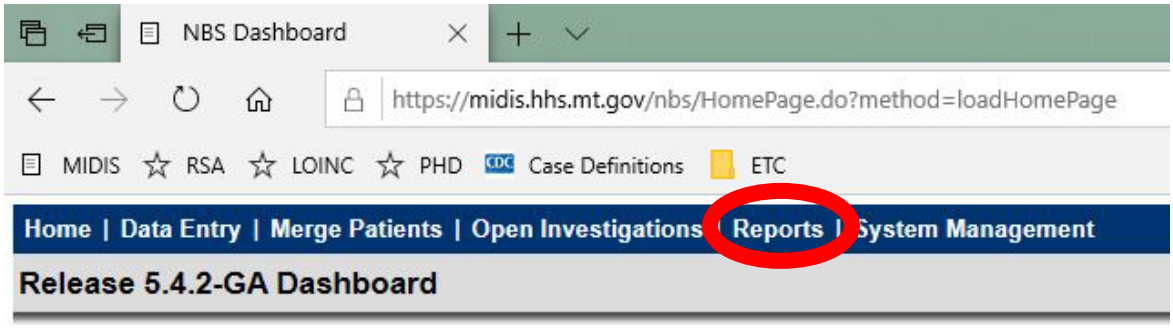
Submit Cancel

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

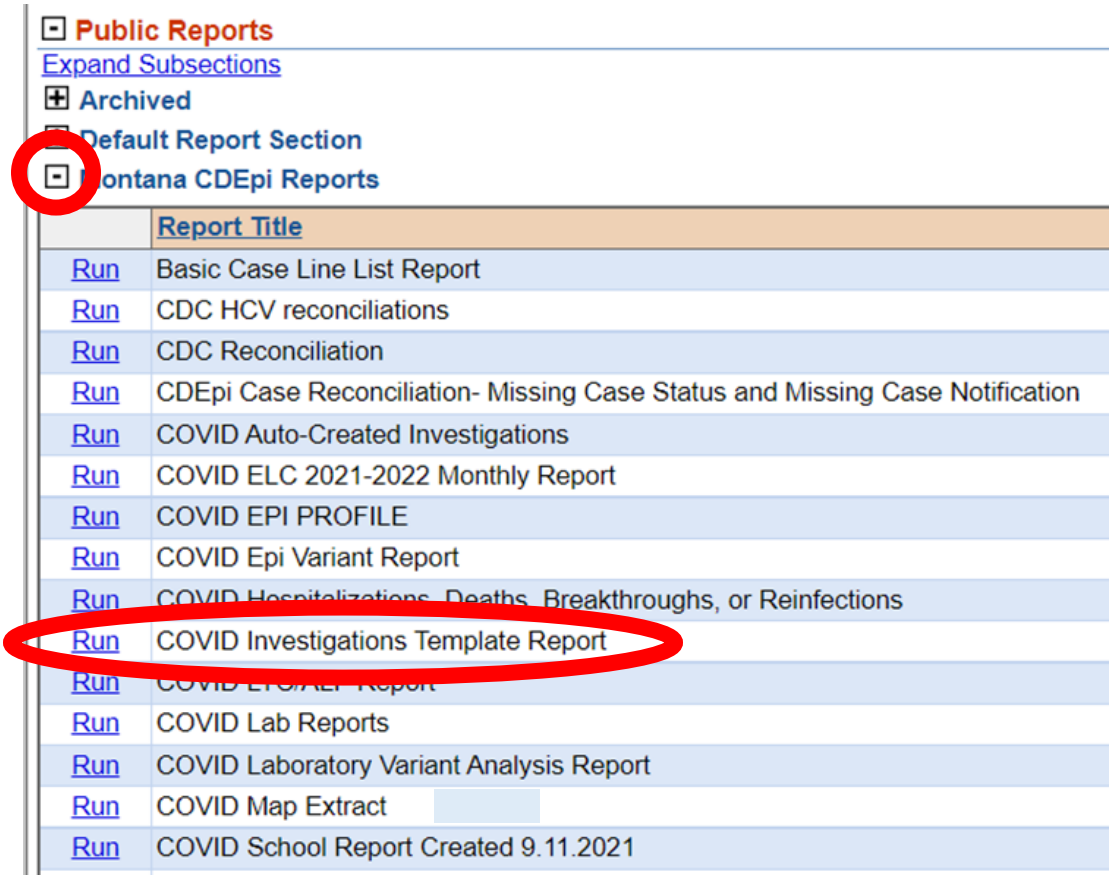
Mark As Reviewed | Remove All Filters/Sorts

How to Run a Report for COVID-19 Investigations

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

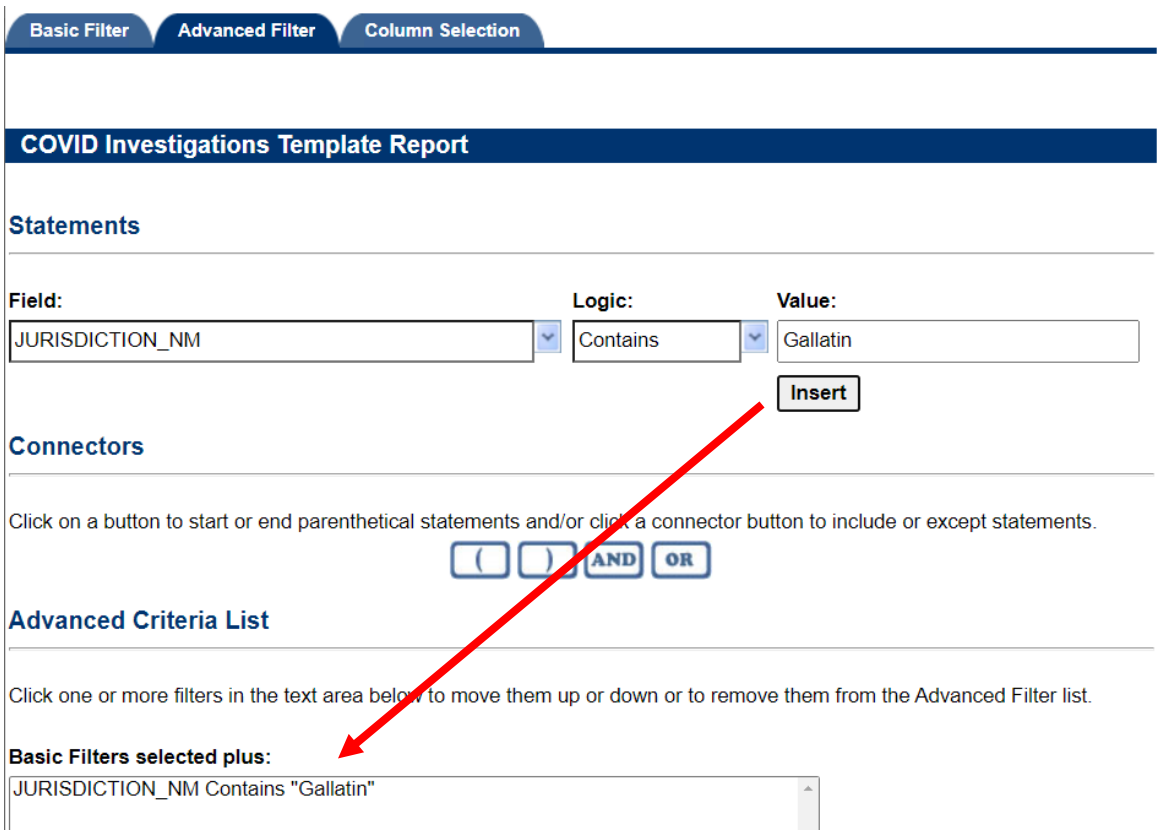


3. Go to "Public Reports". It is the second section with red text.
4. Expand "Montana CDEpi Reports" by clicking on the "+" sign.



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.

