

Manitoba Public Health Information Management System

Exposures User Guide

Entering Contacts

Modified: 2025-May-13

Document Version:	1.3
Document Status:	Final
Document Author:	Manitoba PHIMS – Support Team

Document Version Control

Document Creation Date: 2015-05-07			
Date	Author	Version	Change Description
2019-05-07	C Patterson	0.01	Document Created
2019-06-03	Carol Kurbis	0.02	Edits
2019-10-08	Ruth Deane/Carol Kurbis	0.03	Further review and edits
2019-11-13	Ruth Deane	0.04	Inserted diagram
2019-12-13	Michael Sherby	1.0	Communications review for final version posting
2020-01-14	Robert Desrosiers	1.1	Updated to 3.2.3 version
2022-06-21	Robert Desrosiers	1.2	Updated MB Health logo, Updated to 4.4.5 version
2025-05-13	J. Omega	1.3	Update to section 2.1 based on MB Health recommendations

Table of Contents

1. Background	4
1.1. Definitions for PHIMS Exposures screens:	4
1.2. Purpose / Design of Exposures in PHIMS	4
1.3. Diagrams	5
2. PHIMS Contact overview.....	6
2.1. Entering Contacts in PHIMS.....	6
2.2. Contact Scenarios.....	7
3. Previously Named Contact / Unknown Contact Search.....	12
4. Manitoba Health Surveillance Unit Process.....	12

1. Background

1.1. Definitions for PHIMS Exposures screens:

- "Transmission Event" documents the known details of how/where/when a communicable disease may have been transmitted (spread)
- "Acquisition Event" documents the known details of how/where/when a communicable disease may have been acquired (source)
- "Case Investigation" is created for a client diagnosed with or suspected of having a reportable communicable disease.
- "Contact Investigation" is created for a client who has potentially been exposed to a reportable communicable disease
- "Known Contact" is a Client that exists as a client in PHIMS, and can be searched and selected as a PHIMS client. This usually requires three to four personal identifiers (e.g. PHIN, name, DOB, address, gender)
- "Unknown Contact" is a client where some information is known and the client may exist in PHIMS, however, there is not enough identifying information to ensure the correct client is selected in PHIMS.
- "Anonymous Contact" means that not enough identifying information has been given to ever identify or locate the client.

1.2. Purpose / Design of Exposures in PHIMS

The PHIMS Exposures functionality allows users to create links within a disease investigation between the source of the infection (acquisition events) and where the disease may have been transmitted (transmission events).

Transmission and acquisition events are always recorded under the context of an investigation.

An acquisition event describes details of a Client's potential exposure to a source of the communicable disease. An acquisition event may identify the specific source of the disease, or may just identify a setting where the exposure may have occurred. The source could be another client, or other non-human subject.

A transmission event describes details of a Client's potential transmission/spread of a communicable disease to another subject, or "contact". Transmission events cannot be created for a contact investigation since the contact does not (yet) have a disease to transmit.

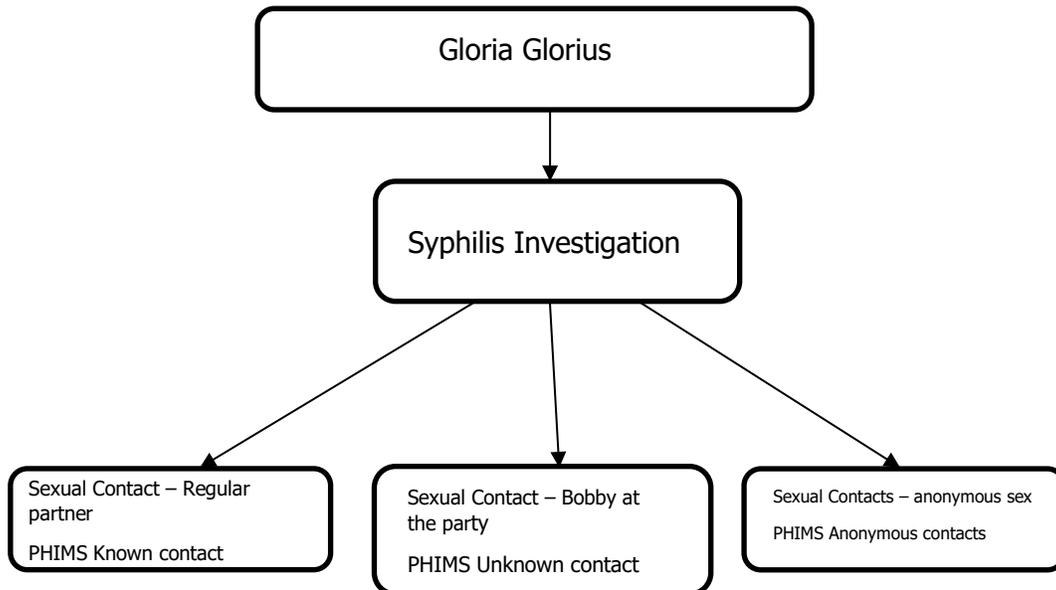
Three types of contacts can be recorded in PHIMS within the transmission event (TE): known, unknown and anonymous.

