MDSS Training
For Health Care Providers

updated June 2024

Michigan Disease Surveillance System

A tool for public health surveillance in Michigan

- Makes reporting of diseases/conditions easier, more efficient, and closer to real-time so public health interventions can be implemented

- Reduces delays in initiation of public health follow-up by correctly reporting to county of residence rather than county of diagnosis

- Allows reporting 24 hours/day from any computer with an internet connection

- Clarifies whether the case reported involves multiple providers/facilities

- Provides documentation of a facility's role in reporting for regulatory and accreditation agencies

- Allows instantaneous retrieval of summary reports of diseases

- Reduces the volume of necessary telephone communications for additional information between LHD and facility-based ICP

MDSS Healthcare Provider (HCP) Responsibilities

- **Confidentiality**

  - MDSS contains confidential public health information on reported individuals. Data are protected by system security and role-defined access, but participants will continue to be bound by rules of confidentiality while accessing system information

  - **MDSS does comply with HIPAA regulations**

- **Participation**

  - To realize the goals of this system, patient information must be entered in a timely manner

  - HCP reporting responsibilities remain unchanged (Communicable Disease Rules R325.171 *et al*.)

  - Your enthusiastic support helps make MDSS a more productive and effective method of communicable disease surveillance

Accessing MDSS

- Software and System Requirements

  - Internet Access

  - Internet Explorer 8.0 or later (IE 8 is the officially supported browser for the system, but there are currently no known issues with any other versions)

- MILoginUser ID and Password

- Authorization to use the MDSS

  - Healthcare providers must partner with their local health department to register and use MDSS

Health Care Provider Rights and Privileges

As a Health Care Provider

- Enter cases

- Rights to any case that you or another user that shares your facility has entered

    - *See ELR for more on this*

- Access to edit cases that you have rights to until the Local Health Jurisdiction closes the investigation

- Ability to run reports on the cases that you have rights to

- Ability to run reports on de-identified aggregate data from around the state

How to access, navigate in, and exit the MDSS

Entering MDSS

- MILogin for Non-Michigan.gov emails - https://milogintp.michigan.gov/

- MILogin for Michigan.gov emails - https://miloginworker.michigan.gov/

- Log in with your MILogin User ID and Password

System Use Notification

- Before accessing the MDSS, and other MILogin applications, users must acknowledge a set of system use requirements regarding secure access, data use, and system monitoring

- Click **I agree to the Terms & Conditions** to continue

- Complete the third-party authentication verification via the phone method of your choice (call or text).
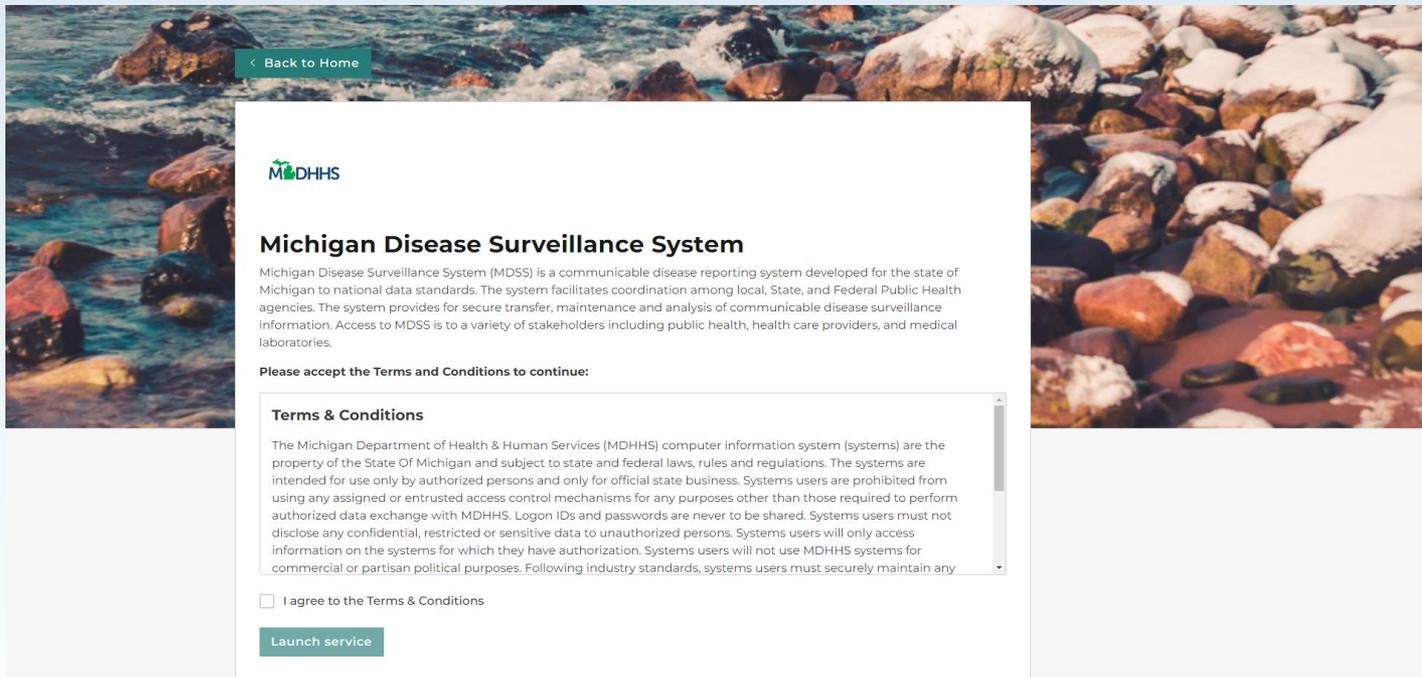
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Part of System User Agreement

- After choosing "Michigan Disease Surveillance System" the following text below heads the System Use Message Box

- Michigan Disease Surveillance System (MDSS) is a communicable disease reporting system developed for the state of Michigan to national data standards. The system facilitates coordination among local, State, and Federal Public Health agencies. The system provides for secure transfer, maintenance and analysis of communicable disease surveillance information. Access to MDSS is to a variety of stakeholders including public health, health care providers, and medical laboratories. System users are charged with supporting public health surveillance activities. **All users agree to only use the MDSS for appropriate purposes and will not disclose information contained in it for unauthorized reasons. Use of data in support of research/publication shall not be conducted without cooperation and agreement between impacted public health agencies.**

Terms & Conditions – Part of System User Agreement

- After agreeing to the Michigan Disease Surveillance System header Use

- Read Terms & Conditions Box for additional information for system user agreement

Please accept the Terms and Conditions to continue:

Terms & Conditions

The Michigan Department of Health & Human Services (MDHHS) computer information system (systems) are the property of the State Of Michigan and subject to state and federal laws, rules and regulations. The systems are intended for use only by authorized persons and only for official state business. Systems users are prohibited from using any assigned or entrusted access control mechanisms for any purposes other than those required to perform authorized data exchange with MDHHS. Logon IDs and passwords are never to be shared. Systems users must not disclose any confidential, restricted or sensitive data to unauthorized persons. Systems users will only access information on the systems for which they have authorization. Systems users will not use MDHHS systems for commercial or partisan political purposes. Following industry standards, systems users must securely maintain any

☐ I agree to the Terms & Conditions

Launch service

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MDSS Portal Page

- The Portal Page is the initial landing page for users

- The user can choose which component to enter (only components that the user has access to, or has requested access to, will be displayed)

- Components include: MDSS, Outbreak Management (OMS), MiCelerity (overdose and poisonings) and CSV Loader

  - *Note: OMS allows for outbreak management and contact tracing – access is available from your regional epidemiologist*

- Click on 'Disease Surveillance' to continue to MDSS

Initial MDSS Screen

The Top Navigation Bar

The Top Navigation Bar links to different modules:

- **Case Investigation**

  Contains all of the functions to enter and manage cases. Add, change, and search the communicable disease information stored within MDSS

- **Messages**

  System maintenance notifications

- **Reports**

  Contains most of the reports available on MDSS. Specify the type of report you wish to create and what information you would like to include on the report

- **Logout**

  Terminates your session and returns you to the *Single Sign On Portal*

The Side Navigation Bar

The Side Navigation Bar displays links to available functions within the current module

Case Investigation

Cases
Unassigned Cases
New Case
New Aggregate Cases
Searches
New Search
New Aggregate Search
Disease Specific Search
Search Field Records
Case Definitions
Blank Forms
User Profile
User Directory

Reports

1. Line Listing
2. Diseases by Demographics
3. Diseases YTD
4. Diseases - 5 Year History
5. Diseases YTD by Geography
6. Disease History by Geography
7. Diseases by Geography
8. Epi Curve
Aggregate Case Report
Audit Report
GIS Map of Diseases by Geography
TB Reports

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On Line Help

- The <u>User Guide</u> is accessible on-line. It can be searched by the table of contents, by the index, or by keyword

- Click the **HELP** button is present throughout the application for assistance relative to the current screen
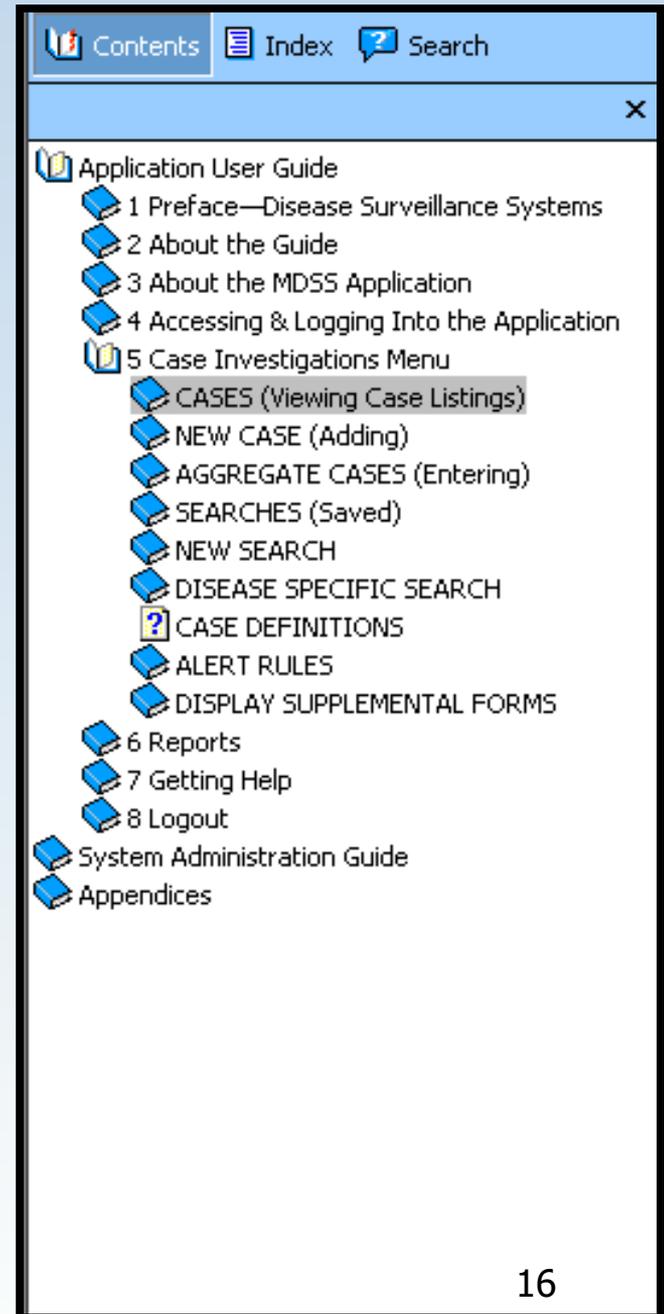
MDSS Security

- <u>Browser buttons (Back, Forward, Refresh, etc.) are not available for use in MDSS</u>

- For security, MDSS and MILogin will automatically log you out if your session remains inactive for more than 30 minutes

  - Save your work frequently

  - You will lose unsaved work if you're automatically logged out

  - Always save your work and log out of MDSS and the MILogin portal if you leave your computer

Clearing Your Browser's Temporary Internet Cache

- A full memory (cache) can interfere with uploading the case investigation data

- We recommend that you periodically empty this cache
  - Open your internet browser
  - Select 'Tools' then 'Internet Options'
  - Select 'Temporary internet files,' 'Delete files,' and check 'Delete all offline content'

Logging Out

1) **Logout** of disease surveillance application of MDSS

2) **Logout** of the MDSS Dashboard

3) **Logout** of the the MILogin Portal
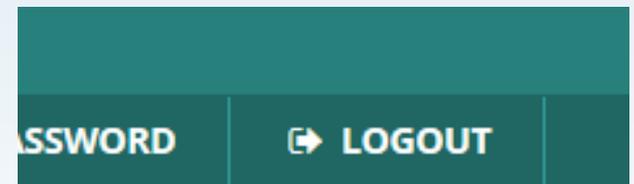
The Message Function

- Allows MDHHS Administrators to create messages that are displayed for all users

- The Messages module will display all System Messages from the past several months

- The 'New Messages Waiting' link displayed on bottom of case listings page indicates that a new message has been added since your last login

- These messages are rare and likely important

- Messages are seen by ALL MDSS users

New Message Waiting

Link indicates that there is a new message waiting to be viewed in Messages tab. The link disappears when the user logs out.