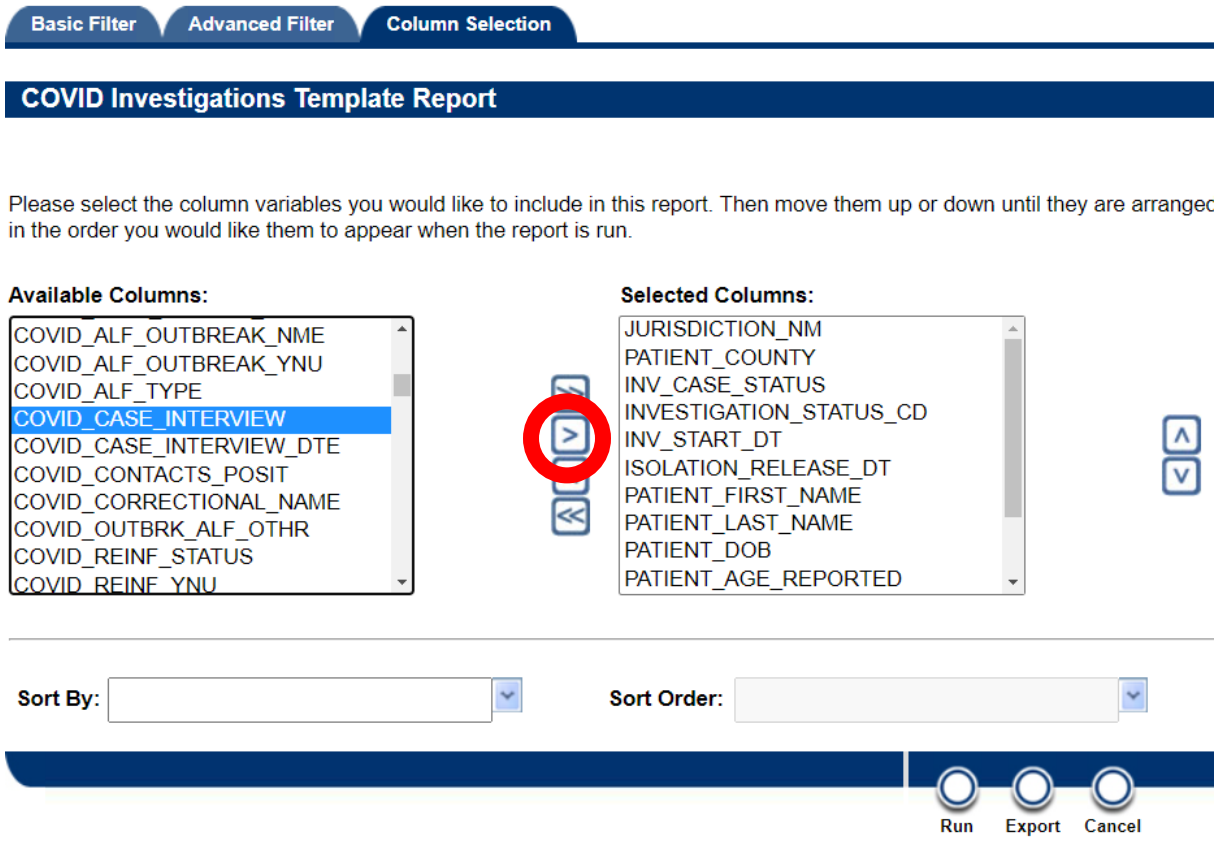
7. Go to the “Advanced Filter” tab and remove the current filter in “Basic Filters selected plus” by selecting “INV_CASE_STATUS Not Null” and then selecting the “<” arrow to delete it. Add a filter so that you only see test results for your jurisdiction. **IMPORTANT!** If you do not do this step, it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



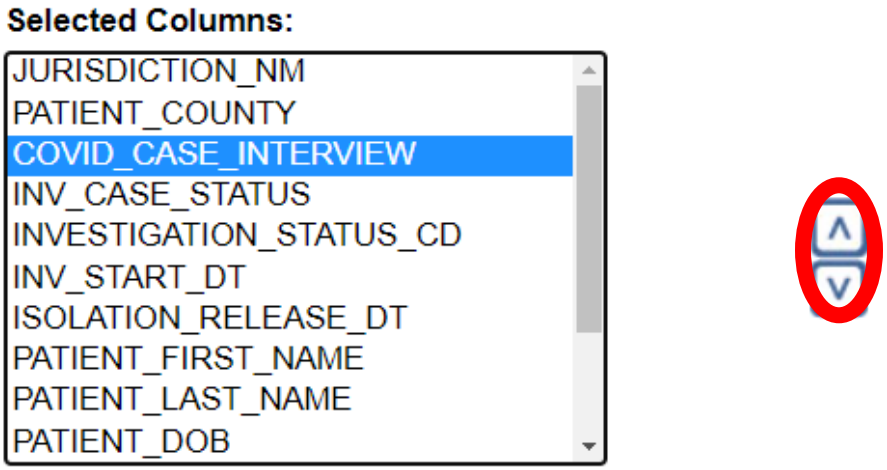
   a. For “Field”, select “JURISDICTION_NM”
   b. For “Logic”, select “Contains”
   c. For “Value”, enter in your jurisdiction name in MIDIS. Ex. “Gallatin” or “Ft. Peck”.
   d. Select “Insert”.

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!

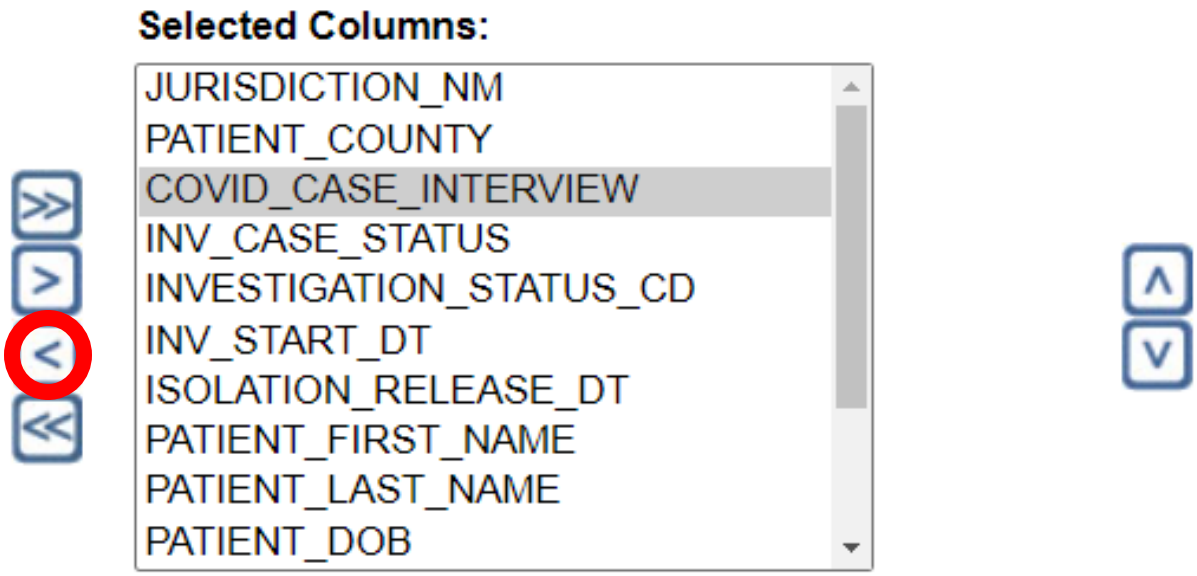
9. To move an available column to the selected column tab, select the name of the column and select the single carrot pointing to the right.



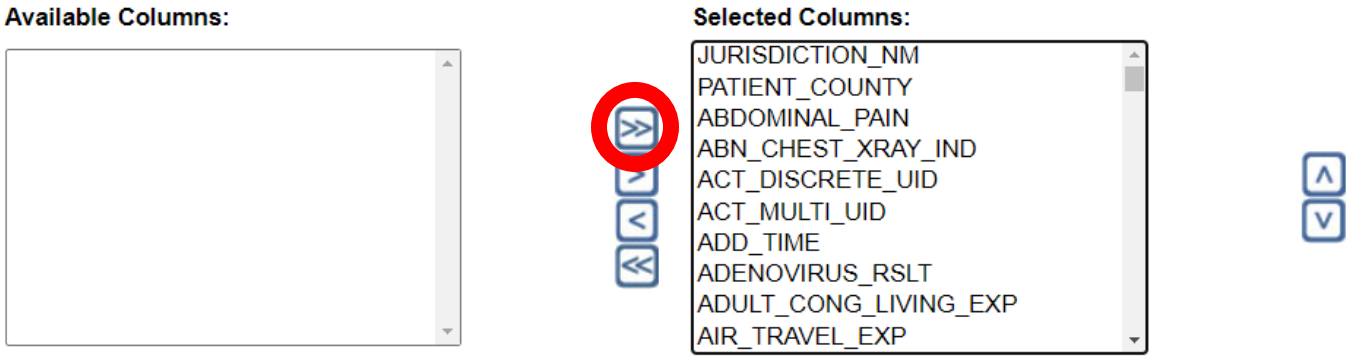
10. You can then move the column up or down in order using the up and down carrot next to the selected columns box.



