MIDIS

Montana Infectious Disease Information System User Guide



Department of Public Health & Human Services

Montana Department of Public Health and Human Services

Communicable Disease Epidemiology Section

Revised: 09/29/2021

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What is MIDIS and how do I use it?

A brief overview of daily MIDIS use in communicable disease investigation and reporting.

The Montana Infectious Disease Information System (MIDIS) is a secure, web-based data system that is used to track all reportable diseases for the state of Montana (except HIV). MIDIS is also used to send notifications of these reportable conditions to CDC. CDC reports state-level case counts on an annual basis.

The following describes how to determine if a case should be entered into MIDIS and a very basic overview of the process of entering data into the system. Specifics are outlined in the subsequent sections of the User Guide.

Is it a Case?

- Determine if the disease/condition is reportable in the state of Montana. See Appendix A of this
 manual or the <u>Communicable Disease Epidemiology website</u> for a list of reportable
 diseases/conditions.
- Determine if the case information meets the case definition for the disease/condition that is being reported. For help, view the CDC list of <u>Nationally Notifiable Diseases and Case</u> <u>Definitions</u>. You can enter the condition name in the "Search Conditions" box.

Reporting a Case

- 1. Search MIDIS for the Patient's record.
 - a. If the patient record exists in MIDIS, go to the existing patient record and update if necessary.
 - b. If the patient record does not exist in MIDIS, add a new patient record.
- 2. Add a laboratory report (if available) to the patient's record.
- 3. Open an Investigation (case report) for the disease that is being reported.
- 4. Create a notification of the case. DPHHS will review and forward to CDC.
- 5. Complete Investigation
 - a. Add case supporting information to investigation in MIDIS
 - b. Fax any required disease specific forms to DPHHS
 - c. Close investigation

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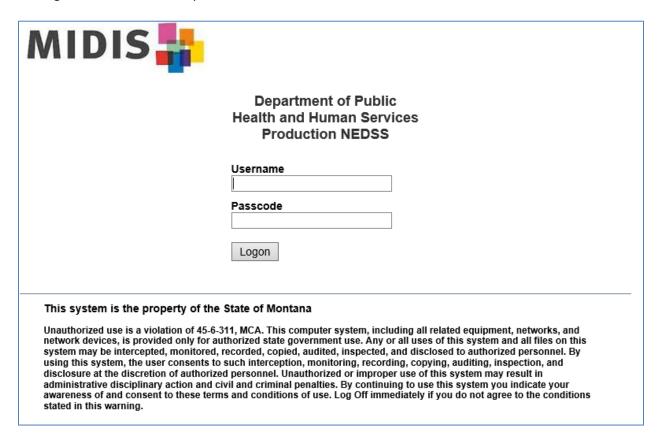
Log On

Want to practice? **MIDIS TEST** is where you can enter 'dummy cases' and get familiar with how the system works. https://midistest.hhs.mt.gov/



Ready to enter data? Log on to MIDIS PRODUCTION: https://midis.hhs.mt.gov/

The log in screen for MIDIS is pictured below.



User ID: The first initial of your first name followed by your full last name followed by '-nedssmt' **Passcode:** Your PIN (between four and eight digits, numbers only, cannot be 1234) plus the 6-digit number displayed on your keyfob.

Example – for user Daffy Duck whose PIN is 3825 and the keyfob is currently showing '125489':

User ID	dduck-nedssmt
Passcode	3825 <mark>125489</mark>

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Important Note: If you receive an error after a log on attempt, check the following:

- Make sure your User ID is entered correctly.
- Check the number of dashes (bars) to the left of the numbers on your keyfob. If there is one bar or less, wait until the number refreshes and try again.
- Check Caps Lock on your keyboard. Your User ID is case sensitive.

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Important MIDIS Features

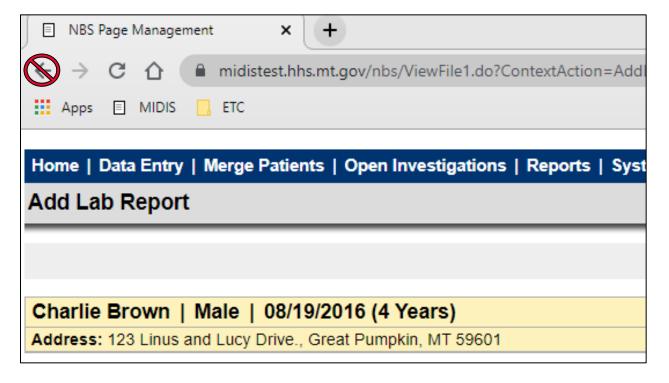
There are several important features to remember as you are using MIDIS.

Browser compatibility

MIDIS is compatible with most browsers. Depending on your security preferences, MIDIS might not work in your browser. We recommend trying other browser options to see if it works better in others.

Back and Forward Arrows

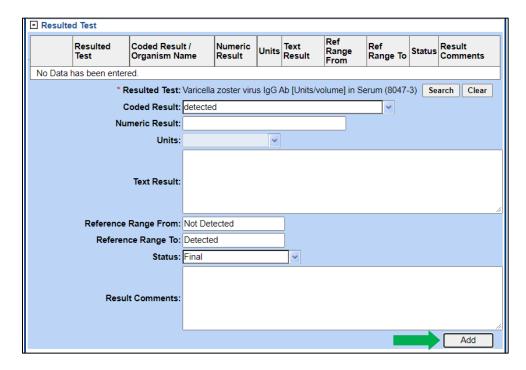
<u>Please do not use the Back or Forward arrows when navigating MIDIS.</u> Use of the Back and Forward Arrows in the Internet Explorer browser window is not supported by MIDIS. You will receive an error message and lose any data entered that has not been submitted or saved.



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Add or Update Button

When information is entered into a section that can display multiple entries (e.g., Patient Address or Test Results) you will need to click the Add/Update button to submit the data.



If you try to "submit" without selecting "add", you will receive the following error message:

"You have entered or edited information and have not clicked on 'add' or 'edit' in the multiple entry table. Please take the appropriate action and try again."

Session Time Out

The MIDIS session is set to time out if there has been no activity in the system for **45 minutes**. You can extend the session by navigating to a new page in MIDIS, or by refreshing the home page. If the session times out, you will be required to log in again.

Program Areas

Conditions (Reportable Diseases) are categorized into Program Areas in MIDIS. Program areas include:

- General Communicable Diseases
- Vaccine Preventable Diseases
- Hepatitis*
- Lead
- Tuberculosis
- Sexually Transmitted Diseases
- HIV/AIDS

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^{*}Users have the option to view records for all jurisdictions in Montana for this program area. For all other program areas, local health jurisdictions (LHJ) will only be able to view records for their specific county or tribal area.

MIDIS Homepage

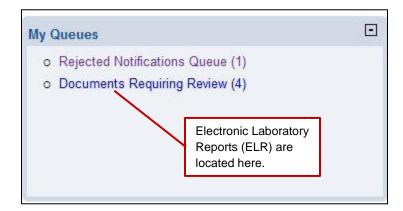
Once you log in to MIDIS, you are automatically directed to the homepage. The homepage consists of six "widgets":

- Patient Search
- My Queues
- My Reports
- News Feeds
- Metrics Viewer
- Notices

Patient Search allows you to find a patient in the system using either a demographic search or a patient ID number.



My Queues allows access to the work queues in MIDIS. (Note: the view will vary depending on the type of user access that you have.)

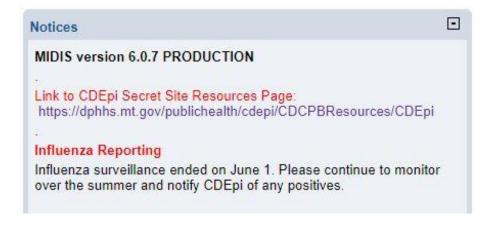


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My Reports allows quick access to the private reports that have been customized and saved by the current user. This view will be empty until you customize and save reports.



Notices allow a user to view any alerts, announcements, etc. that have been created by DPHHS.

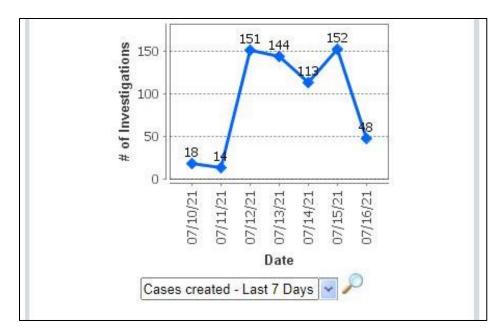


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News Feeds allows the user to access the RSS (Really Simple Syndication) feed(s) that will be set up by DPHHS.



Metrics AVR Viewer allows the user to view charts and graphs of activity over the last 7 days. The user can select one of several views from a drop-down menu.



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Navigation Bar

Additional features of the MIDIS homepage are found in the Navigation Bar. Options available will vary depending on the level of User Access in MIDIS.



Table 1 (below) demonstrates the features of the navigation bar:

Table 1: MIDIS Navigation Bar*

Feature	Description
Home	Displays the 6 widget MIDIS homepage that includes work queues and search box.
Data Entry	 Search/Add Patient Search/Add Providers Search/Add Organizations (e.g., hospitals)
Merge Patient	Local users must request access to this feature.
Open Investigations	View a list of the investigations in MIDIS that are currently 'Open' for your jurisdiction.
Reports	Links to reports available to run in MIDIS
System Management	DPHHS use only
Help	Link to the MIDIS User Guide
Logout	Log out of MIDIS

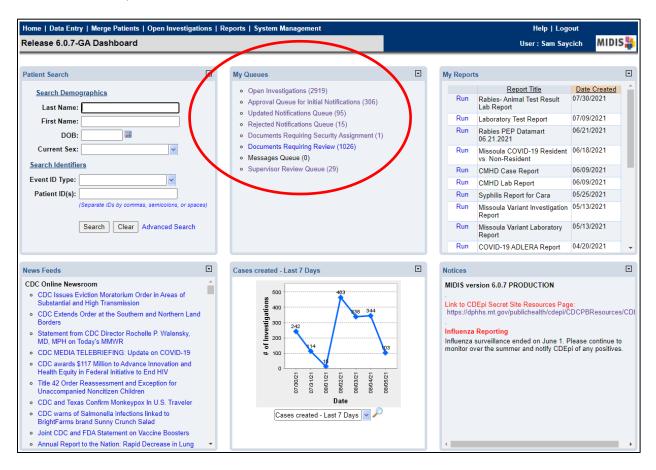
^{*}Note: The view of the Navigation Bar will vary depending on your user permissions in MIDIS.

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Daily Use of MIDIS

View Laboratory Reports delivered via ELR

Electronic Laboratory Reports (ELR) are delivered into MIDIS daily and are stored in the **MY QUEUES** widget. For a list of hospitals that send ELR to MIDIS, please visit the <u>CD Epi Secret Site</u>, <u>MIDIS Resources</u> section or call CDEpi at 444-0273.

