



MDSS Release Notes Version 3.3 (Nov. 2010)

Release Content Summary:

The Surveillance and Infectious Disease Epidemiology Section of the Michigan Department of Community Health is pleased to introduce MDSS Version 3.3. In this version, several changes have been made that will improve the quality of the data collected during case investigations. Revisions were made based on input from MDCH disease specific Epidemiologists in conjunction with local health department Epidemiology and Lab Capacity workgroup participants.

Two new investigation status categories (Review and Completed Follow-Up) have been added. Changes were also made to the demographics section of the case investigation form (ability to select multiple races and a new Arab ethnicity category).

The categories of E. coli O157, Shiga toxin E. coli non-O157 and Shiga toxin E. coli unspecified are now merged into one reportable condition: Shiga toxin-producing E. coli (STEC). Additionally, a number of the disease-specific case investigation forms have been revised to help improve the quality of surveillance information currently being collected. Details about these specific changes are organized by disease group.

If you have any questions about changes in this release or about MDSS, please contact your Regional Epidemiologist, a MDCH disease specific Epidemiologist or Edward Hartwick, MDSS/GIS Coordinator (hartwicke@michigan.gov 517-335-8165).

INVESTIGATION FORM CHANGES (ALL FORMS)

Investigation Status

Two additional investigation status options were created (Review and Completed Follow Up) and have been incorporated into the default All Open Investigations and My Open Investigations searches. The majority of MDSS users use one of these searches. If you use a customized default search, you will need to edit your 'default search' options to see these cases under 'Case Listings' when you log into MDSS.

Review: Indicates that the case is ready for final review by a LHD supervisor or by MDCH staff. After review, the investigation status should be changed appropriately.

Completed Follow Up: This option was created primarily for use by the TB program (see Review and Follow Up Example below). However, this classification could be used with other disease groups to identify/flag a case where the investigation is completed, but you are waiting for additional information (For example, a salmonella serotype).

Instructions: As usual, mark the case investigation status as 'Completed' (this will determine the case completion date). Later, the investigation status can be changed to 'Completed Follow Up' to make any necessary edits. After all edits have been made, then change the investigation status back to 'Completed'.

TB Case Review and Completed Follow Up Example: A LHD is investigating a case of tuberculosis and would like MDCH staff to review the case. The LHD changes the investigation status to "Review" to indicate that the case is ready for review. Once MDCH staff has reviewed the case and submitted information to CDC, the case status will be changed to "Completed Follow up" so that both LHD and MDCH staff will be able to make updates to the case before treatment is completed.

Case Status

A new option 'Confirmed-Non Resident' was created for use by the TB program. Although it will appear as a case status option for all disease groups, this should be used for TB cases only. For specific details, see the TB section of this document.

Demographics Section

Two changes were made to this section to enable the collection of demographic information that better corresponds with US race and ethnicity data collection standards.

1. A new Arab Ethnicity option has been created. The default value is 'unknown'.
2. The race option has been changed to allow users to select more than one race. Below are examples of how multi-race data will appear when exported or in MDSS Report #2 (Diseases by Demographics).

Data Export: All marked races appear as a single line of text.

Patient Race='Black or African American, Caucasian'

MDSS Report #2 (Diseases by Demographics)

For the report type 'counts', cases with multiple races selected are counted under the Multiple Races Selected column.

Disease Group	Disease	American Indian or Alaska Native	Asian	African American	Hawaiian or Pacific Islander	Caucasian	Other	Unknown	Multiple Races selected	Total
AIDS/HIV	AIDS, Aggregate	0	0	0	0	0	0	0	0	0
	HIV/AIDS, Adult	1	0	0	1	1	0	0	1	4
	HIV/AIDS, Pediatric	0	0	0	1	0	0	0	0	1
Subtotal		1	0	0	2	1	0	0	1	5

For the report type 'rates', specific rate calculations are not available for the Unknown or Multiple Races Selected categories.

Disease Group	Disease	American Indian or Alaska Native	Asian	African American	Hawaiian or Pacific Islander	Caucasian	Other	Average
AIDS/HIV	AIDS, Aggregate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	HIV/AIDS, Adult	1.71	0.00	0.35	37	0.11	0.00	0.18
	HIV/AIDS, Pediatric	0.00	0.00	0.00	37	0.00	0.00	0.01
Subtotal		1.71	0.00	0.35	74	0.11	0.00	0.19

INVESTIGATION FORM CHANGES BY DISEASE GROUP

Foodborne

The following changes are the outcome of a project undertaken by the Epidemiology and Laboratory Capacity (ELC) workgroup, a group with both local and state membership. The overall aim is to use better tailored epidemiological information to improve the timeliness of public health interventions during disease cluster or outbreak investigations.