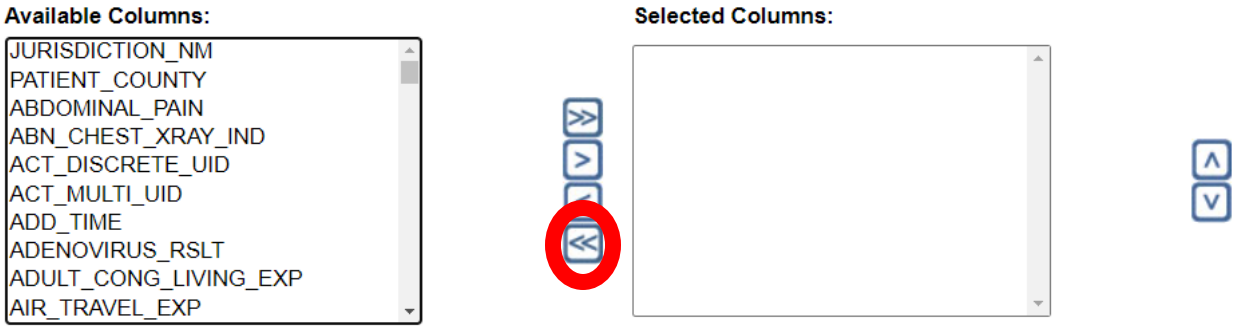
11. To remove a selected column from the report, select the name of the column and select the single carrot pointing to the left.



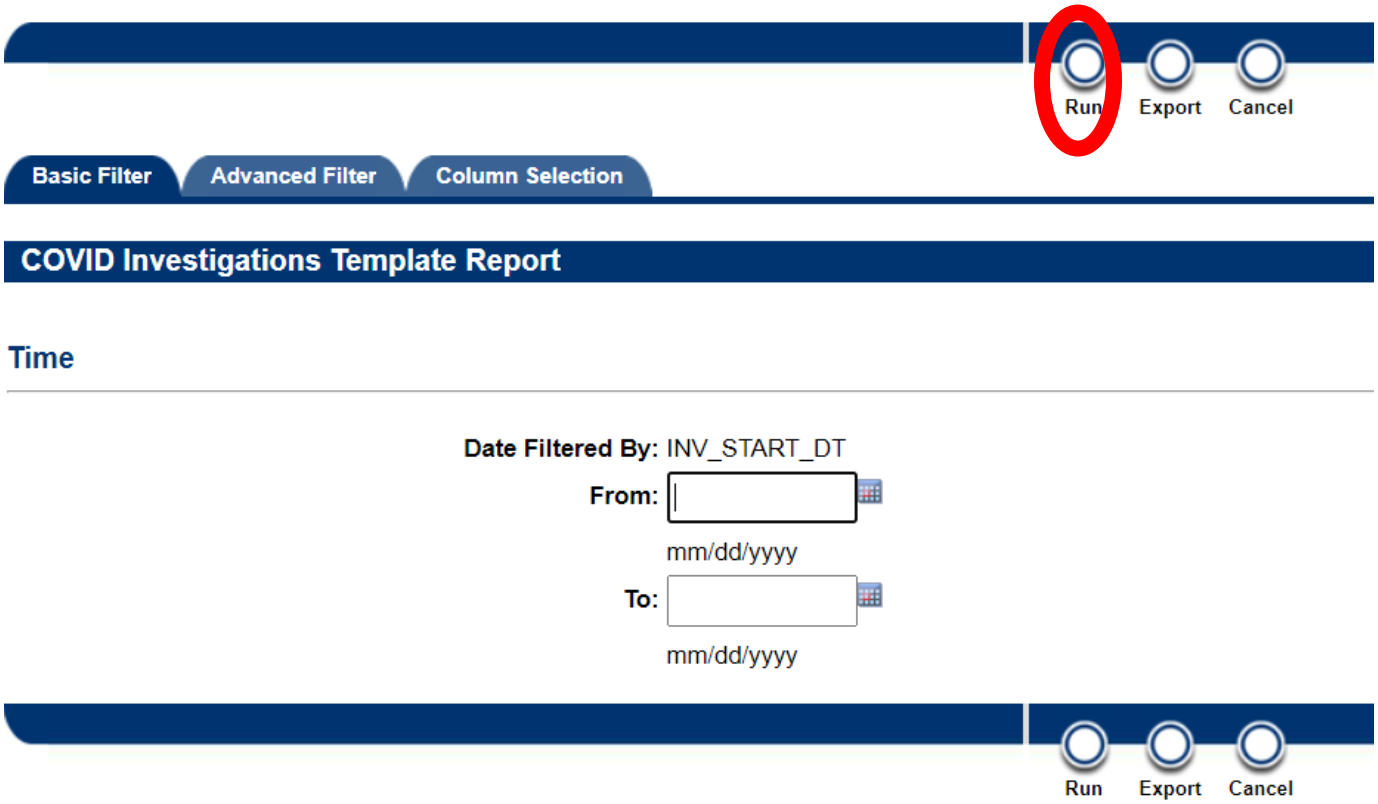
12. To move all available columns over to selected columns for the report, select the double carrot pointing to the right.

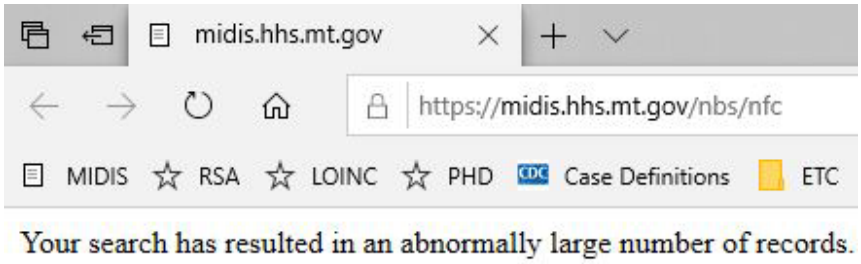


13. To remove all selected columns, select the double carrot pointing to the left.



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.





15. Select “Save as New”.

COVID Investigations Template Report

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

COVID Investigations Template Report

* Indicates a Required Field

Save this report design as: ○ **Private** ◉ **Public** ○ **Reporting Facility**

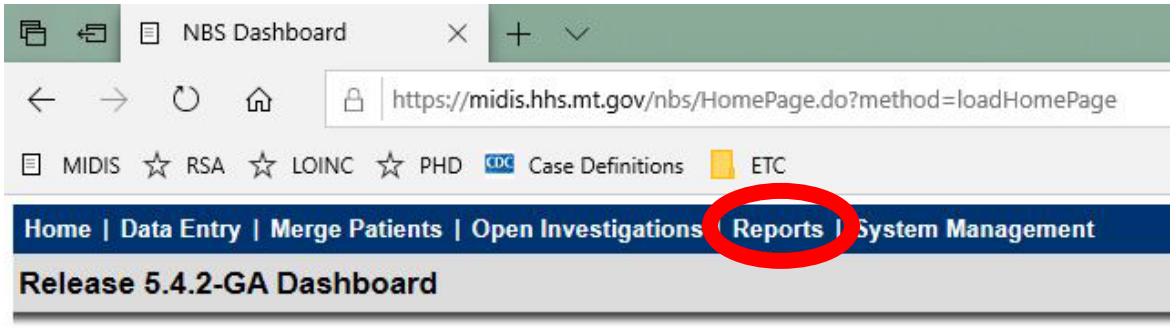
* **Report Name:** Gallatin COVID Investigations Report

Description:

