



# Invasive Pneumococcal Disease (IPD) Case Report Form

<b><u>INSTRUCTIONS</u></b>		<b>Panorama Data Entry Guidance</b>  More details in Section N, page 5.
<ul style="list-style-type: none"> <li>Confidential when completed</li> <li>Report confirmed and probable cases of invasive pneumococcal disease (IPD) to your MHO</li> <li>Enter confirmed and probable cases of IPD into Panorama or PARIS</li> <li>Collect the detailed data outlined on this form for all confirmed or probable cases of IPD <u>AGED 0-16 years</u></li> <li>Fax or e-mail pages 1-4 of this case report form to 604-707-2515 or <a href="mailto:VPD.epi@bccdc.ca">VPD.epi@bccdc.ca</a></li> <li>Case definitions are in Section L, page 4</li> <li>Fields marked with * are part of the minimum data standard for provincial reporting</li> <li>BCCDC Immunization and Vaccine Preventable Diseases Service phone number: 604-707-2548</li> </ul>		
<b>PERSON REPORTING</b>		
Health Authority: <input type="checkbox"/> FHA <input type="checkbox"/> FNHA <input type="checkbox"/> IHA <input type="checkbox"/> NHA <input type="checkbox"/> VCH <input type="checkbox"/> VIHA		Review /update using the links on the top right hand corner: >My Account >>User Profile If entering data on behalf of someone else, record in >Notes when the investigation is in context.  Record Report Date: >Investigation >>Investigation Details >>>Reporting Notifications as Report Date (Received)
Name: _____ <small style="margin-left: 100px;">Last</small> <small style="margin-left: 100px;">First</small>	Phone Number: (    )                      -                      ext.	
Email: _____	Fax Number (    )                      -                      ext.	
*Report Date (received): _____ <div style="text-align: center; margin-top: 10px;"> <span style="border-bottom: 1px solid black; display: inline-block; width: 150px;"></span>  <small>YYYY / MM / DD</small> </div>		
<b>A. CLIENT PERSONAL INFORMATION</b>		
*Name: _____ <small style="margin-left: 100px;">Last</small> <small style="margin-left: 100px;">First</small> <small style="margin-left: 100px;">Middle</small>		Record or review and update in >Subject >>Client Details >>>Personal Information  Select this address as "Client Home Address at Time of Initial Investigation" in >Investigation >>Investigation Details >>>Investigation Information  For temporary workers, snowbirds, and students, record Health Region Information as "Out of BC" (Section N)
*Date of Birth: _____ <small style="margin-left: 100px;">YYYY / MM / DD</small>	*Gender: <input type="checkbox"/> Female <input type="checkbox"/> Male <input type="checkbox"/> Undifferentiated <input type="checkbox"/> Unknown	
*Health Card Number: _____	Alternate Name(s): _____	
Phone Number (home/work/mobile): (    )                      -                      ext.		
*Address at time of case:                      _____ <small style="margin-left: 100px;">Unit #</small> <small style="margin-left: 100px;">Street #</small> <small style="margin-left: 100px;">Street Name</small> <small style="margin-left: 100px;">City</small>		
*Postal Code: _____	*Province: _____	
*Country of Residence (if not Canada): _____		
*Address Located on Reserve Administered By: For temporary workers, snowbirds, and students, provide address, province and country of permanent residence:		
<b>B. *ABORIGINAL INFORMATION</b>		
*Does the client wish to identify as an Aboriginal person? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Asked, not provided <input type="checkbox"/> Not asked		Record in >Subject >>Client Details >>>Aboriginal Information
*If yes, Aboriginal Identity Group:  <input type="checkbox"/> First Nations <input type="checkbox"/> First Nations and Inuit <input type="checkbox"/> First Nations and Métis <input type="checkbox"/> First Nations, Inuit and Métis  <input type="checkbox"/> Inuit <input type="checkbox"/> Inuit and Métis <input type="checkbox"/> Métis  <input type="checkbox"/> Asked, but unknown <input type="checkbox"/> Asked, not provided <input type="checkbox"/> Not asked		
*If First Nations, is the client:  <input type="checkbox"/> Non-Status Indian <input type="checkbox"/> Status Indian <input type="checkbox"/> Asked, but unknown <input type="checkbox"/> Asked, not provided <input type="checkbox"/> Not asked		
<b>C. *CLASSIFICATION</b>		
<input type="checkbox"/> Confirmed <input type="checkbox"/> Probable <input type="checkbox"/> Not a Case		Record/Update in >Investigation >>Investigation Details >>>Disease Summary
<input type="checkbox"/> Person Under Investigation <span style="margin-left: 100px;"><i>See page 4 for case definitions.</i></span>		