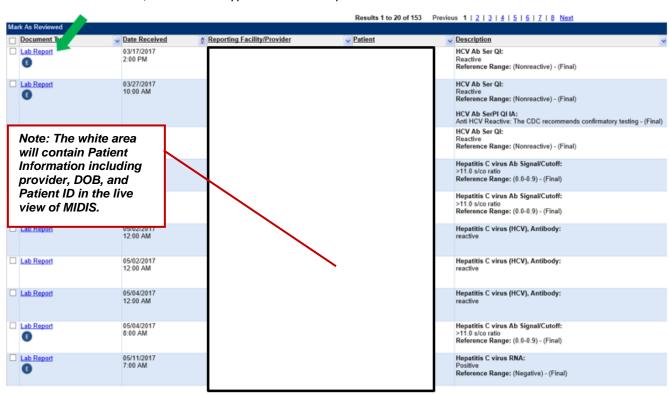


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To view labs for your jurisdiction, click on **DOCUMENTS REQUIRING REVIEW**.



To view an individual lab, click on the hyperlinked Lab Report.



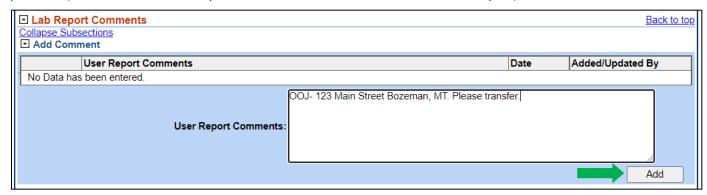
To print a lab, the best method is Control P. This will give you a 2-page document of all laboratory data elements.

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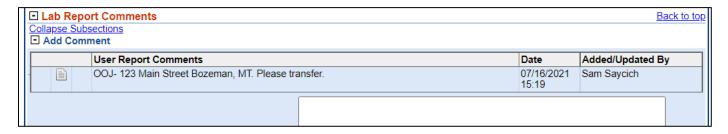
Transfer Jurisdiction of Laboratory Reports

When viewing lab reports in MIDIS, your initial investigation may find that the patient resides in another jurisdiction. Just like with a faxed lab report, you will need to notify DPHHS that this is the case. To do this, take the following steps:

1. Open the laboratory report and scroll towards the bottom to the Lab Report Comment Section. In the comment box, please indicate the jurisdiction where the patient resides by entering as much demographic information as possible. (Hint: think about what you would like to receive if the lab was sent to you.) Click ADD button.



Your comment will now be visible in the lab report.



In the same laboratory report, click on TRANSFER OWNERSHIP at the top of the page. Note: it is important that
you have entered the proper jurisdiction in the Lab Comment field BEFORE you do this step. If you haven't, click
CANCEL to go back.



- 4. In the Jurisdiction drop-down menu, select (or type) MTDPHHS and click SUBMIT.
- 5. You will see a confirmation that the lab report has been transferred to DPHHS for review. DPHHS will notify the correct jurisdiction of the pending lab report.

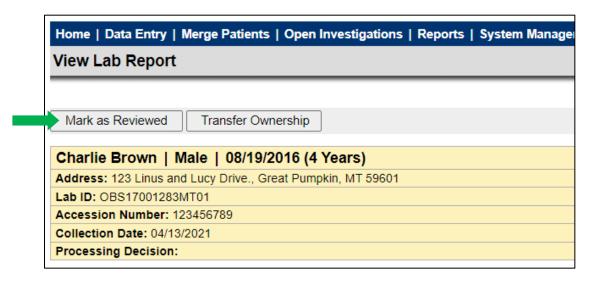
Note: Once you Transfer Ownership, you will no longer be able to view the lab as it is no longer assigned to your jurisdiction.

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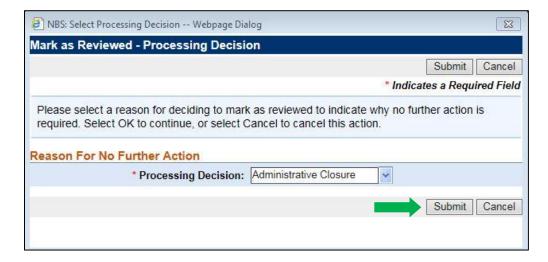
Mark as reviewed

When viewing laboratory reports, you may find that some results are not for reportable diseases or do not need to be turned into an investigation in MIDIS (immunity checks for varicella, blood lead results <5 μ g/dL, etc.). You will want to remove these results from your queue.

To remove a lab report from your queue, in the upper left-hand corner of the laboratory report, click the radial dial that says **MARK AS REVIEWED**. The laboratory report will now be removed from your list of reports needing review.



If the lab report is for an STD, you will need to indicate the reason for marking the lab as reviewed. Select **ADMINISTRATIVE CLOSURE** and click **SUBMIT**. The lab will then be removed from your queue.

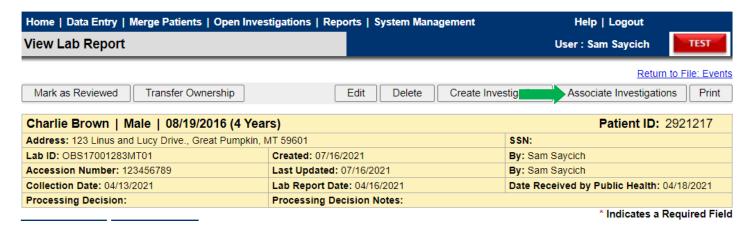


Note: lab reports that are marked as reviewed are not deleted. You will still be able to find the report in MIDIS by searching for the patient's name or ID and retrieving the Patient File.

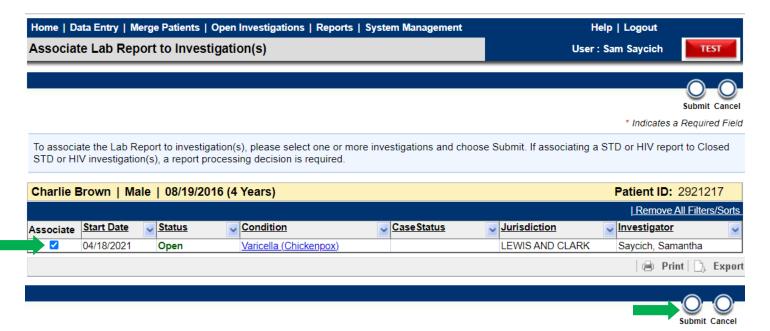
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Associate Investigations

When viewing laboratory reports, you may find that a patient received a test result that is related to a previously known condition. Instead of creating a new investigation or marking these lab reports as reviewed, you can electronically "staple" these lab reports to the patient's previous open or closed investigation.



After selecting "Associate Investigations", all past investigations that are in the patient file in MIDIS will come up, allowing you to associate the lab with the proper investigation. Check the box next to the appropriate investigation and then select "Submit".



The laboratory report will then be removed from your "Documents Requiring Review" queue and will be associated with the patient's past investigation.

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Data Entry

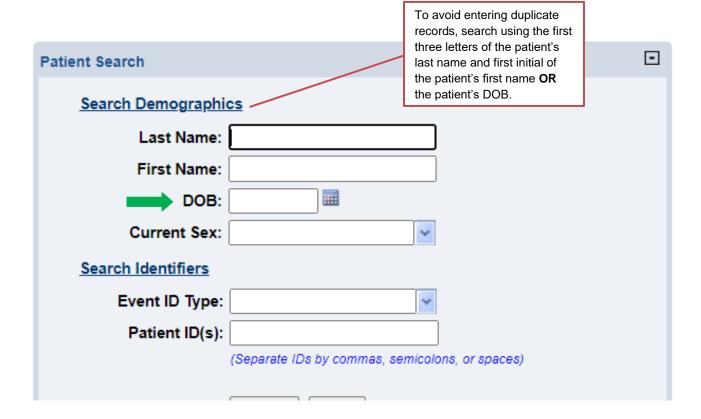
MIDIS is a patient-centered system, and a patient record should only be entered once. Multiple investigations and other records can be added to the same patient record over time. This allows Public Health to view all co-morbidities for a single patient.

The following section describes how to enter all patient information into MIDIS.

Search for a Patient or ADD a New Patient

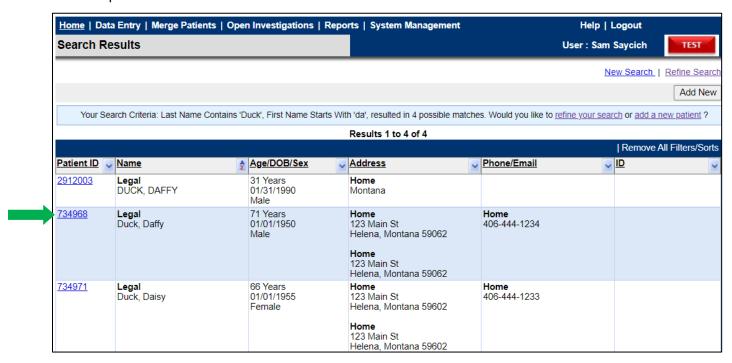
Before you begin, complete a search for the patient to ensure that a patient record does not already exist in MIDIS.

On the MIDIS homepage, find the **PATIENT SEARCH** box in the top left-hand corner.



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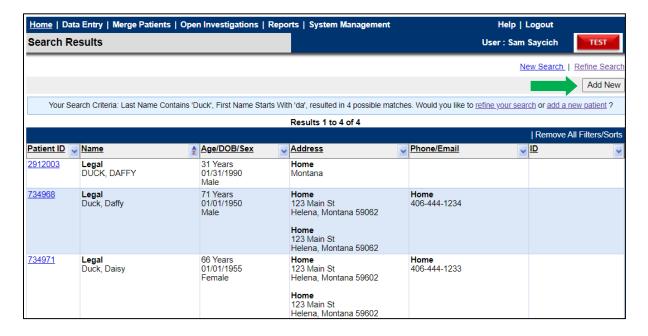
You will be brought to the search results page. If you find the patient, click on the patient ID number to make sure that it is the correct patient.



The minimum data elements to match a patient are: **Last Name, First Name, DOB and Sex.** Keep in mind that some patients may be entered under nicknames as well (e.g., William vs. Bill).