* **Report Section:** Montana LHJ Reports

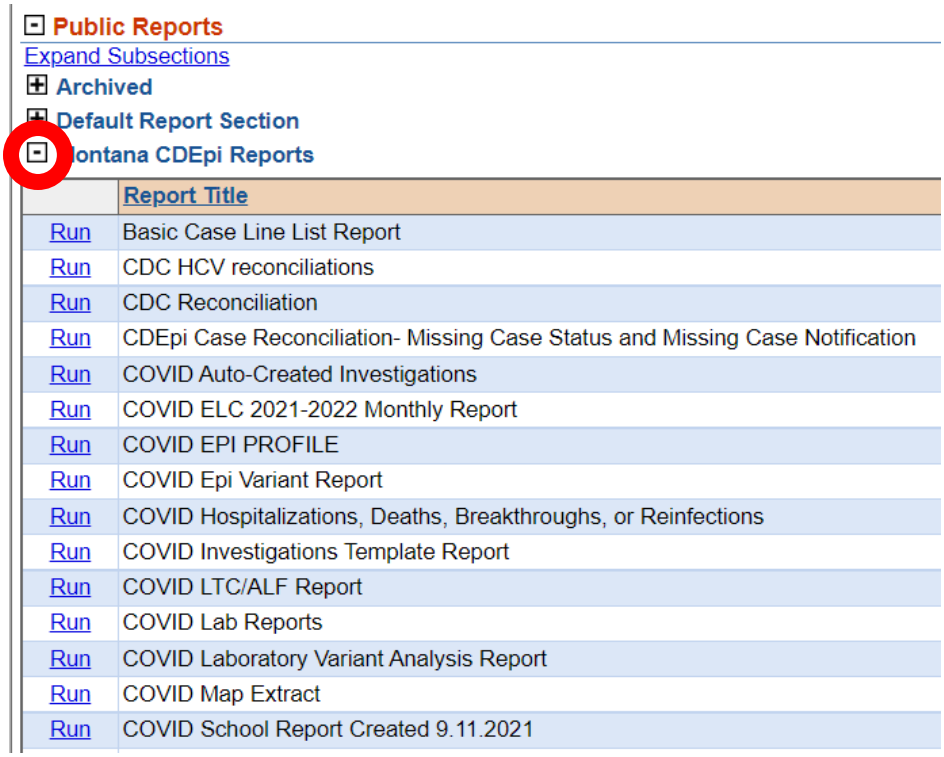
How to Run a Report for COVID-19 Lab Test Results

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

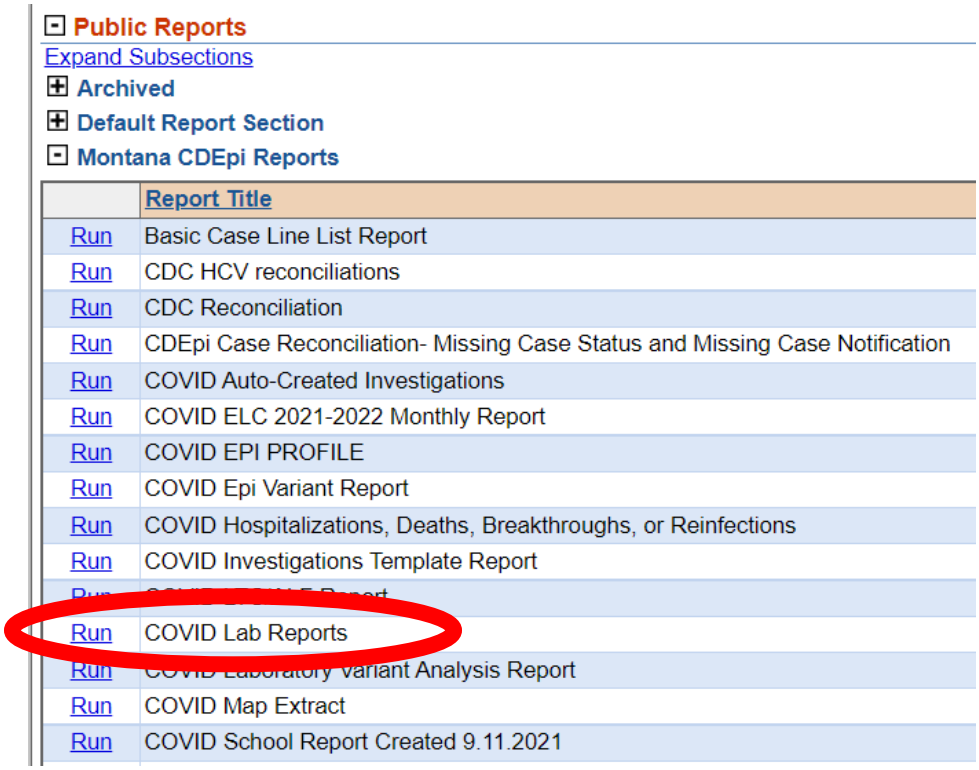


3. Go to "Public Reports". It is the second section with red text.

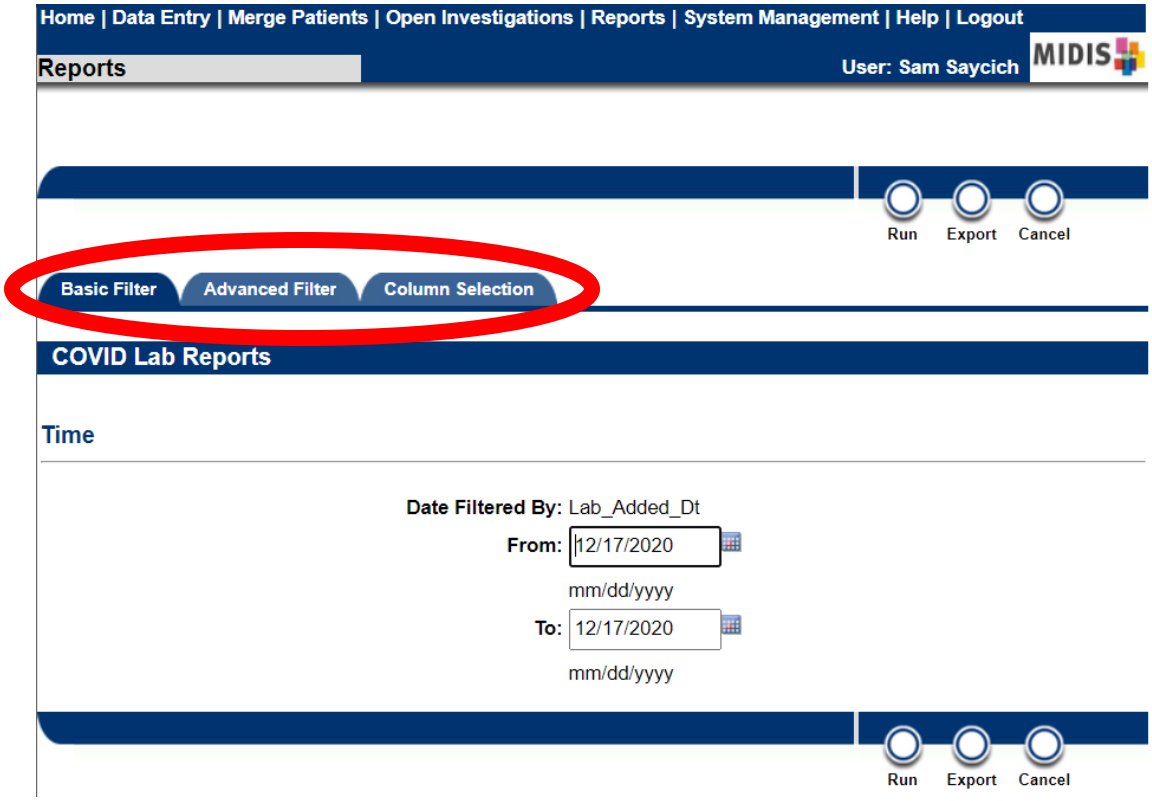
4. Expand "Montana CDEpi Reports" by clicking on the "+" sign.



