Manitoba Public Health Information Management System

Report User Guide

MB2102B

Investigation Quality Assurance Report

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2023-08-26	J. Omaga	0.07	removed flag/column in Case Closure report – No Initial Case Addr, and replaced with No Postal Code flag/column.

Definitions for Report User Guides:

a. "Authorized Organization" means an organization (an RHA, a First Nation, or other organization) with whom Manitoba has entered into an agreement in order to facilitate access to PHIMS,
b. "Authorized User" means an employee, agent or contractor of an Authorized Organization (the employer) permitted access to PHIMS,
c. "Service Delivery Location (SDL)" means a public health office or a Community Health Centre,
d. "User Role" means the specific role or roles to which an Authorized User is assigned and which prescribes what Information the Authorized User is permitted to access, use and disclose.

Data Type		Explanation
Aggregate, no identifiable data	=	Summary data with no client identifiers
Aggregate, no identifiable data, but possible small population sensitivity or Provider / Org Sensitivity	=	Summary data with no client identifiers However, there are sensitivities in the data where small numbers could identify clients, communities or providers
Line Level, Single client identifiable data	=	Includes client identifiers of an individual client
Line level, Multi client identifiable data	=	Includes client identifiers of a list of multiple clients

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1. Background

1.1. Data Access Scope for Investigations in PHIMS

Access to individual client case investigations within the investigation module in PHIMS is based on permissions for specific encounter groups (Sexually Transmitted and Blood-borne Infections, Communicable Diseases, and Tuberculosis).

In Manitoba, Authorized Users ("users") of the investigations module have access to all investigations in encounter groups assigned to the logged in user for all PHIMS clients. This was decided as a result of a number of considerations, including:

- Clients can receive services at service delivery locations other than their default public health office, either within or outside their home health region,
- Cases and outbreaks of vaccine preventable diseases also cross regional boundaries and may involve multiple public health provider organizations,
- It is important to be aware of all concurrent or previous investigations for a client within an encounter group, regardless of which organization is responsible for the investigation.

However, for some reports with access to line-level client data, users may only run reports for investigations associated with their organization.

1.2. Privacy/Data Sensitivity

This report is set at the Region level. This means that users who have access to this report can only "view" data from their own region. The default report includes data at the level of the individual and contains a line list of results based on the extract parameters. No other identifying information is included on the default report. There is an option to display client information on the report, including first name, last name, and PHIN. The user must select this option if required.

Since results displayed may identify individuals, the number of users who have access to this report is limited to a very small set of users.

1.3. Permitted Disclosures

- No disclosure permitted. This report was developed to assist PHIMS users in assessing data quality and completeness.

Note re Permitted Disclosures – In general, Standard Reports in PHIMS have been designed for internal use for day-to-day public health and health service delivery, limited to Authorized Users of Authorized Organizations. Authorized Users may only disclose information from the report that relates to their Designated Health Region. For First Nation Authorized Organizations, sites that have entered into a Bridging Service ISA, an Authorized User (of the Bridging Organization) generating the reports may provide Standard Reports to a FN Authorized User.

1.4. Data Stewardship

Users who have access to this report should have some background in report generation and basic epidemiology, and are responsible for the following:

- Users may only run this report for their designated Health Region,
- The data is intended to be used by public health providers for case and contact management only. No disclosure of information to non-PHIMS users or non-Public Health providers is permitted,
- Users ensure data is managed securely and appropriately according to organizational guidelines.

Users who have access to this report will be subject to PHIMS audits documenting which user generated the report and on what date.

2. Purpose

The purpose of the **Investigation QA Report** is to identify missing core data or data errors in investigations to ensure the quality of surveillance data is as good as possible. The report would flag investigations with missing data elements, or would flag data entries that fail algorithms based on fields such as dates.

The report contains two options: the "surveillance" option assesses data that is entered at the time when the investigation is created; the "case closure" option assesses the complete investigation data that would be present at case closure.

2.1. Populations Included in the Report

The **Investigation QA Report** provides a summary assessment of key information that would be collected for an investigation. The report will return results of investigations based on the filter parameters selected. Users will only be able to select investigations that have been assigned to their organization or lower in the organizational tree.

2.2. Recommended Uses for this Report

This report will be used by:

- Manitoba Health, Seniors and Active Living and Regional Organizations:
    - To evaluate completed investigations to ensure core data elements have been entered.
    - To evaluate the quality of data in investigations to assist with data cleaning and validation.