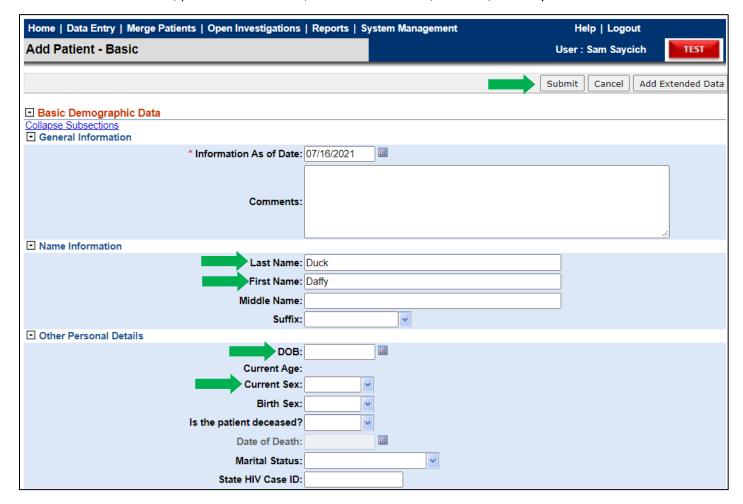
If it is NOT the correct patient, return to the home page and search again by the patient's date of birth (DOB). This is to ensure that the patient doesn't already exist in MIDIS and prevent duplicate records.

If there is no result (meaning the patient does not have a record in MIDIS) you can add a new patient record by clicking on the ADD NEW button.



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You will then be directed to the Add Patient - Basic screen. Enter <u>basic demographic data</u>: Last Name, First Name, DOB, and Current Sex. If known, please enter address, contact information, and race/ethnicity information.



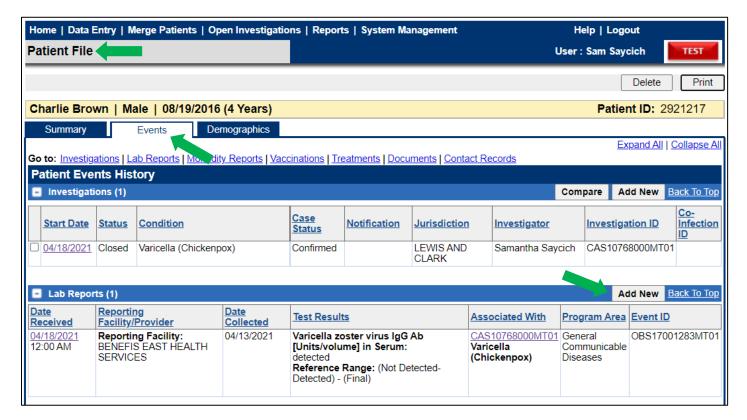
When you are finished, click on the **SUBMIT** button.

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Add a Laboratory Report (if provided)

Not all lab reports are available via ELR. The following explains how to enter paper copies of laboratory reports that you receive by fax or mail from your local providers.

- 1. Search for the patient you want to add laboratory results for. If the patient does not exist **ADD** the patient and basic demographic information first. (See 'Search for Patient' in the previous section.)
- 2. When you find the patient record or when you **ADD** a patient and **SUBMIT**, the **PATIENT FILE** screen will appear. There are three tabs shown on this page: Summary, Events and Demographics. Click on the **EVENTS** tab.



- 3. Under Lab Reports, click on ADD NEW.
- 4. You will be brought to the Add Lab Report screen. Enter data into the appropriate fields. Table 2 below displays requirements (in red) for lab report data entry.

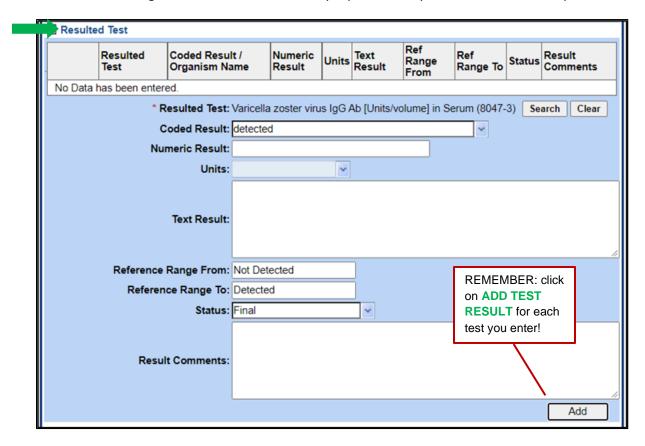
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Table 2: MIDIS Data Entry Rules for Laboratory Reports

Field	Rules for Data Entry	Comments
Order Information		
Reporting Facility	Required	Click Search to find/select the facility that is reporting the lab result.
Ordering Facility	Enter if available	Facility that ordered the test
Ordering Provider	Enter if available	Provider that ordered the test
Program Area	Required	Choices are: General Communicable Diseases Hepatitis HIV/AIDS Lead Vaccine Preventable Diseases Sexually Transmitted Diseases Tuberculosis
Jurisdiction	Required	The jurisdiction is the same as the county or tribal area where the patient resides. This field is usually defaulted based on the jurisdiction that is in the patient address portion of the lab report.
Lab Report Date	Required	Date of the lab result
Date received by Public Health	Required	This is auto-populated by the current date. If needed, change to the date that the report was received by your jurisdiction.
Ordered Test	Enter if available	Use the search box to find the name of the test
Accession Number	Not required	This is also called the "Specimen ID". This can sometimes be found on a laboratory report.
Specimen Source	Required (when available)	Source of specimen is often important in meeting the case definition for a notifiable disease (e.g., Pertussis serology (blood) vs. PCR (NP swab))
Specimen site	Not required	
Date Specimen collected	Required	Enter the specimen collection date from the lab report.
Test Result(s)		
Resulted Test	Required	Use the search box to find the name of the test
Coded Result	At least one of these is	e.g., 'positive', 'detected'
Numeric Result	required. However, when available, please	e.g., 1234
Text Result	enter the numeric value.	e.g., 'Giardia lamblia cysts present.'
Administrative		
Comments	Enter pathogen if applicable	Enter the <u>exact name</u> of the pathogen identified (e.g., Campylobacter jejuni or STEC O157:H7)
		Any additional info that does not fit in the other fields can also be entered here as needed.

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5. After you have entered information into the Test Result section, note the grey button called **ADD TEST RESULT**. You will need to click on that to log the result into the laboratory report before you submit the entire report.



6. If you are going to create an investigation for the patient, click on the **SUBMIT AND CREATE INVESTIGATION** button. If the laboratory results being entered are for a patient who already has a corresponding investigation in MIDIS, then select **SUBMIT**.



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Creating an Investigation (aka: entering a new Case Report)

There are two ways to create an investigation in MIDIS. The first creates an investigation from a lab report as discussed in the previous section. The other allows you to create an investigation from the **SEARCH** and **EVENTS** tabs.

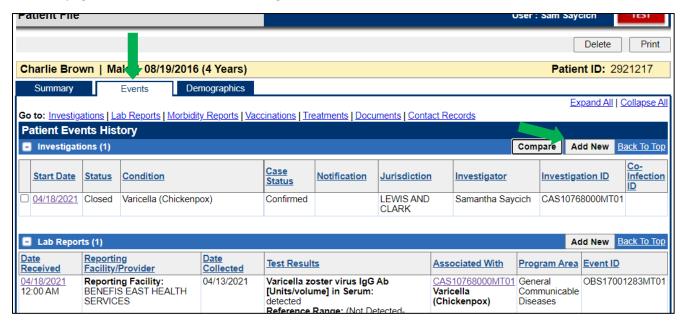
Method 1 – Create Investigation After Creating Laboratory Report:

After filling out the Lab Report information, click the SUBMIT AND CREATE INVESTIGATION button.



Method 2 – Create Investigation without a laboratory report:

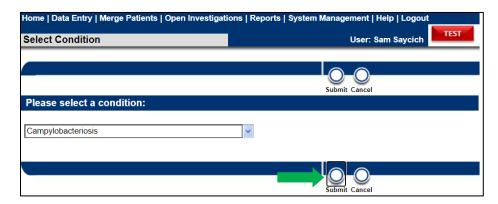
When you search for or add a new patient, you can then continue to create an investigation from the **EVENTS** tab on the **PATIENT FILE** page. Click **ADD NEW** under Investigations.



Either Method 1 or 2 will take you to the **SELECT CONDITION** page.

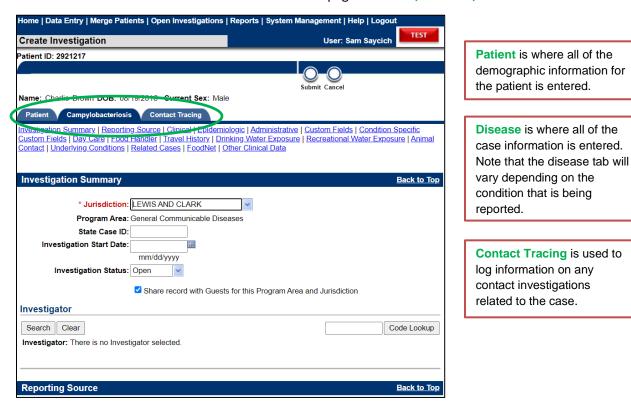
There is a drop-down menu to choose the condition OR you can type in the first 3-4 letters of the condition being reported to auto-populate the field (e.g., typing 'camp' will auto-populate 'Campylobacteriosis').

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Once you have selected a condition, click **SUBMIT**. You will then be taken to the **CREATE INVESTIGATION** page.

There are three tabs in the CREATE INVESTIGATION page: PATIENT, DISEASE, and CONTACT TRACING.



Data entry requirements for the Patient tab are in Table 3 (in red) below.

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Table 3. MIDIS Data Entry Rules for the Patient Tab of Investigations*

Field	Rules for Data Entry	Comments
Basic Demographic Data		
Last Name	Required	Patient's Last Name
First Name	Required	Patient's First Name
Middle Name	Enter if available	
DOB	Required	Patient's Date of Birth. PHEP contract deliverable data element.
Reported Age	Enter if available	This may pre-populate if investigation is created from the laboratory report
Current Sex	Required	Patient's gender
Is the patient deceased?	Enter if available	
Marital Status	Not Required	
SSN	Not used by DPHHS	Do not enter SSN in MIDIS
Type, Authority, Value	Do not use	
Street Address	Enter if available	Address of patient residence
City	Enter if available	
State	Required	
Zip	Required	Zip code of residence. PHEP contract deliverable data element.
County	Required	County of residence
Home Phone	Enter if available	
Work Phone	Enter if available	
Ethnicity	Required	Ethnic group of patient. PHEP deliverable data element.
Race	Required	Race of patient. PHEP contract deliverable data element. You can choose multiple categories. Do not check unknown.

^{*}Note: If you create an investigation from a lab report, some of the data may be pre-populated in the investigation.

Data entry requirements for the Disease tab are in table 4 (in red) below. Note that this list is present in all investigations. Additional disease-specific questions will vary depending on the condition being reported.