- A Known contact is one where the Client exists in the System. When the known client is selected in the TE, the system automatically creates a contact investigation for that client, as well as an acquisition event for that client to indicate the potential source. The TE and AE are linked. Only select data elements from the TE are copied to the AE. These include Exposure Name,

Exposure start date and Exposure location. Potential mode of acquisition and exposure end date will need to be confirmed with the contact and entered as required. All data elements on an Acquisition event created via a TE can be updated except the Exposure location details.

- An Unknown contact is recorded when there is limited identifying information available about the individual, and the information may or may not be correct. This is recorded directly in the TE. An investigation is not created as the identity is not yet known. When identified, the unknown contact disposition can be “converted to client”, and a known contact can be documented (as above).
- An Anonymous contact is one where there is insufficient contact information about the individual to try to contact them. The System simply records an overall anonymous contact count in the TE.
- For STIs, the transmission route is less apparent, so transmission from case to contact is documented in transmission events, regardless of the sequence of diagnosis, except where the case is unknown. Acquisition events must be manually created for contacts if the case is unknown (or out of province), because a transmission event cannot be created if the source case is not in PHIMS.

1.3. Diagrams



2. PHIMS Contact overview

2.1. Entering Contacts in PHIMS

For STBBI's, when a source case has named one or more contacts, a transmission event should be created under that source case investigation for **each contact**. When the setting and exposure characteristics are unique for each contact (e.g. Nature of transmission includes type of sexual contact, number of sexual contacts, use of condoms), a new TE is required for each STBBI contact. A separate TE is not always created for each STBBI contact, depending on setting and exposure characteristics.

For other communicable diseases, additional contacts can be added to the same TE if the setting and exposure characteristics are the same for the specific group of contacts. For example, for measles exposure in a hospital ER, all contacts exposed in the ER may be added to the same TE.

Unknown and anonymous contacts are recorded directly in the transmission event and do not have investigations with a contact classification. To review these contacts, a user will need to put the source case investigation into context and review the details in the associated transmission events.

Known contacts are able to be identified as clients in PHIMS. To record the exposure to the communicable disease, an investigation with a contact classification is created automatically for the named known contact, including an acquisition event under the investigation which is linked to the source cases' transmission event. To review known contacts, a user can put the source case investigation into context and review details in the associated transmission event, or they can search in the application for the contact using information such as the client dir. disease, etc.

- PHIMS allows clients to have multiple case investigations and multiple contact investigations.
- Whether an investigation is a case investigation or a contact investigation is determined through the classification of the disease.
- Sometimes a client will have a contact investigation entered into PHIMS before a case investigation and sometimes a client will have a case investigation entered before a contact investigation.
- It is also possible to update a contact investigation to a case investigation.

There are several summary views in PHIMS:

- Subject summary allows a user to view all investigations that have been created for the client
- Exposures summary without an investigation in context allows a user to view all exposures that have been created for a client. This allows the user to assess how many times the client has named contacts (Transmission Event Summary) and how many times the client has been named as a contact (Acquisition Event Summary)
- Exposure summary with a case investigation in context allows a user to view all Transmission Events and Acquisition Events associated with the case.

2.2. Contact Scenarios

This section explores the different scenarios for how contacts are created and managed. For more common infections such as chlamydia, an individual may be named as a contact by multiple individuals, and the number of investigations in PHIMS may become numerous. In this situation, instead of creating new investigations with every notification, the clinician may wish to follow the alternate workflow in the Option 2 column to minimize the number of investigations created.