Messages

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Entering
a New Case

New Case Entry

Cases

New Case

New Aggregate Cases

Searches

New Search

New Aggregate Search

Disease Specific Search

Search Field Records

Case Definitions

Alert Rules

Blank Forms
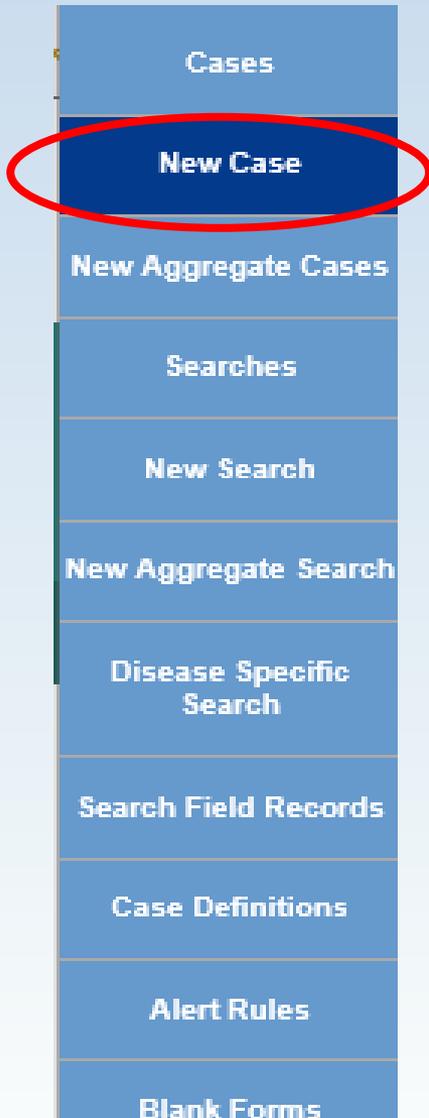
- The New Case function allows new cases to be manually added to MDSS

- The New Case entry process is divided into three sections

New Case Entry – Screen One

Investigation Information

Reportable Condition*:
- SELECT -   Detail

☐ State Prison Case

Patient Information

Patient Status* : Alive   Patient Status Date* (mm/dd/yyyy) : 11/05/2019   Case Disposition* : - SELECT -

First* :   Last* :   Middle :

Street :

City :   County :   State :   Zip :

Home Phone (###-###-####):   Ext: Other Phone (###-###-####):   Ext:

Onset Date (mm/dd/yyyy) :   Referral Date (mm/dd/yyyy) :

Diagnosis Date (mm/dd/yyyy) :

Case Status*:
- SELECT -

*indicates required items

Continue   Cancel   Help

Besides required fields, make sure **address** fields are also complete

This allows case to be sent to the proper health department

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Validation

- Clicking **CONTINUE** initiates a validation process

- You must correct errors prior to proceeding

Example error message

Screen One Key Field Definitions

- Fields in Red with * are required fields. Case entry will not proceed unless they are complete ('unknown' is generally an option)

- **Case Status** – refers to the case definition criteria (Confirmed, Confirmed-Non Resident, Not a Case, Probable, Suspect, Unknown)

- **Patient Status** – refers to whether the patient is alive or dead

- **Patient Status Date** – automatically set to current date during case entry and updated when a change is made to the "Patient Status" *Note: date can also be entered manually*

- **Case Disposition –** refers to inpatient/outpatient status

- **Referral Date** – is an editable field generally indicating the date the case was referred to the LHD

New Case Entry – Screen Two

Demographics

Race* :
- American Indian or Alaska Native
- Asian
- Black/African American
- Caucasian
- Hawaiian or Pacific Islander
- Other
- Unknown

Sex* : - SELECT -

Hispanic Ethnicity* : - SELECT -

Arab Ethnicity : Unknown

Date of Birth / Age

Date of Birth (mm/dd/yyyy):

Age at Onset (if DOB unknown) :

Age Unit :

Parent/Guardian (required if under 18)

First :

Last :

Middle :

Work / Occupation or School / Grade

Worksites / School :

Occupations / Grade :

Patient Identifiers

MDOC ID :

*indicates required items

| Continue | Back | Cancel | Help |

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Date of Birth/Age Information Reminder Box

If **Date of Birth**, **Age**, and **Age Units** is not complete, a Reminder Box will display when you continue to the next entry screen

Message from webpage

? Neither Date of Birth nor Age were entered.
Please enter Date of Birth or Age Information, if you have that information available.

- Press Cancel to enter the Date of Birth or Age information.
- Press OK to continue to the next page.
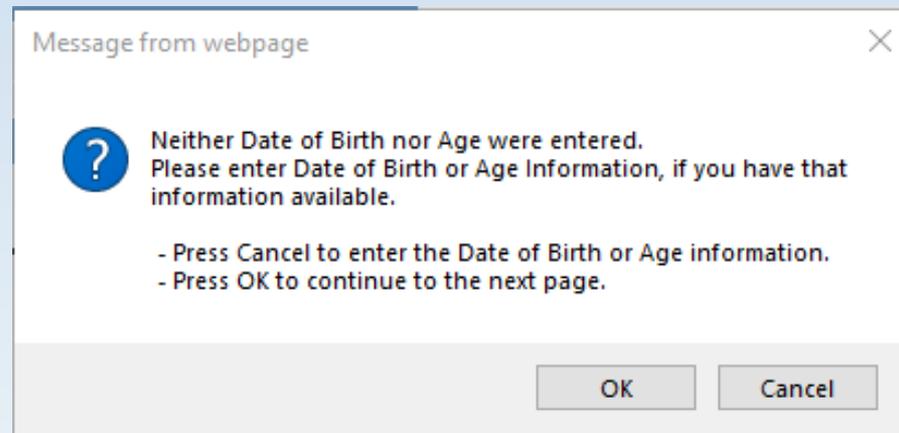
OK   Cancel

- If information is available, click **CANCEL** to return to the New Case Entry screen and enter the information

- If information is not available, click the **OK** button to continue to the next screen

Screen Two Key Field Definitions

- **Age** - Reflects the age at illness onset by subtracting Onset Date from Date of Birth (when available). Referral Date is used if onset is unavailable

- **Age Unit**: Pertains to the measurement of the age of the patient at illness onset (in days, months, or years). If **Date of Birth** is not available, Age and Age Units can be entered directly. Age units should be:

  - **Days** if Age is less than or equal to 30 days

  - **Months** if Age is less than 2 years

  - **Years** if Age is greater than or equal to 2 years

New Case Entry – Screen Three

- Enter your information under the "Person Providing Referral"

    Note: Use the "User Profile" and your information will be auto-populated for each new case

- Enter Primary Physician Information: <u>Name</u> and <u>Phone Number</u> at minimum

- Enter lab data by clicking the "Enter Lab Data"

1. Click **Create New Lab Report**
2. Add Lab Order info with pull-down menu or manually by choosing 'Other'
3. Add Ordering Provider info
4. Enter Lab info with pull-down menu or manually by choosing 'Other'
5. Add Specimen info
6. Click **New Result**

Lab Reports — Create New Lab Report — Help

Date Received	Ordered Test Name	Electronic

Save & Finish   Back   Cancel

Lab Order Information

Filter Test List By: [____] Filter Clear

Select Ordered Test* : Chlamydia sp DNA [Presence] in Unspecified specimen by Probe & target amplification method

Test Name* : Chlamydia sp DNA [Presence] in Unspecified specimen by Probe & target amplification method

Lab Report Date (mm/dd/yyyy) : [____]

A pop-up reminder will display if lab report date is left blank

Ordering Provider

First : Physician   Last : Physician

Affiliation : Bronson   Street : [____]

City : Kalamazoo   County : Allegan   State : Michigan   Zip : 49080

Phone number : [____]   Ext : [____]

Laboratory Information

Select Lab* : Bronson Hospital Laboratory   Filter Lab List By: [____] Filter Clear

Lab Name* : Bronson Hospital Laboratory

Street : 601 John Street   Geocode Source :

City : Kalamazoo   County : [____]   State : Michigan   Zip : 49007

Phone number : 269-341-6440

Specimen Information

Specimen Collection Date (mm/dd/yyyy) : [____]

Specimen Source : Urethral swab

Specimen Site : [____]

Specimen Site Text : [____]

Specimen ID : [____]

Results   New Result

Add New Lab   Cancel   Help

7. Add Lab Result info and relevant information

8. Click **Add Result**

9. Review lab result info that was added to bottom of lab report

10. Click **Add New Lab**

Specimen Information		
Specimen Collection Date (mm/dd /yyyy) :		
Specimen Source :		
Specimen Site :		
Specimen Site Text :		
Specimen ID :		

Results		New Result

Reported Test Name : Chlamydia trachomatis+Neisseria gonorrhoeae rRNA [Presence] in Unspecified specimen by DNA probe   Edit   Delete

Coded Result :	Chlamydia species
Numeric Result :	
Reference Range :	
Comments :	8/14/2016 1g Zithromax
Relevant Clinical Information :	Also notified partner

Add New Lab   Cancel   Help

11. Click **Save & Finish**

Lab Reports		Create New Lab Report	Help

Date Received	Ordered Test Name	Electronic		
08/18/2016	Chlamydia trachomatis+Neisseria gonorrhoeae rRNA [Presence] in Unspecified specimen by DNA probe	No	Edit	Delete

Save & Finish   Back   Cancel

Background Processing

Once a case is entered, the following processes occur behind the scenes:

- **Geocoding**: Validates the address and assigns coordinates to map it, supports referral to correct LHJ

- **De-Duplication**: identifies duplicate patients and case reports. If a case must be de-duplicated it will not be immediately available for editing

- **Case Referral**: Determines the referral LHJ based on the Investigation Address and assigns the case to the LHJ Administrator

More information about these processes can be found
in the section *Background Processing* in *Chapter 5* of the
<u>User Guide</u> or by viewing Online Help.

Geocoding: Determining the Investigation Address

- The Investigation Address is set by address availability in the following order:

    1. Patient Address

    2. Provider Address (on Referral or Lab Report)

    3. Laboratory Address (for electronic laboratory reports only)

- Investigation address determines LHJ referral

Geocoding – Multiple Address Matches

If the investigation address matches multiple coordinates returned by the Geocoder, the matching addresses are presented to the user for mandatory selection:

- Choose the correct address by selecting the appropriate radio button and click the **CONTINUE** button

- **If uncertain:** select the address in your LHJ, click the **CONTINUE** button and investigate further by contacting the patient or provider

- **If no address is offered within your LHJ:** click the **BACK** button, remove zip code and city, enter one of your LHJs Counties and investigate further

Geocoding - Geocode Source

The "Geocode Source" indicates how the address was mapped

Geocode Source Values

- **CGI** – The address, county and LHJ could be mapped by the Center for Geographic Information (CGI). The case map will show case. This is the most accurate information

- **MDSS City** – A match was not identified but the county and LHJ was assigned based on the City. The case map will not show case

- **MDSS ZIP Code** – A match was not identified but county and LHJ was assigned based on ZIP code. The case map will show the case in the ZIP code center***

- **Blank** – No match, the case is referred to State personnel
  - Out of State Addresses
  - Address so incomplete cannot determine county

*** Important for Jurisdiction Assignment

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Unassigned Cases

- The unassigned case listing shows HCP users a list of cases that have been entered into the MDSS that are potential duplications and are currently unavailable because they are in the de-duplication queue.

- To access the list click on the Unassigned Cases button

Unassigned Cases Listing

Case Investigation		Messages	Reports	

Cases

Unassigned Cases

New Case

New Aggregate Cases

Searches

New Search

New Aggregate Search

Disease Specific Search

Search Field Records

Case Definitions

Blank Forms

User Profile

User Directory

Case Work Queue

Disease	Patient Name	Referral Date	Jurisdiction
Amebiasis	Tom Jones	08/04/2005	

HCP-entered cases awaiting de-duplication in the pending work queue are visible to the HCP in the unassigned cases view.