3. Selecting the Report Parameters

You can generate this report from the "Reports" section in PHIMS.

This is a statistical report under Case: Manitoba Reports

- Click **Reporting & Analysis > Reports** (LHN) or the **Reporting** tile on the dashboard,
- Open the **Case Report Folder** by expanding the collapsible panel,

- Select **MB2102B - Investigation QA** *hyperlink*,
- Enter the **Report Date from** and **to** (required)
- Select the **Encounter Group(s)** (required). Users will only be able to select the encounter groups accessible by their logged-in role.
- Select the **Encounter Group(s)** (optional). This must be selected a second time to filter the disease selection.
- Select the **Disease(s)** (optional). Diseases displayed will be filtered by the encounter group selected.
- Select the **Classification Group(s)** (required). Identifies whether cases and/or contacts should be included in the report.
- Select the **Classification(s)** (optional). Identifies which classifications should be included in the report. The data present may depend on the case classification (e.g. clinical cases will not have lab results), so the option to select specific classifications has been included.
- Enter the **Investigation Status** (required). Investigation Status can be Open, Closed and/or Transferred.
- Enter the **Investigation Status Date from** and **to** (optional). This allows users to look for cases that have been closed during a specific timeframe.
- Select the **Investigation Disposition** (optional). Identifies which dispositions should be included in the report. The data present may depend on the disposition (e.g. "unable to locate" will have limited investigation information), so the option to select specific dispositions has been included.
- Select the **Investigation Organization(s)** (required). Users will only be able to select their organization or lower in the organizational tree that have active workgroups.
- Select the **Report Option** (required). This will identify the sub-report that will be generated. "Surveillance" provides an assessment of data entered when the investigation is created. "Case Closure" provides an assessment of key investigation data that should be present at case closure.
- Select whether you wish to **Display Client Identifiable Data** (required). The default is "no", which only displays client ID, gender, DOB. If "yes" is selected, the First Name, and Last Name are also displayed in the sub-report. Note: The Case Closure report will not display First Name and Last Name.
- Click **Generate Report Now.**

Parameter Definitions:

Parameter Name	Data Type	Required	Description
Report Date (Received)	Date Range	Mandatory	Select report date range
Encounter Group	Multi-select	Mandatory	Limited to Encounter Groups accessible by Logged-on role
Disease(s)	Multi-select	Optional	Filtered by Encounter Group In the event of an investigation with multiple diseases, the report will only display the selected disease(s). Must be in same encounter group (same disease can exist in more than one encounter group; encounter group selection should match for report filtering)
Classification Group	Multi-select	Mandatory	Case and/or contact
Classification	Multi-select	Optional	
Investigation Status	Multi-select	Mandatory	Open, Closed, Transferred. Transferred is a secured application code that cannot be selected by a user. It cannot, however, be removed from the application.
Investigation Status Date	Date Range	Optional	Option to select investigation status date range. This date corresponds to the most recent date the case status changed to open or closed. Will assist in review of investigations opened, closed or re-opened during a specified timeframe.
Investigation Disposition	Multi-select	Optional	Option to select investigation disposition. Will assist in review of investigations as incomplete dispositions will contain limited data.
Investigator Organization	Multi-select	Mandatory	Limited to those Jurisdictional Organizations included in the tree of Organizations for the logged-on organization that have active workgroups.
Report Option	Drop list	Mandatory	Select "Surveillance" if assessing data quality of newly created investigations, or "Case Closure" if reviewing completed investigations.
Display Client Identifiable Data	Drop list	Mandatory	Defaulted to "no". If "yes" selected, will display client first name and last

			name. Note: The Case Closure report will not display First Name and Last Name.

4. Report Output

4.1. Surveillance

Note: If an investigation has more than one disease, each disease will display on a separate row if multiple diseases are selected in the report parameter selection. The investigation ID will be the same for all diseases in an investigation.

