**Ontario Cryptosporidiosis** **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 **♦** Reported Date: YYYY-MM-DD **❖**Diagnosing Health Unit:  Enter health unit **♦** Disease: CRYPTOSPORIDIOSISType: [ ] Home [ ] Mobile [ ] Work**♦** Is this an outbreak associated case?[ ]  Yes, *OB #* ####-####-### [ ]  No, *link to OB # 0000-2005-009 in iPHIS*Is the client in a high-risk occupation/ environment? [ ]  Yes, specify: Specify [ ]  No |  ♦ 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 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 DateYYYY-MM-DD | Specify | Specify | Specify | [ ]  PHI [ ]  PHN[ ]  Other \_\_\_\_\_\_\_  |
| Specify | Assignment DateYYYY-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 |  |  |  |  |
| Call 6 | YYYY-MM-DD |  | [ ]  Outgoing[ ]  Incoming |  |  |  |  |
| Date letter sent: YYYY-MM-DD |

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| **Case Details** |
| **♦ Aetiologic Agent** | [ ]  Cryptosporidium parvum[ ]  Cryptosporidium hominis[ ]  Cryptosporidium unspecified[ ]  Cryptosporidium other (specify) |
| **Subtype** |  Specify | **Further Differentiation** | Specify |
| **♦ 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)* |
| **Symptoms** |
| ***Incubation period*** *is variable. 1 – 12 days is the likely range, with an average of about 7 days.* ***Communicability:*** *Oocysts, the infectious components of the parasites life cycle, appear in stool at the onset of symptoms and are infectious immediately upon excretion. Excretion continues in stools for several weeks after symptoms resolve; outside the body, oocysts may remain infective for 2-6 months or longer in a moist environment. Oocysts are highly resistant to chemical disinfectants used to purify drinking water. One or more auto-infectious cycles may occur in humans.* |
| ***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 ClockHH:MM*(discretionary)* | **❖ Recovery Date**YYYY-MM-DD*(one date is sufficient)* |
| **Yes** | **No** | **Don’t Know** | **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* |
| Abdominal Pain | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | YYYY-MM-DD | HH:MM | YYYY-MM-DD |
| Anorexia [loss of appetite] | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | YYYY-MM-DD | HH:MM | YYYY-MM-DD |
| **Diarrhea** | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | 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** |
| [ ]  Extraintestinal infection [ ]  None [ ]  Other [ ]  Unknown |

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| **Incubation Period**  |
| *Enter onset date and time, using this as day 0, then count back to determine the incubation period.* |
|   - 12 days - 1 day Onset  Select a date Select a date Select a date & time  |

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| **Medical Risk Factors** | **❖ Response** | **Details***iPHIS character limit: 50* |
|  | **Yes** | **No** | **Unknown** | **Not asked** |  |
| **❖**Immunocompromised (specify)(e.g., by medication or by disease such as cancer, diabetes, etc.)  |[ ] [ ] [ ] [ ]  If yes, specify |
| **❖**Other (specify)(e.g., use of antacid, surgery, etc.) |[ ] [ ] [ ] [ ]  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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| **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 nameDate(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-DDRoute 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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| **Date of Onset, Age and Gender** *Complete this section if submission of pages 5-7 and 11 to Public Health Ontario is required* |
| Date of Onset: | YYYY-MM-DD | Age: | **Age**  | Gender: | Select an option |

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| **Preliminary Questions**  | **Response** | **Details** |
|  | **Yes** | **No** | **Unsure** |  |
| Do you have any idea how you became sick? |[ ] [ ] [ ]  If yes, specify |
| Were you on any specific diet(s) in the 1-12 days prior to the onset of your illness (e.g., vegetarian, vegan, gluten-free, kosher, halal, etc.)? |[ ] [ ] [ ]  If yes, specify  |
| Did you attend any special functions such as weddings, parties, showers, family gatherings or group meals in the 1-12 days prior to the onset of your illness? |[ ] [ ] [ ]  If yes, specify *(e.g., location, number attended, any ill)*  |

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| **Behavioural Social Risk Factors in the 1-12 days prior onset of illness****Travel** | **❖ Response** | **Details***iPHIS character limit: 50.*  |
|  | **Yes** | **No** | **Unknown** | **Not asked** |  |
| **❖** Travel outside the province in the last 1-12 daysprior to illness(specify) |[ ] [ ] [ ] [ ]   |
| Within Canada  |[ ] [ ] [ ] [ ]  From: YYYY-MM-DD To: YYYY-MM-DDWhere: Specify |
| Outside of Canada  |[ ] [ ] [ ] [ ]  From: YYYY-MM-DD To: YYYY-MM-DDWhere: SpecifyHotel/Resort: Specify |
| ***Attention!*** *If the case travelled during the entire incubation period, you can skip the remainder of the behavioural social risk factor section and go to the* **High Risk Occupation/High Risk Environment** *section on page 8. If the case travelled for part of their incubation period, please collect information for the behavioural social risk factors acquired in Canada.* |