The Animal Contacts section has been expanded to collect information on Aquatic and Domestic pets.

To improve question clarity, the Contact Information section has been changed from three questions to two.

Contact Information	
Number of OTHER persons in the household who are ILL	Total number of persons in the household (including ill)

A section on Special Diet was added to all foodborne disease forms to characterize typical dietary practices. Eliminating possible food groups consumed based on this information will improve hypothesis generation during outbreak investigations.

Special Diet	
Special Diet? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	If Yes, specify: (Check all that apply) <input type="checkbox"/> Vegetarian <input type="checkbox"/> Vegan <input type="checkbox"/> Lactose Free <input type="checkbox"/> Nutritional or Diet Plan (e.g. Nutri System, etc.) <input type="checkbox"/> Gluten Free <input type="checkbox"/> Other, Specify: _____
Food Allergies (e.g. nut allergies, seafood, etc.) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	If yes, list: _____

A custom High Risk Food Exposures section has been added to the Campylobacter, Salmonella and the Shiga toxin-producing E. coli (STEC) forms. This section contains items historically associated with illness caused by each of these pathogens. The new section provides structure and captures critical details on food items that are likely to be of high interest during case and cluster investigations.

The open-ended Food History sections have been extended to better reflect the disease-specific incubation periods for Campylobacter (5 days), Salmonellosis (7 days) and STEC (7 days).

Shiga toxin-producing E. coli (STEC) and Hemolytic Uremic Syndrome (HUS)

The categories of E. coli O157, Shiga toxin E. coli non-O157 and Shiga toxin E. coli unspecified have been merged into one reportable condition: Shiga toxin-producing E. coli (STEC). This corresponds with reporting of STEC to CDC under a single category. All cases of STEC reported in 2010 will be automatically migrated to the new single STEC category. Forms for STEC and Hemolytic Uremic Syndrome (HUS) have both been updated and will remain identical. As with the previous three forms users have the ability to mark the Investigation Status as ‘Complete’ for cases with a case status of ‘Suspect’.

The original three categories E. coli O157, Shiga toxin E. coli non-O157 and Shiga toxin E. coli unspecified will be available for use in searches and reports only and will be marked with an “*”.

Additional fields were added under the Laboratory Information section to capture laboratory results for O antigen, H antigen and Toxinotype.

Serotype:	
O antigen: <input type="radio"/> O26 <input type="radio"/> O45 <input type="radio"/> O103 <input type="radio"/> O111 <input type="radio"/> O121 <input type="radio"/> O145 <input type="radio"/> O157 <input type="radio"/> Unknown <input type="radio"/> Other _____	
H Antigen: <input type="radio"/> H2 <input type="radio"/> H7 <input type="radio"/> H11 <input type="radio"/> H19 <input type="radio"/> Unknown <input type="radio"/> Other _____	Toxinotype: (Check all that apply) <input type="checkbox"/> STX1 Positive <input type="checkbox"/> STX2 Positive <input type="checkbox"/> Unknown

Influenza

With the end of the 2009 influenza A (H1N1) pandemic, use of the 2009 H1N1 Influenza case form for new case entry has been discontinued. However, data from this form will be available for searches, exports and reports. Data fields from this form, as well as additional updates, have been incorporated into the Influenza form.

The Novel Influenza form should continue to be used only for suspect cases of avian influenza or other novel influenza strains (not 2009 H1N1).

Influenza Form Updates by Section

Specimen Approval Section: New section, same as 2009 H1N1 form.
Hospital Section: New fields were added including ICU status and isolation information.
Clinical Section: New fields added, similar to 2009 H1N1 form.
Epidemiologic Section: Question additions include risk factors for complications and fields for information on obesity, pregnancy and healthcare worker status.
Treatment Section: New fields for describing additional antivirals given.
Vaccine Section: Monovalent vaccine options removed.
Lab Section: An option for Influenza A/H1N1 2009 was added to the results column.
Contacts Section: New columns for Flu-like symptoms and quarantined added.

