Manitoba Public Health Information Management System

Report User Guide

MB6810A
Immunization Count by Provider Organization

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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 to 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, <u>Single client</u> identifiable data	=	Includes client identifiers of an individual client
Line level, <u>Multi client</u> identifiable data	=	Includes client identifiers of a list of multiple clients

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1. Background:

1.1. Data Access Scope for Immunization in PHIMS

In Manitoba, Authorized Users ("users") of the immunization module have access to immunization records for all Manitobans. This was decided as a result of a number of considerations, including:

- Clients can receive immunization services at service delivery locations other than their default public health office, either within or outside their home health region
- School age clients may attend schools outside their home region where immunization services are delivered
- Cases and outbreaks of vaccine preventable diseases also cross regional boundaries and may involve multiple public health provider organizations.

1.2. Privacy/Data Sensitivity

This report is set at the Manitoba level. This means that users who have access to this report can "view" data from all regions and provider types in Manitoba. The report includes data to the level of the organization and service delivery location. Although this is aggregate data representing numbers of doses administered, and personal health information is not displayed, there may be results displayed which may identify individual providers when detailed reports are generated. As a result, the number of users who have access to this report is limited to a very small set of users.

1.3. Permitted Disclosures

- Disclosure of the number of doses administered by provider organization and organization type (e.g. public health, long term care, pharmacy, physician...) is permitted.
- Disclosure of the number of doses administered by service delivery location is not permitted except for service delivery locations within the Authorized Users jurisdictional organization

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 only run this report for their designated Health Region, or on a need to know basis.
- The data produced are to be validated and interpreted prior to disseminating any information produced from the report. The output requires contextual interpretation based on the filters used and timing of when the report was generated.
- The data are intended to be used by public health for program planning and monitoring. Data are not to be made available to the public or run on specific providers without prior consultation with the Health Region and Manitoba Health.
- Users ensure data are managed securely and appropriately according to organizational guidelines especially when the report(s) identifies small populations or providers (e.g. Physicians with SDL detail – every physician office will show up)

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 Immunization Count by Provider Organization extract contains information on the number of immunizations administered by a specified provider type [organization].

2.1. Populations Included in the Report

The **Immunization Count by Provider Organization Report** provides a summary count of the number of immunizations provided by organizations and their associated service delivery locations. The report is based on who provided the immunization, and the organization/service delivery location associated with that provider. It includes immunizations (valid and invalid) provided to any client in PHIMS, both active and inactive, regardless of where they live. As a result, it is NOT a population-based coverage report. Each immunization is counted once, and includes additional doses to the same client (each dose counted separately).

Users who have access to this report must be familiar with the organization model in PHIMS. This report utilizes the organization model to summarize data. The top row of the organization model contains the "parent" organizations, which represent RHA's, FNIHB, Manitoba Physicians, Manitoba Pharmacies. Sub-organizations are also present under many of these parent organizations. All organizations have been assigned organization types for the purpose of this report, which allows users to summarize data based on the organization type (analogous to provider type).

Regions should only select their own provider organization (RHA's, FNIHB) to generate a report. RHA/FNIHB reports will include data on immunizations provided by their associated organization types:

- Home care
- Long Term Care
- Medical Clinic
- Occupational Health
- Public Health
- RHA Other

Note: If regional immunizations are incorrectly associated directly to the parent regional/FNIHB organization, the organization type will be:

- FN – RHA (Org = FNIHB)
- MB - RHA (Org = Interlake Eastern, Prairie Mountain, Northern, Southern, Winnipeg)

The following are other parent-organization types currently included in the drop list of organization types. Note: These should not come up on a regional/FNIHB report, but may be used by Manitoba Health for provincial reporting.

- Jurisdiction (Org = Manitoba Health when Org is unspecified)
- Medical Practitioner (Org = Manitoba Physicians)
- Other (Org = Manitoba Corrections, Out of Province)
- Pharmacy (Org = Manitoba Pharmacies)

A report run by MB Health would include physicians and pharmacists as these providers are not mapped to the region where their services are provided.

2.2. Recommended Uses for this Report

The Immunization Count by Provider Organization may be produced:

- To monitor the number of vaccines provided over a specified time frame by organization type during immunization campaigns.
    - For example, it may be generated during large immunization campaigns, such as the annual influenza campaign, to monitor the number of doses provided by different providers.
- To monitor the number of doses of each type of vaccine provided during the year by a program or organization for program planning.
    - For example, regional public health may generate an annual report by public health office to determine the # of doses provided for selected antigens.
- To monitor trends in vaccine usage by different providers/provider types and to inform centralized vaccine planning and procurement.
- To monitor quality of regional data entry to ensure the correct organizations and service delivery locations are being utilized.