Electronic Lab Reports (ELR)

- Many commercial and public health laboratories around the state enter disease reports electronically into MDSS

- Reporting is generally automatic and happens once the lab enters the results into their computer system

- This is the fastest form of reporting as it is entered into the MDSS as soon as the lab result is complete

ELR and the HCP

- If a lab enters a case before an HCP, the case will need de-duplication

THUS:

- HCPs can see cases that have already been entered by ELR using the "Unassigned Cases" queue

- Once the case is deduplicated, the HCP will have access to it

More About ELR

- Laboratories using ELR are likely to report cases into the MDSS prior to an HCP

- If a case is to be merged during the case de-duplication process, only one Case Detail Form can be selected. The other will be discarded

- **Recommendation:** HCPs who work in facilities that regularly use ELR labs should enter only minimal information upon initial case entry. If the case is immediately available in the "All Open Cases" search, then enter the remaining data. If the case is found in the "Unassigned Cases" queue, wait until de-duplication is complete

Case Definitions

Cases

New Case

New Aggregate Cases

Searches

New Search

New Aggregate Search

Disease Specific Search

Search Field Records

Case Definitions

Alert Rules

Blank Forms

User Profile

- MDSS provides a link to the available CDC Case Definitions

- LHDs should use definitions to determine how to report a case (i.e., confirmed, probable, suspect)

- Helpful for HCPs to know what laboratory and clinical criteria are required to confirm a case

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Aggregate Case Entry

Aggregate Case Reports

- Aggregate case entry provides a method to enter aggregate case information for conditions such as influenza-like illness (ILI), gastrointestinal-like illness, scabies, etc

- Aggregate count entry is similar to individual case entry

- Counts can be entered on a daily or weekly basis. Counts can be added up to 90 days prior to the current date by changing the referral date to a date from the correct MMWR week

- Aggregate counts can be searched and exported in a manner similar to individual case reports

- The aggregate report may be relied on heavily in the event of a pandemic or other large scale epidemic when individual case reporting becomes impossible or unnecessary

Aggregate Case Entry – Screen One

- •In left panel, click on "New Aggregate Cases"
- •Red* are required fields:
  - • Reportable Condition
  - • Total Number ill (Cases)
  - • Reporting Period (Weekly/Daily)
  - • Case Status (leave "Confirmed")

Aggregate Case Entry
Screen One Details

- The Reportable Condition shows this condition being entered in aggregate. Additional conditions can be added on an as needed basis

- It is important to enter at least one aggregate report each week for 'flu-like disease' reporting. **The case count can be 0 and can be edited at a later point in time**

- 'Daily' or 'Weekly' refers to the time period in which the case counts have occurred

Aggregate Case Entry
Screen One Details – Cont.

- A single reporting site can have multiple entries of information on either a daily or weekly basis

- During a typical flu season, aggregate reports of 'Flu Like Disease' should be assigned a 'weekly' reporting period

- Multiple aggregate reports from the same weekly reporting period will be aggregated together in the reports

- 'Daily' reporting of 'Flu Like Disease' should generally only be used during a pandemic

Aggregate Case Entry – Screen Two

- Required Fields:
  - County
  - Reporting Source (school, LTC, hospital)
- Once all information is filled in, select Continue

Aggregate Case Entry
Screen Two Details

- **Person Providing Referral**: Contact information for person entering the report into the MDSS. *Note: Information will auto-populate if User Profile is utilized*

- **Case Notes**: Same notes field that is on all case reports - stamped with time, date, and User ID

- **Reporting Source (Required):** Drop down field listing local public health, physician, hospital, etc.

- **Reporting Source Description**: Free text field to enter name of reporting source (i.e., LHD or Hospital name)

- **Address Information (Only County is Required):** Complete address information for the reporting source. *Note: Information will auto-populate if User Profile is utilized*

Aggregate Case Entry – Screen Three

- The third screen of the aggregate case report form can be used to capture information from outbreaks
- This screen does not need to be completed for routine weekly reporting
- Click 'Save & Finish' when complete

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Aggregate Case Entry
Screen Three Details – for Outbreak Reporting

- **Facility Name**: Include the facility name and the type of congregate setting (day care, event, college, etc.)

- **Epidemiology Section**: Complete the onset date of the first case, the number of ills and the total number of residents/employees

- **Symptom Presentation**: It is important to include a count of cases reporting each type of symptom

- **Specimen Testing**: indicate whether any testing was done or if specimens are being collected

- **Consultation Provided**: Check all options that were completed for this outbreak

Finding Aggregate Case Reports

- In order to find an aggregate case report, you will need to run an aggregate search by selecting "New Aggregate Search" from the left hand column of the Case Investigation functions

- If you would like to change or edit the information submitted or have additional numbers to report, you can contact your local health department or regional epidemiologist to re-open the report and change the information

Time Saving Step - The User Profile

- The User Profile allows users to set default setting to case entry fields that are repeated with each new case, such as referrer, physician, and lab

- When complete, the fields will automatically populate during case entry

- These fields are modifiable, in case changes are needed

The User Profile
Auto-populated Information

Person Providing Referral

First : Jane   Last : Doe

Phone (###-###-####): 586-555-1212   Email : jane.doe@anyhospital.com
Ext:

Primary Physician

First : Doc   Last : Baker

Affiliation : Walnut Grove ER

Phone (###-###-####):   Email :
Ext:

Street :

City : Mt. Clemens   County : Macomb   State : Michigan   Zip :

Case Notes

Save & Finish   Enter Lab Data   Back   Cancel   Help

- Example of Screen 3 of New Case Entry

- All saved profile information is auto-populated

How to Work With Your Case

Case Listings - Search Option
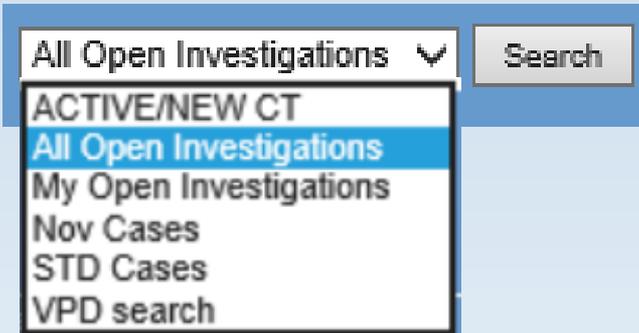
- The cases that initially display are based on your default search criteria and your jurisdiction, role and permissions

- 'All Open Investigations' and 'My Open Investigations' are saved searches in MDSS

- Users can create and save new searches (see Searches Section)

- Changing the Case Listings search option, changes the cases displayed for the duration of the session or until another search option is selected

Accessing the Case Details

1. Locate the specific case you want to access

2. Click the **EDIT** button. The "Case Detail" screen appears

Displaying results **1-10** of **3284** found
[|< First] **1** 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 [Next >>] [Last >|]

Case Listings					Investigation Status ∨	Sort	All Open Investigations ∨	Search	Export	Help

Include Labs in Export ☐

Investigation Status	Case Status	Investigation ID	Referral Date	Patient Name	Date of Birth	Disease	Investigator	County		
Completed - Follow Up	Confirmed	7215	08/13/2004	EASTER, MIKE	07/26/1954	Dengue Fever	CARLSON, BRAD	Oakland	Edit	View
Active	Not a Case	21996	08/16/2004	SQUIRREL, ROCKY	05/18/1966	Meningitis - Aseptic	CARLSON, BRAD	Washtenaw	Edit	View
New	Confirmed	6789748	08/16/2004	FIELDS, SALLY	01/01/1999	Meningitis - Bacterial Other	COLLINS, JIM	Muskegon	Edit	View
New	Confirmed	10588946	08/16/2004	STEIN, FRANK N	06/27/1979	Hemorrhagic Fever	LUTZKE, MARY	Kent	Edit	View
Active	Probable	39913	08/17/2004	BENNN, GEORGE W		Meningitis - Bacterial Other	DOGAN, DELILAH D.	Wayne	Edit	View
Active	Confirmed	8931102	08/18/2004	BOOP, BETTY	12/10/1955	Shigellosis	COLLINS, JIM	Washtenaw	Edit	View
New	Confirmed	52936	08/25/2004	BOLONEY, JOE		Botulism - Foodborne	COLLINS, JIM	Livingston	Edit	View
New	Confirmed	54245	08/31/2004	OUT, TIME	04/03/1968	Cryptococcosis	CARLSON, BRAD	Oakland	Edit	View
Completed - Follow Up	Confirmed	59063	09/02/2004	DOE, JANE M	05/03/1960	Influenza, Novel	COLLINS, JIM	Jackson	Edit	View
Completed - Follow Up	Confirmed	63920	09/02/2004	KENT, CLARK S	05/01/1943	Hepatitis A	COLLINS, JIM	Jackson	Edit	View

[|< First] **1** 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 [Next >>] [Last >|]

Case Locking

- All screens within "Case Details" will indicate that the case is locked and by which user

- Only the user locking the case can make edits

Viewing a Locked Case

- While a case is locked, other users will be able to view the case information but will not be able to edit any of the field values

- All of the fields appear "grayed out." This indicates that all of the fields are disabled to the user until the case is unlocked

- This lock remains in effect until the user navigates away from the record

Patient COPPALLA, FRANCIS Locked by LAIJOY (JOYCE LAI)

Reportable Condition* :	Case Status* :	Investigation Status* :
Streptococcal Dis, Inv, Grp [Detail]	Confirmed	New

Patient Information

Patient Status* : OutPatient   Patient Status Date* (mm/dd/yyyy) : 08/13/2004

First* : FRANCIS   Last* : COPPALLA   Middle : FORD

Onset Date (mm/dd/yyyy) : 06/11/2004   MMWR : 32-2004   Patient Id : 9132

Investigation Address

Street : 300 E MICHIGAN AVE   Geocode Source : CGI

City : LANSING   County : Ingham   State : Michigan   Zip : 48933

Jurisdiction : Ingham County

Investigation Information

Outbreak Y/N : U   Outbreak Name :

Referral Date (mm/dd/yyyy) : 08/13/2004   Case Entry Date : 08/13/2004

Investigation ID : 9134   NETSS ID : 12   Assigned to : CARLSON, BRAD / Statewide

[Reset] [Cancel] [Help]

The "Case Reporting" Tab

- The Case Reporting tab contains basic information about the case
- The Case Detail form is available on this tab

Case Reporting
Key Field Definitions

- **Investigation Status**: refers to the stage of the investigation (Active, Canceled, Completed, Completed – Follow Up, New, Review, Superceded)

    - Case Status should be set according to case definition (confirmed, probable, suspect, not a case) and then marked as "Completed" for Investigation Status

    - If duplicate cases are entered, all but one should be marked "Superceded" for Investigation Status with one case investigated to resolution. The dedup button can also be used to merge duplicate cases

    - Select "Canceled" if the case cannot be investigated to resolution (e.g., cannot contact patient or provider)

Case Detail Forms

- Each disease has an associated case investigation form called a Case Detail Form.

- Forms are accessed through the Case Reporting tab

- Most diseases have unique forms, but some use a "basic" form

- All of the fields required to reported to MDHHS and/or CDC are contained on the Case Detail Form

- All data from the basic case entry is auto-populated somewhere on the Case Detail Form

Case Detail Forms

- Provide a common format for handwritten and computer data entry

- Use a web interface for basic intake information

- Allow for supplemental data for reportable conditions requiring detailed information

- Eliminate the need for mailing case investigation forms

Case Detail Forms

To access the form, click the "detail" button on the case reporting tab

Case Detail Forms

Working with Case Detail Forms

1. Clicking the 'Details' button opens the HTML disease specific form, retrieving the data from the database

2. Add or edit data to the form as needed or required

3. Click **SAVE** at top of screen to save changes

    Note: Save changes frequently – this is key as your session may time out before you return to the MDSS

4. Click **EXIT** to exit without saving

    Note: If you make changes to the form, a pop-up window will appear asking if you   are sure you don't want to save changes

5. Click **PRINT** at the top of the screen to print the form at any point of data entry

Details are provided in the section *Disease Specific Forms* in *Chapter 5* of the <u>User Guide</u> or by viewing Online Help

Case Detail Form: Basic Information

Each form contains basic information applicable to all diseases . . .

Case Detail Form: Supplemental Information

...as well as specific information only pertaining to the specific disease

For example:
Clinical data
Laboratory data
Epidemiological data

Hospital Information

Patient Hospitalized ○ Yes ○ No ○ Unknown	Hospital	Hospital City	Hospital Record No.