5. Find "COVID LAB REPORTS" and select "Run".

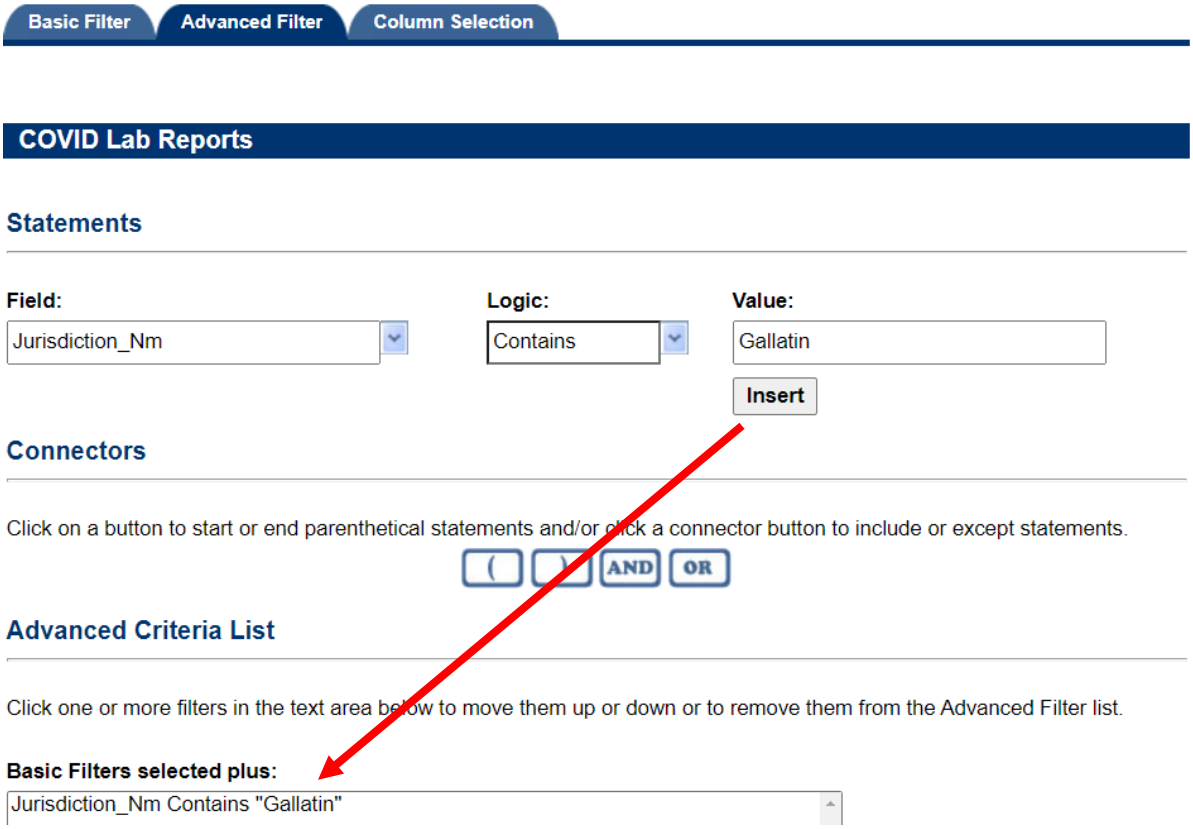


6. A screen will show up with three tabs: basic filter, advanced filter, and column selection.



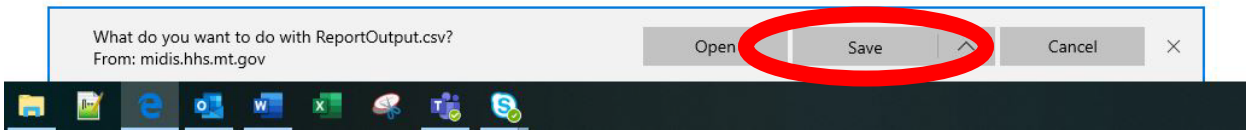
7. Adjust the date filter on the **"Basic Filter"** tab to account for when you're looking for lab results.

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.

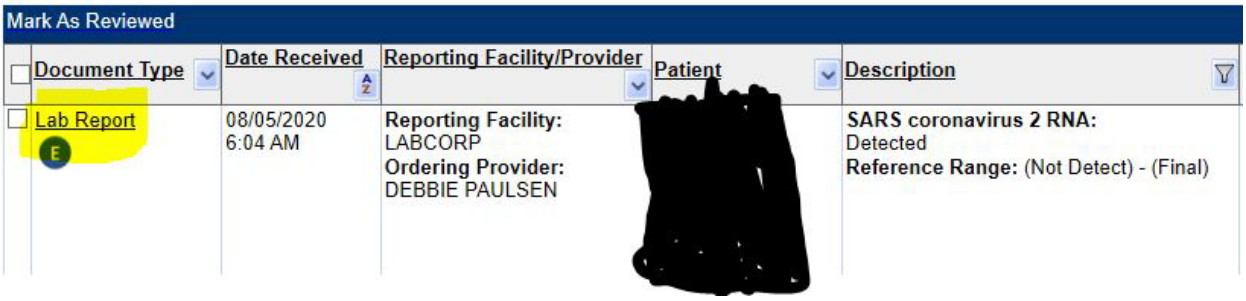


   b. For “Field”, select “JURISDICTION_NM”
   c. For “Logic”, select “Contains”
   d. For “Value”, enter in your jurisdiction name in MIDIS. Ex. “Gallatin” or “Ft. Peck”.
   e. Select “Insert”.

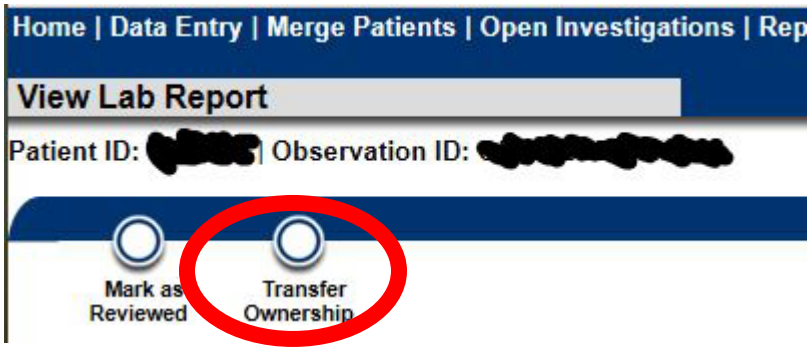
9. Go to “Column Selection” tab. This report already comes with columns selected, but if you would like to add more, select a column from “Available Columns”, select the “>” to move it over to “Selected Columns”, and then use the up and down arrows to adjust based on where you want it in your report.
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



5. Scroll to the top of the lab document and select "Transfer Ownership". Change the **jurisdiction** 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 UKNOWN, 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.

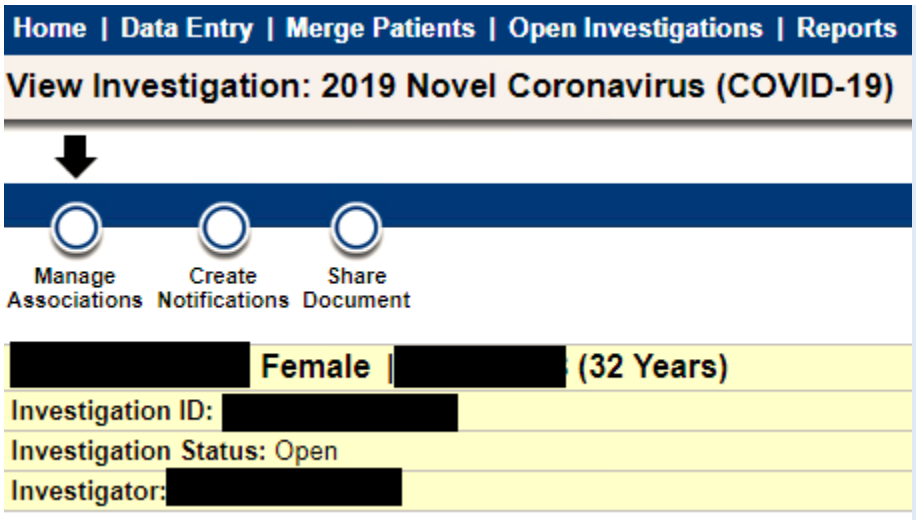
The recommended browser to perform this function is Internet Explorer. Using Google Chrome will cause query buttons to disappear on occasion.

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).