Field Name	Description
Client ID	Unique client identifier.
Date of Birth	Client's birthdate.
Gender	Client's gender.
Last Name	Client's last name. Only displays if Display Client Identifiable Date=yes.
First Name	Client's first name. Only displays if Display Client Identifiable Date=yes.
Investigation ID	Unique identifier for an investigation.
Earliest Rpt Dt (Rcvd)	The earliest report date received.
Status	The investigation status – open, closed, transferred.
Status Dt	The investigation status date.
Disease	Investigation disease included in the extract. If the investigation has more than one disease, each disease will display on a separate row if multiple diseases are selected in the report parameter selection. The investigation ID will be the same for all diseases in an investigation.
Etiology Agent	Etiology agent for the disease displayed
Classification	The current investigation classification
Classification Dt	The classification date
Investigator Workgroup	The investigator workgroup for the primary investigator.
Classification Dt < Rcvd Dt	The earliest report date (received) is later than the earliest disease classification date. The earliest classification date will display only if above rule is present. The earliest report date should be on the same date as the classification (Notification occurs before classification).
Rcvd Dt < Collection Dt	The earliest investigation report date (received) date is earlier than the earliest specimen collection date on any associated labs. The earliest specimen collection date will display only if above rule is present. For lab confirmed cases, the specimen collection date should be prior to the investigation report date, unless there was a clinical notification.
PH Rcvd Dt (Lab)< Rcvd Dt	The earliest public health received date on any associated labs is earlier than the earliest investigation report date (received). The earliest public health received date on any associated labs will display only if above rule is present.

	For lab confirmed cases, the earliest public health received date on the lab should be the same as the earliest investigation report date (received).
Lab Alignment	Disease classification is Case-Lab Confirmed and there is no associated lab result OR disease classification is Contact and there is at least one lab result. An "X" will display if the above rule is present.
Duplicate Inv <= 30 Days	If the Earliest Report Date (received) for an Investigation with the same disease is within 30 days for the same client, a string of investigation ID's for the same disease and classification group will display. This will flag potential duplicate investigations.

Only investigations that fail any of the above rules will be displayed.

4.2. Case Closure

Note: If an investigation has more than one disease, each disease will display on a separate row if multiple diseases are selected in the report parameter selection. The investigation ID will be the same for all diseases in an investigation.

Field Name	Description
Client ID	Unique client identifier.
Date of Birth	Client's birthdate.
Gender	Client's gender.
Investigation ID	Unique identifier for an investigation.
Earliest Rpt Dt (Rcvd)	The earliest report date received.
Status	The investigation status – open, closed, transferred.
Status Dt	The investigation status date.
Disease	Investigation disease included in the extract. If the investigation has more than one disease, each disease will display on a separate row if multiple diseases are selected in the report parameter selection. The investigation ID will be the same for all diseases in an investigation.
Etiologic Agent	Etiologic agent for the disease displayed
Further Differentiation	Additional information related to the causative agent entered in a text field in PHIMS. Includes additional levels of causative agents such as subtypes or serogroups, and epi markers such as WGA, MLVA, etc.
Prov Outbreak Code	Epi marker
OICC Code	Epi marker
WGS Pattern	Epi marker
WGS Cluster	Epi marker
Current Stage	The current stage value
Stage History	Concatenated values of ALL stages in order. Date will display for the most recent stage.
Initial Stage	Stage date of the earliest disease stage. If the earliest

	disease stage is Unknown or undetermined and there are other stages, this will be the earliest date of the other stages.
Classification	The current investigation classification.
Classification Dt	The classification date
Investigation Disposition	The current investigation disposition.
Earliest Onset Sx	The earliest onset date among the symptoms recorded for the investigation
Sensitive Env/Occ	The sensitive environment/occupation recorded for the investigation
Sensitive Env/Occ Details	The sensitive environment/occupation details recorded for the investigation
Investigator Workgroup	The investigator workgroup for the primary investigator.
Primary Investigator	The primary investigator for the investigation.
Contact Counts	
# Known	The number of known contacts is displayed when known contacts exist in any of the transmission events recorded for the investigation. Blank if none recorded.
# Unknown	The number of unknown contacts is displayed when unknown contacts exist in any of the transmission events recorded for the investigation. Blank if none recorded.
# Anonymous	The number of anonymous contacts is displayed when anonymous contacts are recorded in any of the transmission events recorded for the investigation. Blank if none recorded.
Tests for Missing Data	
No Postal Code	If the postal code of the address at time of initial investigation is missing, an "X" will display. If address at time of initial investigation is missing, an "X' will also display.
No Site(s)	If no sites have been recorded, an "X" will display.
No REI	If the race, ethnicity, Indigeneity information is not documented for the client, an "X" will display.
No Risk Factors	If no risk factors have been recorded, an "X" will display.
No Sx	If no symptoms have been recorded, an "X" will display.
No Onset Sx	If an onset date has not been recorded in any symptom, an "X" will display.
No Rx	If no prescriptions have been recorded, an "X" will display.
No AE(s)	If no acquisition events have been recorded, an "X" will display. This will assist in reviewing investigations where the source of the infection is a key component of the investigation (e.g.