Admission Date mm/dd/yyyy	Discharge Date mm/dd/yyyy	Days Hospitalized	Patient Died ○ Yes ○ No ○ Unknown	Date Of Death mm/dd/yyyy

Clinical Information

Date Recovered: mm/dd/yyyy

Symptoms(Check all that apply)
☐ No Symptoms ☐ Abdominal Pain ☐ Body Ache ☐ Chills ☐ Diarrhea ☐ Diarrhea w/blood
☐ Fatigue ☐ Headache ☐ Nausea ☐ Vomiting

Fever? ○ Yes ○ No ○ Unknown	If yes, specify highest fever:	Scale ○ F ○ C
Other Symptoms? ○ Yes ○ No ○ Unknown	If yes, please specify:	

Laboratory Information

Please insert the first positive lab report date for this illness (for metrics analyses) (mm/dd/yyyy)

Specimen Collected	Collection Date (mm/dd/yyyy)	Test Result	Test Name	Laboratory Name
Blood				
Stool				
Urine				
Other				

Salmonella serotype:
○ Typhimurium ○ Enteritidis ○ Newport ○ Heidelberg
○ Javiana ○ Montevideo ○ Muenchen ○ Oranienburg
○ Saintpaul ○ Infantis ○ Thompson ○ Paratyphi B var.L (+)tartrate+ (Formerly Java)
○ Braenderup ○ Agona ○ Hadar ○ Mississippi
○ Berta ○ I 4,[5],12:i:- ○ Poona ○ Other, specify:

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The Address History screen

- Addresses are associated with a patient, not a case, thus a *patient* can have multiple address, but a *case* is only associated with one

- Date ranges, onset if available, referral if not, are used to define which address a certain *case* is affiliated with

- When viewing the Address History on a *case*, the *patient's* entire address history is shown, but only the official *case* address has an "X" by it
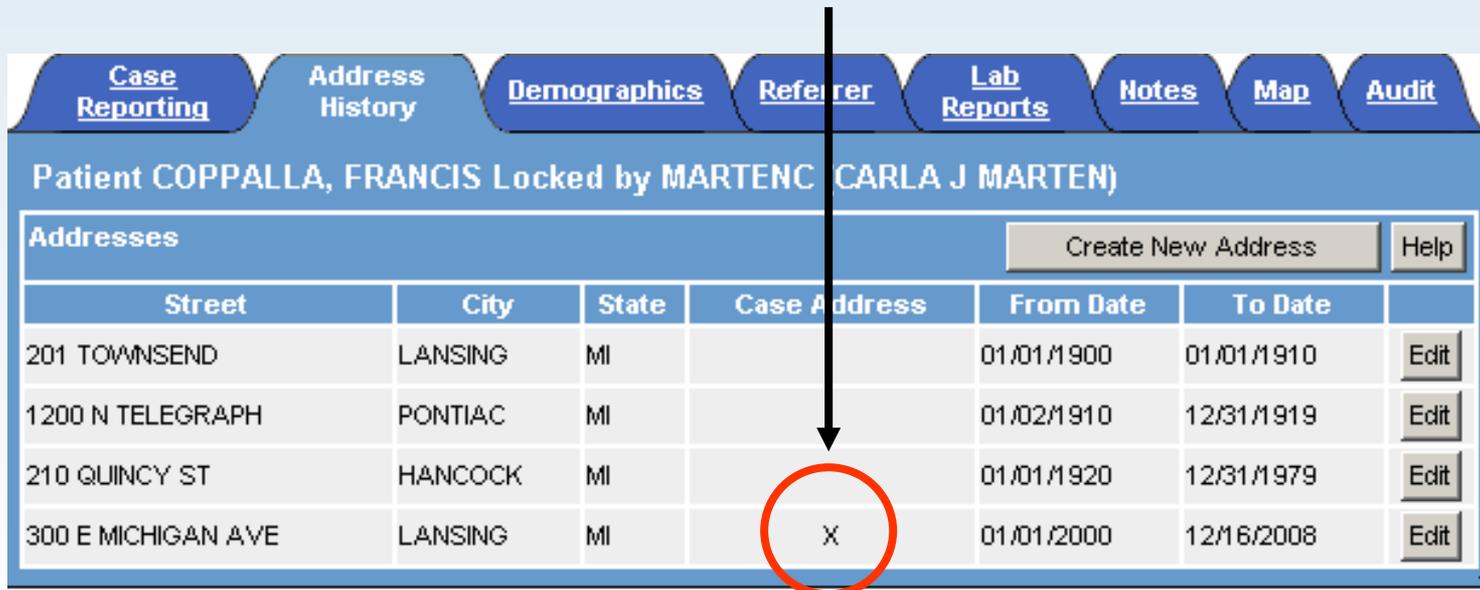
Change of Jurisdiction Warning

The *Change in Jurisdiction Warning* occurs if you change date variables or address information that would impact the case address and therefore LHD jurisdiction
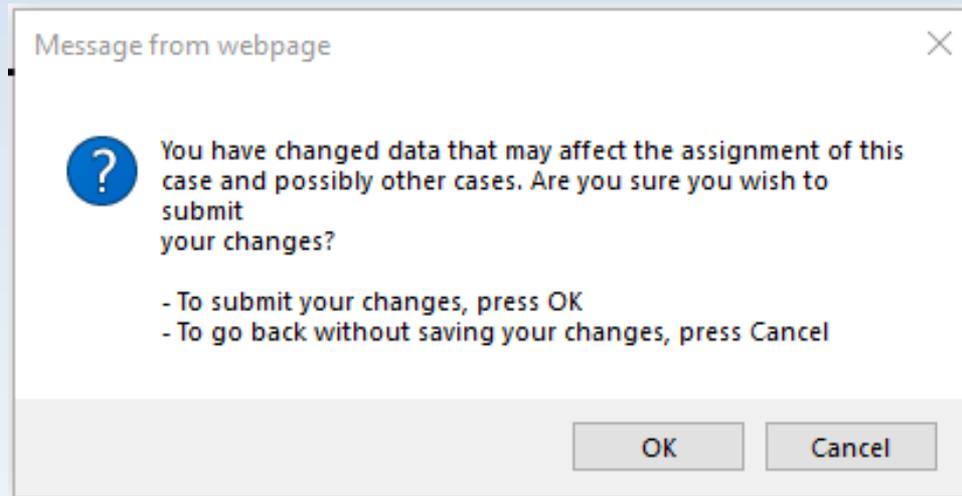
Adding a New Address
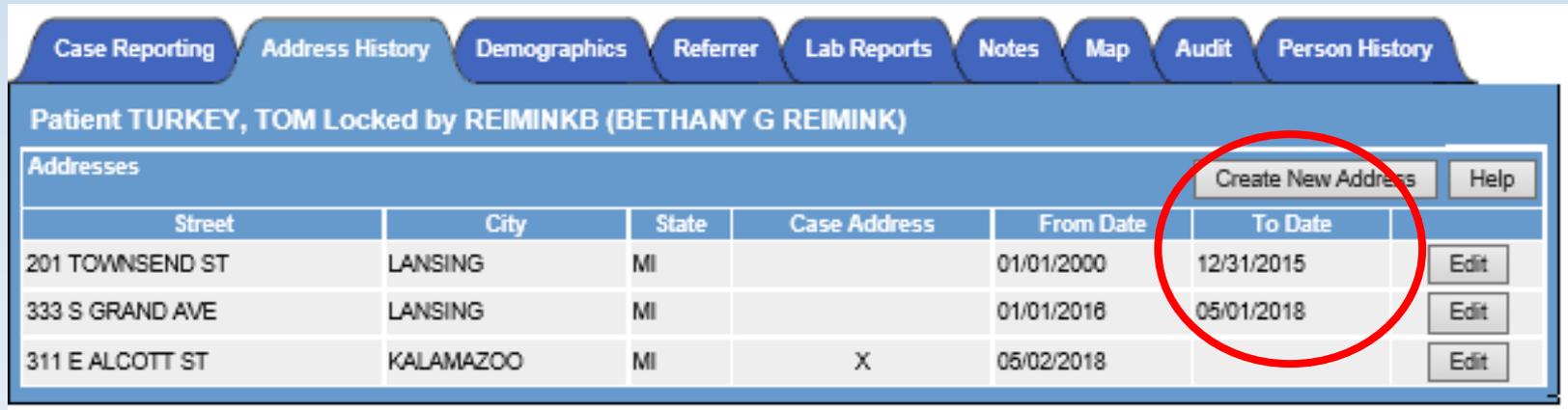
Before you add a new address, each existing address must have a "To Date"

1. Use the **EDIT** button to modify an existing address

2. Click the **CREATE NEW ADDRESS** button

Adding a New Address

3. The "Create New Address" window appears

4. Enter the new address

5. Click the **CREATE ADDRESS** button to save changes

If multiple addresses exist for the patient, use the "From" and "To" date fields to indicate dates when the addresses were valid

Demographics and Referrer Screens

Lab Reports

- Electronic Laboratory Reports (ELR) and/or manually entered Laboratory Reports can be viewed in the Lab Report tab

- Lab results are also available at the bottom of the Case Detail Form

- Laboratory results can be entered into MDSS three ways:

    1) Manually upon case entry, in the 3rd screen

    2) Manually using the "Lab Reports" tab after it is already in the system

    3) Electronically via *Electronic Laboratory Reports*

- MDHHS Bureau of Laboratories and many commercial and public health laboratories are using electronic reporting

Lab Reports Screen

- Click **CREATE NEW LAB REPORT** button to add a lab report

- Click **EDIT** to view or edit an existing lab report

- Laboratory reports are associated to the patient, not the case
  - Multiple cases can be associated with a single patient
  - Any changes or additions of laboratory reports will be associated with that patient

Lab Report - ELR Example

Case Reporting | **Address History** | **Demographics** | **Referrer** | **Lab Reports** | **Notes** | **Map** | **Audit** | **Person History**

Patient BUNNY, BUGS Locked by HENDERSONT1 (TIFFANY A HENDERSON)

Lab Order Information

Test Name* : SALMONELLA TYPING - HUMAN

Lab Report Date (mm/dd/yyyy) : 09/18/2007

Ordering Provider

First : JOANNE   Last : MORRIS

Affiliation : WILLIAM BEAUMONT HOSPITAL-TROY   Street : 44201 DEQUINDRE ROAD

City :	County :	State :	Zip :
TROY	Oakland	Michigan	48098

Phone number :   Ext :

Laboratory Information

Name* : MDCH REGIONAL LAB LANSING

Street : 3350 N. Martin Luther King, Jr. Blvd.   Geocode Source :

City :	County :	State :	Zip :
Lansing	Ingham	Michigan	48909

Phone number :
517-335-8471

Specimen Information

Specimen Collection Date (mm/dd/yyyy) : 09/08/2007

Specimen Source :

Specimen Site :

Specimen Site Text : FECES

Specimen ID : M07ST001012

Results

Reported Test Name : GENUS (BACT),SPECIES (BACT),SEROTYPE (BACT)

Coded Result :	Salmonella
Alternate Coded Result :	Salmonella,sp.,Newport
Numeric Result :	

Reported Test Name : RESULT PRE-COMMENT (BACT)

Coded Result :	CULTURE IDENTIFICATION :
Numeric Result :	

Reset | Cancel | Help

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Notes Screen

- The Notes tab works like nursing notes – saved notes cannot be edited so a new note must be added to update information

- Each note is time and date stamped with the User' ID

- Documents can be attached to a case using the "Attach New Document" function

Audit Screen

Date Changed	User Name	Jurisdiction	Role	Inv Status	Action Performed
08/08/2016 01:14:58 PM	MDSS TEST	Wayne County	LHJ	New	Add Case
08/08/2016 01:14:59 PM	MDSS TEST	Wayne County	LHJ	New	Lab Added With New Case
08/08/2016 01:16:46 PM	JOYCE LAI	Statewide	MDCH-BOE	New	Update Address
08/08/2016 01:18:05 PM	JOYCE LAI	Statewide	MDCH-BOE	New	Add Note
08/08/2016 01:22:16 PM	JOYCE LAI	Statewide	MDCH-BOE	New	Add Note

Patient CHEESEY, JOHN Locked by LAIJ (JOYCE LAI)

- Changes to cases are tracked in the audit trail

- The audit trail includes the user ID, jurisdiction, the investigation status of the case (at time of audit), and the action performed

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User Directory

- The MDSS User Directory provides each user's UserID, name, jurisdiction, email, and phone number

- It is available in the case investigation tab

- The directory can be used in conjunction with the audit trail to contact individuals who have edited a case

MDSS Searches

or

"Where did my case go?"

New Searches

- If you need to find a case or set of cases, you will need to create a new search

- The *New Search* function is under the 'Case Investigation' module

- There are two levels of search options:

  - Basic

  - Advanced
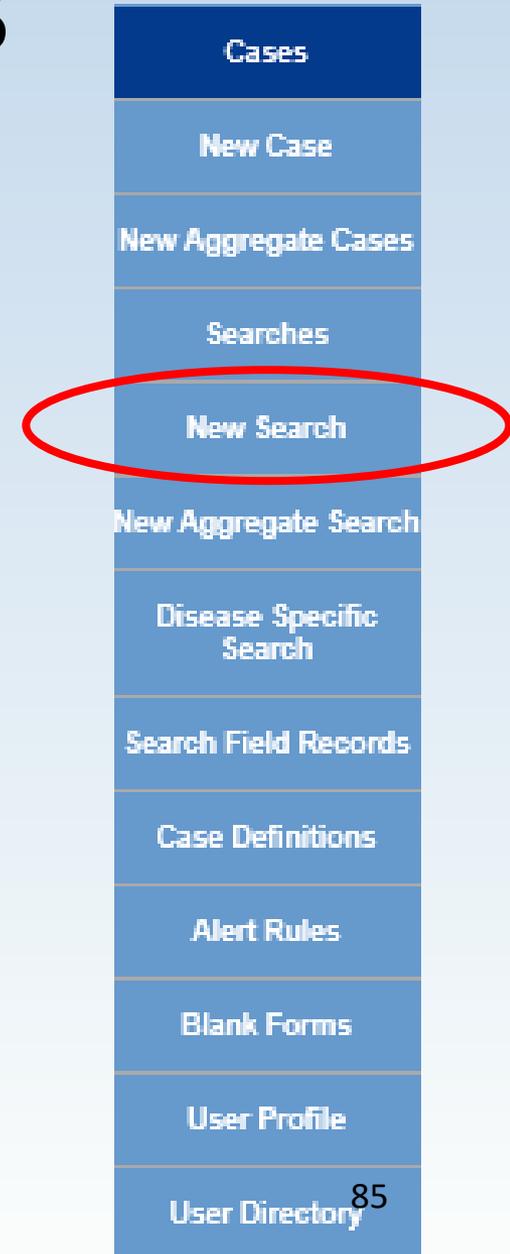
Cases

New Case

New Aggregate Cases

Searches

New Search

New Aggregate Search

Disease Specific Search

Search Field Records

Case Definitions

Alert Rules

Blank Forms

User Profile

User Directory

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Basic Search

Clicking **New Search**, opens the "Basic Search" screen

Search by:

Patient Name
Investigator Name

Disease or Disease Group

Dates

Geographic or Political Region

Advanced Search

Click on the 'Advanced' button at the bottom of the screen

Additional Options With Advanced Searches

Search by:

Demographics

Type of lab result

Physician or
Reporting Lab

MDOC ID

Geography
Coordinates

Advanced Search
Key Field Definitions

- **Age and Age Unit**: "Age" provides a numeric range search, while "Age Unit" works in conjunction with the "Age" field to determine the correct measurement for the age provided.