Meningitis

Previously the same core MDSS form was used for Bacterial Meningitis Other and Meningococcal Disease. Each disease classification now has its own form to better tailor the information collected for each classification.

Meningococcal Disease Investigation Form

NOTE: Report only disease caused by Neisseria meningitidis on this form
A new Infection and Laboratory Information section has replaced the previous Infection Information section. Questions about antibiotic and CSF examination have been added.
Clinical Information section options have been revised.
New Risk Factor Information and Vaccination History sections have been added.

Bacterial Meningitis Other Investigation Form

A new Infection and Laboratory Information section has replaced the previous Infection Information section. Questions about antibiotic and CSF examination have been added.
Clinical Information section options have been revised.

TB (New MOTT Classification Options and Form Revisions)

Several important changes have been made in the current release that impact how TB cases are handled in MDSS. These changes include the creation of a new category Mycobacterium-Other than tuberculosis (MOTT). This new category was created to better identify MOTTs in MDSS. MDCH TB staff will schedule specific trainings for MDSS users on these changes later this year or early in 2011. However, general guidance can be found below or you can also contact Noreen Mollon, TB Epidemiologist, (517)-335-8165 with questions.

Changes to Case and Investigation Status Options

Review Investigation Status: Mark the investigation status as 'Review' when the case is ready for the MDCH TB staff to review. TB staff will then mark the case and investigation status as appropriate after review.

Completed Follow Up Investigation Status: This option is intended for use by MDCH TB staff to identify cases that have been reported to the CDC, but are awaiting additional information.

TB Case Review and Completed Follow Up Example: A LHD is investigating a case of tuberculosis and would like MDCH staff to review the case. The LHD changes the investigation status to "Review" to indicate that the case is ready for review. Once MDCH staff has reviewed the case and submitted information to CDC, the case status will be changed to "Completed Follow up" so that both LHD and MDCH staff will be able to make updates to the case before treatment is completed.

Confirmed-Non Resident Case Status: The Confirmed-Non Resident Case Status was developed to improve tracking of TB cases that are managed in MI, but are counted as a case in another state. This option will be used in conjunction with the Linking State Case Number field (See RVCT revisions below).

Mycobacterium-Other Classification

This option was created to more easily identify MOTT cases in MDSS. However, you do **not** need to investigate/complete the case investigation form for these cases.

Please use the following process to complete MOTTs in MDSS:

Review the laboratory information to make sure the case is correctly classified.

Mark the case status as confirmed.

Mark the investigation status as 'Review'; the MDCH TB program will review the laboratory information and then mark the case and investigation status as appropriate.

Tuberculosis Case Investigation Form Revisions (RVCT)

Linking State Case Number:

This new field can be used in 3 different ways:

1. To track a case that is counted in another state but is treated in MI (see Confirmed-Non Resident Case Status above).
2. To track cases with epidemiological links.
3. To track cases of reactivated TB.

New Additional Surveillance Information section added.
Sputum Culture Report Date was added under the Laboratory Information section.
The city option under Follow-Up Report was removed.

Vaccine Preventable Diseases

Haemophilus Influenzae Case Investigation Form

A new case investigation form was created to better tailor the data collected to the disease condition.

Pertussis Case Investigation Form

Under the vaccine information section, two new questions were added:

For cases 11 years of age and older: Received Tdap vaccine any time prior to the onset of this illness? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	If yes, date of Tdap vaccination: mm/dd/yyyy
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Other Disease Specific Changes

Revision: Basic Case Investigation Form

A new Hospitalization Section was added, similar to that of the other case investigation forms.

Revision: Strep Pneumno Case Investigation Form

Antibiotic choices are now alphabetized and 'without focus' option under type of infection caused by the organism was removed.

Pediatric HIV/Adult HIV

Changes made are accessible to HIV program staff only.

Revisions: VISA/VRSA Case Investigation Forms

Revision: Rocky Mountain Spotted Fever and Typhus group drop down options were changed to Rickettsial Disease-Spotted Fever and Rickettsial Disease-Typhus.

TECHNICAL CHANGES

Changes were made to the NEDSS message send user interface.

Framework has been put in place in preparation for the transmittal of electronic death records (EDRs) from the MDCH Division of Vital Records and Health Statistics into MDSS.

The 'system administration' tab has been renamed the 'administration' tab for the majority of MDSS users. The functions available on the tab have not been changed. The new 'system administration' tab was created for state level users who perform NEDSS exports etc.