

PHIMS COVID-19 CASE INVESTIGATION STEPS

- 2 Check subject summary for any concurrent open investigations and close as appropriate. Eg. Close the contact investigation and change disposition to contact turned case.
- 2 Navigate to subject > client details > client demographics
 - o * Verify address. If missing, add as “MHSU” Address Type
 - o * Add phone number (this is not pre-populated from the registry)
 - o * Add language/interpreter if required
- 2 Navigate to investigations. Select the COVID-19 Case Investigation – go to Investigation Quick Entry.
 - o * Enter indigenous identity and ethnicity if missing
 - o * Select client home address at time of initial investigation
 - o Enter sensitive environment/occupation and details for occupational data collected
 - o * Select staging – close contact of known case, travel acquired, or unknown

The image shows two screenshots of the PHIMS system. The top screenshot is the 'Client Details' form, which includes fields for Indigenous Identity, First Nations Status, Ethnicity, and Other Ethnicity. The bottom screenshot is the 'Disease Details' form, which includes fields for Primary Authority, Classification, Classification Date, First Reporting Source, Responsible Organization, Investigator Organization, Disposition, Client Home Address at Time of Initial Investigation, Sensitive Environment / Occupation, Sensitive Environment / Occupation Details, Staging, and Microorganisms.

Enter symptoms:

- 2 Enter *”asymptomatic”, or * “symptomatic” with onset date of first symptom
- 2 Check off any other symptoms that are present, select set response, and select “yes” and apply

The image shows the 'Signs and Symptoms' form in PHIMS. It features a table with columns for Sign or Symptom, Response, Onset Symptom, and Onset Date. The table lists various symptoms such as Abdominal pain/cramping, Acute respiratory distress syndrome, Asymptomatic, Chills, Confusion, altered mental state, Cough, dry, Cough, productive, Diarrhea, Encephalitis, Fever, Headache, Muscle pain (myalgia), Pneumonia, Renal failure, Seizures, Septicemia or sepsis, Shortness of breath (dyspnea), Sore throat, Symptomatic, and Vomiting. Each row has a checkbox for 'Set Response' and a dropdown for 'Response'. The 'Onset Symptom' and 'Onset Date' columns have checkboxes and date pickers respectively.

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Enter Risk Factors:

- ❓ Enter *all risk factors individually where response is “yes” and add additional information and dates.
- ❓ Check all risk factors where the response is “no”, select set response, select “no”, and apply.

Risk Factors						
For full information and features: Risk Factors						
Reset Risk Factors						
Set Response						
<input type="checkbox"/> Preset	Risk Factor	Response	Additional Information	Frequency	Effective From Date	Effective To Date
<input checked="" type="checkbox"/>	Animal or animal waste contact (domestic pets, farm animals, wildlife etc.)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Contact to a new or previously diagnosed case (specify infection and date)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Contact with someone with similar illness (specify details and date range of exposure)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Exposure setting/location: Other province in Canada (specify)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Exposure setting/location: Outside Canada (specify)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Other risk factor (specify)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Outbreak associated (specify name and for outbreak code)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Pregnant (specify EDC)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Sensitive Environment/...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>
<input checked="" type="checkbox"/>	Underlying illness (specify)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="yyyy/mm/dd"/>	<input type="text" value="yyyy/mm/dd"/>

Enter Exposures:

Acquisitions events (“AE”) (the source of the infection if known or suspected) – navigate to exposure summary and create acquisition event.

- ❓ Determine incubation period (14 days prior to onset of symptoms, or if asymptomatic, 14 days prior to specimen collection date: __/__/__ to __/__/__
- ❓ Should be completed if there is a previous known or suspected exposure(s). E.g. this should be completed for cases staged as close contact or travel acquired.
- ❓ Each setting should be entered as a separate AE
 - Enter *exposure name, *acquisition start and end dates (if ended)
 - Enter *setting type and exposure location
 - If travel – add the information on the mode of travel. Eg. Location Name = e.g., “Air Canada AC492; Toronto; Winnipeg; 12D, 2020-03-10; 2020-03-10; Sat next to sick person”
 - Enter source (enter investigation ID if known case)

Transmission events (“TE”) (contacts) – navigate to exposure quick entry and create transmission event(s).