  - *Note: the patient's reported age is not converted to days/months/years during the comparison*

- **Zip**: Searches the "Investigation Address." The "Zip" search allows single, multiple, and range selection

- **City:** Searches the "Investigation Address." The "City" search allows single, multiple and wildcard (*) selection

- **Include Aggregate**: Determines whether the search will include only individual case reports or both individually reported cases and aggregate reports

Advanced Search

Key Field Definitions

- **Investigation Closure Date:** Searches the system generated value of "Investigation Closure Date." This search automatically limits the results to "closed" cases

- **Outcome, Hospitalized:** Compares the values entered in the appropriate fields ("Patient Died" or "Patient Hospitalized") on the Case Detail Form. Using these fields as search criteria will automatically limit the results to reportable conditions that request this information on the Case Detail Form

- **ELR**: Allows the user to select cases based on how lab results were added to the case. Default includes both ELR and non-ELR cases

- **Laboratory Name**: Compares against the values entered in the Lab Reports screen (basic case entry) *not* the information provided on the Case Detail Form

Geographic Map Search

- The Geographic Extent icon on the Advanced Search Screen allows the user to search for cases within a geographic boundary using the GIS Map to select the coordinates

- Click on the icon to select an area on the map

Geographic Criteria							
Geographic Extent :	x :		y :		to	x :	y :

Saving & Creating a Default Search

1. To save a search for future use, enter a name for the search

2. Select all criteria

3. Click on **Save & Finish**

4. Check the **Default Search** box prior to saving to make it your default search (what you see when you first open MDSS)

Notes on Searching

- LHJ users will only be able to view cases assigned to their program area

- **Wild Card** searches allow the user to perform searches when the complete term is not known

  - Use asterisks "*" to signify unknown strings

  - For example: L* gives all entries that start with L

- **Date** searches:

  - Enter only "From Date" to find all cases after and including that date

  - Enter only "To Date" to find all cases before and including that date

Notes on Searching

- Each **new variable** added operates like an "and"…the search becomes more restrictive (male and 2-6 years and Salmonella)

- Each selection **within a variable** operates like an "or"… that is less restrictive (Barry or Eaton)

- Try to limit the size of searches - extracting large datasets can be time consuming and may tax the system

- If large searches are needed, split them up into multiple small searches and merge them later or perform them only during off peak hours such as first thing in the morning or last thing at night

Tricks of the Trade

Selecting Multiple Sequential Options
1. Move the mouse cursor to first desired option on the list and click left mouse button
2. Move the mouse cursor to the last desired option of the list and hold down the **SHIFT key** while clicking the left mouse button

Selecting Multiple Non-Consecutive Options
1. Move the mouse cursor to first desired option on the list and click left mouse button
2. Move the mouse cursor to the next desired option on the list and hold down the **CTRL key** while clicking the left mouse button. Repeat until all desired options are selected

De-Selecting Options
1. Move the mouse cursor to option you want to de-select and hold down the **CTRL key** while clicking the left mouse button

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Executing a Saved Search

There are two ways to execute a saved search:

1) From case listings

2) From saved searches

Executing a Temporary Search

- When creating a New Search, you can click the **Search** button to execute the search immediately

- The search criteria will NOT be saved

Editing and Deleting Searches

The **Searches** function provides access to your saved searches

- Searches can be executed, edited, or deleted

- You cannot delete your default search, but **EDIT** allows you to select a new default search

- The **EDIT** Search screen looks just like the New Search screen but pre-selects that searches existing search criteria

Disease Specific Searches and Exports

Disease Specific Search

Cases
New Case
New Aggregate Cases
Searches
New Search
New Aggregate Search
Disease Specific Search
Search Field Records
Case Definitions
Alert Rules
Blank Forms
User Profile

- The **Search** and **New Search** functions limit the selectable criteria to **basic case information** - information that is common to all diseases such as the patient last name

- The **Disease Specific Search** expands the selectable criteria to include all of the data collected for a particular reportable condition from the Case Detail Form

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Performing a Disease Specific Search

- Click **Disease Specific Search**

- Select the reportable condition. **Note: you may only search one condition at a time**

- Click the **SELECT** button and the Disease Specific Search form will open

NOTE: *Select the 'Include Historic Forms' checkbox to include case detail forms that are no longer used in the drop-down menu of conditions*

Disease Specific Search

- The **Disease Specific Search** forms look like the case detail form

- The form has been modified to accommodate ranges and wildcards

Disease Specific Search

Possible Search Criteria:

Person
Place
Time
Symptoms
Labs
Treatment
Risk Factors
Vaccine History

Disease Specific Search Criteria

To match all of the data stored for the particular field, leave the form field empty

To match all data that has the exact value of the particular word or phrase, enter the word or phrase

To match all data that starts with a particular word or phrase, enter the word or phrase followed immediately by the wildcard (*)

Person Providing Referral

First

Last
Smith-Jones

Phone
###-###-####

Primary Physician

First
La*

Last

Phone
###-###-####

Street Address

City

County

St

Date and Numeric Search Criteria

Selecting a range of values

Enter the beginning range in the space preceding the 'to' label
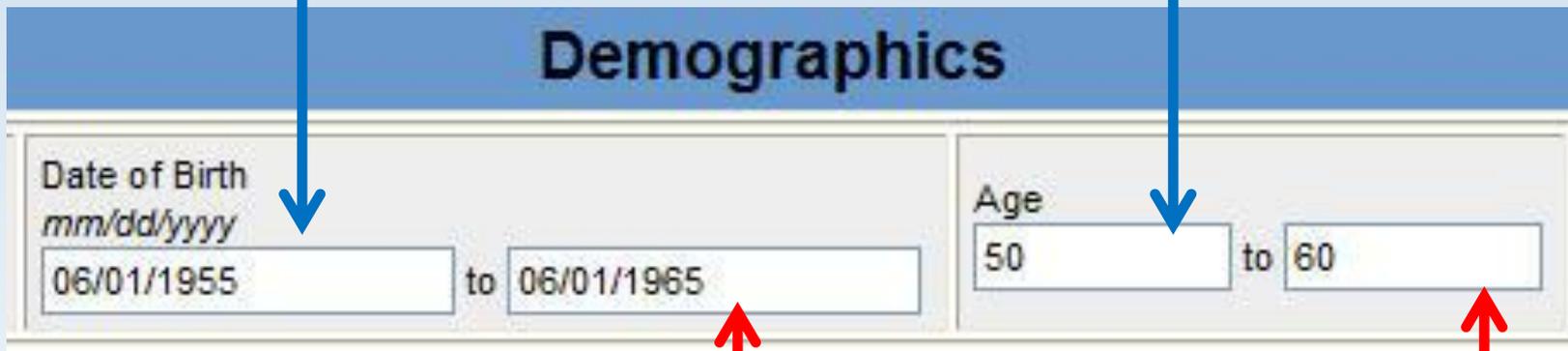
Demographics

Date of Birth
mm/dd/yyyy
06/01/1955   to   06/01/1965

Age
50   to   60

Enter the ending range in the space following the 'to' label

Checkbox Search Criteria

If one or two values are checked, only cases with those selected values will be returned

Case Status
☑ Confirmed ☐ Not a Case ☑ Probable ☑ Suspect ☐ Unknown

Part of an outbreak?	Outbreak Name	Case Updated Date mm/dd/yyyy
		to

If none or all of the values are checked, cases with <u>any</u> value for that field will be returned

In this example, all Confirmed, Probable, or Suspect cases will be returned, regardless of whether a case was part of an outbreak

Drop-Down Box Search Criteria

If none or all of the values are selected from the drop-down option list, cases with any value for that field will be returned
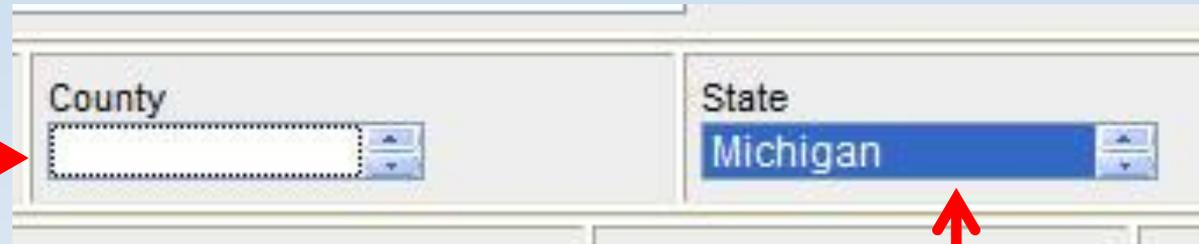
County

State

Michigan

If one or more values are selected, only cases with those selected values will be returned

NOTE: The blue background indicates that a drop-down option is available or has been selected

Table Search Criteria

- Search criteria fields can be represented in a table format as a string, phone number, date, or as drop-down boxes

- Drop-down box options are listed in the column

- To select a drop-down option within a table, click the option you wish to select

Animal Contacts		
Type of Animal	Contact?	Specify
( )	(Y=Yes N=No UNK=Unknown)	( )
Reptiles (snake, turtle, lizard, etc.)	Yes	
Livestock (cattle, sheep, etc.)		

Table Search Limitations

**Table searches are limited to searching
for the data as it was entered on a given row**

- If you are looking for cases where the patient was in contact with "John Doe" you must supply the name "John Doe" to the exact row within the contact table where it was entered

- Specifying "John Doe" as the search criteria on the first row of the table will only return cases where "John Doe" was listed as the first contact during case entry, it will not return cases where "John Doe" was listed as the second, third, or fourth contact. Similarly entering "John Doe" on each line will only return cases where "John Doe" was entered on each line

- **For efficiency, do not place selection criteria in these fields; you can export and view the data in a spreadsheet**

Disease Specific Search Results

- When finished entering search criteria, click **SUBMIT QUERY** at the top of the page
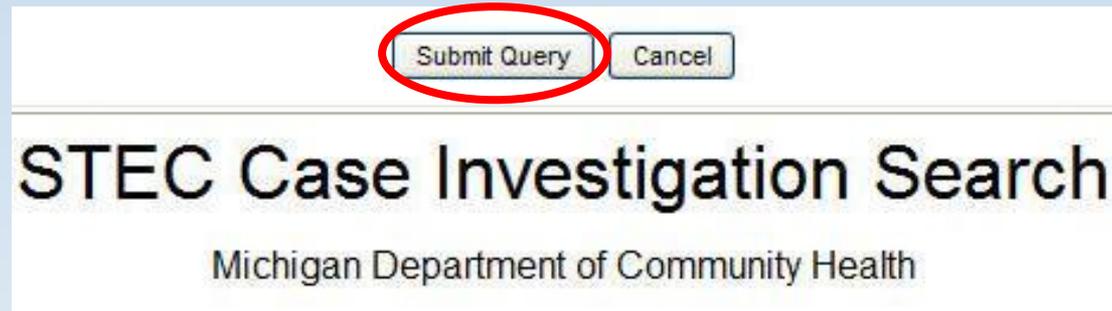
- The search executes and launches the "Case Listings" to display the search results

Disease Specific Export

- The Disease Specific Export expands the subset of exportable data to include all of the data collected on the associated Disease Specific Form

- The Disease Specific Export is accessible from the "Case Listings" screen after the search results are displayed from a Disease Specific Search

Performing a Disease Specific Export

1. Following a **Disease Specific Search**, from the "Case Listings" screen, click the **EXPORT** button

2. The Disease Specific Export form appears

Selecting Fields to Export

3.   Either click the **SELECT ALL** button located at the top of the form OR click the individual checkboxes next to the fields desired - only the selected fields will be exported

Disease Specific Export

4.   You may supply alternate export column titles by overwriting the column title that appears next to the *"export as"* label within each field

5.   Click the **EXPORT** button

Note: On certain computer systems, the user must click and hold down the Ctrl button until the export is COMPLETE

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Exporting the File

6. A pop-up will appear asking if you want to export the search immediately or let it run overnight (it is preferred to run large data exports overnight so that they do not tax the system). Click "Continue" or "Postpone"

Disease Specific Export

This export can be run now or postponed as part of a batch to be done overnight. If batched, an email will be sent when the export is ready for download. Would you like to Continue the export now or Postpone for later?