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| **Behavioural Social Risk Factors in the 1-12 days prior to onset of illness****Residential drinking water source** | **❖ Response** | **Details**(e.g., Brand name, purchase/consumption location, product details, date of exposure)*iPHIS character limit: 50.*  |
|  | **Yes** | **No** | **Unknown** | **Not asked** |  |
| **❖** Private water system(specify if treated, e.g., Brita, boiled, UV light, on tap filter, reverse osmosis, etc.) |[ ] [ ] [ ] [ ]  Specify |
| **❖** Municipal water system (specify if treated, e.g., Brita, boiled, UV light, on tap filter, reverse osmosis, etc.) |[ ] [ ] [ ] [ ]  Specify |
| **Waterborne** |
| **❖** Swim or contact with water from lakes, rivers, streams in Ontario *(specify location)* |[ ] [ ] [ ] [ ]  Specify |
| **❖** Swim or contact with water from swimming pools, hot tubs, wading pools or water parks in Ontario *(specify location*) |[ ] [ ] [ ] [ ]    |
| **Foodborne** |
| **❖** Consumption of iceberg lettuce (specify if prepackaged or loose) |[ ] [ ] [ ] [ ]  Specify |
| **❖** Consumption of mesclun lettuce (aka spring mix) (specify if prepackaged or loose) |[ ] [ ] [ ] [ ]  Specify |
| **❖** Consumption of romaine lettuce (specify if prepackaged or loose) |[ ] [ ] [ ] [ ]  Specify |
| **❖** Consumption of spinach (specify if prepackaged or loose) |[ ] [ ] [ ] [ ]  Specify |
| **❖** Consumption of ready-to-eat, pre-washed, or pre-made salads*Excluding the 4 risk factors mentioned above.*E.g., lettuce or leafy greens salad kits with toppings and dressing; ready-to-eat salads sold at the grocery store deli counter or fast food restaurant   |[ ] [ ] [ ] [ ]  Specify |
| **Behavioural Social Risk Factors in the 1-12 days prior to onset of illness****Foodborne** | **❖ Response** | **Details**(e.g., Brand name, purchase/consumption location, product details, date of exposure)*iPHIS character limit: 50.* |
|  | **Yes** | **No** | **Unknown** | **Not asked** |  |
| **❖** Consumption of raw vegetables (specify) (e.g., broccoli, parsley, carrots, green onion) |[ ] [ ] [ ] [ ]  Specify |
| **❖** Consumption of raw fruits (specify) (e.g., strawberries, tomatoes) |[ ] [ ] [ ] [ ]  Specify |
| **❖** Consumption of raw/unpasteurized milk or milk products (specify location of purchase) |[ ] [ ] [ ] [ ]  Specify |
| **❖** Consumption of raw/unpasteurized juice/cider  |[ ] [ ] [ ] [ ]  Specify |
| **Zoonotic** |
| **❖** Contact with animals, e.g., pets, farm animals or (petting) zoo |[ ] [ ] [ ] [ ]  Specify |
| **Other Modes of Transmission** |
| **❖** Anal-oral contact |[ ] [ ] [ ] [ ]  Specify |
| **❖** Close contact with case |[ ] [ ] [ ] [ ]  Specify |
| **❖** Poor hand hygiene |[ ] [ ] [ ] [ ]  Specify |
| **❖** Other (specify) *for all modes of transmission* |[ ] [ ] [ ] [ ]  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 as required.*  |

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| **Premises Referral** |
| Has a food premises been identified as a possible source?  | [ ]  Yes  [ ]  No  | *If yes, refer premises to the Food Safety Program and create an exposure as appropriate.* |

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| **High Risk Occupation/High Risk Environment** |
| Are you/ your child in a high risk occupation or high risk environment (including paid and unpaid/volunteer position)?  | [ ]  Yes [ ]  No  | [ ]  Child care/kindergarten staff or attendees [ ]  Food handler [ ]  Health care provider [ ]  Other (specify) Occupation: Specify |
| Name of Child care/Kindergarten/Employer | Enter name |
| Child care/Kindergarten/Employer Contact Information (name, phone number, etc.) | Enter contact information |
| Address | **Enter address** |
| Are you/ your child still having diarrhea? | [ ]  Yes [ ]  No  | Last day case attended child care/kindergarten/work: | YYYY-MM-DD |
| Exclusion required from child care/kindergarten/work?  | [ ]  Yes [ ]  No  | Case/Parent/Guardian advised that public health unit will contact child care/ kindergarten/work?  | [ ]  Yes [ ]  No  |
| Could we have your permission to release your/ your child’s diagnosis to child care/kindergarten/work? | [ ]  Yes Enter name of individual permission granted by[ ]  No  |
| *Refer to the current Infectious Diseases Protocol, Cryptosporidiosis chapter, Appendix A, Management of Cases section for exclusion pertaining to day care staff and attendees, food handlers, and health care providers.* *→**For iPHIS data entry – if the case is excluded from work or child care/kindergarten, enter information under Interventions.*  |