- ❓ Determine period of communicability (2 days prior to symptoms developing to 10 days from onset of symptoms, or if asymptomatic, 2 days prior to specimen collection date to 10 days after specimen collection date: __/__/__ to __/__/__
- ❓ *Enter all settings and the associated close contacts (known, unknown, and anonymous) during the period of communicability.
 - Do not enter settings where there was no close contact (e.g. shopping with no close contact).
 - Enter each setting type as a different transmission event. All contacts that are associated with the setting with the same exposure dates can be entered in that TE.
 - Ensure all contacts entered in the TE have the same exposure dates, as the start and end dates will inform the contact isolation period – they must correspond.

- If contacts are in different investigation organizations, either create a separate TE with exposure quick entry for each organization, or add the individual(s) separately by navigating to the TE after it is created in exposure quick entry. Perform a known contact search that will individually add a contact and create an investigation that can be assigned to the other organization.
- Enter * exposure name, * transmission start and end dates (if ended)
- Enter exposure location if relevant
- Enter contacts (search clients, or add contact list - note: do not save until all contacts are entered for this setting).
- Enter contact investigation details:
 - * First reporting source = “other” – enter contact
 - * enter responsible and investigator organization, workgroup
 - * select disposition – pending (default) or assign to call center

Exposure Quick Entry [Save] [Reset] [Print] [Help] [Close]

Transmission Event Details

* Exposure Name: [] * Transmission Start: [yyyy/mm/dd] [hh:mn] CDT * Transmission End: [yyyy/mm/dd] [hh:mn] CDT

Responsible Organization: [e.g. Organization Display Name] [Info] [Search]

Exposure Location

Location Name: [] Setting Type: [] Setting: []

Unit No.: [] Street No.: [] Street Name: [] Street Type: [] Street Direction: []

P.O. Box: [] STN: [] RPO: [] Rural Route: []

Country: [Canada] Province / Territory: [Manitoba] City / Town: [] Postal Code: []

Known Contacts [Add Contact List]

Client: [Client Last Name or ID] Search Type: [] [Info] [Search] [Add]

Contact Investigation Details

Disease	Microorganism	Authority	Classification	Classification Date
COVID-19	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)	Provincial	Contact - Person Under Investigation	2020 Oct 24

* First Reporting Source: Provider Location Other

Provider: [e.g. Provider Last Name, First Name] [Info] [Search]

* Responsible Organization: [Manitoba] * Responsible Organization Workgroup: []

* Investigator Organization: [Manitoba] * Investigator Workgroup: []

* Disposition: [Pending] * Report Date (Received): [2020/10/24]

Enter Interventions:

- 🔍 Navigate to intervention summary and add relevant preset interventions
- 🔍 Enter * COVID Alert App – Positive Key entry.
 - If client has app and key offered - select disposition of “issued” or “declined”, outcome= not applicable
 - If client doesn’t have app – select disposition of not completed, outcome= not applicable
 - If not asked, select outcome of “unknown”
- 🔍 Enter * COVID Alert App – Exposure notification.
 - If client has app, check if they received an exposure notification in the past 14 days - select disposition of “issued” or “not issued”, outcome= not applicable
 - If client doesn’t have app – select disposition of not completed, outcome= not applicable
 - If not asked, select outcome of “unknown”
- 🔍 Enter * isolation intervention with * outcome (initially pending), * start date, and * end date corresponding to period of communicability
- 🔍 Enter the relevant * status assessment
 - The status should be updated if it changes. Updates may be added by MHSAL if noted on ADT system.

Interventions							
For full information and features: Intervention Summary							
Reset Interventions							
Perform...	Type	Sub Type	Outcome	Disposition	Start Date	Next Follow Up Date	Follow Up Workgroup
<input type="checkbox"/>	App	COVID Alert App - Exposure Notification			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	App	COVID Alert App - Positive Key Entry			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Isolation	Facility isolation			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Isolation	Home isolation			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Isolation	Self isolation			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Status Assessment	Fatal			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Status Assessment	Home isolation			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Status Assessment	Hospitalizati...			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Status Assessment	ICU			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Status Assessment	Mechanical ventilation			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Status Assessment	Recovered			yyyy/mm/dd	yyyy/mm/dd	
<input type="checkbox"/>	Status Assessment	Unknown			yyyy/mm/dd	yyyy/mm/dd	

- 🔍 Add relevant notes if required.
- 🔍 Update disposition. Consider using call center for ADM's.