Postpone   Continue
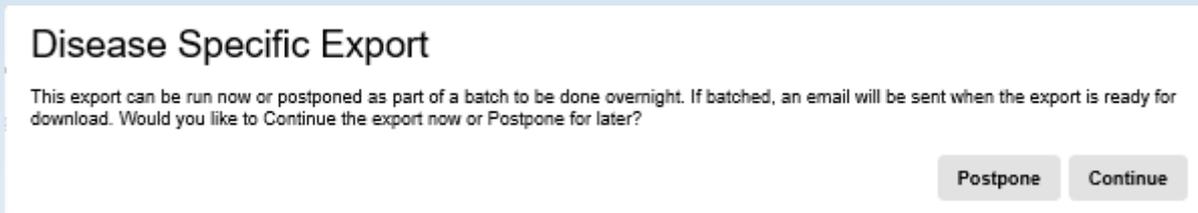
7. When you click **Continue** you will receive another pop-up message. Click **OPEN** or **SAVE** to proceed
If your system requires the Ctrl Button method continue to hold it down here

File Download

Some files can harm your computer. If the file information below looks suspicious, or you do not fully trust the source, do not open or save this file.

File name: Temporary.csv
File type: Microsoft Office Excel Comma Separated Values Fil
From: mdss-devel.stchome.com

Would you like to open the file or save it to your computer?

Open   Save   Cancel   More Info

☑ Always ask before opening this type of file

Do you want to open or save **STEC Export.csv** from **milogintpqa.michigan.gov**?   Open   Save

Viewing the Disease Specific Export File

This is an example of an export file
as viewed with Microsoft Excel®

- A data dictionary is available to help interpret export results: www.michigan.gov/mdss, Click on MDSS Guides and References

I'm having a problem . . .

Who can help me?

Support and Help Contacts

- User Guides, FAQs, and Tip Sheets are available at www.mi.gov/mdss

- For browser, adobe, or connectivity issues, contact your local IT support

- Contact your local MDSS administrator for general questions

- Regional Epidemiologists are always available!

Regional Epidemiologists

Region	Name	Phone/Cell	E-Mail	Counties
1	Meghan Weinberg	517.887.4615 (Ingham) 517.552.6878 (Livingston)	WeinbergM1@michigan.gov	Clinton, Eaton, Gratiot, Hillsdale, Ingham, Jackson, Lenawee, Livingston, Shiawassee
2N	Nicole Parker-Strobe	248.452.9936 517.930.6906 (Cell)	ParkerStrobeN@michigan.gov	Macomb, Oakland, St. Clair
2S	Joyce Lai	734.727.7204 517.930.6958 (Cell)	LaiJ@michigan.gov	Detroit City, Monroe, Washtenaw, Wayne
3	vacant	989.832.6690 517.930.6910 (Cell)		Alcona, Arenac, Bay, Genesee, Gladwin, Huron, Iosco, Lapeer, Midland, Ogemaw, Saginaw, Sanilac, Tuscola
5	Bethany Reimink	269.373.5293 517.719.0407 (Cell)	ReiminkB@michigan.gov	Allegan, Barry, Berrien, Branch, Calhoun, Cass, Kalamazoo, St. Joseph, Van Buren
6	Fatema Mamou	616.632.7245 517.204.6086 (Cell)	MamouF@michigan.gov	Clare, Ionia, Isabella, Kent, Lake Mason, Mecosta, Montcalm, Muskegon, Newaygo, Oceana, Osceola, Ottawa
7	Roger Racine	231.995.6106 517.930.6914 (Cell)	RacineR@michigan.gov	Alpena, Antrim, Benzie, Charlevoix, Cheboygan, Crawford, Emmet, Grand Traverse, Kalkaska, Leelanau, Manistee, Missaukee, Montmorency, Oscoda, Otsego, Presque Isle, Roscommon, Wexford
8	Scott Schreiber	906.643.1100x108 517.930.6908 (Cell)	SchreiberS@michigan.gov	Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac,

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- **Scientific Technologies Corporation**
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  - Matthew Boulton, Bill Colville, Frances Downes, John Dyke, Jim Lee, Pamela Masur, Whitney Mauer, Linda Myers, John Petrasky, Girish Salpekar, Bill Schneider, Melinda Wilkins

Questions
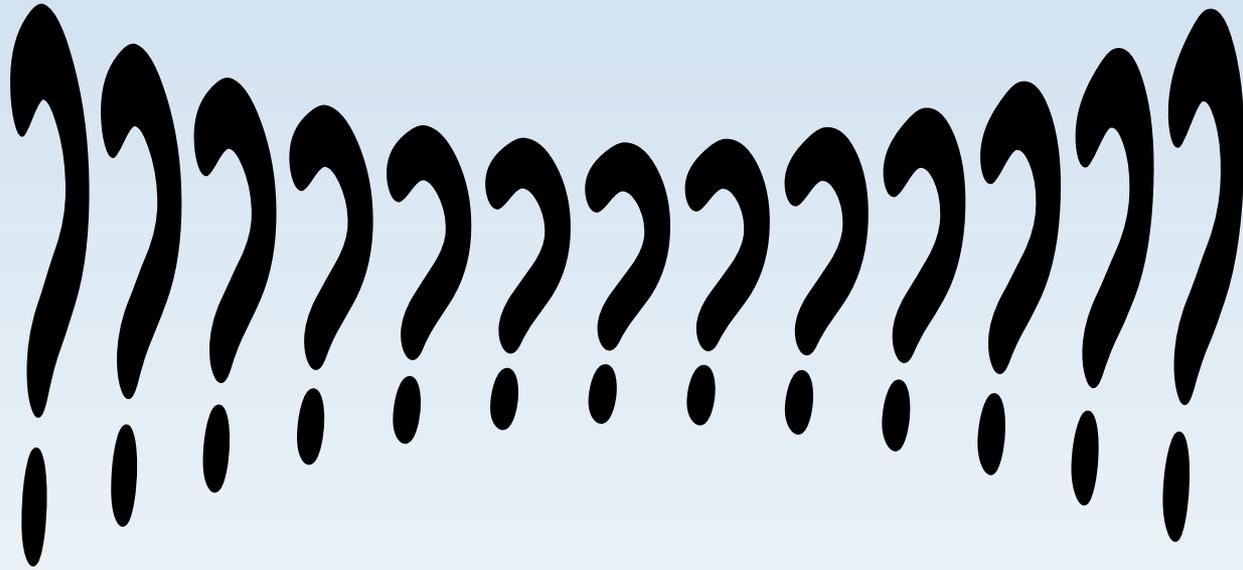
Running Reports

or
"What is happening around the state?"

Reports

There are several reports formats available within the MDSS Reports module:

- Report 1 - Line Listing
- Report 2 - Disease by Demographics
- Report 3 - Diseases YTD
- Report 4 - Diseases – 5 Year History
- Report 5 - Diseases YTD by Geography
- Report 6 - Disease History by Geography
- Report 7 - Diseases by Geography
- Report 8 - Epi Curve
- Aggregate Case Report
- Audit Report
- GIS Map of Diseases by Geography
- TB Reports

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MDSS Reports Quick Reference

In the examples shown below, settings have been chosen arbitrarily and numerous options are available for each report. Geographic breakdown includes state, region, local health jurisdiction, county, or city. Time interval includes year, month, and week. Reports #2-7 can be run for either count or rate per 100,000.
Note: Reports 3, 4, 5, 6, and Aggregate automatically use onset date if available, otherwise referral date.

Report 1: Line Listing

Invest. ID	Age	Sex	Condition	Status	Referral
230144 9136	32 Y	M	Amebiasis	Confirmed, Active	05/13/2010
230119 9035	48 Y	F	Campylobacter	Confirmed, Active	05/13/2010
228630 6585	79 Y	M	Campylobacter	Probable, New	05/05/2010

Line list of individual cases from selected disease(s) or disease group. You choose which fields/columns to display.

Report 2: Diseases by Demographics

Disease Group	Disease	<1 yr	1-4	5-9	10-14
Other	Brucellosis	0	0	0	0
	Cholera	0	0	0	0
	Coccidioidomycosis	0	0	0	0
	Creutzfeldt-Jakob Disease	0	0	0	0

Counts/rate for a selected time period stratified by sex, age, race, or ethnicity. All disease/disease groups are displayed.

Report 3: Diseases YTD*

Disease Group	Disease	Jan	Feb	Mar	Apr	May
Other	Creutzfeldt-Jakob Disease	1	0	1	0	1
	Cryptococcosis	2	4	5	1	3
	Cyclosporiasis	0	1	0	0	0

Year-to-date aggregate counts/rate for all disease/disease groups. Select geography and time interval (week or month).

Report 4: Diseases - 5 Year History*

Disease Group	Disease	2006	2007	2008	2009	2010
Other	Creutzfeldt-Jakob Disease	12	16	18	15	3
	Cryptococcosis	57	53	70	76	15
	Cyclosporiasis	0	1	2	3	1

5 year history of counts/rate for all disease/disease groups. Select geography and time interval.

Report 5: Diseases YTD by Geography*

Region	Jan	Feb	March	April	May	Total
1	364	323	440	364	183	1674
2 North	717	614	793	703	487	3314
2 South	2400	2282	2676	2189	1040	10587

Statewide year-to-date counts/rates for a selected disease or disease group. Select geographic breakdown and time interval.

Report 6: Disease History by Geography*

Region	2006	2007	2008	2009
1	4870	4848	4668	4394
2 North	6707	7244	7552	8463
2 South	24138	23523	27265	29531
3	7117	6862	6647	6633

Statewide 5 year history for a selected disease or disease group. Select geographic breakdown and time interval.

Report 7: Diseases by Geography

Disease Group	Disease	1	2 North	2 South	3
Other	Creutzfeldt-Jakob Disease				
	Cryptococcosis	0	0	0	0
	Cyclosporiasis	0	0	1	0
		0	0	0	0

Counts/rate for a selected time period for all disease/disease groups. Select overall geographic area and geographic breakdown.

Report 8: Epi Curve

Epi curve of case count over time for a selected disease or disease group. Select time period, time interval, and geographic area.

Aggregate Case Report*

Regions	05-2009	06-2009	07-2009	08-2009	09-2009
1	1166	995	33	16	2425
2 North	2095	3176	30	5	2241
2 South	2575	1682	58	8	3420

Statewide counts for aggregate conditions. Select time period, geographic breakdown, condition, and reporting source.

GIS Map of Diseases

Map of count or rate for selected disease or disease group. Select time period and geographic breakdown.

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HCP Report Access

- The HCP Role has access to all MDSS Reports with one restriction:

    - Report 1 – Line Listing - presents patient-level data. Therefore, this report has the same security as the "Case Listings" (i.e., patient level data reports can only be viewed and exported by users with authorized roles to view that data in the system)

General Characteristics of Reports

Each report provides a report parameter screen –

the selected parameters are used to identify which cases are included in the report and to determine the format of the report

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Selecting the Report Parameters

Although each report is distinct, many of the report parameters are common

Common Parameters:

- Aggregate vs. Individual Cases

- Counts vs. Rates

- Desired Time Period

- Which dates to use to select cases

Selecting the Report Parameters

Common parameters (continued):

- What status cases to choose from

- Where should the cases be from

Beware of Report Quirks . . .