Note to user

- Consider defining a routine business cycle to run these reports to maximize their use.
- Consider establishing a secure archiving process for reports to allow comparisons over time.

3. Selecting the Report Parameters

When running a report, you must select specific parameters. Some parameters are required and some are optional.

Selecting the Correct Parameters to get the Needed Output

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

This is a statistical report under Immunization: Surveillance Reports

- Click on **Standard Reports** (LHN)
- Open the Immunization Report Folder by clicking on **Show Report Folders**
- Scroll to Surveillance Reports and select **MB6810A Immunization Count by Provider Organization**
- Select the **Date Administered** time frame
- Select the **Antigen** from the drop list (required)
- Select the **Immunizing Agent** (required)
- Select the **Provider Organization** from drop list (required)

- Select your region
- Manitoba Health could select all for a province wide report

Note: Provider organization differs based on the report context. For this report: Provider Organization = the parent organization, of the organization responsible for the immunization, at the level directly below MB Health. Providers, SDL's, and sub-organizations are all associated to a parent organization. When an immunization is administered, it will be associated to a parent organization based on these attributes. If all are blank, the provider organization will be "unspecified".

- Select **Organization Type** (optional)

Note: Organization types have been defined for this report to allow different organizations to be grouped into categories to summarize the data. These include:

Regional/FNIHB Organization Types:

- Home Care – home care program organizations
- Long Term Care – long term care organizations
- Medical clinics – RHA primary care providers who do not submit fee-for-service or shadow billings for immunization. These immunizations are entered directly into PHIMS.
- Occupational Health – RHA occupational health organizations. Does not include private occupational health providers.
- Public Health – Public health organizations in RHA's/FNIHB.
- RHA – Other – Other types of organizations associated with RHA's – e.g. Child health, Women's health, ER programs...

Note: If an immunization is assigned to the parent RHA/FNIHB organization, it will also be given the following organization types:

- FN-RHA – First Nation organizations – where the parent FN organization is selected and not the sub-organizations that fall below it such as a public health unit.
- MB-RHA – Regional health authority organizations – where the parent RHA organization is selected and not the sub-organizations that fall below it such as public health, home care, etc.

Manitoba Parent Organization Types:

- Jurisdiction – displayed when the organization is unspecified.
- Medical practitioner – providers with a billing number who submit fee-for-service or shadow billings for immunization through the claims processing system. Records are transferred electronically into PHIMS from the claims processing system. Immunizations entered into PHIMS associated to these providers are also included. Other – includes "other" providers that are not associated to an RHA/FNIHB, such as Manitoba Corrections, or out of province.
- Pharmacy – Includes all pharmacy service delivery locations.
- RHA/FNIHB users are recommended to NOT select organization type, because if data were incorrectly entered at the parent RHA/FNIHB organization, they would not display in this report. You would only select

this option if there was a need for data specific to a type of organization. For example, Manitoba Health may select "Pharmacy" if generating a report on the number of vaccines administered by pharmacy providers.

- o If you wish to display the organization type, select group by organization type or organization.

- Select **Reason for Immunization** (optional)

  - o Select this option if there was a need for data specific to a reason for immunization. For example, regions may use reason for immunization to distinguish influenza vaccine provided to long term care residents or inpatients, staff, and visitors/volunteers based on the provider organization and reason for immunization (occupational hazard, routine).

- Select **Group by Filters** (required)

  - o Group by Provider Organization - summarizes the data into the parent organization groups. The organization or organization type is not displayed.
  - o Group by Organization Type - summarizes the data by the organization types. Select this if you want to see a summary of immunizations provided by the organization types in your region without the organization details.
  - o Group by Organization – includes the name of the organization and the organization type.

  Users are recommended to choose "Organization" for most reports to provide detailed data, which allows the user to further validate the data.

- Select **Show SDL Detail** (Yes or No)

  - o If yes is selected, the data is summarized for each individual service delivery location documented on an immunization (as selected in the filters).

- Click **Generate Report Now**

Parameter Definitions:

Parameter Name	Data Type	Description	Validation
Date Administered	Date Range	Date range is required	Required
Antigen	Drop List	The name of the antigen that the client was immunized for. Note that for some diseases, there may be more than one antigen if there are different strengths or formulations of the vaccine. E.g. diphtheria, pneumococcal. Multiple antigens can be selected – the data will be summarized for all selected. If you want to know the number of immunizations by antigen, select only one antigen and run each report separately.	
Immunizing Agent	Multi-select List	Name of the immunizing agent(s). You must select at least one immunization agent. For most reports, select all agents associated with the antigen of interest, unless you are searching for data for a specific vaccine.	Required
Provider Organization	Multi-select List	The parent organization, of the organization responsible for the immunization, at the level directly below MB Health. Providers, SDL's, and sub-organizations are all associated to a parent organization Note: Select your region	Required
Organization Type	Multi-select List	Categorizes provincial and regional organizations by type for administrative purposes. Note: select an organization type if only interested in a specific type – e.g. public health.	Optional
Reason for Immunization	Multi-select List	Presents information on reason why client was immunized. Note: would usually not select a reason for immunization unless there was a specific need, such as for influenza.	Optional
Group by	Drop List	Depending on the level of detail needed for the report; would usually select "organization".	Required
Show SDL Detail	Drop List	**No** (default) or Yes	Required