To close case: [note this may be done at the Call Centres]

At end of isolation period:

- 🔍 Ensure end date of isolation period is past. Update outcome of isolation intervention to "completed".
- 🔍 Add status assessment of "recovered" or "fatal" and add start date.
- 🔍 Close investigation.

PHIMS COVID-19 CONTACT INVESTIGATION STEPS

- 2 Check subject summary for any concurrent open investigations and close as appropriate. Eg. Close the older contact investigation and change disposition to “concurrent contact investigation”.
- 2 Navigate to subject > client details > client demographics
 - o * Verify address. If missing, add as “MHSU” Address Type
 - o * Add phone number (this is not pre-populated from the registry)
 - o * Add language/interpreter if required
- 2 Navigate to investigations. Select the COVID-19 Contact Investigation – go to Investigation Quick Entry.
 - o * Select client home address at time of initial investigation
 - o Enter sensitive environment/occupation and details for occupational data collected

Enter symptoms:

- 2 Enter * “asymptomatic”, or * “symptomatic” with onset date of first symptom
- 2 Check off any other symptoms that are present, select set response, and select “yes” and apply

Sign or Symptom	Response	Onset Symptom	Onset Date
<input type="checkbox"/> Abdominal pain/cramping		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Acute respiratory distress syndrome		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Asymptomatic		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Chills		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Confusion, altered mental state		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Cough, dry		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Cough, productive		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Diarrhea		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Encephalitis		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Fever		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Headache		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Muscle pain (myalgia)		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Pneumonia		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Renal failure		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Seizures		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Septicemia or sepsis		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Shortness of breath (dyspnea)		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Sore throat		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Symptomatic		<input type="checkbox"/>	yyyy/mm/dd
<input type="checkbox"/> Vomiting		<input type="checkbox"/>	yyyy/mm/dd

Do Not Enter Risk Factors

No risk factors on contact form

Review Exposures:

- ☒ Check if more than one acquisition event. Identify the date of the most recent acquisition end date. If acquisition end date is missing, go to exposure summary and navigate to the transmission event of the case to determine if the date was entered. (see appendix A at end of document for calculating isolation dates.)
 - **Note that depending on how the transmission event was entered, the AE on the contact investigation may not display the acquisition end date. You must check the transmission event for the end date if it is missing.**
- ☒ Determine incubation period (14 days after to the last exposure date) which corresponds to the isolation period: __/__/__ to __/__/__

Enter Interventions:

- ☒ Navigate to intervention summary and add relevant preset interventions
- ☒ Enter *COVID Alert App– Exposure notification.
 - If client has app, check if they received an exposure notification in the past 14 days - select disposition of “issued” or “not issued”, outcome= not applicable
 - If client doesn't have app – select disposition of not completed, outcome= not applicable
 - If not asked, select outcome of “unknown”
- ☒ Enter *isolation intervention with *outcome (initially pending), *start date, and *end date corresponding to self-isolation period. Start date should reflect when the contact started self-isolating.
- ☒ Add first follow-up on isolation.
 - Click “add follow-up”
 - Enter follow-up type (telephone), follow-up disposition (completed, unsuccessful, completed-referred to nurse), has symptoms (yes/no).
 - ☒ Add relevant notes in comment box of follow-up if required.
 - ☒ Click save

Enter Notes:

- ☒ Enter notes if required.

Ensure Investigation Disposition has been updated:

- ☒ Consider using:
 - ☒ call center for active daily monitoring (ADM's through the Canadian Red Cross or COVID-19 Call Center at Deer Lodge) – use “follow-up by call center” or “follow-up by Canadian Red Cross” according to the direction provided by your region.
 - ☒ For contact notification, use “follow-up by Statistics Canada” for known contacts with investigations created, who will notify the contact and provide education on self-isolation.

To close contact:

At end of isolation period: [may be done at Call Centre]

- ☒ Ensure end date of isolation period is past. Update outcome of isolation intervention to “completed”.
- ☒ Close investigation.