- Radio buttons
  - Unlike some other web applications, the MDSS does not automatically highlight the radio button when a selection is made within that box

  - *You must make sure that the appropriate radio buttons are correctly highlighted*
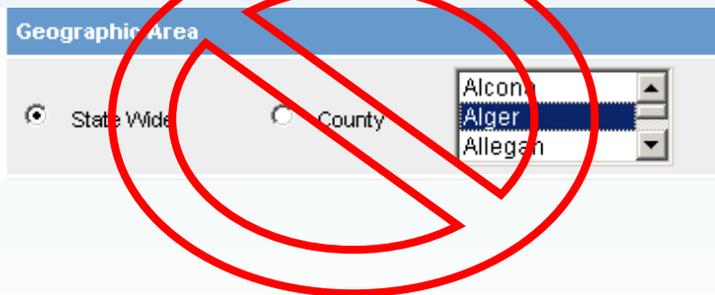
Aggregate vs. Individually Reported Cases

Aggregate / Individual Cases
The default is to include both aggregate and individual cases

☐ Aggregate cases only   ☐ Individual cases only

- Individually reported cases are name-based cases

- Aggregate cases are generally based on weekly counts from schools or other congregate settings and may include flu-like disease or other illnesses

- Reports allow user to select only aggregate cases or only individually reported cases

- By default, both individual and aggregate are included

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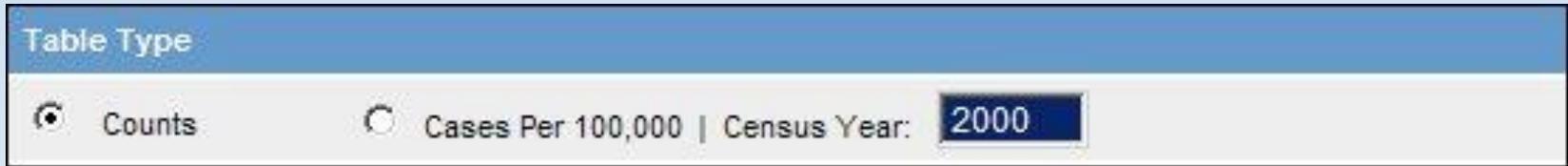
Counts vs Rates

The user can select the type of information contained in the report:

- **Count** - the report will contain disease counts

- **Rate** - the report will contain rates calculated from disease counts and population data as of the **Census Year** selected

    - The rates display as cases per 100,000 population

Time Period

- **Month** – includes only cases within the month selected

- **Year** – includes only cases within the year provided

- **Five-year period ending Year** – includes cases within the specified year and preceding four years (based on the provided ending date)

- **From Date / To Date** – includes cases within the date range provided

- **Week** – includes cases within the "MMWR Week" provided

- **Onset vs. Referral** – allows the user to make a report based on disease onset or referral of the case into the LHD

Beware of Report Quirks . . . (2)

Dates

– **For date ranges using the Time Period:**

- MDSS selects cases with Onset Dates that fall within that range. If Onset Date is missing, the Referral Date will be used *(or the user can dictate this in some of the reports)*

– **For reports by Month or MMWR week:**

- Month is determined by Onset Date (or Referral Date if Onset Date is unavailable).

- MMWR Week is always determined by Referral Date

There can be situations where numbers can change from report to report, based on differences in the Onset Date and Referral Date

Case and Investigation Status

- **Case Status**: defines if a case is confirmed, probable, suspect or not a case, according to the appropriate case definition

- **Investigation Status:** identifies what stage of the investigation the case is in, i.e., active, new or complete, review, etc.

- The user can search cases in any combination of case status or investigation status

Geographic Area

- Only one geographic boundary at a time can be selected

- Cases will be mapped based on the "Investigation Address"

- Only cases that fall within the selected geographic boundary will be included on the report

Geographic Area

The geographic area options limit the report to the geographic area selected and may include:

- Statewide

- Public Health Preparedness Regions

- Local Health Jurisdictions

- County

- City/Township*

- Zip

- School District*

*Cases entered into MDSS that are Geocoded (*the "Geocode Source" is "CGI"*) can be reported by "City/Township" and "School District." Historic data (originally entered into LHDSURV) has not been geocoded

Disease or Disease Group

- Only one of radio button can be selected at a time (you can run the report by a reportable condition **OR** by disease group)

- Only the cases of the selected reportable condition or conditions will be included on the report

- Multiple conditions or disease groups can be selected (by holding the Ctrl key), except for Report 8 – Epi Curve

- Making **no** selection indicates **ALL** conditions or disease groups will be included in the report

Running a Report
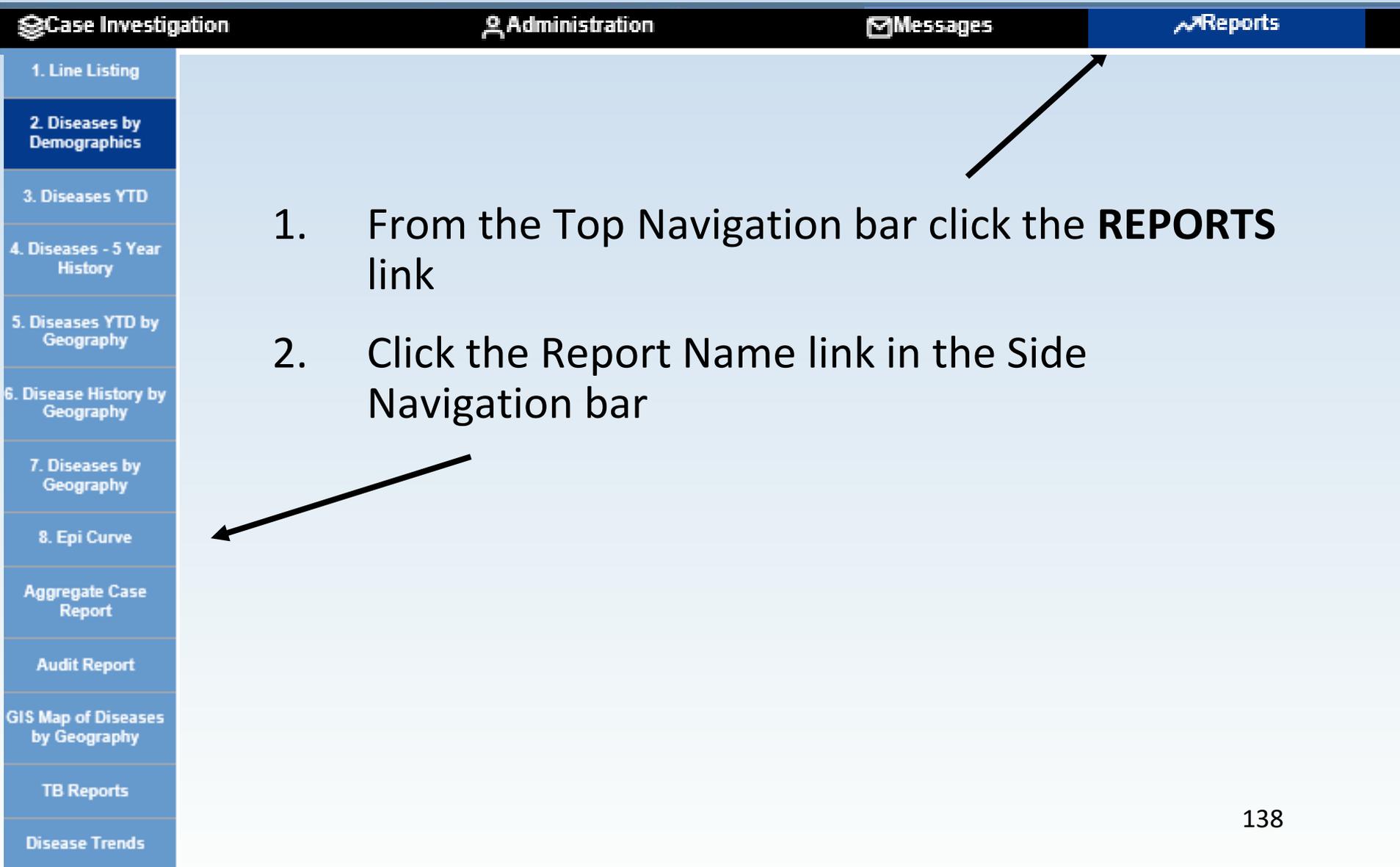
| Case Investigation | Administration | Messages | Reports |

1. Line Listing

2. Diseases by Demographics

3. Diseases YTD

4. Diseases - 5 Year History

5. Diseases YTD by Geography

6. Disease History by Geography

7. Diseases by Geography

8. Epi Curve

Aggregate Case Report

Audit Report

GIS Map of Diseases by Geography

TB Reports

Disease Trends

1. From the Top Navigation bar click the **REPORTS** link

2. Click the Report Name link in the Side Navigation bar

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Running a Report

3. The Report Parameters screen appears

4. Select the parameters needed for your search

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Selecting a Report Format

- Each report (except GIS Map the Epi Curve reports) can be presented in three different formats:

  - HTML REPORT – displays the report as a standard web document

  - PDF REPORT – displays the report as a PDF file in Adobe Acrobat

  - CSV REPORT – creates a Comma Separated Value file. The display of this format depends on the configuration of your PC, but usually (and often best) in Excel or other spreadsheet applications

  5. Select the report format by clicking the appropriate button:

View HTML Report	View PDF Report	View CSV Report
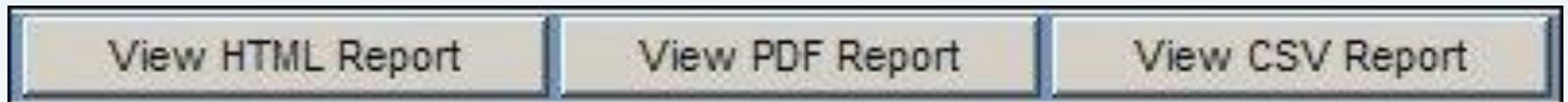
Running a Report

6. The following dialog box will appear asking you to confirm your choice of the report output file:
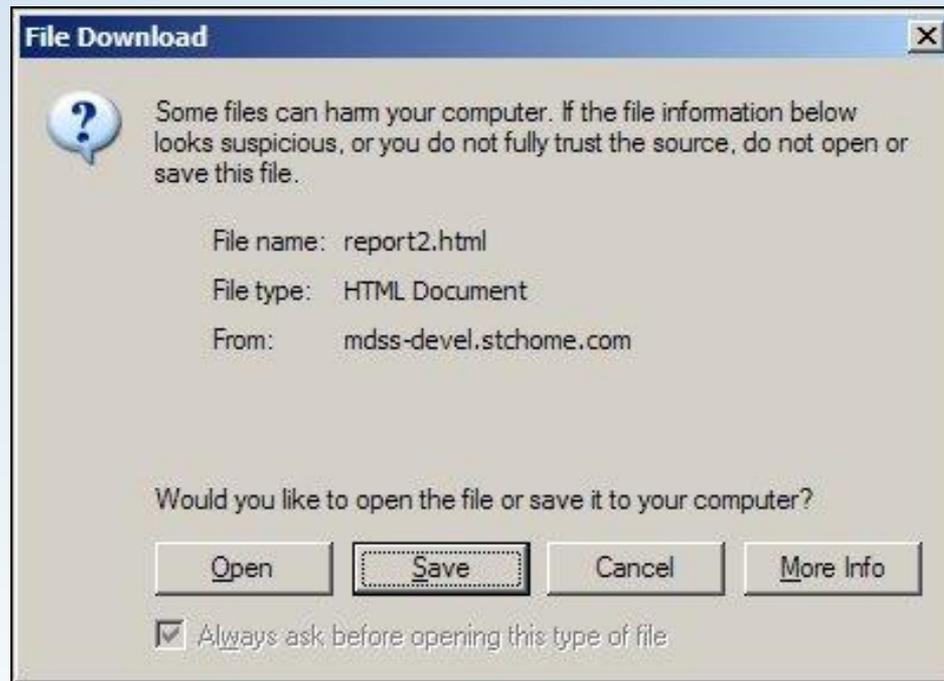
Viewing Report Output

7. Click the OPEN button

8. A new browser window will open to display the report output

Report 1: Line list of Disease Cases for a Given Timeframe and Geographic Location
Start Date: Mon Jun 7, 2004
End Date: Tue Jun 8, 2004
Reportable Conditions: All conditions
Geographic Area: The State of Michigan
There are 11 cases listed in this report.