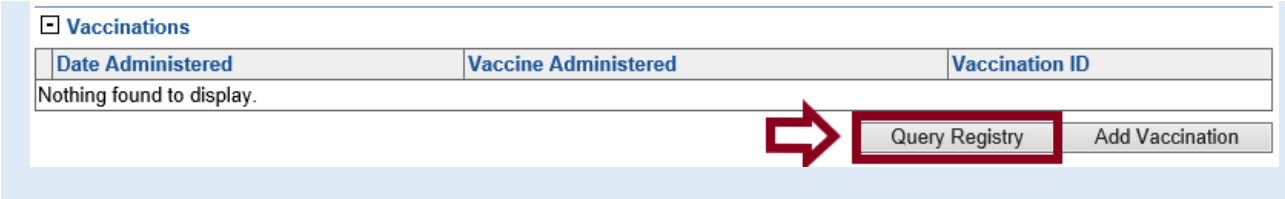
Manage Associations



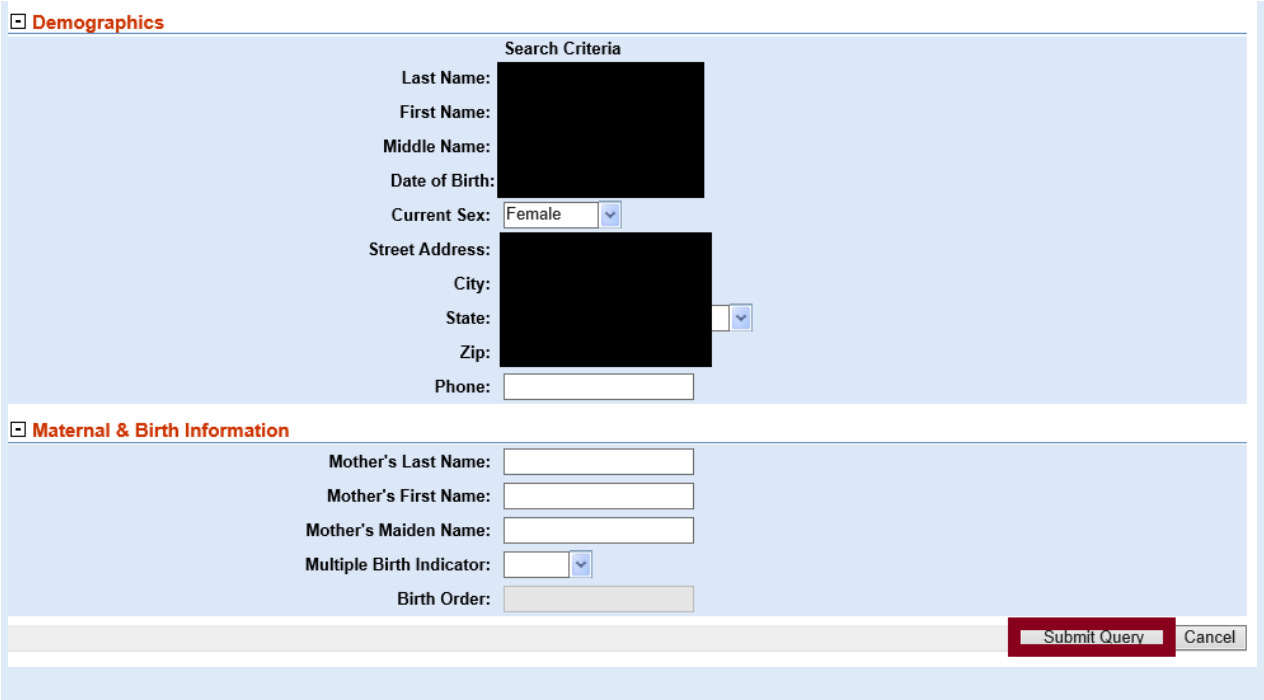
Click the MANAGE ASSOCIATIONS button at the top left corner. This is the same button you use to attach laboratory reports.

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)

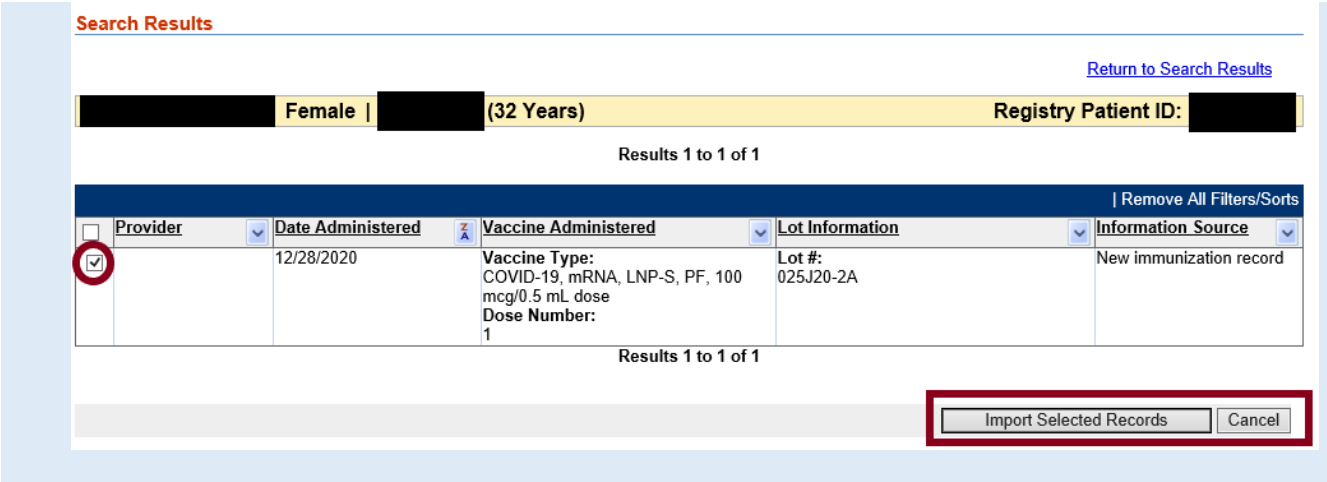


Query Information



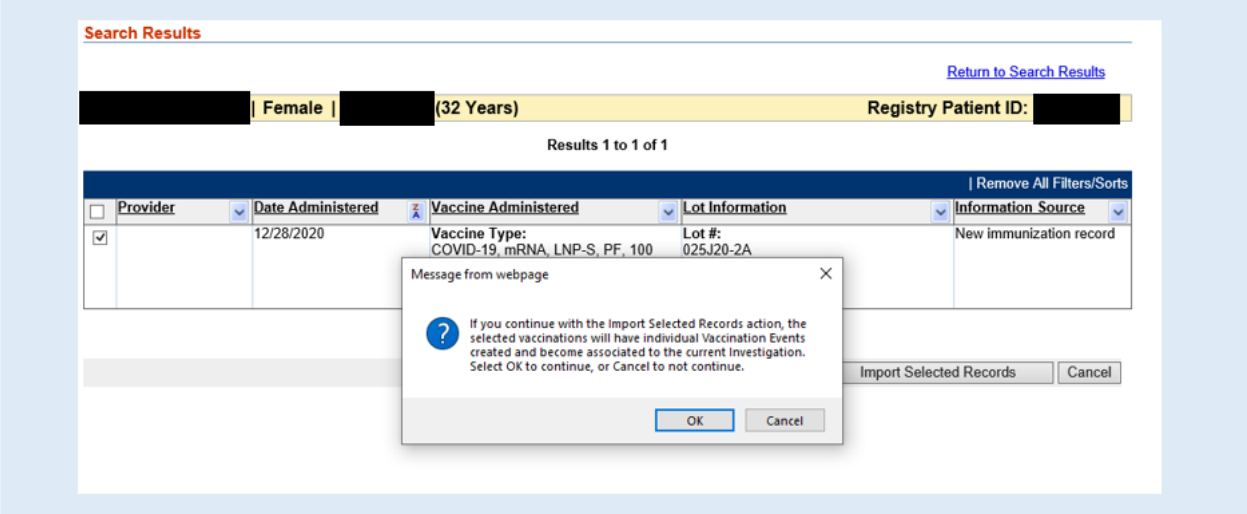
- The demographic information entered into the case investigation will auto populate in the query page.
- Verify that the name and date of birth are correct.

Attach the Vaccine to the Case Investigation



- **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



- 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
☐	10/19/2020 E	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

[redacted] | Female | [redacted] Patient ID: [redacted]

Created: 01/08/2021 By: Magdalena Scott

Last Updated: 01/08/2021 By: Magdalena Scott

* Indicates a Required Field

Patient | Vaccination

Vaccination Back to top

Collapse Subsections

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.