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| **Symptomatic Contact Information**  |
| **Are you aware of anyone who experienced similar symptoms before, during, or after you (or your child) became ill? This includes those in your family, household, child care or kindergarten class, sexual partner(s), friends or coworkers.**  | [ ]  Yes [ ]  No [ ]  N/A  |
| Contact 1 |
|  Name | Enter name | Relation to case | Specify |
|  Contact information(phone, address, email)  | Enter contact information |
| Notes | Enter notes |
| Recommend contact seek medical attention/testing?  | [ ]  Yes [ ]  No [ ]  N/A  |
| Contact 2 |
|  Name | Enter name | Relation to case | Specify |
|  Contact information(phone, address, email)  | Enter contact information |
| Notes | Enter notes |
| Recommend contact seek medical attention/testing?  | [ ]  Yes [ ]  No [ ]  N/A  |

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| **Education/Counselling** *Discuss the relevant sections with case* |
| **Hand Hygiene** | [ ] [ ]  | Wash hands with soap and water after using the bathroom, after changing diapers, handling animals or pet food, and before preparing meals or eating meals is shown to be an effective measure to reduce transmission of diseases. The duration of parasite excretion continues in stools for several weeks after symptoms resolve. Outside the body, the parasite may remain infective for 2-6 months or longer in a moist environment. |
| **Recovery** |[ ]  If you continue to feel unwell, or new symptoms appear, or symptoms change – seek medical attention. |

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| **Education/Counselling** *Discuss the relevant sections with case* |
| **Water** | [ ]  | Avoid using recreational water venues such as swimming pools, lakes and rivers for two weeks after symptoms resolve. |
|  |[ ]  If using well water, test water regularly as water quality can change frequently. If results are adverse, boil or treat water for consumption. |
|  |[ ]  If using surface water, boil or treat if testing is not readily available (e.g., while camping) or if test results indicate the water is unsafe for consumption. |
|  |[ ]  For more information on small drinking water systems and well disinfection, please visit https://www.ontario.ca/page/drinking-waterand Public Health Ontario’s [Well Disinfection Tool](http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Well-Disinfection-Tool.aspx) at <http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Well-Disinfection-Tool.aspx>. |
| **Travel-related Illness** |[ ]  Refer to the Government of Canada’s Travel Health and Safety Page: [www.phac-aspc.gc.ca/tmp-pmv/info/index-eng.php](http://www.phac-aspc.gc.ca/tmp-pmv/info/index-eng.php). |
|  |[ ]  In areas where hygiene and sanitation are inadequate:* Bottled water from a trusted source is recommended instead of tap water. Use bottled water for drinking, preparing food and beverages, making ice, cooking, and brushing teeth. Alternatively, water can be boiled or filtered. Instructions for each method should be consulted.
* Avoid salads, already peeled or pre-cut fresh fruit and uncooked vegetables.
* Eat only food that has been fully cooked and is still hot, and fruit that has been washed in clean water and then peeled by the traveler. Avoid buying ready to eat foods from a street vendor.
 |
|  |[ ]  Accidental ingestion or contact with recreational water from lakes, rivers, oceans, and inadequately treated swimming pools can cause many enteric illnesses. |
| **Sexual Transmission** |[ ]  Certain sexual activities increase the risk of transmission.* Avoid anal-oral sexual contact. *Cryptosporidium* can be transmitted for several weeks after symptoms resolve.
 |
|  |[ ]  Review importance of personal hygiene. |
| **Animals** |[ ]  Wash your hands after handling animals, their feces, and the living environment such as cages, pens, etc. Cattle and various other animals are known to carry *Cryptosporidium*.  |
| **Food Safety** |[ ]  Avoid preparing or serving food while ill with diarrhea. Consider reassignment of duties. |
|  |[ ]  Thoroughly cooking or baking fruits and vegetables will eliminate the risk of *Cryptosporidium* infection. |
|  |[ ]  Freezing fruits and vegetables may kill parasites. |
|  |[ ]  Prevent cross contamination when preparing/handling food:* Clean raw vegetables and fruit including those used as garnishes
 |
|  |[ ]  Produce should be washed thoroughly using potable water before it is eaten, although this practice does not eliminate the risk of *Cryptosporidium*. |

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| **Outcome** *Mandatory in iPHIS only if Outcome is Fatal* |
| [ ]  Unknown [ ]  ♦ Fatal [ ]  Ill [ ]  Pending [ ]  Residual effects [ ]  Recovered *If fatal, please complete additional required fields in iPHIS* |

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| **Thank you** |
| Thank you for your time. This information will be used to help prevent future illnesses caused by *Cryptosporidium*. 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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| **Interventions** |
| **❖ 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, general food safety chart/cooking temperature chart, hand washing information) | [ ]  |  | YYYY-MM-DD | YYYY-MM-DD |
| ER visit  | [ ]  |  | YYYY-MM-DD | YYYY-MM-DD |
| Exclusion | [ ]  |  | YYYY-MM-DD | YYYY-MM-DD |
| Food Recall | [ ]  |  | 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.