ID	Name	Address	Age	DOB	Race	Ethnicity	Sex	Condition	Status
341934	FLINTSTONE, FREDICK		67 Y		Caucasian	Not Hispanic or Latino	M	Amebiasis	Confirmed
343725	BOOP, BETTY		59 Y	03/15/1945	Caucasian	Hispanic or Latino	F	Botulism - Foodborne	Confirmed
340554	FILBERT, JEFFREY		?		Asian	Not Hispanic or Latino	M	Campylobacter	Suspect
342530	WEYERHAEUSER, GRAYLING		68 Y	06/24/1935	Hawaiian or Pacific Islander	Hispanic or Latino	M	Animal Bite	Suspect
343127	NEWMAN, ALFRED		?		American Indian or Alaska Native	Unknown	U	Blastomycosis	Probable
341372	FILBERT, JEFFREY		?		Asian	Not Hispanic or Latino	M	Brucellosis	Probable
344324	MAY, DAISY		?		Other	Unknown	F	Brucellosis	Probable
344934	MARTIN, RICKY		24		Caucasian	Hispanic	M	Cholera	Suspect

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Saving a Report

OR

- Click the **SAVE** button in the "File Download" box

- The "Save As" Dialog box opens

- Supply a file name and select a location on your computer to store the report
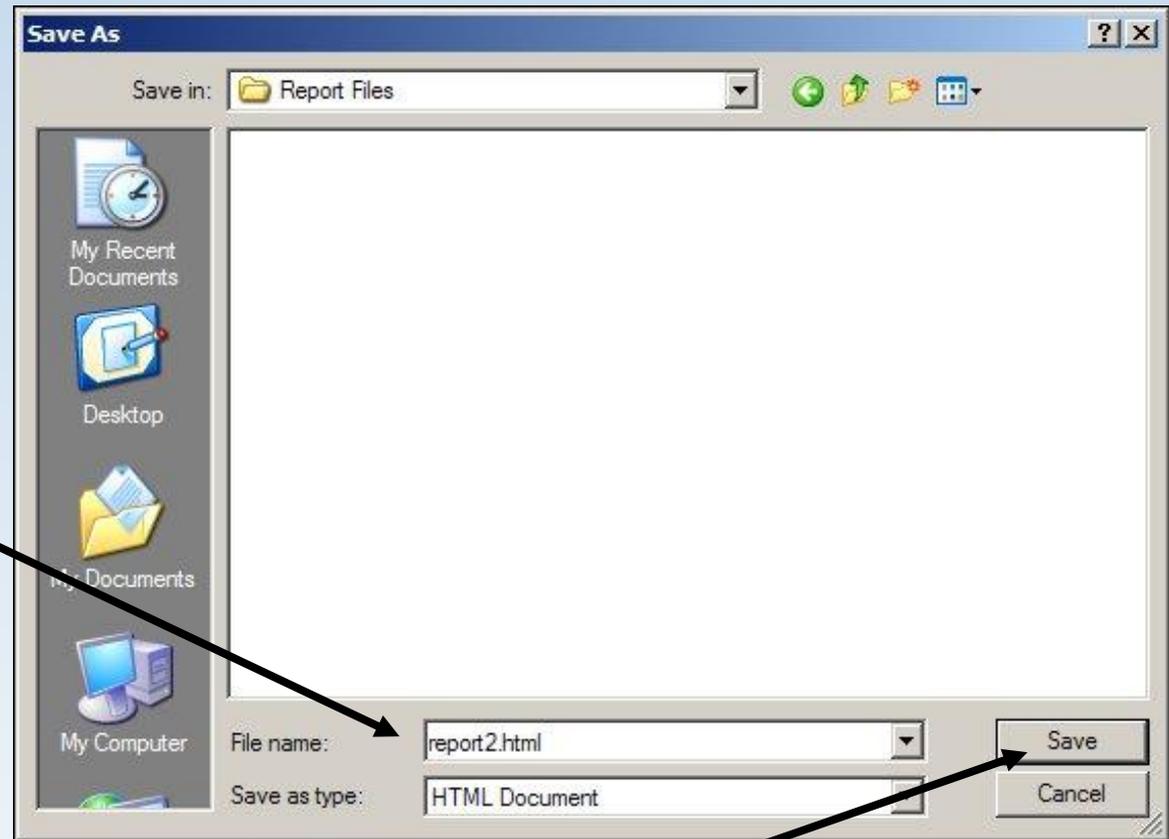
10. Click the **SAVE** button. Your report output file will now reside on your computer in the location that you specified

Report 1 – Line Listing

Line List of Disease Cases for A Given Timeframe and Geographic Location

- This is this only report limited based on geography because it returns identified case information. Users will be limited to cases from their primary jurisdiction

- This report creates a patient-level list of all cases that fall within the specified time period, geographic area and disease selection

- **Display Columns:** select the fields to be included in the report

  - To include a field on your report, activate that field's checkbox

  - To exclude the field, remove the checkmark from the checkbox by clicking on the checkmark associated with the field you wish to exclude

Report 2 – Diseases by Demographics

Table of Diseases by Demographics for a Given Time Period

- Creates a table of counts or rates for all diseases that fall within the specified time period and geographic area

- **Demographic Variable 1 & 2-** select demographic variable(s) for the report:

  – **Sex** – provides a breakdown by Male, Female, and Unknown

  – **Age Group** – provides an incremental age breakdown (e.g., less than 1 year, one through four years, five through nine years, etc.)

  – **Race** – provides a breakdown by race (e.g., Caucasian, Asian, African American, etc.)

  – **Ethnicity** – provides a breakdown by ethnic groups of Hispanic or Latino, Non Hispanic or Latino, and Unknown

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Report 3 - Diseases YTD

YTD Table of Diseases for a Given Year

- Creates a table of year-to-date counts or rates for <u>all</u> diseases that fall within the selected year and geographic area

- **Display Interval:** select **By Month** or **By Week** (only one may be selected)

  – **By Month:** includes data from January through December of the year selected

  – **By Week:** includes data from the first to the last MMWR Publication Week of the year selected

Report 4 - Diseases – 5 Year History

Table of Diseases Comparing a selected 5 Year Period

- Creates a comparison table of counts or rates for all diseases reported for the selected year and preceding four years within the geographic area.
- **Display Interval:** select one for a breakdown of counts or rates as follows:
  - **Year:** presented with a column for each year
  - **Month:** presented in columns by month for each year, beginning with the 'From Month' and ending with the 'Through Month'
  - **Week:** presented in columns by week for each year, beginning with the 'From Week' and ending with the 'Through Week'

Display Interval			
⦿ By Year			
○ By Month	From month: January ▼	through month: January ▼	
○ By Week	From week: [ ]	through week: [ ]	147

Report 5 - Diseases YTD by Geography

Year to Date Disease by Geographic Area and Timeframe for a Given Year

- Creates a table of counts or rates for all cases that fall within the selected time period and disease information

- Data are not presented in the report for a given geographic level if the count or rate is equal to zero

- **Display Interval:** select By Month or By Week

  - **By Month:** presented in columns from January of the year selected through the selected ending month (**Through Month**)

  - **By Week:** presented in columns from the first MMWR week of the year selected through the ending MMWR week (**Through Week**)

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Report 5 – Diseases YTD by Geography

- **Geographic Breakdown:** Select one geographic location for the report
  - **Region** – data presented in columns by Public Health Preparedness Regions
  - **County** – data presented in columns by counties
  - **City** – data presented in columns by cities
  - **Zip** – data presented in columns by zip codes

Report 6 - Disease History by Geography

Displays selected Diseases or Disease Groups by Geographic Area and Timeframe

- Creates a comparison table of counts or rates for all cases that fall within the specified year and preceding four years

- Data are not presented in the report for a given geographic level if the count or rate is equal to zero

- **Display Interval:** select one for a breakdown of counts or rates as follows:
  - **Year:** presented with a column for each year
  - **Month:** presented in columns by month for each year, beginning with the 'From Month' and ending with the 'Through Month'
  - **Week:** presented in columns by week for each year, beginning with the 'From Week' and ending with the 'Through Week'

Display Interval				
○ By Year				
● By Month	From month:	January ▾	through month:	December ▾
○ By Week	From week:	01	through week:	49 150

Report 6 – Disease History by Geography

- **Geographic Breakdown:** Select one geographic location for the report

  - **Region** – data presented in columns by Public Health Preparedness Regions

  - **County** – data presented in columns by counties

  - **City** – data presented in columns by cities

  - **Zip** – data presented in columns by zip codes

Report 7 - Diseases by Geography

Table of Diseases by Geographic location

- Creates a table of counts or rates for all diseases that fall within the selected time period and geographic area

- **Geographic Breakdown:** Select one geographic location for the report

  - **Statewide:** data presented as totals for the State

  - **Region:** data presented in columns by Public Health Preparedness Regions

  - **Local Health Jurisdiction:** data presented in columns by local health jurisdictions

  - **County:** data presented in columns by counties

  - **City:** data presented in columns by cities

  - **Zip:** data presented in columns by zip codes

  - **School District:** data presented in columns by school districts

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Report 8 - Epi Curve

- Creates a graph showing the number of cases over time for a selected reportable condition or disease group and time period

- The PDF format provides both a graph and data while the CSV format only provides data and the user can prepare the graph

- **Time Interval:** Select one for a breakdown of cases within the selected timeframe

  – **By Month:** cases presented by each month

  – **By MMWR Week:** cases presented by each MMWR week

  – **By Day:** cases presented by each day

- **Disease or Disease Group:** Only **one** reportable condition **OR** disease group may be selected at one time

Aggregate Case Reports

- Returns aggregate report totals for selected time period geographic location

- Select the aggregate statistic for the report (cases, deaths, isolations, hospitalizations)

- Select the condition

Audit Report

- Generates information on audited activities for users including:
  - Audit Date
  - Case ID
  - Patient Name & DOB
  - Audit Action

- The report can be run by LHJ Administrators for their jurisdiction

- HCP and Lab users can run the report for their facilities

- The reports shows all actions performed in the time period specified

GIS Map of Diseases by Geography

- Provides statewide maps of individual cases or diseases groups based on user selected time periods, case and investigation status and geographic breakdowns.

2008 Flu-Like Disease, Counts vs. Rates

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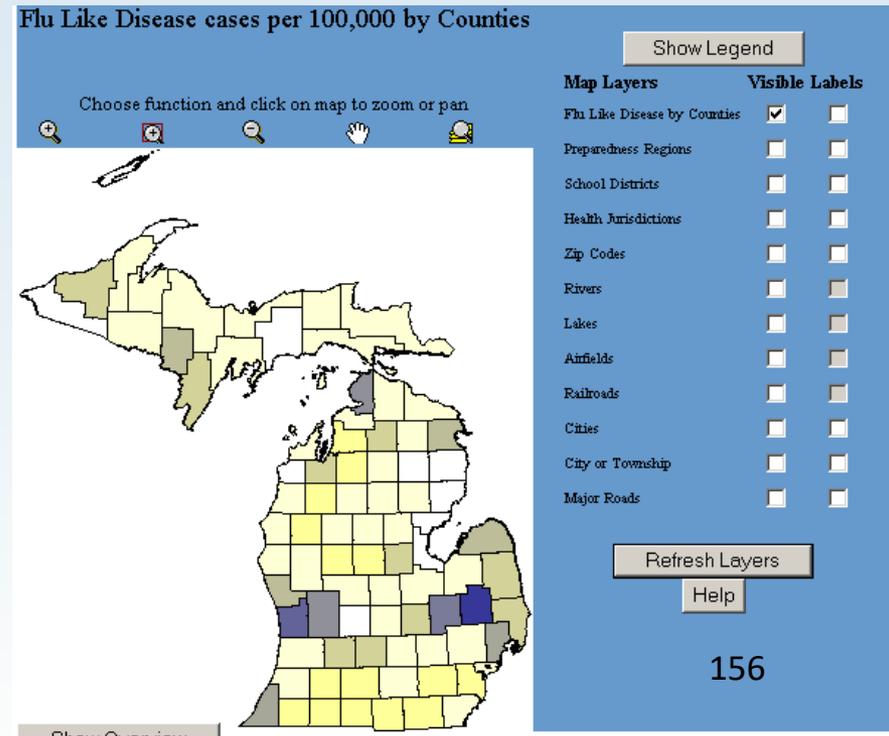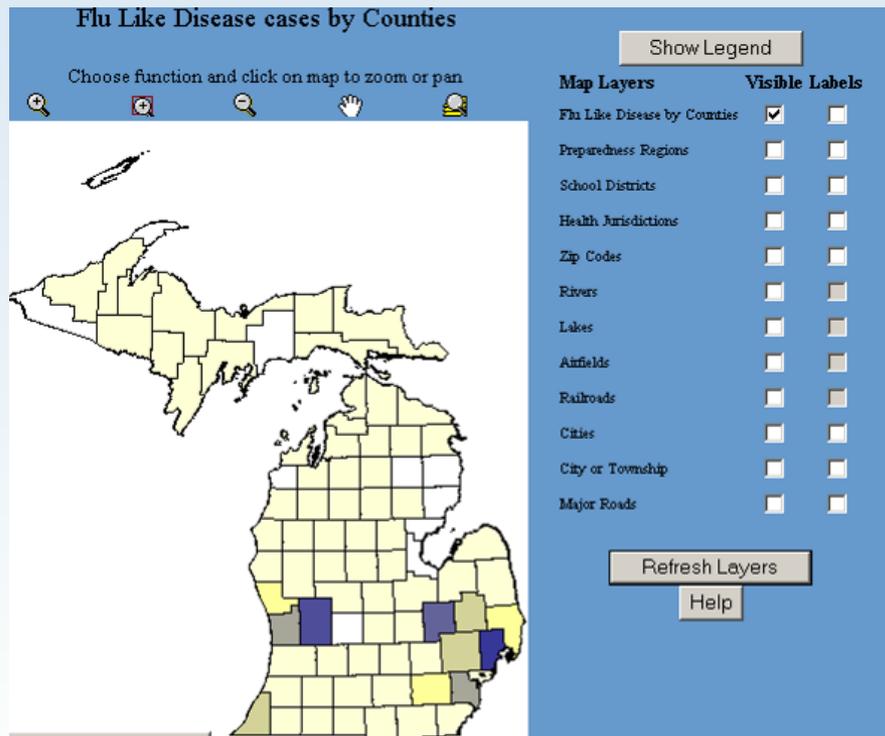
TB Reports

- The Tuberculosis Reports creates the 'Completion of Therapy' and 'Sputum Culture Conversion' reports for the TB cases that fall within the selected time frame and geographical area

- Statewide TB results are also displayed