	enteric infections).
No TE(s)	If no transmission events have been recorded, an "X" will display. This will assist in reviewing investigations where the transmission (spread) of the infection is a key component of the investigation (e.g. VPD's).
Indicators	
Provider Form	If there is an open Provider Form investigation (under STBBI Encounter Group only) or a Provider Form investigation with a report date received in the last two months for the same client, an "X" will display.
Context Doc	If a context document is uploaded to the investigation, an "X" will display.
Addr/Org Alignment	If postal code of address at time of case does not match the investigator organization for the initial active primary investigator, an "X" will display.
Lab Alignment	Disease classification is Case-Lab Confirmed and there is no associated lab result OR disease classification is Contact and there is at least one lab result. An "X" will display if the above rule is present.
Lab SDL is PH	If the ordering SDL of the earliest lab is a public health office, an "X" will display.
Rx by RN	If the investigation includes a medication prescribed by a nurse ('RN' suffix on the provider last name), an "X" will display.
Date Compares	
Days to Initial Stage	Calculated period of time in days from earliest report date to date of first stage documented.
Documentation Period (days)	Calculated documentation period for investigation= number of days from earliest report date received to closed status date. Provides quality check on timeliness of investigation.
Classification Dt < Rcvd Dt	The earliest report date (received) is later than the earliest disease classification date.The earliest classification date will display only if above rule is present. The earliest report date should be on the same date as the classification (Notification occurs before classification).
Rcvd Dt < Collection Dt	The earliest investigation report date (received) date is earlier than the earliest specimen collection date on any associated labs. The earliest specimen collection date will display only if above rule is present. For lab confirmed cases, the specimen collection date should be prior to the investigation report date, unless there was a clinical notification.

Rcvd Dt < Onset Dt	If the earliest investigation report date is earlier than the symptom onset date, the symptom onset date will be displayed.
PH Rcvd Dt (Lab)< Rcvd Dt	The earliest public health received date on any associated labs is earlier than the earliest investigation report date (received). The earliest public health received date on any associated labs will display only if above rule is present. For lab confirmed cases, the earliest public health received date on the lab should be the same as the earliest investigation report date (received).
Duplicate Inv <= 30 Days	If the Earliest Report Date (received) for an Investigation with the same disease is within 30 days for the same client, a string of investigation ID's for the same disease and classification group will display. This will flag potential duplicate investigations.
Duplicate Inv > 30 Days	If the Earliest Report Date (received) for an Investigation with the same disease is more than 30 days for the same client, a string of the **most recent** 2 investigation ID's for the same disease and classification group will display. For chronic diseases, this will flag potential duplicate investigations. There should be only one investigation per chronic disease, unless there is a reinfection.
Risk Factor Flags (any active on the client level or any investigation)	
Pregnancy RF	If the client has a pregnancy risk factor that has a reported date within 9 months of the earliest investigation report date (received), an "X" will display.
Housing RF	If the client has an active risk factor of this type, an "X" will display
Injection Drug Use	If the client has an active risk factor of this type, an "X" will display
Incarceration	If the client has an active risk factor of this type, an "X" will display
Given Goods for Sex	If the client has an active risk factor of this type, an "X" will display
Received Goods for Sex	If the client has an active risk factor of this type, an "X" will display
Men Sex w Men	If the client has an active risk factor of this type, an "X" will display
Latest Investigation Note	The most recent Clinical Note recorded for the investigation – displays the subject and first 100 characters. If the entire note is too long to be displayed, a visual indicator will appear notifying the user they will need to view the note in the application.

The rules will be applied to all diseases. Users will need to determine the rules that apply to the disease investigation under review. They may wish to use filters on columns to display information of interest, or hide columns irrelevant for the disease under review.

5. Report is assigned to the following User Roles

- MB CDI MBHEALTH SURVEILLANCE
- MB CDI EPI ANALYST
- MB CDI MEDICAL OFFICER
- MB CDI PUBLIC HEALTH COORDINATOR

6. Report Description

Report Output: The report will be generated as a excel file.

Data Source: Operational data from the PHIMS Database