4. Report is assigned to the following User Roles:

MB EPI ANALYST / MB CDI EPI ANALYST

MB CDI MEDICAL OFFICER

MB CDI PUBLIC HEALTH COORDINATOR

5. Report Description

Report Output: The report will be generated as a Formatted Excel Spread sheet

Data Source: Replicated data from the PHIMS Reporting Database (replicates every few minutes)

Report Data Fields

#	Field Name	Description
Header		
1	Report Title	Immunization Count by Provider Organization
2	Static Text	Number of immunizations administered (valid and invalid, for all clients) over a specified period and broken down by Provider Organization.
3	Date Generated	The date the report was generated YYYY-Mmm-DD
Report Parameters		
4	Date Administered	The date the vaccines were administered. From: To:
5	Immunizing Agent	Name of the Immunization Agent(s).
6	Provider Organization	The parent organization, of the organization responsible for the immunization, at the level directly below MB Health.
7	Organization Type	The type of organization.
8	Reason for Immunization	The reason the client was immunized.
9	Group by	List the different options to group the report by.
10	Show SDL Detail	Whether or not to show the Service Delivery Location on the report.
Details		
11	Provider Organization	The parent organization, of the organization responsible for the immunization, at the level directly below MB Health. If the Provider Organization cannot be determined, this field will show *Unspecified*
12	Organization Type	The type of organization. If the immunizing Organization is not set, this field will show *Jurisdiction.* This column will only show on the extract when [Group by] parameter = Organization Type or Organization

13	Organization	The organization responsible for the immunization.
		If the immunizing Organization is not set, this field will show *MB Health.*
		This column will only show on the extract when [Group by] parameter = Organization
14	Service Delivery Location	The service delivery location where the immunization was administered.
		If the immunizing Service Delivery Location is not set, this field will show *Unspecified*
		This column will only show on the extract when [Show SDL Detail] parameter = Yes
15	# Immunizations	The total number of immunizations administered
		Count of all immunizations (Valid and Invalid) within the [Date Administered] parameter range, broken down by the Details columns that are actively displayed.
		These include Provider Recorded, Non-Provider Recorded, and Historical.

6. Report Data Mapping

Records are filtered by:

1. Immunization administered between [Date Administered] parameter
2. Immunizing agent = [Immunizing Agent(s)] parameter
3. Provider Organization (the parent of the immunizing Organization at the level directly below MB Health) = [Provider Organization] parameter
4. The immunizing Organization has type = [Organization Type] parameter
5. The reason for immunization = [Reason for Immunization] parameter

In the event that no data is retrieved, a blank report is generated and returned to the user.

7. Suggest Workflows and Examples

7.1. To monitor the number of vaccines provided.

1. To monitor the number of vaccines provided over a specified time frame by organization type during immunization campaigns.
   - For example, it may be generated during large immunization campaigns, such as the annual influenza campaign, to monitor the number of doses provided by different providers.
2. To monitor the number of doses of each type of vaccine provided during the year by a program or organization for program planning.
   - For example, regional public health may generate an annual report by public health office to determine the # of doses provided for selected antigens.
3. To monitor trends in vaccine usage by different providers/provider types and to inform centralized vaccine planning and procurement.
   - For example, Manitoba Health may wish to monitor vaccine use by provider type.

Report Filters

- Date administered (select timeframe)
- Select antigen(s) and add filter
- Select associated immunization agents and add filter
- Select "your" Provider Organization (your Region) e.g. "Southern Health" or for Manitoba Health could choose all.
- Organization Type: no filter
- Reason for Immunization – no filter (filter by reason for adhoc reports as desired)
- Group by: Organization
- Show SDL Detail: Yes

7.2. Quality Monitoring

To monitor quality of regional data entry to ensure the correct organizations and service delivery locations are being utilized.

Report Filters

- Date administered (select timeframe)
- Select all antigens and add filter
- Select all immunization agents and add filter
- Select "your" Provider Organization e.g. your Public Health Organization e.g. "Southern Health" **and** Unspecified
- Organization Type: no filter
- Reason for Immunization: no filter
- Group by: Organization
- Show SDL Detail: Yes

Important: The output will require line by line analysis to determine whether users are correctly documenting Org and SDL. Issues identified are linked to Service Delivery Locations where immunizations have been given not specific users.