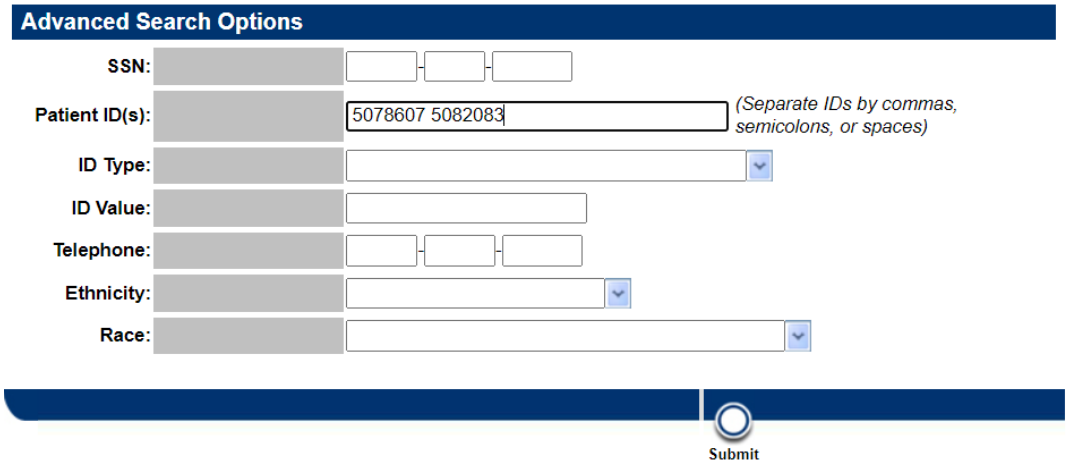
- Double check every file before merging it. Sometimes, it'll look like two files need to be merged, but verify that it isn't a father/son or SR/JR situation. Other situations we run into at the state are twins with similar names. Please be very careful before proceeding with a merge.

- 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.

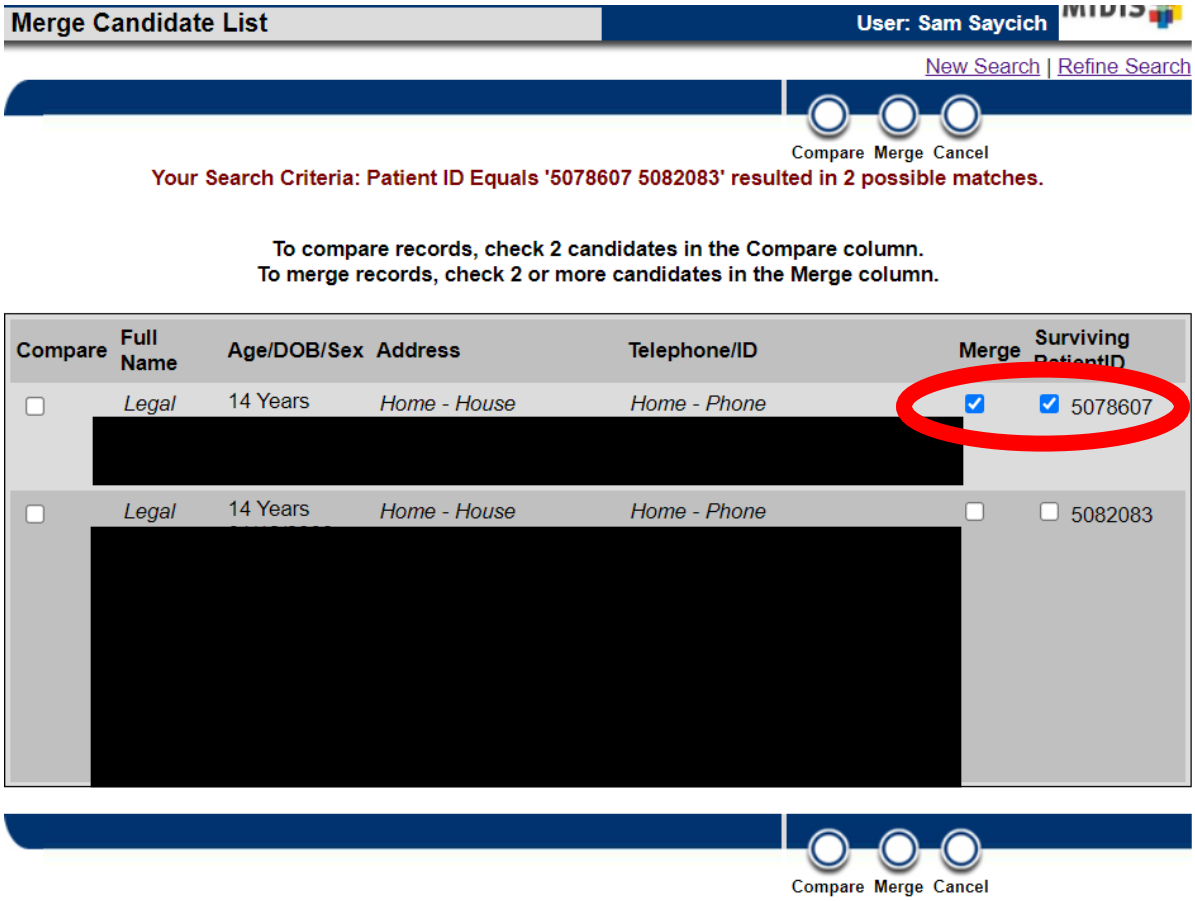
How-To Merge Patient Files

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".

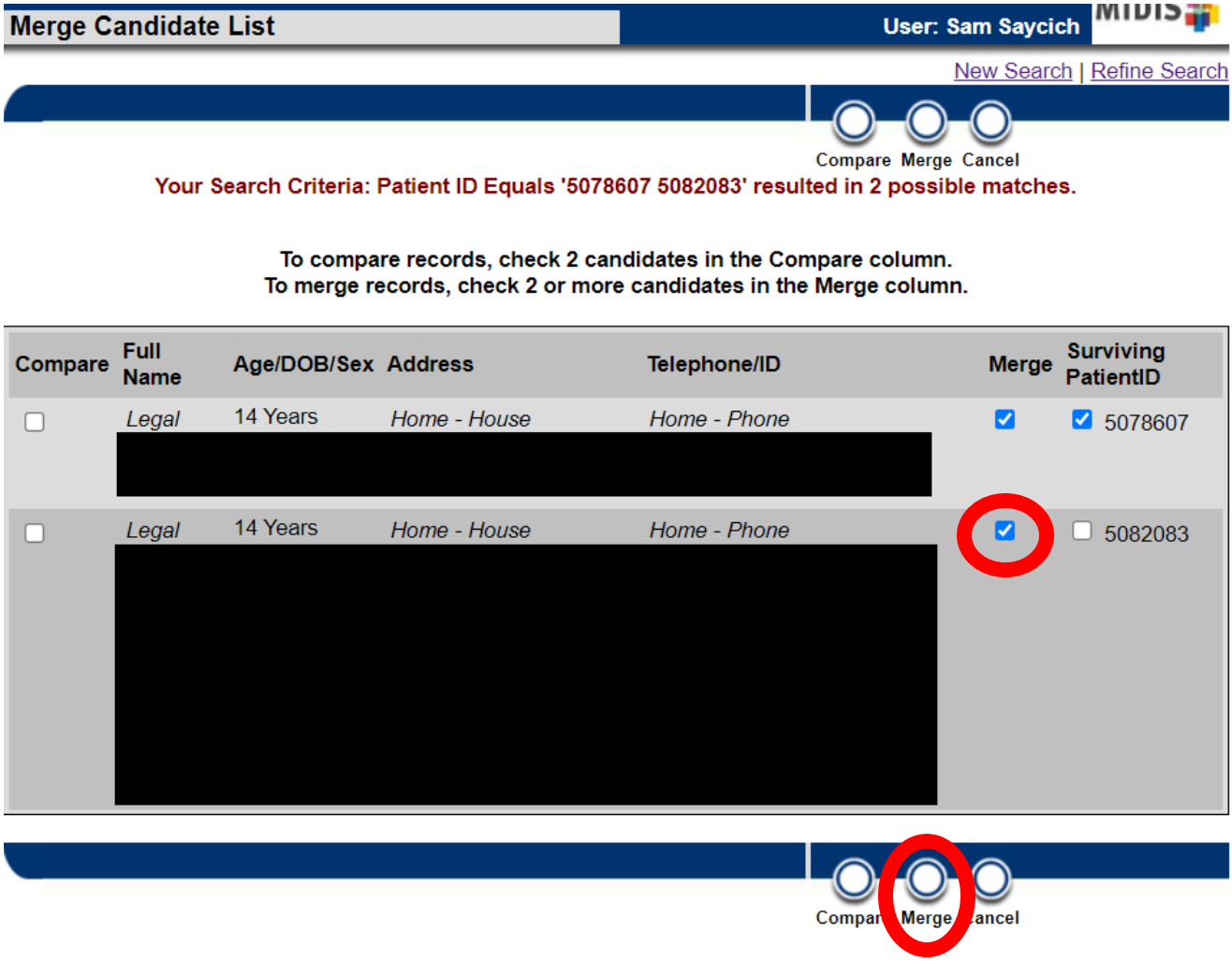
4. Enter in the patient ID's that you want merged with a space, comma, or semicolon between them. Select "Submit"



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.