Appendix A: Determining Isolation Dates:

- Check subject summary for concurrent contact investigations and ensure most recent investigation and associated exposure dates are being used.
- Navigate to Exposure summary:

Exposure Summary

To enter exposures: [Acquisition Event Quick Entry](#)
For full information and features: [Exposure Summary](#)

Acquisition Events

Update

AE ID	TE ID	Source Name	Exposure Name	Acquisition Start	Acquisition End	Setting Type	Setting	Likely Source
239	135	Albert	ae test	2020 Oct 22				

- Make sure you are using the most recent exposure dates if there is more than one AE.

Transmission Event Summary

0 Transmission Events Found. 0 Contacts Found.

TE ID	Transmission Start	Transmission End	Location Name	Setting Type	Outbreak ID	Invalid
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Acquisition Event Summary

1 Acquisition Events Found.

Row Actions: Search and Link TE Copy Multiple AE Entry Create Acquisition Event

AE ID	TE ID	Source Name	Acquisition Start	Acquisition End	Location Name	Setting Type	Exposed	Likely Source	Invalid
239	135	Albert	2020 Oct 22		Household, Last exposure Oct 22				

- Click on the TE ID to navigate to the transmission event (TE) from the case.
 - o Note that the AE may not display the acquisition end date from the transmission event, depending on how the TE was entered. You must check the transmission event for the end date if it is missing.
- Review the TE event date/time:

Save Reset Cancel Use Map

Required Field

Transmission Event Details

Exposure Name: ae test Transmission Event ID: 135

Invalid: Invalid Reason:

Responsible Organizational Unit: Organization: Top Level > Level 2 (specific one) > Level 3 (specific one) > [Selected Level & Organization] Find

Transmitter Role:

Source: Contains Data Show Source

Source Details: Show Source Details

Transmission Event Investigator Information: Show Transmission Event Investigator Information

Known Contact Search: Show Known Contact Search

Acquisition Events

Row Actions: Unlink

Acquisition Event ID	Investigation ID	Subject Name	Acquisition Start	Acquisition End	Classification	Disposition	Invalid
239	757		2020 Oct 22		COVID-19 Contact - Person Under Investigation	Pending	

Total All Contacts: 1

Unknown/Anonymous Contacts: Show Unknown/Anonymous Contacts

Transmission Event Date/Time

Disease	Earliest Possible Communicability From	Earliest Probable Communicability From	Latest Probable Communicability To	Latest Possible Communicability To
COVID-19				

Transmission Start: 2020/10/22 [hh:mm] CDT [] Estimated

Transmission End: 2020/10/28 [hh:mm] CDT [] Estimated

Exposure Duration: 6 Days

Exposure Location: Show Exposure Location

Exposure Location Name: Household, Last exposure Oct 28

Exposure Setting Type: Household exposure

Exposure Setting:

- The isolation end date should be 14 days from the TE end date (the last date of exposure). If the TE end date is missing, calculate 14 days from the start date. Make a note of the start and end dates for the TE and the associated self-isolation start and end dates. The last date on the TE should be considered day 0, and self-isolation will end at midnight on day 14.
- The exposure location may also provide some context about the exposure. The details in the location should not be shared with the contact, as this may identify the case, but may help in provide additional context on the exposure to identify any issues with the self-isolation dates.
- When the review is complete, click cancel at the top, which will take you back to the investigation you are working on.
- Navigate to the Intervention Summary.
- Select the preset isolation intervention you wish to add: (home isolation if at home, self-isolation if at another location, facility isolation if in a facility), and click “add preset”.

Preset Interventions Hide Preset Interventions		
Row Actions: Add Preset		
Type	SubType	Added
<input type="radio"/>	Isolation	Facility isolation
<input type="radio"/>	Isolation	Home isolation
<input type="radio"/>	Isolation	Self isolation

- Add the intervention disposition (in progress), the outcome (pending), the isolation start date (when they began isolating) and end date from your above calculation based on the transmission event date(s).
- Click save

Intervention Details Hide Intervention Details

** Required field*

Encounter Group: Outbreak Response

** Intervention Type:* ** Intervention Sub Type:*

Intervention Disposition:

** Outcome:*

** Start Date:* / / *End Date:* / /

Next Follow Up Date: / /

Workgroup Organization To specify an Organization first click on the 'Find' button. Then search, or type the name of the Organization you wish to specify, select it and click on 'Select' button. Then click 'Close' to close.

Organization:

Workgroup: User: