**Ontario Powassan Virus** **Investigation Tool**

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| **Legend** | **for interview with case ♦ System-Mandatory ❖ Required Personal Health information** |

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| **Cover Sheet***Note that this page can be autogenerated in iPHIS* | | |
| Date Printed: YYYY-MM-DD  Bring Forward Date: YYYY-MM-DD  iPHIS Client ID #:  Enter number  **♦** Investigator:  **Enter name \_ \_**  **♦** Branch Office:  Enter office  Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **♦** Reported Date: YYYY-MM-DD  **❖**Diagnosing Health Unit:  Enter health unit  Tel. 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **♦** Disease: **POWASSAN VIRUS**  **♦** Is this an outbreak-associated case? Other, please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Yes, *OB #* ####-####-###  No, *link to* ***OB # 0000-2023-00007*** *in iPHIS* | **♦** Client Name:  **Enter name \_ \_**  Alias:  **Enter alias \_ \_** | |
| **♦** Gender: **Select an option** | **♦** Age: **Age** |
| **♦** DOB:YYYY-MM-DD  Address:  **Enter address \_**  **Enter address \_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Tel. 1:  **###-###-####**  Type:  Home  Mobile  Work  **Other, specify**  Tel. 2:  **###-###-####**  Type:  Home  Mobile  Work  **Other, specify**  Email 1: **Enter email address \_ \_**  Email 2:  **Enter email address \_ \_**  Is the client in a high-risk occupation/environment?  Yes, specify: Specify  No | |
| Is the client homeless?  Yes  No  New Address:  **Enter address \_**  **♦** Language:  **Specify \_ \_**  Translation required*?*  Yes  No  **Proxy respondent**  Name:  **Enter name \_ \_**  Parent/Guardian  Spouse/Partner  Other  **Specify \_ \_** | **♦** Physician’s Name: **Enter name \_ \_**  **♦** Role**:**  Attending Physician  Family Physician  Specialist  Walk-In Physician  Other  Unknown  **OPTIONAL**  Additional Physician’s Name: **Enter name \_**  Address:  **Enter address \_**  Tel:  **###-###-####**  Fax:  **###-###-####**  Role:  **Enter role \_ \_** | |

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| **Verification of Client’s Identity & Notice of Collection** |
| Client’s identity verified?  Yes, *specify*:  DOB  Postal Code  Physician  No |
| **Notice of Collection**  *Please consult with local privacy and legal counsel about PHU-specific Notice of Collection requirements under*  *PHIPA s. 16*. *Insert Notice of Collection, as necessary.* |

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| **Record of File** | | | | | |
| **♦ Responsible Health Unit** | **Date** | **♦ Investigator’s Name** | **Investigator’s Signature** | **Investigator’s Initials** | **Designation** |
| Specify | **❖**Investigation Start Date  YYYY-MM-DD | Specify | Specify | Specify | PHI  PHN  Other \_\_\_\_\_\_\_ |
| Specify | Assignment Date  YYYY-MM-DD | Specify | Specify | Specify | PHI  PHN  Other \_\_\_\_\_\_\_ |

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| **Call Log Details** | | | | | | | |
|  | **Date** | **Start Time** | **Type of Call** | **Call To/From** | | **Outcome**  **(contact made, v/m, text, email, no answer, etc.)** | **Investigator’s initials** |
| Call 1 | YYYY-MM-DD |  | Outgoing  Incoming |  |  |  |  |
| Call 2 | YYYY-MM-DD |  | Outgoing  Incoming |  |  |  |  |
| Call 3 | YYYY-MM-DD |  | Outgoing  Incoming |  |  |  |  |
| Call 4 | YYYY-MM-DD |  | Outgoing  Incoming |  |  |  |  |
| Call 5 | YYYY-MM-DD |  | Outgoing  Incoming |  |  |  |  |
| Date letter sent: YYYY-MM-DD | | | | | | | |

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| **Case Details** | | | | | | |
| **♦ Aetiologic Agent** | Select the Aetiologic Agent | | | | | |
| **♦ Classification** | Confirmed  Probable  Does Not Meet Definition | | | | **♦ Classification Date** | YYYY-MM-DD |
| **♦ Outbreak Case Classification** | Confirmed  Probable  Does Not Meet Definition | | | | **♦ Outbreak Classification Date** | YYYY-MM-DD |
| **♦ Disposition** | Complete  Closed- Duplicate-Do Not Use  Entered In Error  Lost to Follow Up  Does Not Meet Definition  Untraceable | | | | **♦ Disposition Date** | YYYY-MM-DD |
| **♦ Status** | Closed | | Initial here | | **♦ Status Date** | YYYY-MM-DD |
| Open (re-opened) | | Initial here | | **♦ Status Date** | YYYY-MM-DD |
| Closed | | Initial here | | **♦ Status Date** | YYYY-MM-DD |
| **♦ Priority** | ☐ High | ☐ Medium ☐ Low | | *(At health unit’s discretion)* | | |

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| **Symptoms** | | | | | | | | | |
| ***Incubation period*** *is usually 7-30 days after a bite from an infected tick.*  ***Communicability****: person-to-person transmission (i.e., via contaminated blood transfusion) is thought to be rare.* | | | | | | | | | |
| ***Specimen collection date:*** YYYY-MM-DD | | | | | | | | | |
| **♦ Symptom**  *Ensure that symptoms in* ***bold font*** *are asked* | **♦ Response** | | | | | **❖ Use as Onset**  *(choose one)* | **❖ Onset Date**  YYYY-MM-DD | **Onset Time**  24-HR Clock  HH:MM  *(discretionary)* | **❖ Recovery Date**  YYYY-MM-DD  *(one date is sufficient)* |
| **Yes** | **No** | **Unknown** | **Not Asked** | **Refused** |
| Asymptomatic |  |  | *Enter zero (0) for the duration days. DO NOT enter an Onset Date and DO NOT check the ‘Use as Onset’ box* | | | | | | |
| Anemia |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD |
| Ataxia  [lack of coordination/balance] |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD |
| Chills |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Confusion |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Fever |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Headache |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Lymphocytes, increased |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Muscle, paralysis |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Myalgia [muscle pain] |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Nausea |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Vomiting |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Weakness [asthenia] |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| Other, *specify* |  |  |  |  |  |  | YYYY-MM-DD | HH:MM | YYYY-MM-DD | |
| ***Note: This list is not comprehensive. There are additional symptoms listed in iPHIS.*** | | | | | | | | | | |

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| ♦ **Complications** |
| None  Other  Unknown  Meningitis/Encephalitis |

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| **Hospitalization & Treatment** *Mandatory in iPHIS only if admitted to hospital* | | |
| Did you go to an emergency room? | Yes  No | If yes, name of hospital: Enter name  Date(s): YYYY-MM-DD |
| **♦** Were you admitted to hospital as a result of your illness (not including stay in the emergency room)? | Yes  No  Don’t recall | If yes, name of hospital: Enter name  ♦ Date of admission: YYYY-MM-DD  ❖ Date of discharge: YYYY-MM-DD  Unknown discharge date |
| *→ For iPHIS data entry – if the case is hospitalized enter information under Interventions.* | | |
| Were you prescribed antibiotics or medication for your illness? | Yes  No  Don’t recall | If yes, Medication: Enter name  Start date: YYYY-MM-DDEnd date: YYYY-MM-DD  Route of administration: Enter route Dosage: Enter dosage |
| Did you take over-the-counter medication? | Yes  No  Don’t recall | If yes, specify |
| *Treatment information can be entered in iPHIS under* ***Cases > Case > Rx/Treatments>Treatment*** *as per current iPHIS User Guide* | | |

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| **Outcome** *(complete for cases only)**Mandatory in iPHIS only if Outcome is Fatal* | | | | |
| **Outcome** | Unknown  ♦ Fatal  Ill  Pending  Residual effects  Recovered | | ♦ **Cause(s) of** **Death?**  *If fatal, complete disposition type and facility name in iPHIS* | Specify |
| *If fatal, complete section below under Outcome* | | | | |
| ♦ **Type of Death** | Reportable disease contributed to but was not the underlying cause of death  Reportable disease was the underlying cause of death  Reportable disease was unrelated to the cause of death  Unknown | | | |
| **Outcome Date** | YYYY-MM-DD | **Date Accurate** | Yes Specify source (e.g. death certificate)  No | |

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| **Medical Risk Factors** | **❖ Response** | | | | **Details**  *iPHIS character limit: 50.* |
| **Yes** | **No** | **Unknown** | **Not asked** |
| **❖** Immunocompromised  (e.g., by medication/disease) |  |  |  |  | If yes, specify |
| **❖** Other (specify) |  |  |  |  | If yes, specify |
| **❖** Unknown |  |  | *→ For iPHIS data entry – check Yes for Unknown if all other Medical Risk Factors are No or Unknown.* | | |

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| **Date of Onset, Age and Gender**  *Complete this section if submission of pages 7-11 to Public Health Ontario is required* | | | | | |
| Date of Onset: | YYYY-MM-DD | Age: | **Age** | Gender: | **Select an option** |

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| **Incubation Period** |
| *Enter onset date and time, using this as day 0, then count back to determine the incubation period.* |
| - 30 days - 7 days onset  Select a date Select a date Select a date & time |

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| **Behavioural Social Risk Factors in the 30 days prior to onset of illness** | | **❖ Response** | | | | **Details**  *iPHIS character limit: 50.* |
| **Yes** | **No** | **Unknown** | **Not asked** |
| **❖** Activities in wooded or tall grass areas | |  |  |  |  | Specify |
| **❖** Camping, hiking, working or other activities in wooded areas | |  |  |  |  | Specify |
| **❖** Does not always check themselves for ticks after being outdoors in wooded or tall grass areas | |  |  |  |  | Specify |
| **❖** Does not always use adequate clothing protection in wooded/field areas, e.g. long sleeves, long pants, covered shoes | |  |  |  |  | Specify |
| **❖** Does not always use insect repellant when outdoors, e.g., wooded areas | |  |  |  |  | Specify |
| **❖** Lived/worked in a blacklegged tick risk area | |  |  |  |  | Specify |
| **❖** Occupational – hunter or trapper | |  |  |  |  | Specify |
| **❖** Outdoor dog or cat that shares bed or living space | |  |  |  |  | Specify |
| **❖** Tick bite or exposure to ticks | |  |  |  |  | Specify |
| **❖** Travel outside province in the last 30 days (specify province or country) | |  |  |  |  | Specify |
| **❖** Other (specify) | |  |  |  |  | Specify |
| **❖** Unknown | |  |  | *→ For iPHIS data entry – check Yes for Unknown if all other Behavioural Risk Factors are No or Unknown.* | | |
| **♦** CreateExposures *Identify Exposures to be entered in iPHIS.*  *→ For iPHIS data entry – record details of exposure(s) in* [*iPHIS Case Exposure Form*](https://www.publichealthontario.ca/-/media/Documents/I/2015/investigation-tool-iphis-case-exposure-form.docx?la=en&rev=d8fb16a37da3475fb46fba02e9505f0f&sc_lang=en&hash=47E3148895EB5991B7766C95B3CC96C5) *as required.* | | | | | | |