	Scenario	Option 1	Option 2
1.	The Case identifies a Contact. The Contact has no previous investigations.	<p>Transmission Event For Known Contact – QRC</p> <ul style="list-style-type: none"> • Create a TE in the source investigation. • Search and select the known contact. • Creates a new investigation with a contact classification type, and an AE in the contact investigation which is linked to the TE. 	
2.	The Case identifies a Contact. The Contact is already a named contact to the disease and has a current contact investigation.	<p>Transmission Event For Known Contact - QRC</p> <ul style="list-style-type: none"> • As per above, create a new contact investigation. This is the default work flow. • The investigation can be closed and the disposition updated if no further documentation is required (i.e. the other contact investigation contains all the relevant information). 	<p>Transmission Event For Known Contact - QRC</p> <ul style="list-style-type: none"> • Link the existing contact and case investigations together via the source transmission event. Locate the investigation ID for the contact investigation you wish to link to. In the Known Contact Search, search for the investigation ID. Note: This option may be selected if the contact already has multiple contact investigations in the same timeframe, and avoids repetitive documentation. However, the clinician must confirm that treatment dates and

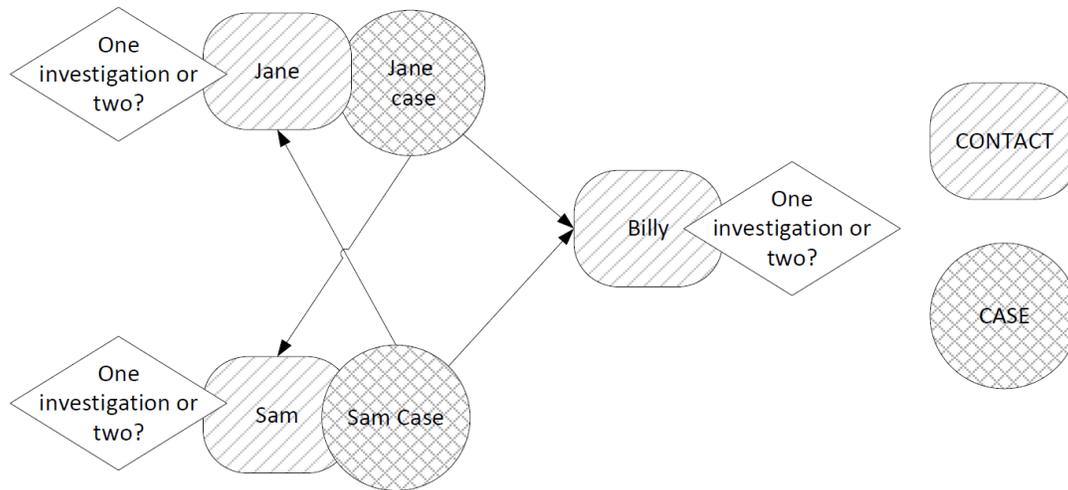
			<p>exposures are reviewed to ensure re-infection has not occurred. Since a new investigation will not be created, the clinician responsible for the contact investigation must be aware and be notified that a new TE link has been added.</p>
3.	<p>The Case identifies a Contact. The Contact is already identified as a case for the disease.</p>	<p>Transmission Event For Known Contact - QRC</p> <ul style="list-style-type: none"> As per above, create a new contact investigation. This is the default work flow. The investigation can be closed and the disposition updated if no further documentation is required (i.e. the other case investigation contains all the relevant information). 	<p>Transmission Event For Known Contact - QRC</p> <ul style="list-style-type: none"> Link the source case and the contact's case investigation together via the source transmission event. Locate the investigation ID for the case investigation you wish to link to. In the Known Contact Search, search for the investigation ID. <p>Note: This option may be selected if the documentation recorded on the contact's case is extensive and the additional contact information can be more efficiently recorded. However, the clinician must confirm that treatment dates and exposures are reviewed to ensure re-infection has not occurred. Since a new investigation will not be created, the clinician responsible for the contact's case investigation must be aware and be notified that a new TE link has been added.</p>