						Panorama Data Entry Guidance
<b>D. *RISK FACTORS</b>						
*Risk Factor	Yes	No	Asked but Unknown	Declined to Answer	Not Assessed	Record in >Subject >> Risk Factors Set as pertinent to the investigation.  If the investigation is in context, the preset list of risk factors specific to IPD will display, and selected risk factors will be set as pertinent to the investigation.
*Chronic cardiac condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Chronic CSF leak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Cystic fibrosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Chronic liver disease, <i>specify:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Malignancy/cancer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Chronic renal disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Chronic respiratory/pulmonary condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Sickle cell disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Cochlear implant (candidate or recipient)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Congenital, acquired, or functional asplenia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Transplant candidate or recipient, <i>specify HSCT, Islet cell or solid organ/tissue:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Immunosuppression related to treatment, <i>specify:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Other immunocompromising condition, <i>specify:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*Other risk factor, <i>specify:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>E. *IMMUNIZATION INFORMATION</b>						
*Immunizing Agent	*Date(s) of Immunization (YYYY/MM/DD)				Record or review and update immunization information in the Immunization Module.  Documented immunizations: >Immunizations >>Record & Update Imms  Undocumented immunizations: >Immunizations >>Special Considerations	
	Dose 1	Dose 2	Dose 3	Dose 4		
<input type="checkbox"/> Prevnar® 7	_____	_____	_____	_____		
<input type="checkbox"/> Prevnar® 13	_____	_____	_____	_____		
<input type="checkbox"/> Synflorix (PCV-10)	_____	_____	_____	_____		
<input type="checkbox"/> Unspecified conjugate pneumococcal vaccine	_____	_____	_____	_____		
<input type="checkbox"/> Polysaccharide pneumococcal vaccine	_____	_____	_____	_____		
*Un-documented history of prior pneumococcal immunizations:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown	(See Section N)	
<i>If yes, please provide available details:</i> _____						



# Invasive Pneumococcal Disease (IPD) Case Report Form

						Panorama Data Entry Guidance		
<b>E. *IMMUNIZATION INFORMATION (continued)</b>								
*Summary of pneumococcal immunization status prior to onset (based on BC schedule):  <input type="checkbox"/> Fully immunized for age-documented <input type="checkbox"/> Partially immunized for age-documented <input type="checkbox"/> Unimmunized  <input type="checkbox"/> Fully immunized for age-undocumented <input type="checkbox"/> Partially immunized for age-undocumented <input type="checkbox"/> Unknown						Record summary immunization status in: >Investigation >>Investigation Details >>>Links & Attachments >>>>Pneumococcal Case Investigation Form		
*If unimmunized against pneumococcal disease, reason(s):  <input type="checkbox"/> Exemption – Client or Parent/Guardian Refusal  <input type="checkbox"/> Any other Exemption, <i>specify:</i> _____  <input type="checkbox"/> Contraindication <input type="checkbox"/> Deferral <input type="checkbox"/> Unknown						Contraindications or Exemptions: >Immunizations >>Special Considerations >>>Type of Special Considerations  Deferrals: >Immunizations >>Record and Update Imms >>>Deferrals		
<b>F. *LABORATORY INFORMATION</b>								
*Specimen	*Test	*Laboratory CID#:	*Collection Date (YYYY/MM/DD)	*Result		Record in >Investigation >>Lab >>>Lab Quick Entry  Record Causative Agent in >Investigation >>Investigation Details >>>Disease Summary  Record the serotype, subtype under Causative Agent Level 2		
<input type="checkbox"/> Blood	<input type="checkbox"/> Culture	_____	_____	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative		<input type="checkbox"/> Indeterminate	<input type="checkbox"/> Pending
	<input type="checkbox"/> PCR	_____	_____					
<input type="checkbox"/> CSF	<input type="checkbox"/> Culture	_____	_____	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative		<input type="checkbox"/> Indeterminate	<input type="checkbox"/> Pending
	<input type="checkbox"/> PCR	_____	_____					
<input type="checkbox"/> Other sterile site, <i>specify:</i> _____	<input type="checkbox"/> Culture	_____	_____	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative	<input type="checkbox"/> Indeterminate	<input type="checkbox"/> Pending	
	<input type="checkbox"/> PCR	_____	_____					
*Serotype, subtype: _____								
Notes: _____								
<b>G. PHYSICIAN</b>								
Physician Name: _____ <span style="margin-left: 150px;"><i>Last</i></span> <span style="margin-left: 150px;"><i>First</i></span>						<b>Optional:</b> Record in >Investigation >>Investigation Details >>>External Sources		
Physician Phone: (    ) _____ - _____ ext. _____								
<b>H. *SIGNS AND SYMPTOMS</b>								
*Onset of symptoms <sup>1</sup> : _____ / _____ / _____ <span style="margin-left: 100px;">YYYY</span> <span style="margin-left: 100px;">MM</span> <span style="margin-left: 100px;">DD</span>								
<sup>1</sup> The earliest date the client reported a clinically relevant symptom								
*Clinical Presentation		Yes	No	Asked but Unknown	Declined to Answer	Not Assessed	Record in >Investigation >>Signs and Symptoms  Select "Set as Onset" and record onset date of the first symptom indicative of invasive pneumococcal disease.	
*Bacteremia		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
*Meningitis		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
*Pneumonia		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
*Other, <i>specify:</i> _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		



# Invasive Pneumococcal Disease (IPD) Case Report Form

I. HOSPITALIZATION	
*Admitted to hospital: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Did not ask If yes, hospital name: _____ *Admission Date: _____ <span style="margin-left: 350px;">YYYY/MM/DD</span> *Admitted to an intensive care unit: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Did not ask	Record in >Investigation >>Investigation Details >>>Links & Attachments >>>>Pneumococcal Case Investigation Form
J. *OUTCOME	
<input type="checkbox"/> Fully Recovered <input type="checkbox"/> Not yet recovered/recovering <input type="checkbox"/> Death    *If died, date of death: _____ <span style="margin-left: 250px;">(also select cause of death below)      YYYY/MM/DD</span> <input type="checkbox"/> Other, <i>specify below</i> <input type="checkbox"/> Unknown <input type="checkbox"/> Permanent disability/incapacity, <i>specify below</i> *Specify other outcome / permanent disability: _____ *If died, cause of death: <input type="checkbox"/> Underlying cause of death <input type="checkbox"/> Contributed but wasn't the underlying cause <input type="checkbox"/> Did not contribute to death/incidental <input type="checkbox"/> Unknown <input type="checkbox"/> Other, <i>specify</i> _____	Record in >Investigation >> Outcome (See Section N)
K. *NOTES	
	Record notes relevant to provincial surveillance in >Investigation >>Investigation Details >>>Links & Attachments >>>>Pneumococcal Case Investigation Form (in Notes)
L. CASE DEFINITIONS	
Invasive Pneumococcal Disease	Reportable?
<b>Confirmed case</b> Clinical evidence <sup>†</sup> of invasive disease with laboratory confirmation of infection by: <ul style="list-style-type: none"> <li>• isolation of <i>Streptococcus pneumoniae</i> from a normally sterile site (excluding the middle ear); <b>OR</b></li> <li>• demonstration of <i>S. pneumoniae</i> DNA from a normally sterile site (excluding the middle ear)</li> </ul>	Yes
<b>Probable case</b> Clinical evidence <sup>†</sup> of invasive disease with no other apparent cause and with non-confirmatory laboratory evidence: <ul style="list-style-type: none"> <li>• demonstration of <i>S. pneumoniae</i> antigen from a normally sterile site (excluding the middle ear and pleural cavity)</li> </ul> <p><b>Note:</b> laboratories in British Columbia (BC) generally do not conduct pneumococcal antigen testing. This case definition would primarily apply to probable cases in BC residents diagnosed outside of BC.</p>	Yes
<b>Suspect case</b> These are general classifications of cases included in the Panorama user interface. Cases that fall into these classifications are not reportable. The suspect case classification should not be used for Invasive Pneumococcal Disease investigations.	
<b>Person under investigation</b> <b>Person Under Investigation:</b> A client who is being/has been followed-up for a reportable condition and does not meet the criteria outlined in any of the case definitions; however, the diagnosis has not been completely ruled out.	No
<b>Not a case</b> <b>Not a Case:</b> A client who was followed-up for a reportable condition but was found to have an alternate diagnosis or to have been entered in error.	
<sup>†</sup> Clinical illness associated with invasive disease manifests itself mainly as pneumonia with bacteremia, bacteremia without a known site of infection, and meningitis. Pneumonia without bacteremia is not reportable.	
M. OUT OF PROVINCE CASES	
<b>Out of province cases</b> should be notified to the BCCDC Immunization Programs and Vaccine Preventable Diseases Service (fax: 604-707-2515 or e-mail vpd.epi@bccdc.ca) to enable reporting to their home jurisdiction.	



## N. PANORAMA DATA ENTRY DETAILS

For definitions on documenting the appropriate **geographical attribution of the case**, see Communicable Disease Control Manual ([www.bccdc.ca](http://www.bccdc.ca)): [Surveillance of Reportable Conditions-Documenting Geography for CD Investigations in Panorama](#).