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| **Exposures – Linked to provincial canned exposure** | | | | | |
| Please document locations of travel and/or contact with wooded/tall grass areas in the 28 days prior to symptom onset.  If the location(s) of exposure is included in the list of provincial canned exposure below use that exposure and enter the relevant client details (ie. client earliest and most recent exposure date). Please do not create individual exposures for the locations included in the list of provincial canned exposures. **Also please do not change any details or add any comments to the canned exposures as it will affect all cases that are linked to the exposure**. If you need to add specific comments please do so in the case notes.  If the exposure of interest is not found, go to the next section to create a new exposure.  Please identify the most likely exposure. | | | | | |
| **Exposure ID** | **Exposure Name** | **Client Earliest Exposure Date/ Time**  **YYYY-MM-DD** | **Client Most Recent Exposure Date/ Time**  **YYYY-MM-DD** | **Exposure Mode** | **Most Likely Source (select one only)** |
| 209725 | KINGSTON - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209718 | LONG POINT PROVINCIAL PARK -TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209721 | MURPHYS POINT PROVINCIAL PARK - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209730 | PERTH – TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209723 | PICTON - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209724 | PINERY PROVINCIAL PARK - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209729 | POINT PELEE NATIONAL PARK - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209728 | PRINCE EDWARD POINT NATIONAL WILDLIFE AREA - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209719 | RONDEAU PROVINCIAL PARK - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209731 | ROUGE VALLEY - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209727 | ST. LAWRENCE ISLANDS NATIONAL PARK - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209722 | TURKEY POINT PROVINCIAL PARK - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209726 | WAINFLEET BOG CONSERAVATION AREA - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209737 | CONNECTICUT - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209742 | DELAWARE – TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209733 | MAINE – TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209745 | MARYLAND - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209735 | MASSACHUSETTS - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209738 | MINNESOTA - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209740 | NEW HAMPSHIRE – TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209739 | NEW JERSEY - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209743 | NEW YORK - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209736 | PENNSYLVANIA - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209744 | RHODE ISLAND - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| Exposure ID | Exposure Name | Client Earliest Exposure Date/ Time  YYYY-MM-DD | Client Most Recent Exposure Date/ Time  YYYY-MM-DD | Exposure Mode | Most Likely Source (select one only) |
| 209732 | VERMONT - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209741 | VIRGINIA - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| 209734 | WISCONSIN - TICK | **YYYY-MM-DD** | **YYYY-MM-DD** | Acquisition |  |
| **Creating a New Exposure** | | | | | |
| If the location of exposure is not found in the list of provincial canned exposures, please create a new exposure using the fields below and enter into iPHIS. If multiple exposures are identified, please create an exposure for each location and indicate which one is the most likely exposure. Please collect as much information regarding the location of exposure. If the exposure you have created is within a different health unit please send an iPHIS referral to that health unit with the exposure ID so that they are aware of the exposure in their jurisdiction. Please fill out the full street address if possible, at a minimum include the city or town name.  Enter the exposure using the naming convention below. Multiple exposures can be entered for a single case. Note, a date is not included in the exposure name,  {LOCATION – TICK}  Location name should be either a park name, landmark or city name. | | | | | |

**Exposure 1:**

|  |  |  |  |  |  |  |  |
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| Exposure Type: | Vector | | | | | | |
| Exposure ID #: |  | | | | | | |
| **♦**Exposure Name:  {LOCATION – TICK} |  | | | | | | |
| **♦**Health Unit Responsible: |  | | | | | | |
| **♦** Earliest Exposure: | **YYYY-MM-DD**  **Date** | HH :MM  **Time** | | Most Recent Exposure: | **YYYY-MM-DD**  **Date** | | HH :MM  **Time** |
| Category/Transmission: | Vectorborne | | | Source: | Tick | | |
| Exposure Address | | | | | | | |
| Full Street Address: |  | | | | | | |
| **♦** City/Province: |  | | | | | | |
| Postal Code: |  | | **♦** Country: | | |  | |
| **❖** Exposure Setting: |  | | Exposure Setting Type: | | |  | |
| **♦** Exposure Mode: | Acquisition | | **❖** Most Likely Source? | | |  | |
| Exposure Assignment: |  | | Health Unit Person Responsible: | | |  | |