4.	<p>The Contact becomes a Case</p>	<p>Contact Turned to Case - QRC</p> <ul style="list-style-type: none"> • Create a new case investigation from the laboratory result. This is the default work flow. • Update disposition on previous contact investigation to "contact turned case", and close contact investigation. 	<p>Investigation Information - QRC</p> <ul style="list-style-type: none"> • Update classification to case, lab or clinically confirmed (as appropriate), and proceed with further documentation. • If lab has been associated to new investigation by the MHSU, unlink lab and link it to the now updated investigation Unlink/Link an Investigation - QRC and delete the new investigation Delete an Investigation - QRC
5.	<p>Case identifies contact. The case has other previous chronic reportable diseases that are not part of the current investigation, but are relevant to the contact investigation.</p> <p>(e.g. New infection for hepatitis B. HIV positive in 2005.)</p>	<p>Transmission Event For Known Contact – QRC</p> <ul style="list-style-type: none"> • Create a TE in the source investigation. • Search and select the known contact • Creates a new contact investigation, and an AE in the contact investigation which is linked to the TE. • In the newly created contact investigation, add the additional disease following Disease Summary – QRC . 	

6.	Contact presents for care, but source case is unknown, or the source is a non-human subject.	<p>Create an Investigation - QRC</p> <ul style="list-style-type: none"> • Create contact investigation for client for disease(s) under investigation. In exposures, create an acquisition event and document as much detail as available about the exposure. 	
7.	Case identifies the source of infection	<p>Acquisition Event - QRC</p> <ul style="list-style-type: none"> • In exposures, create an acquisition event and document as much detail as available about the exposure, including the exposure dates and setting. • If source is a subject and is identified, and has an existing investigation, search for source investigation by investigation ID in the "Source" section of the AE.* <p>If the source is a subject and does not have an existing investigation, search by client ID and create clinical case investigation if they meet a clinical case definition by virtue of this epi link. If they do not meet this definition, this subject would be a contact and would be entered via a transmission event using</p>	<ul style="list-style-type: none"> • Use existing identified source case investigation and create a transmission event. Document as much detail as available about the exposure, including the exposure dates and settings. <p>Search for known contact (new case identified in first column) by investigation ID using Transmission Event For Known Contact - QRC</p> <p>*Note: The clinician should review both investigations to ensure re-infection has not occurred. Since a new investigation will not be created, the clinician responsible for the case investigation must be aware and be notified that a new AE, and potentially TE link has been added.</p>

		<p>Transmission Event For Known Contact - QRC (see scenario 1)</p> <p>Note: the clinician should review both investigations to ensure re-infection has not occurred. Since a new investigation will not be created, the clinician responsible for the case investigation must be aware and be notified that a new AE, and potentially TE link has been added.</p>	
8.	<p>Converting Unknown Contact to Known Contact (e.g. contact was identified, but not enough information to confirm their identity in PHIMS. Now identity is known)</p>	<p>Transmission Event For Known Contact - QRC</p> <ul style="list-style-type: none"> • Create a new contact investigation – Create an Investigation – QRC <p>Covert Unknown to Known Contact – QRC</p> <ul style="list-style-type: none"> • Navigate to TE to the section for Unknown/Anonymous Contacts. Select the unknown contact in the table and click update. Set the disposition to “converted to client” and save. This will remove this unknown contact from the total contact count. 	

2.3 Diagrams:



3. Previously Named Contact / Unknown Contact Search

As indicated in the section above, for more common infections such as chlamydia, an individual may be named as a contact by multiple individuals, and the number of investigations in PHIMS may become numerous. When adding a known contact to a TE, if a client already has an open investigation, a warning will appear in PHIMS: "An Active Disease in the same Disease Family [Disease] already exists for another Open Investigation for this Subject. Select a different Disease or submit again to bypass this validation." You may choose to bypass this warning and create another investigation, or you may wish to navigate to and review the contact's record in PHIMS and follow steps in the option 2 column.

For unknown contacts, the MB23000-Unknown Contacts report may be helpful to find an unknown contact that may be connected to other cases.

4. Manitoba Health Surveillance Unit Process

Manitoba Health Surveillance Unit will follow the default method of creating case and contact investigations from lab results and investigation forms in the Option 1 column of section 2.

Regions can choose to unlink labs (**Unlink/Link an Investigation** - QRC) from the investigations created and link TEs or AEs to other investigations following the Option 2 column. When following option 2, please ensure that the clinician is aware of the additional link being added to an investigation.

If a TE/AE is entered in error, it cannot be deleted. It must be inactivated by following TE Known Contact or TE Unknown Contact or Acquisition Event – QRCs, Invalidate AE/TE.