For temporary workers, snowbirds, or students attending educational institution:

- "Client Home Address at Time of Initial Investigation" should reflect temporary BC address
- Record their health region information as Out of BC (under Subject > Client Details >> Personal Information).
- Record primary home address as the address of their permanent residence (under Subject > Client Details >> Personal Information).

If out of provinces cases are entered in Panorama, record the out of province address in Panorama as "Client Home Address at Time of Initial Investigation" (under Investigation > Investigation Details >> Investigation Information on the left hand navigation).

For **historic immunizations**, record details in the Panorama Immunization Module.

Documented: A written record that includes the agent received and the year and month (with or without the day) of immunization.

Undocumented: A verbal history or a written record missing the month/year of immunization.

For **documented immunizations**, record in Immunizations -> Record & Update Imms:

If the agent(s) and the complete date(s) (day/month/year) are known, enter the dose(s) using the Add Historic Immunization screen, specifying the agent(s) and date(s) administered. If additional information (e.g. lot number, site, route, trade name, manufacturer, dosage) is known, record it in the designated field(s).

If the agent is known and the year and month, but no day is known, enter the dose(s) using the Add Historic Immunization screen, specifying the agent. Record the date as the last day of month. Select the Estimated flag. If additional information (e.g. lot number, site, route, trade name, manufacturer, dosage) is known, record it in the designated field(s).

For **undocumented immunizations**, record in Immunizations > Special Considerations:

Record undocumented immunizations using the Add/Update Special Considerations screen. Create an Exemption with the Reason for Special Consideration specified as 'Client Reports Undocumented Immunizations'. Enter the effective date according to date standards specified above for documented immunizations and select the most appropriate option from the Source of Evidence field. Exemption should be future end-dated to the best estimated date for when Special Consideration will no longer be relevant OR if a booster dose is required in the future, please end-date for when the client would be eligible for the booster. This includes series that are reported as complete, but is missing information to identify the product received (i.e. missing trade name and generic name and abbreviation).

Record **Summary immunization status** in the User Defined Form (Pneumococcal Disease Investigation Form):

The individual conducting the case follow-up will then review the data entered in the Immunization and Special Considerations Screens, determine cases immunization status and record a summary assessment in the Pneumococcal Case Investigation Form (in Links and Attachments, under Investigation>Investigation Details on the left hand navigation).

Pediatric pneumococcal **summary immunization status**:

Population	Partially immunized for age	Fully immunized for age
Healthy infants, 2-3 months old	n/a	1 dose PCV product
Healthy infants, 4-11 months old	1 dose PCV product	2 doses PCV product
Healthy children, 12 months old to those born on or after July 1, 2003	≥1 dose PCV product <sup>†</sup>	3 doses PCV product <sup>†</sup>
Medically at high-risk for IPD	May require an additional dose of PCV product. PPV-23 may also be indicated. See <a href="#">Immunization Manual Section VII, Pneumococcal Conjugate Vaccine and Pneumococcal Polysaccharide Vaccine</a>	
Healthy infants <2 months old	n/a. First PCV dose recommended at 2 months of age.	

<sup>†</sup>See [Immunization Manual Section VII, Completing a Pneumococcal Conjugate Vaccine Series](#) when the basic schedule has been delayed to determine a client's immunization status.

For **unimmunized** clients, record reason:

If the reason is Refusal, any other Exemption, or Contraindication, record in Immunizations > Special Considerations. Enter the effective date, select the most appropriate options for the Reason for Special Consideration and the Source of Evidence fields. Special Considerations should be future end-dated to the best estimated date for when it will no longer be relevant.

If the reason is Deferral, record in Immunizations > Record and Update Imms > Deferrals. Enter the effective date and select the most appropriate option for Reason.

^Training Materials: Add Historical Immunization-Quick Steps-Immunization, Special Consideration-Quick Steps-Immunization, UDFs-Reference Guide-Investigations

^Data Standards: Historic Immunizations-Data Standard-Immunization, Special Considerations-Data Standard-Immunization

If the **outcome is death**, record as follows.

Outcome: Death

Outcome Date: Date of death (if known) or date at which user found out about fatal outcome (if date of death unknown)

Cause of Death: Select most appropriate response

After recording the outcome, inactivate the client in the Personal Information screen (under Subject > Client Details on the left hand navigation) following routine procedures/standards.

**Note:** If the outcome is **not death**, the outcome date is the date public health was made aware of the outcome.

**^ NOTE:** Please contact your regional Panorama Support Team representative to access these and additional relevant training materials and data standards from the Panorama Solution Partner Portal (<https://panoramacst.gov.bc.ca>).