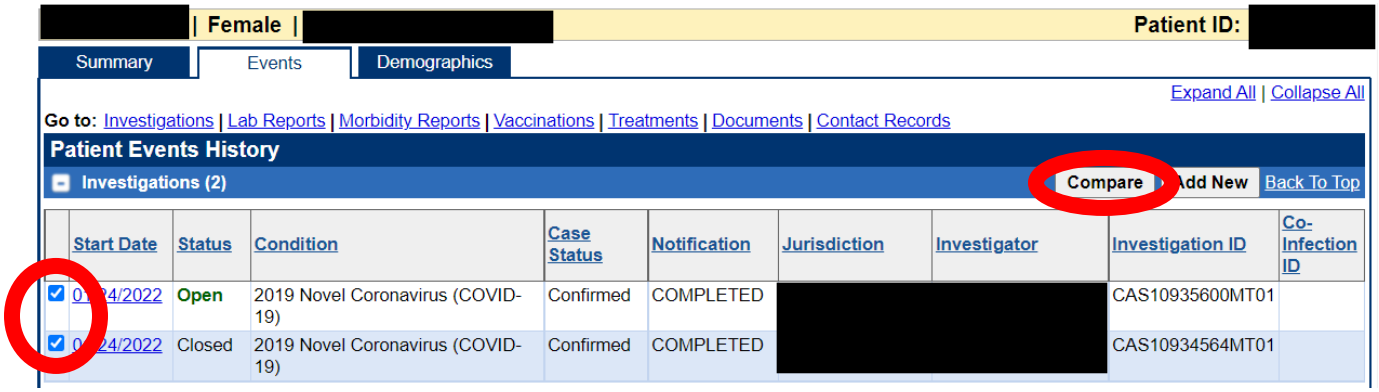


6. Select any additional patients that need to be merged into the first patient record by checking the box in the "Merge" column. When you are done selecting all additional records that need to be merged, select "Merge".

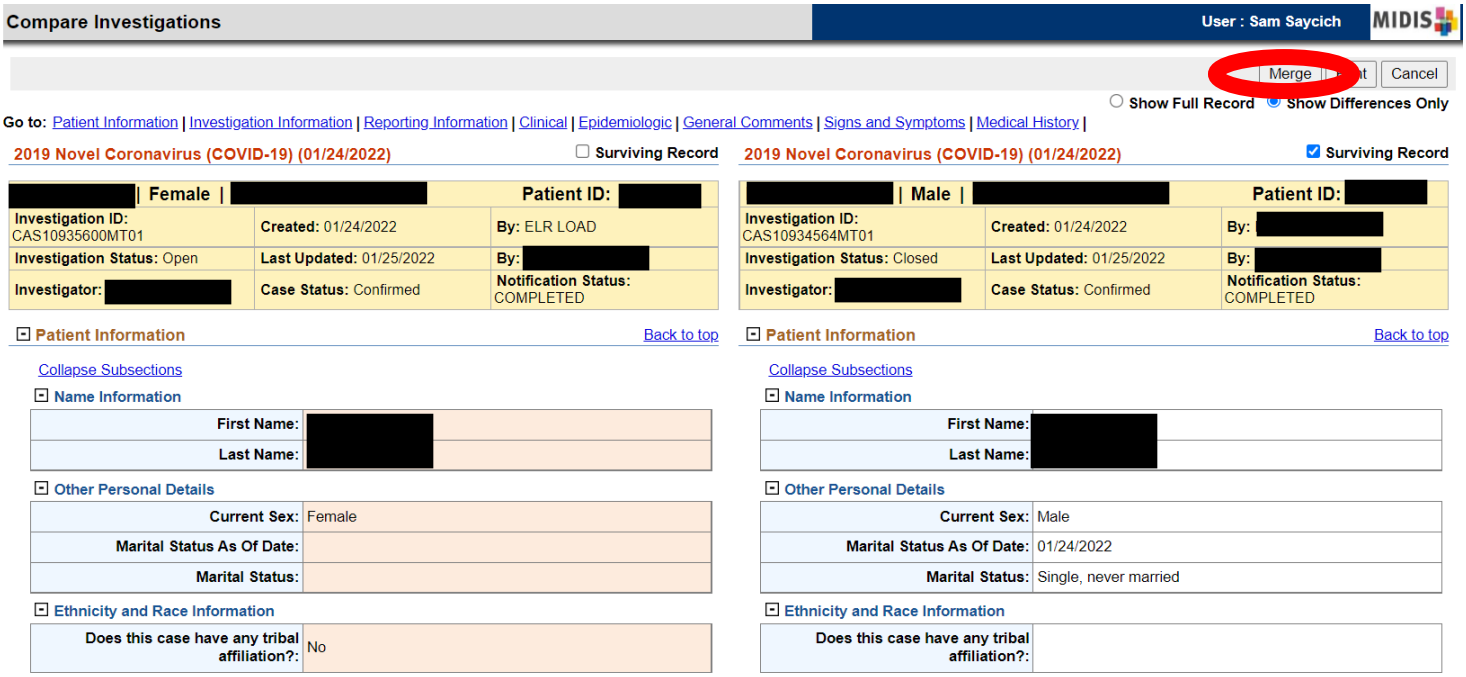


How-To Merge Investigations

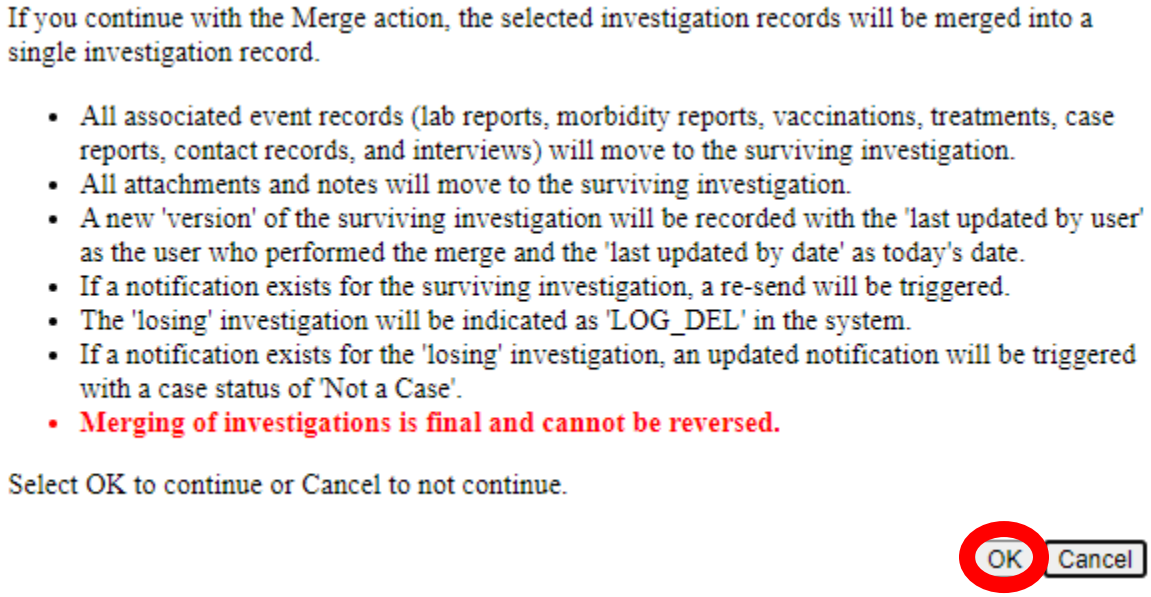
1. Go into the "Events" tab of the patient file. Select the two checkboxes next to the investigations that need to be merged into one. Select "Compare".



2. 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”.



3. 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”.
4. A pop-up window will show with a warning about how merging is permanent. Select “OK” if you are confident that everything is correct.



CDEpi MIDIS Help Desk

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

Call CDEpi at 406-444-0273!