**Exposure 2:**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Exposure Type: | Vector | | | | | | |
| Exposure ID #: |  | | | | | | |
| **♦**Exposure Name:  {LOCATION – TICK} |  | | | | | | |
| **♦**Health Unit Responsible: |  | | | | | | |
| **♦** Earliest Exposure: | **YYYY-MM-DD**  **Date** | HH :MM  **Time** | | Most Recent Exposure: | **YYYY-MM-DD**  **Date** | | HH :MM  **Time** |
| Category/Transmission: | Vectorborne | | | Source: | Tick | | |
| Exposure Address | | | | | | | |
| Full Street Address: |  | | | | | | |
| **♦** City/Province: |  | | | | | | |
| Postal Code: |  | | **♦** Country: | | |  | |
| **❖** Exposure Setting: |  | | Exposure Setting Type: | | |  | |
| **♦** Exposure Mode: | Acquisition | | **❖** Most Likely Source? | | |  | |
| Exposure Assignment: |  | | Health Unit Person Responsible: | | |  | |

**Exposure 3:**

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| Exposure Type: | Vector | | | | | | |
| Exposure ID #: |  | | | | | | |
| **♦**Exposure Name:  {LOCATION – TICK} |  | | | | | | |
| **♦**Health Unit Responsible: |  | | | | | | |
| **♦** Earliest Exposure: | **YYYY-MM-DD**  **Date** | HH :MM  **Time** | | Most Recent Exposure: | **YYYY-MM-DD**  **Date** | | HH :MM  **Time** |
| Category/Transmission: | Vectorborne | | | Source: | Tick | | |
| Exposure Address | | | | | | | |
| Full Street Address: |  | | | | | | |
| **♦** City/Province: |  | | | | | | |
| Postal Code: |  | | **♦** Country: | | |  | |
| **❖** Exposure Setting: |  | | Exposure Setting Type: | | |  | |
| **♦** Exposure Mode: | Acquisition | | **❖** Most Likely Source? | | |  | |
| Exposure Assignment: |  | | Health Unit Person Responsible: | | |  | |

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| **Education/Counselling** *Discuss the relevant sections with case* | | |
| **Disease prevention** | ☐  ☐  ☐ | Avoid bites of deer flies, mosquitoes and ticks by using insect repellent, wearing long sleeved shirts and pants and light coloured clothing.  Bathe or shower within 2 hours of coming indoors  Check for ticks frequently, including checking pets |
| **Recovery** | ☐ | If you continue to feel unwell, or new symptoms appear/symptoms change – seek medical attention. |

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| **Thank you** |
| Thank you for your time. This information will be used to help prevent future cases of Powassan virus. Please note that another investigator may contact you again to ask additional questions if it is identified that there is a possibility that you are included in an outbreak. |

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| **❖ Intervention Type** | **Intervention implemented (check all that apply)** | **Investigator’s initials** | ♦ **Start Date**  **YYYY-MM-DD** | **❖ End Date**  **YYYY-MM-DD** |
| Counselling |  |  | **YYYY-MM-DD** | **YYYY-MM-DD** |
| Education  (e.g., disease fact sheet) |  |  | YYYY-MM-DD | YYYY-MM-DD |
| ER visit |  |  | YYYY-MM-DD | YYYY-MM-DD |
| Hospitalization |  |  | YYYY-MM-DD | YYYY-MM-DD |
| Letter - Client |  |  | YYYY-MM-DD | YYYY-MM-DD |
| Letter - Physician |  |  | YYYY-MM-DD | YYYY-MM-DD |
| Other (i.e., contacts assessed, PHI/PHN contact information) |  |  | YYYY-MM-DD | YYYY-MM-DD |
| *→**For iPHIS data entry – enter information under* ***Cases > Case > Interventions.*** | | | | |

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| **Progress Notes** |
| **Enter notes** |

If you have any comments or feedback regarding this Investigation Tool, please email us at [ezvbd@oahpp.ca](mailto:ezvbd@oahpp.ca).