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Table 4. MIDIS Data Entry Rules for the Disease Tab of Investigations

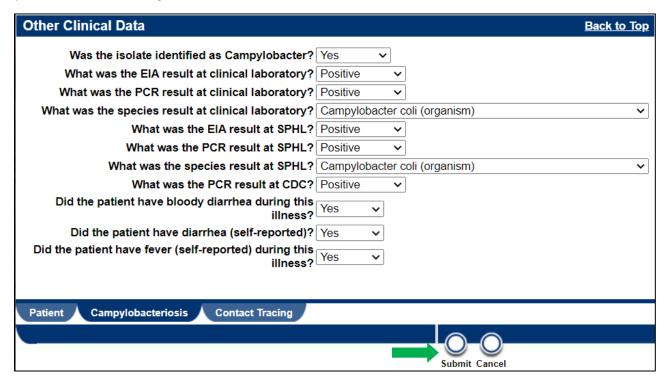
Table 4. MIDIS Data Entry Rules fo Field	Rules for Data Entry	Comments
Investigation Summary		
Jurisdiction	Populated or Enter	Select jurisdiction. If the investigation is created from a lab report, the jurisdiction is auto populated.
Program Area	Populated or Enter	If investigation is created from a lab report, the Program Area is auto populated. Otherwise, select from the following: General Communicable Diseases Hepatitis HIV/AIDS Lead Sexually Transmitted Diseases Vaccine Preventable Diseases Tuberculosis
State Case ID	Not used by DPHHS	
Investigation Start Date	Required	Date that your jurisdiction began the investigation.
Investigation Status	Required	Default is 'Open.' Select 'Closed' once: 1. the investigation is complete 2. all relevant case information is added 3. disease-specific forms have been faxed to DPHHS
Investigator	Required	Enter your Quick Code OR use the search box to find your name/organization.
Reporting Source		
Date of report	Required	Date that public health received notification of the case.
Reporting Source	Enter if available	Search and select source of the case notification.
Earliest Date Reported to County	Required	Date that case notification was received by your jurisdiction.
Earliest Date Reported to State	Required	Date that your jurisdiction notified DPHHS of the case.
Reporter	Not used by DPHHS	
Clinical		
Physician	Enter if available	Search and select provider name. (see Appendix C for information on how to enter provider information into MIDIS)
Was the patient Hospitalized?	Required	Check yes or no. Note: if 'yes' is selected, a drop-down menu will appear to enter data specific to the hospitalization. PHEP contract deliverable data element.

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Diagnosis Date	Required	Date of the laboratory result, or the date of physician diagnosis. PHEP contract deliverable data element.
Illness Onset Date	Required	Date of the onset of symptoms. PHEP contract deliverable data element.
Illness End Date	Enter if known	
Illness Duration	Enter if known	
Age at Onset	Enter if available	
Is the patient pregnant?	Enter if applicable	
Does the patient have pelvic inflammatory disease?	Enter if applicable	
Did the patient die from this illness?	Required	Select yes or no.
Epidemiologic		
Is this patient associated with a daycare facility?	Required	Select yes or no.
Is this patient a food handler?	Required	Select yes or no.
Is this case part of an outbreak?	Required	Select yes or no. Note: if yes, a drop-down menu will appear that will allow you to assign an outbreak code and enter outbreak specific questions.
Where was the disease acquired?	Enter if available	
Transmission mode	Enter if available	
Detection method	Enter if available	
Confirmation method	Required	Method used to confirm case.
Confirmation date	Enter if known	Date the lab/physician confirmed the case.
Case Status	Required for notification to CDC. Please refer to CDC Case Definition guidance to select the appropriate status for the condition being reported.	Choose: Confirmed Probable Suspect (some diseases only) Not a case (only use this if you are editing a previous investigation that has been determined not to meet case definition.)
MMWR Week	Required for notification to CDC	The default MMWR week is generated by the current date. If you are entering a case from a different week, remember to change the number to reflect the appropriate week.
MMWR Year	Required for notification to CDC	The default MMWR Year is generated by the current date.
Administrative		<u></u>
General comments	Enter if needed	You may enter any additional information that you feel is applicable to the case here (free text.)

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When you are finished entering all of the information, click **SUBMIT**.



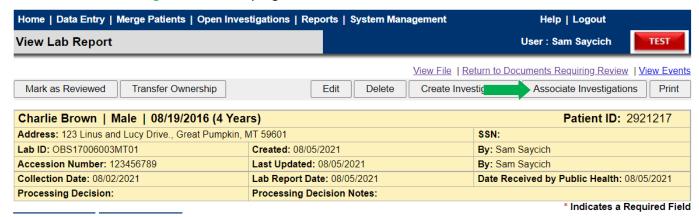
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Associating (aka attaching) a Lab Report with an Investigation

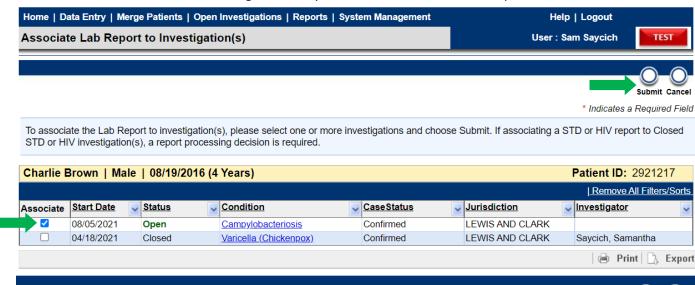
To support the case investigation, all available confirmatory laboratory reports need to be associated with the investigation. This is the electronic version of stapling a laboratory report to a case report. You can do this two different ways:

Option 1: From Lab Report in Documents Requiring Review Queue

- 1. From your Documents Requiring Review queue, select Lab Report.
- 2. Select **Associate Investigations** in the top-right corner of the lab.



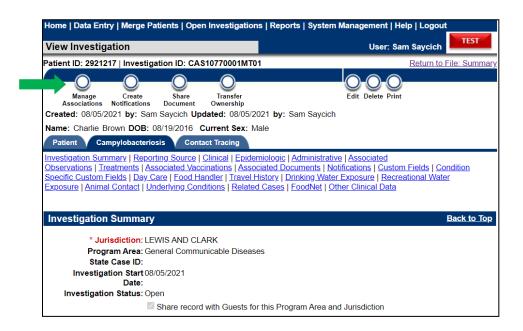
3. Select the checkbox next to the investigation that you want to associate the lab report to and select Submit.



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Option 2: Going Through the Patient File

- 1. Click the **EVENTS** tab on the **VIEW FILE** page.
- 2. Click the hyperlinked start date of the investigation. The investigation will open.
- 3. Click the MANAGE ASSOCIATIONS radial button.



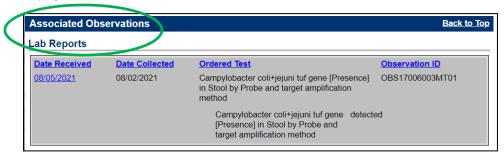
4. Find the laboratory report that you want to associate and click the checkbox next to it.



5. Click SUBMIT.

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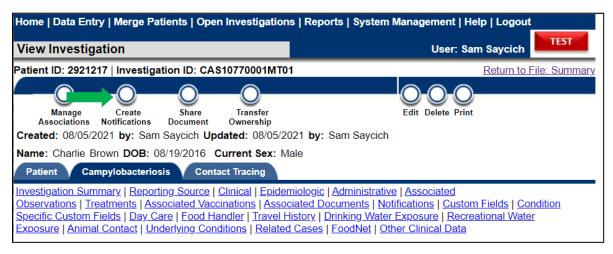
The **VIEW INVESTIGATION** page will reopen and now displays the lab report in the Associated Observations area towards the bottom of the page.



Creating a Notification

Once you have completed an investigation and associated laboratory reports, you must create a notification of the new investigation that will be forwarded to DPHSS for review.

1. In the View Investigation screen, click on the **CREATE NOTIFICATION** button at the top of the investigation page.



2. Check the notification for accuracy and then click the **SUBMIT** button.



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3. The notification has been submitted. It will be reviewed by DPHHS CDEpi for completeness and a notification will be sent to CDC as a Montana case.

Note: Notification history and status can be viewed at the bottom of the View Investigation page.



Once you have submitted a notification to DPHHS, the investigation will reside in an Approval Queue for Initial Notifications at DPHHS.

If the investigation is approved by DPHHS, a notification of the case will be sent to CDC.

If the investigation is rejected by DPHHS, it means that there is additional information that is required before a notification can be sent to CDC. This may occur for one of the following reasons:

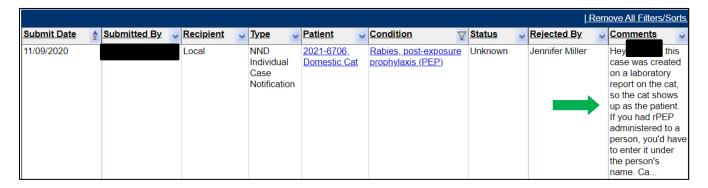
- A CDC required data element is missing (e.g., Jurisdiction, Case Status)
- Case defining information is not present (i.e., it does not meet the requirements established by CDC case definitions)
- The lab confirmation came back negative, and the investigation is no longer a case.

Rejected investigations can be viewed in the Rejected Notifications Queue found in the My Queues widget.



When viewing the list of rejected Investigations, note the comments. This is where DPHHS will indicate changes that are needed in order for notification to be sent to CDC.

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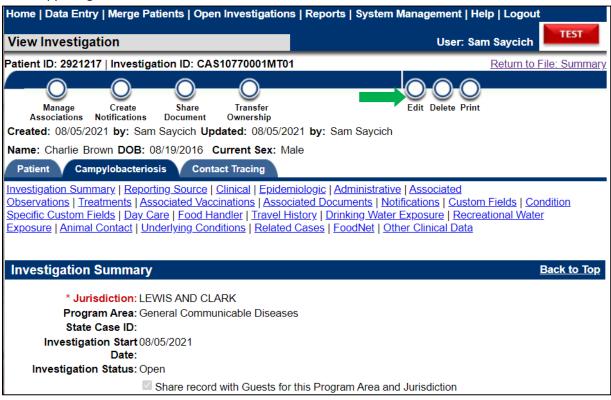
Once corrections/updates are made and submitted (see Editing an Investigation below) you must create another notification (see above) to notify DPHHS that changes have been made. It is helpful if you add a comment describing the updates you made.

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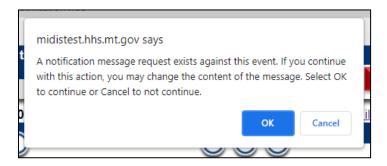
Editing an Investigation

To add information or make changes to an investigation, click on the hyperlinked date in the **EVENTS** tab to open the investigation.

In the upper right-hand corner, click EDIT.



If you have already sent a notification for this case, you will see the following message appear:



Click **OK** to continue.

Make any changes to the investigation, then click **SUBMIT** to save your changes. You do not need to resend a notification; MIDIS does this automatically for you.

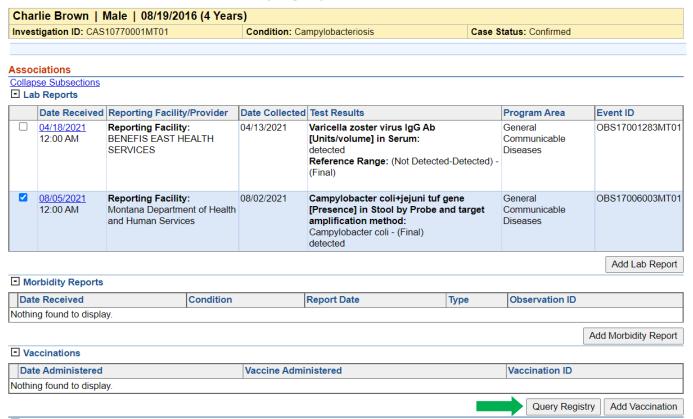
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Entering Vaccination Information

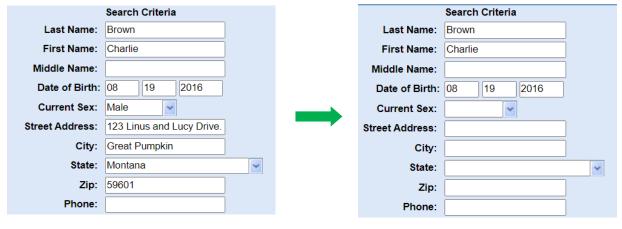
Basic vaccination information can be added to supplement an investigation of a Vaccine Preventable Disease (e.g., Pertussis, Chickenpox). A patient's complete vaccination record can be queried or manually entered into MIDIS within the patient record.

To Query ImMTrax for a Vaccination:

- 1. Open the Investigation that you would like to associate a vaccination record to.
- 2. Select Manage Associations.
- 3. Scroll down to vaccinations and select Query Registry.



4. The search criteria will automatically populate based on information currently present in the patient file. CDEpi recommends removing quite a bit of this so you just search for the name and DOB. Select Submit Query.

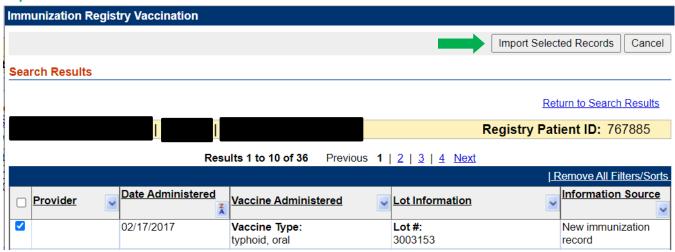


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5. Select the Registry Patient ID.



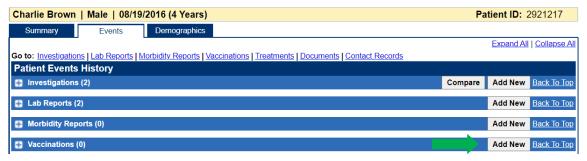
6. Select the checkbox next to the vaccination that you would like to associate with the investigation and select **Import Selected Records**.



- 7. You will have a popup that notifies you that you are about to associate a vaccine record to an investigation. Select **OK**.
- 8. Once the **Manage Associations** window reloads, check that the vaccine was associated and then select **Submit** in the right-hand corner of the screen.

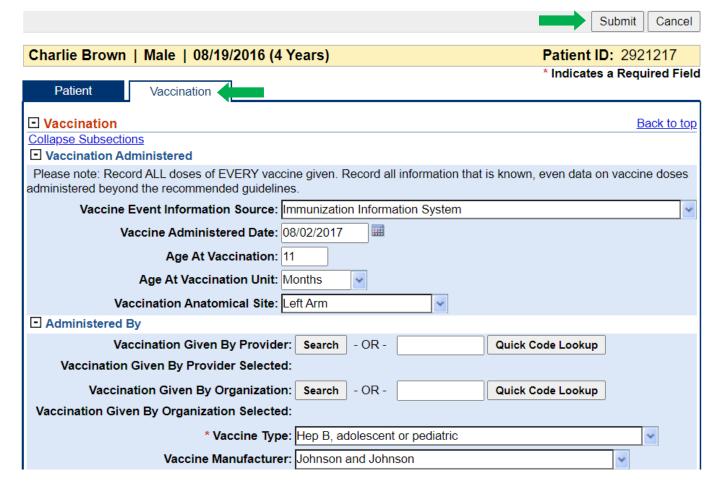
To Manually Enter a Vaccination:

- 1. Open the **PATIENT FILE** page and click on the **EVENTS** tab.
- 2. Scroll down to VACCINATIONS and select ADD NEW.



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- 3. The Add Vaccination page is displayed. Click on the vaccination tab.
- 4. Enter Vaccination Information. Desired elements are highlighted in red.
 - a. Vaccine Event Information Source
 - b. Vaccine Administered Date
 - c. Age at Vaccination (auto-calculated based on DOB and administration date)
 - d. Age at Vaccination Unit (auto-calculated based on DOB and administration date)
 - e. Vaccination Anatomical Site
 - f. Vaccination Given By Provider
 - g. Vaccination Given By Organization
 - h. Vaccine Type
 - i. Vaccine Manufacturer
 - j. Vaccine Expiration Date
 - k. Vaccine Lot Number
 - Dose Number



Note: CDC adult and child immunization schedules are linked at the bottom of the Vaccination page for easy reference.

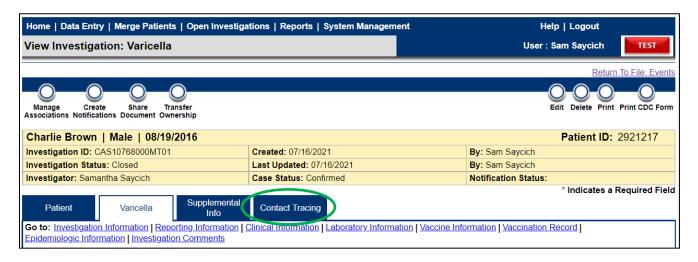
5. Click **SUBMIT**. The vaccination added is displayed in the Patient File under Vaccinations.

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Contact Investigations

MIDIS has the capability to manage contact investigations for a patient. This is helpful for diseases like pertussis, where the number of contacts can be very large. In addition, contact records are linked to show both contacts named by a patient as well as investigations that a patient has been named a contact for. Contact information is managed within an Investigation, but records are listed on the View File page.

To add a new Contact Tracing Record, you must first submit your investigation for the initial case. Next, click on the **CONTACT TRACING** tab.

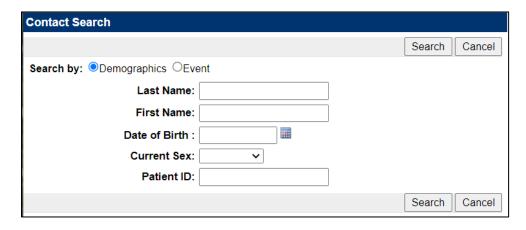


Click ADD NEW CONTACT RECORD.

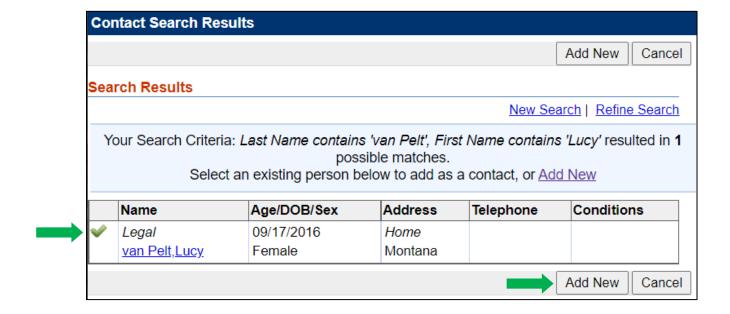


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Before entering a new contact, you will need to search to determine if the patient already has a record in MIDIS. Enter their personal information into the Contact Search box, and press Submit.

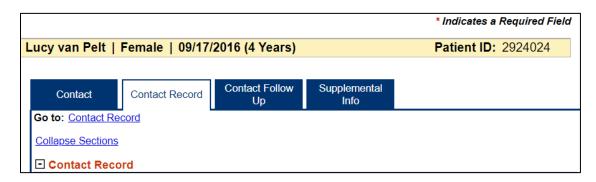


If the patient does have a file in MIDIS, a result will be presented to you. If this is the patient that you are looking for, click on the green check mark. If this is NOT the correct patient, then click **ADD NEW** to add a new patient record.



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There are four tabs in a Contact Record.



CONTACT: Enter the demographic information of the contact.

CONTACT RECORD: Enter information regarding the status and priority of the contact, as well as exposure information.

CONTACT FOLLOW UP: Enter signs and symptoms, risk factors, testing, evaluation, and treatment of the contact.

SUPPLEMENTAL INFO: This is currently not in use.

Once you have submitted the information, you can view the contact record by clicking on the hyperlinked **CONTACT RECORD ID**.

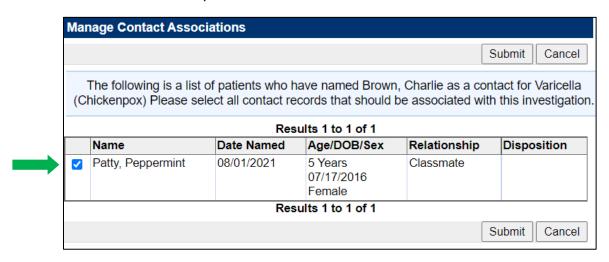


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If the patient was named by another patient as a contact you will need to manage the contact records in the Patient Named by Contacts section. Click **MANAGE CONTACT ASSOCIATIONS** to open and select the records that should be associated with the investigation.



Check the box next to the contact that you want to associate and click **SUBMIT**.



You will now be able to view contacts who named your patient as a contact within their investigation.



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Influenza Aggregate Case Counts, Hospitalizations, and Deaths

Step 1: Enter summary data for Influenza case counts in your jurisdiction (each week).

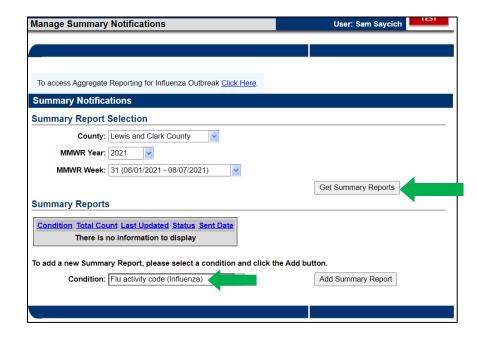
1. From the MIDIS homepage, click on **DATA ENTRY** in the Navigation Bar at the top of the page.



2. Click on **SUMMARY DATA**



- 3. Select your jurisdiction from the **County** drop-down box. *Check that the date range of the MMWR week reflects the week you are reporting for.
- 4. Click GET SUMMARY REPORTS
- 5. Select Flu activity code (Influenza) from the Condition drop-down box



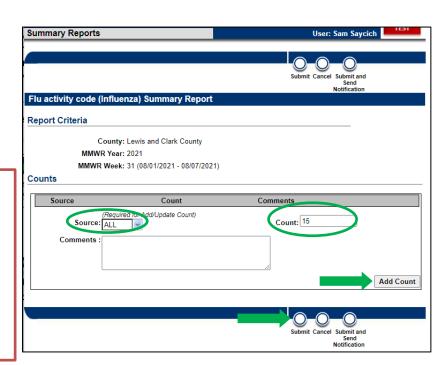
6. Click on the hyperlinked Flu activity code (Influenza) in the grey Summary Reports box.



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- 7. For **SOURCE**, select **ALL**
- 8. Enter your case count
- Click on ADD COUNT (the information will save in grey)
- 10. Click SUBMIT

Note: If you need to update a previous case count, select the MMWR week you need to update and follow steps 4-6. On the next page: click "Edit" under the "Counts" section, adjust the count, and click "Update Count" and "Submit" to save.



Step 2: Enter hospitalizations and deaths due to Influenza

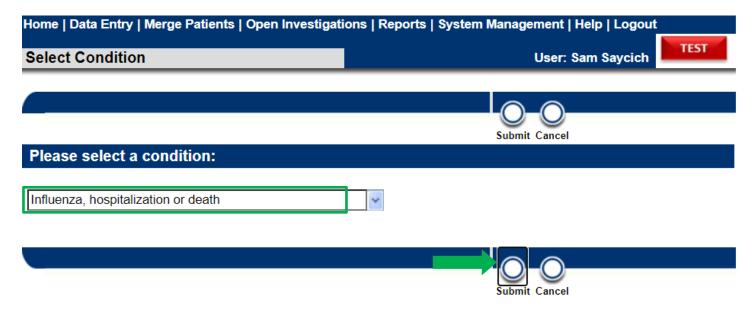
Please create an investigation for each patient who was hospitalized or died from Influenza.

- 1. From the MIDIS homepage, search for the patient by Name or DOB. You will be brought to the search results page. If the patient is not listed in the search results, click on **ADD NEW** to create a new patient.
- 2. Go to the Events tab of the patient file. To the right of Investigations, click ADD NEW to create a new case.



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3. On the condition selection drop-down box, choose Influenza, hospitalization or death and click SUBMIT.



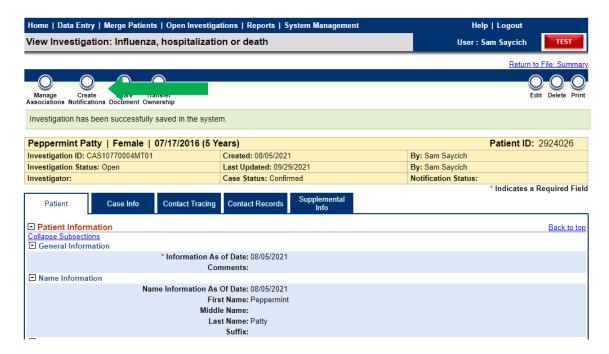
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4. The investigation page will open. You should be familiar with this form. Please remember to start with the **PATIENT** tab to enter in all demographic data. Then continue to the **Case Info** tab to fill in the information received for your patient:

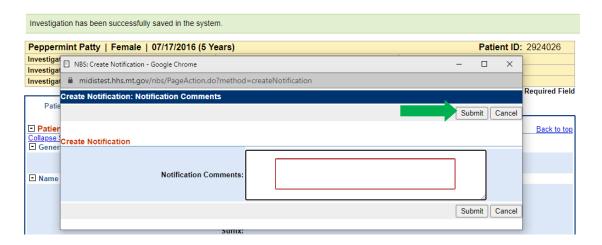
□ Hospital	Remember to
**Hospitalization Status is a required data element.	include:
Was the patient hospitalized for this illness?: Yes	
Hospital: Clear/Reassign	Hospitalization (Yes)
Hospital Selected: ST PETER'S HOSPITAL LABORATORY LABORATORY	
2475 BROADWAY Helena, Montana 59601-0000	Name of Hospital
406-444-2387 406-444-2319	A almosta a to a Dod
Admission Date: 09/25/2021	Admission Date
Discharge Date: 09/27/2021 III	Diagnosis Date
Total Duration of Stay in the Hospital (in days): 2	Ziagiloolo Bato
Condition **Diagnosis Date and Onset Date are required data elements.	Illness Onset Date
Diagnosis Date and Onset Date are required data elements. Diagnosis Date: 09/21/2021	
Illness Onset Date: 09/18/2021	Death (Y/N)
Onset date could not be determined:	
Illness End Date:	
Illness Duration:	
Illness Duration Units:	
Age at Onset: 5	
Age at Onset Units: Years	
Influenza virus type: Flu A/H1N1	Elia Tarra
Did subject receive a flu vaccine this season?:	Flu Type
Flu Vaccine Administered Date:	Whathar a fluvessins
(Use Ctrl to select more than one)	Whether a flu vaccine was
Asthma	administered this season
Select all applicable underlying Cancer Treatment	(and date, if known)
conditions or comorbidities: Cardiovascular disease Cirrhosis/liver failure	Hadayldan san 300
Selected Values: Asthma, Cancer Treatment, Neurological disorder	Underlying conditions
Other underlying conditions:	
Is the patient pregnant?: No	
Did the patient die from this illness?: No	
Date of Death:	
- Case Status	
Link to CD Epi Case Definitions and Resources Website	
Transmission Mode:	
Detection Method:	Confirmation Matter
(Use Ctrl to select more than one)	Confirmation Method
Active Surveillance	Confirmation Date
Confirmation Method: Case/Outbreak Investigation Clinical diagnosis (non-laboratory confirmed)	Communation Date
Epidemiologically linked	Case Status
Selected Values:	Jaco Glaido
Confirmation Date: 09/21/2021	MMWR Week and
Case Status: Confirmed	Year
MMWR Week: 38	. 501
**Control Measures and Lost to Follow-up are required data elements.	 _
Control Measures and Lost to Pollow-up are required data elements. Control Measures Implemented Date:	

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- 5. Once you have entered in your case information, please **SUBMIT** to save your work.
- 6. **CREATE NOTIFICATION** to send the case to CDEpi for review. The create notification button is at the top of the investigation page.



7. Click **SUBMIT** to send the notification. Please leave the comment box on this page empty.



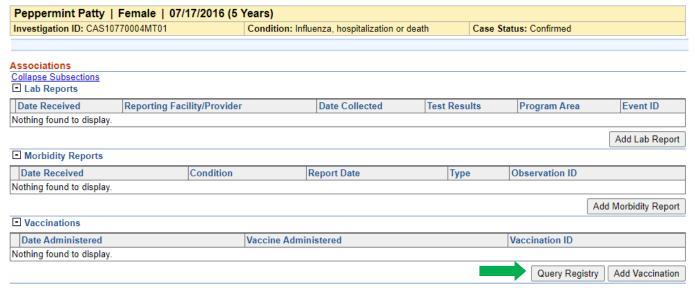
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Step 3: "Associate" Vaccination Records to Investigation.

Basic vaccination information can be added to supplement an investigation of a Vaccine Preventable Disease (e.g., Influenza hospitalization or death, Pertussis, Chickenpox). A patient's complete vaccination record can be queried or manually entered into MIDIS within the patient record.

To Query ImMTrax for a Vaccination:

- 1. Open the **Investigation** that you would like to associate a vaccination record to.
- 2. Select Manage Associations.
- 3. Scroll down to vaccinations and select Query Registry.



4. The search criteria will automatically populate based on information currently present in the patient file. CDEpi recommends removing quite a bit of this so you just search for the name and DOB. Select Submit Query.

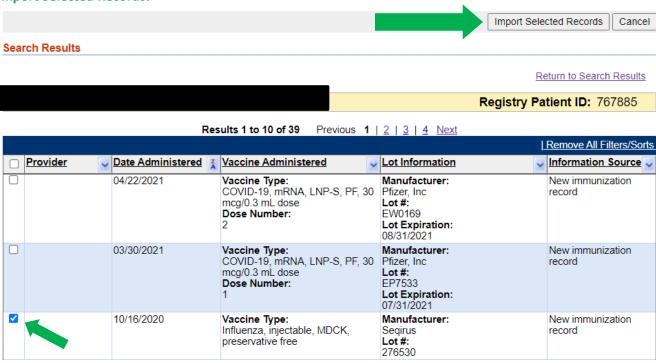


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5. Select the Registry Patient ID.



6. Select the checkbox next to the vaccination that you would like to associate with the investigation and select **Import Selected Records**.

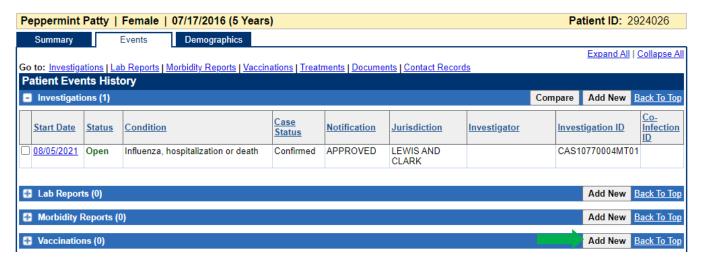


- 7. You will have a popup that notifies you that you are about to associate a vaccine record to an investigation. Select **OK**.
- 8. Once the **Manage Associations** window reloads, check that the vaccine was associated and then select **Submit** in the right-hand corner of the screen.

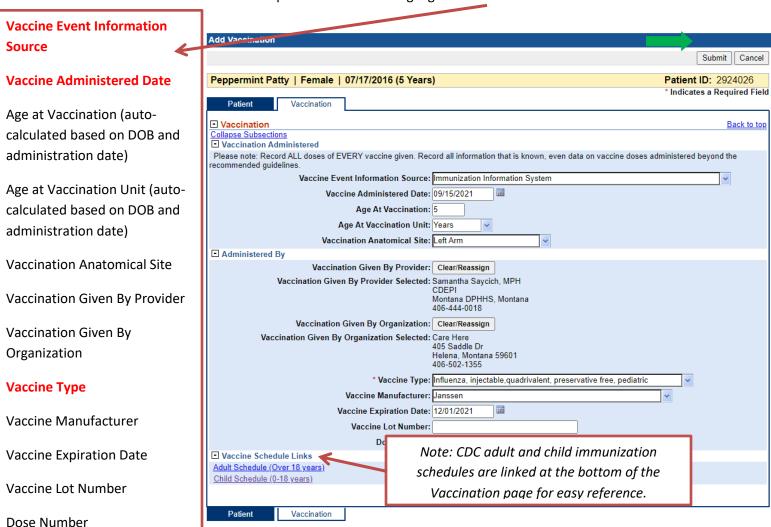
To Manually Enter a Vaccination:

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- 6. Open the **PATIENT FILE** page and click on the **EVENTS** tab.
- 7. Scroll down to VACCINATIONS and select ADD NEW.



- 8. The Add Vaccination page is displayed. Click on the vaccination tab.
- 9. Enter Vaccination Information. Required elements are highlighted in red. Click "Submit" when done.



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Influenza Comorbidities

Use the list below to determine if the reported case has any of the risk factors or medical conditions/comorbidities and add the pre-existing medical conditions/comorbidities in MIDIS in the "Case Investigation" section of the investigation.

- Asthma (medical diagnosis of asthma or reactive airway disease)
- Cardiovascular Disease (such as congenital heart disease, congestive heart failure, coronary artery disease, heart attack, stroke)
- Chronic lung disease (such as COPD, emphysema, or cystic fibrosis)
- Immune suppression due to disease or medication (such as people with HIV or AIDS, those on immunosuppressive therapies, those receiving cancer treatments, or those on chronic steroids)
- Metabolic disorders (such as inherited metabolic disorders, mitochondrial disorders, diabetes mellitus, obesity, thyroid dysfunction, adrenal insufficiency, liver disease)
- Neurologic disorders (such as seizure disorder, cerebral palsy and cognitive dysfunction)
- Neuromuscular disorders (such as multiple sclerosis and muscular dystrophy)
- Renal disease (such as acute or chronic renal failure, nephrotic syndrome, glomerulonephritis, impaired creatinine clearance)
- Smoking Status (smoker-current, smoker-former)

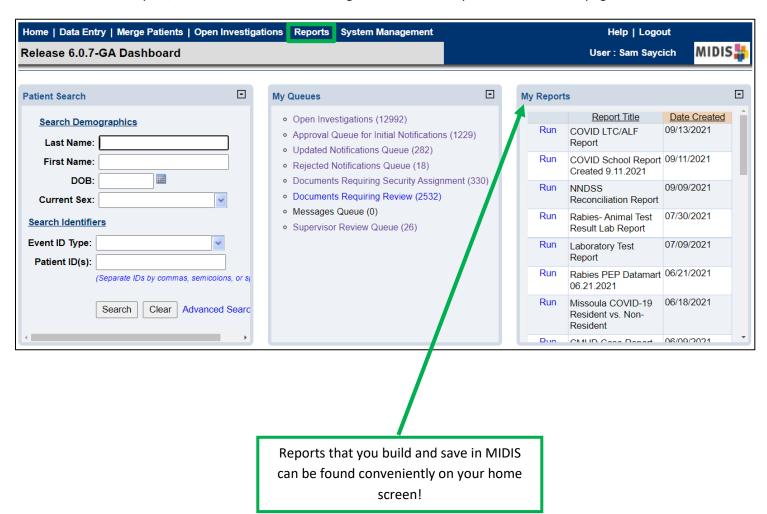
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Reports

You can pull reports in MIDIS to help you find collections of data related to information in MIDIS! There are many reports that came 'pre-packaged' with MIDIS, as well as others that have been created by DPHHS. Reports can also be customized for private use.

Running and Exporting Reports

To select and run a report, click on REPORTS in the Navigation Bar at the top of the MIDIS homepage.



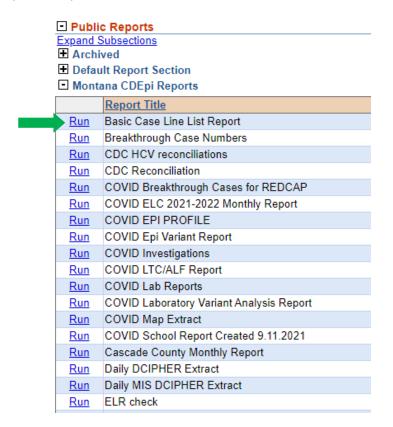
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This will bring you to a page of all available reports by category (Private, Public, Template, and Reporting Facility).

Expand any of these categories to view all available reports. **Note: reports that are most commonly used are in the Public Reports section under Montana CDEpi Reports and Montana LHJ Reports.**



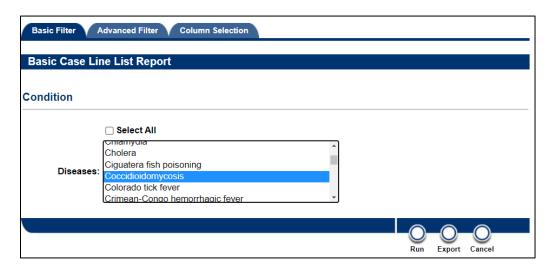
Click on RUN next to the report that you would like to use.



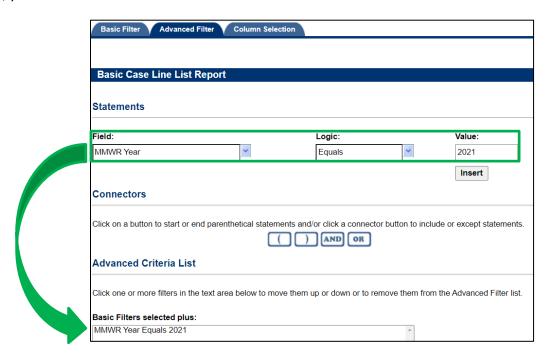
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Reports have a three-tabbed format similar to what you find in MIDIS investigations. The tabs are named: **BASIC FILTER**, **ADVANCED FILTER**, and **COLUMN SELECTION**.

The following example will run a report that will give you a **basic line list of cases** in your jurisdiction. On the **BASIC FILTER** tab, select the disease(s)/condition(s) you wish to include. You can select one or use Ctrl + click to select multiple diseases/conditions. There is also a checkbox option to simply "select all" conditions.



The **ADVANCED FILTER** tab allows you to narrow the scope of your report by many different variables. You can select and insert your parameters in each of the drop-down menus, using logic language (e.g., equals, less than, between). For example, you could choose to look at all cases for the MMWR Year 2012:

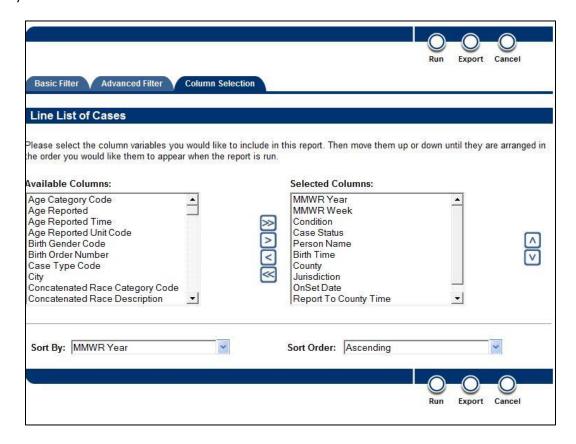


You can select as many variables in the Advanced Filter as you would like (using the **INSERT** button and using the **AND** or **OR** buttons to connect each). You can also choose to leave this filter section blank.

Note: If you cannot select items in the drop-down menu of the Advanced Filter tab please see 'Important Settings for Reports' in Appendix B.

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On the **COLUMN SELECTION** tab, you may choose the variables that you would like to display in your report. Some reports already come with columns selected.



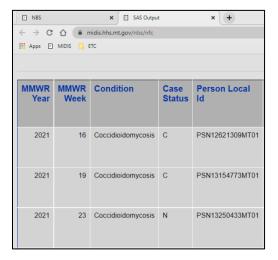
You can add, delete, or rearrange columns if needed! You can choose to have all of the columns in your export by clicking on the >> button or you can move them one at a time by selecting a variable and moving them to the "Selected Columns" box with the > button. You can rearrange the order that the variables are displayed by using the up/down toggle buttons:

ltem	Description
٨	Move Up. Moves the selected item up.
V	Move Down. Moves the selected item down.
<	Remove. Removes the selected item.
<<	Remove All. Removes all items.

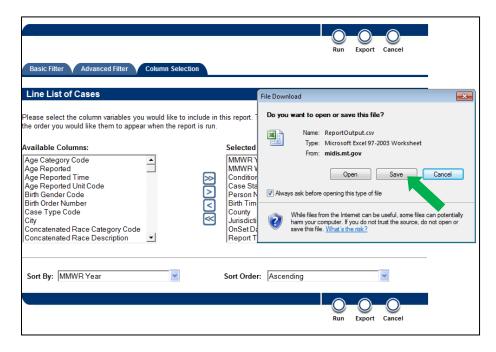
At the bottom of this screen, select the variable that you would like the output to **SORT** by. In the example above, MMWR Year is selected. Then choose either **RUN** or **EXPORT** to run your report.

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If you choose RUN the result will be an HTML output in a new tab of your web browser:



More often, you will want to export your data for analysis with other software (e.g., Excel). To do this, click on **EXPORT**. You will be prompted to save the file.



Click **SAVE** (or **SAVE AS**) and provide a destination to save the file (i.e., desktop, computer drive, etc). The file will download to that location. The downloaded file will be in .csv format, which will open in Microsoft Excel. You can now work in Excel to analyze the data from your MIDIS report!

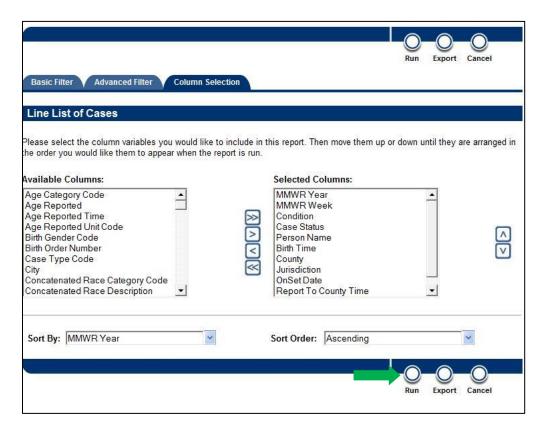
Note: This file will contain protected health information. Please remember to save to a secure location.

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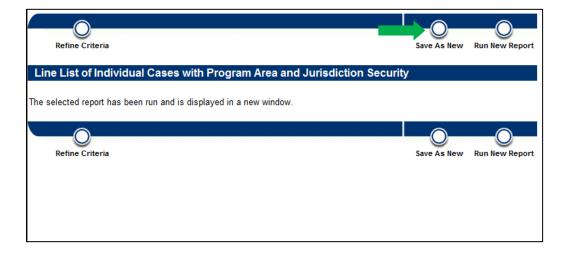
Saving Reports

Reports can be saved as Private or Public Reports if you want to access a report you customized later. Private reports are not visible to other users and display in the My Reports widget on the MIDIS home page. Public reports are visible to other users and display in the My Reports section as well as the Public reports section of the Reports page.

To save a report, click through each of your tabs to set your parameters as explained in Running and Exporting Reports. Then click RUN.

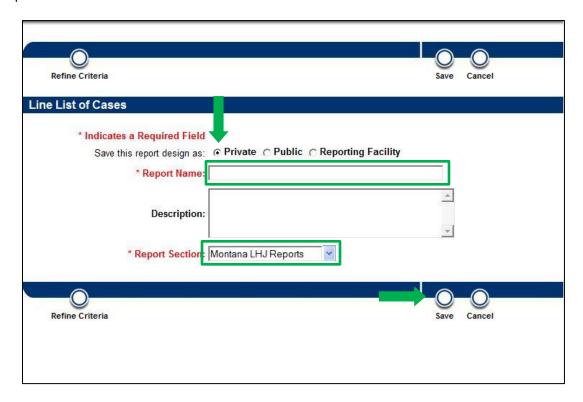


The following screen will be displayed. Click on SAVE AS NEW.



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You will be prompted to give your report a name and location to save the report in MIDIS. When you save a report for your own use, please select **PRIVATE**, give it a title, and select **MONTANA LHJ REPORTS** under Report Section. Click **SAVE** to save the report.



If you need to update a saved report, you will notice that the page has an additional radial dial, **SAVE**. In this case, instead of clicking on Save as New you will click on **SAVE**. You will be warned that the saved report will overwrite any previous versions. Click **YES** to do so.



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Need Help?

MIDIS CDEpi Help Desk: 444-0273

✓ CDEpi Contact: Samantha Saycich, MPH

Phone: 444-0018

Email: samantha.saycich@mt.gov

MIDIS STD Help Desk: 444-9028

√ STD Contact: Peggy Baker

Phone: 444-9028

Email: pebaker@mt.gov

Do not hesitate to call about any questions or concerns!

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APPENDIX A: Reportable Diseases for the State of Montana as of 9/29/2021

The following is a list of conditions that are reportable to DPHHS.

AIDS and HIV infection

Anaplasmosis

Anthrax

Arboviral diseases, neuroinvasive and nonneuroinvasive (California serogroup, Chikungunya, Eastern equine encephalitis, Powassan, Saint Louis encephalitis, West Nile virus, Western equine encephalitis, Zika virus infection)

Arsenic poisoning (≥ 70 micrograms per liter (µg/L) total arsenic in urine; or ≥ 35 µg/L methylated plus inorganic arsenic in urine)

Babesiosis

Botulism

Brucellosis

Cadmium poisoning (≥ five µg/L total blood cadmium levels; or ≥ three µg/L total cadmium in urine)

Candida auris (C. auris)

Campylobacteriosis

Chancroid

Chlamydia trachomatis infection

Cholera

Coccidioidomycosis

Colorado tick fever

Cryptosporidiosis

Cyclosporiasis

Dengue virus infections

Diphtheria

Ehrlichiosis

Escherichia coli, Shiga toxin-producing (STEC)

Gastroenteritis outbreak

Giardiasis

Gonorrheal infection

Granuloma inguinale

Haemophilus influenzae invasive disease

Hansen's disease (leprosy)

Hantavirus pulmonary syndrome or infection

Hemolytic uremic syndrome, post diarrheal

Hepatitis A, acute

Hepatitis B, acute, chronic, perinatal

Hepatitis C, acute, chronic

Influenza

Lead poisoning (≥ five micrograms per deciliter µg/dL total blood lead levels)

Legionellosis

Leptospirosis

Listeriosis

Lyme disease

Lymphogranuloma venereum

Malaria

Measles (rubeola)

Meningococcal disease (Neisseria meningitidis)

Mercury poisoning (≥ 200 μg/L total mercury in urine or ≥ 20 μg elemental mercury/g creatinine in urine or ≥ 10 μg/L elemental, organic, and inorganic blood mercury levels)

Mumps

Pertussis

Plague

Poliomyelitis, paralytic or nonparalytic

Psittacosis

Q-fever (acute and chronic)

Rabies in a human or animal exposure to a human by a species susceptible to rabies infection

Rubella (including congenital)

Salmonellosis (including Salmonella Typhi and Paratyphi)

Severe acute respiratory syndrome-associated coronavirus

(SARS-CoV) disease

Shigellosis

Smallpox

Spotted fever rickettsiosis

Streptococcus pneumoniae, invasive disease

Streptococcal toxic shock syndrome (STSS)

Syphilis

Tetanus

Tickborne relapsing fever

Toxic shock syndrome (TSS) (nonstreptococcal)

Transmissible spongiform encephalopathies (including

Creutzfeldt Jakob Disease)

Trichinellosis (trichinosis)

Tuberculosis (TB) including latent tuberculosis infection

Tularemia

Varicella (chickenpox)

Vibriosis

Viral hemorrhagic fevers

Yellow fever

Also reportable is an outbreak of any communicable disease listed in the "Control of Communicable Diseases Manual, an Official Report of the American Public Health Association" (20th edition, 2015) in an institutional or congregate setting and any unusual incident of unexplained illness or death in a human or animal with potential human health implications.

Note: An up-to-date list of Reportable Diseases in Montana is maintained on the CDEpi website. To view the current list, please visit: https://dphhs.mt.gov/publichealth/cdepi/reporting/index

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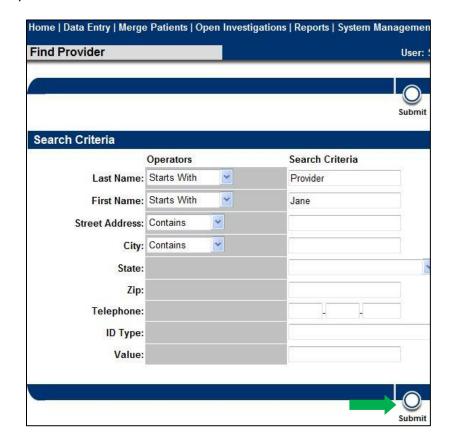
APPENDIX B: Adding Providers to MIDIS

When completing an investigation, there is a place to search and enter provider information. You may find that a provider for your jurisdiction is missing in MIDIS. To add a provider to MIDIS, please do the following:

In the MIDIS Navigation Ribbon, click on DATA ENTRY. In the submenu, click PROVIDER.



Search for the provider by name.

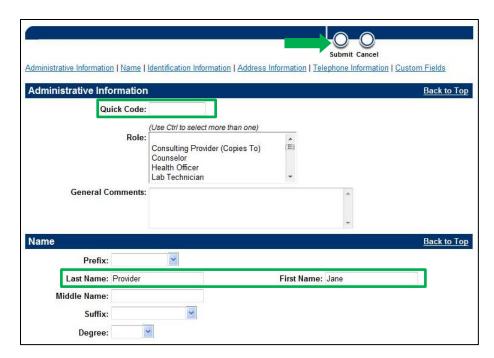


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If the search result does not bring up the provider you are looking for, then click **ADD** to add new provider information.



Fill out the fields for the provider's name and office address. You can also assign a Quick Code for the provider. The Quick Code will allow you to look up the provider within an investigation. An example of a Quick Code could be the provider's initials.



When you are finished, click **SUBMIT**.

You will now be able to search and select the provider within an Investigation or Laboratory Report.

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GLOSSARY

ARM: Administrative Rules of Montana

CDC: Centers for Disease Control and Prevention

DOB: Date of Birth

Documents Requiring Review: This queue is where new electronic laboratory reports are put for review.

ELR: Electronic Laboratory Reporting. This is the electronic version of a paper lab report.

Hyperlink: A link from one document to another. Hyperlinks in MIDIS are highlighted in blue underlined text.

Investigation: Information that supports the case definition for notifying DPHHS of a reportable disease. This is the same as a case report.

Keyfob: A token that contains a randomly generated number that is used in combination with a user ID and PIN to securely log into MIDIS.

LHJ: Local Health Jurisdiction

Metrics AVR Viewer: Widget on the MIDIS homepage that allows the user to view charts and graphs of activity over the last 7 days. The user can select one of several views from a drop-down menu.

MIDIS: Montana Infectious Disease Information System

MMWR: Morbidity and Mortality Weekly Reports. This is a publication prepared by the CDC that contains data on specific diseases reported by state and territorial health departments.

MMWR Week: The week of the year when a notifiable disease/condition is reported.

MT DPHHS: Montana Department of Health and Human Services

My Reports: Widget on the MIDIS homepage that allows quick access to the private reports that have been customized and saved by the current user.

My Queues: Widget on the MIDIS homepage that allows access to the work queues in MIDIS.

NBS: NEDSS Base System. MIDIS is an example of an NBS.

NEDSS: National Electronic Disease Surveillance System

News Feeds: Widget on the MIDIS homepage that allows the user to access the RSS (Really Simple Syndication) feed(s) that will be set up by DPHHS.

NNDSS: National Notifiable Disease Surveillance Systems

Notices: Widget on the MIDIS homepage that allows a user to view any alerts, announcements, etc. that have been created by DPHHS.

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Ordering Facility: The facility/practice where the Ordering Provider (Physician) works.

Ordering Provider: In a laboratory report, this is the physician or healthcare provider that ordered the laboratory test to be performed.

Passcode: A MIDIS user's PIN plus the six digit number displayed on the user key fob.

Patient File: Information that contains all data on a patient in MIDIS. This includes demographics and events (laboratory results, case reports, vaccination record, and contact information.)

Patient Search: Widget on the MIDIS homepage that allows a user to find a patient in the system using either a demographic search or a patient ID.

PIN: Personal Identification Number created when you first log in with your MIDIS key fob.

Protected Health Information (PHI): any information about health status, provision of health care, or payment for health care that can be linked to a specific individual.

Rejected Notification Queue: A list of investigations that require additional information before they can be sent to CDC for notification.

Reportable Condition: A disease or condition that is required to be reported to the state of Montana. The list of reportable conditions is found in Appendix A of this user guide.

Reporting Facility: The laboratory name or provider that is reporting the laboratory result in a lab report.

Session Time Out: The length of time that a MIDIS window can remain open with no activity. It is currently set to 45 minutes.

Specimen Collection Date: The date that the specimen was collected.

UserID: The user identification to log into MIDIS. This is typically the first initial of the first name followed by the full last name and '-nedssmt.'

Widget: A component of MIDIS that enables a user to perform a function or access another location within the system. For example, the Reports widget provides access to a specific report.

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REVISION HISTORY

DATE	CHANGE(S)	AUTHOR
12/12/12	Initial Document	Stacey Anderson
1/3/17	 Update MIDIS URL Added STD reporting section Added influenza reporting section Updated MIDIS Program areas 	Stacey Anderson
3/14/17	Edited MIDIS Help Desk Contact informationAdded the STD User Guide	Rachel Hinnenkamp
5/30/19	Added new screen shots with Page Builder pages for flu	Magdalena Scott
7/16/2021	 Updated URLs Updated contact information Updated screenshots Added new screen shots Created vaccination query instructions Removed the STD User Guide 	Samantha Saycich

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