Invasive Group A Streptococcal Disease (iGAS)
Case Report Form

BC Centre for Disease Control
An agency of the Provincial Health Services Authority

INSTRUCTIONS

- **Confidential when completed**
- **Report probable and confirmed cases of invasive group A Streptococcal disease to your MHO**
- **Enter probable and confirmed cases into Panorama or PARIS**
- **Fax or e-mail pages1-3 of this case report form to 604-707-2515 or VPD.epi@bccdc.ca**
- **Case definitions are on page 4**

Panorama Data Entry Guidance

More details in Section M, page 5.

PERSON REPORTING

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.

Health Authority: ☐ FHA   ☐ FNHA   ☐ IHA   ☐ NHA   ☐ VCH   ☐ VIHA

Name: _____ (Last) _____ (First)

Phone Number: ( ) -   ext.

Email: _____

Fax Number ( ) -   ext.

Date case report form completed: _____ YYYY / MM / DD

A. CLIENT PERSONAL INFORMATION

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

Name: _____ (Last) _____ (First) _____ (Middle)

Date of Birth: _____ YYYY / MM / DD

Gender: ☐ Male   ☐ Female   ☐ Undifferentiated   ☐ Unknown

Health Card Number: _____

Alternate Name(s): _____

Phone Number (home/work/mobile): ( ) -   ext.

Address: _____ (Unit #) _____ (Street #) _____ (Street Name) _____ (City)

Postal Code: _____

Province: _____

Country of Residence (if not Canada): _____

Address Located on Reserve Administered By: _____

B. RISK FACTORS

Record in >Subject >> Risk Factors

If the investigation is in context, the preset list of risk factors specific to iGAS will display, and selected risk factors will be set as pertinent to the investigation.

Risk Factor	Yes	No	Asked but Unknown	Declined to Answer	Not Assessed
Chronic cardiac condition	☐	☐	☐	☐	☐
Diabetes	☐	☐	☐	☐	☐
Chronic respiratory/pulmonary condition	☐	☐	☐	☐	☐
Homeless/under-housed	☐	☐	☐	☐	☐
Immunosuppressive condition, *specify*: _____	☐	☐	☐	☐	☐
Alcoholism	☐	☐	☐	☐	☐
Injection drug use	☐	☐	☐	☐	☐
Other risk factor, *specify*: _____	☐	☐	☐	☐	☐

	Panorama Data Entry Guidance

C. LABORATORY INFORMATION

Specimen Collected	Collection Date *(YYYY/MM/DD)*	Result			Receive through E-Lab inbox or record in >Investigation >>Lab >>>Lab Quick Entry
☐ Blood		☐ Positive	☐ Negative	☐ Pending	
☐ CSF		☐ Positive	☐ Negative	☐ Pending	Attach histopathology reports in >Investigation >>Investigation Details >>>Links & Attachments
☐ Joint fluid		☐ Positive	☐ Negative	☐ Pending	
☐ Deep tissue*, *specify:*		☐ Positive	☐ Negative	☐ Pending	
☐ Other*, *specify:*		☐ Positive	☐ Negative	☐ Pending	Record Causative Agent in >Investigation >>Investigation Details >>>Disease Summary

* A histopathology report should be enclosed if the source of the specimen was not clearly a sterile site (blood, CSF, or joint fluid).

Streptococcus pyogenes further characterization:

emm: _____ T: _____ SOF: ☐ Positive ☐ Negative

Record T-type and SOF in Causative Agent Further Differentiation field.

D. PHYSICIAN

		Optional: Record in >Investigation >>Investigation Details >>>External Sources
Physician Name: _____ Last _____ First		
Physician Phone: (___) _____ - _____ ext. _____		

E. CLINICAL PRESENTATION

Onset of symptoms: _____ / _____ / _____
                     YYYY   MM   DD

Sign / Symptom	Yes	No	Asked but Unknown	Declined to Answer	Not Assessed	
Arthritis	☐	☐	☐	☐	☐	Record in >Investigation >>Signs and Symptoms
Bacteremia	☐	☐	☐	☐	☐	
Cellulitis	☐	☐	☐	☐	☐	Select "Set as Onset" and record onset date of the first symptom indicative of invasive group A Streptococcal disease.
Meningitis	☐	☐	☐	☐	☐	
Necrotizing fasciitis/myositis/gangrene	☐	☐	☐	☐	☐	
Pneumonia	☐	☐	☐	☐	☐	
Puerperal fever associated with pregnancy/labour	☐	☐	☐	☐	☐	If infant affected in puerperal case, record in Transmission Event Quick Entry and link to case investigation for infant (Section M).
If yes, was the infant affected? ☐ Yes ☐ No ☐ Unknown						
Septicemia	☐	☐	☐	☐	☐	
Toxic shock syndrome	☐	☐	☐	☐	☐	
Other, *specify*:	☐	☐	☐	☐	☐	

	Panorama Data Entry Guidance
F. HOSPITALIZATION	
Admitted to hospital: ☐ Yes ☐ No ☐ Unknown If yes, hospital name: _____	
Admission date: _____ *YYYY/MM/DD* Discharge date: _____ *YYYY/MM/DD*	
Admitted to an intensive care unit: ☐ Yes ☐ No ☐ Unknown	Record in >Investigation >>Investigation Details >>>Links & Attachments >>>>(iGAS) Invasive Group A Streptococcal Investigation Form
Surgical Intervention: ☐ Yes ☐ No ☐ Unknown	
G. PREDISPOSING CONDITIONS	
Chickenpox in the last 30 days ☐ Yes ☐ No ☐ Unknown	
Skin infection ☐ Yes ☐ No ☐ Unknown	
Wound ☐ Yes ☐ No ☐ Unknown	
Specify type of wound: ☐ Surgical ☐ Trauma ☐ Burn	
H. EXPOSURES	
Hospital acquired infection: ☐ Yes ☐ No ☐ Unknown *If yes*, specify hospital name, type and location.	
Details: _____	Record in >Investigation >>Exposure Summary as an Acquisition Event (Section M)
Attends child care, school or university: ☐ Yes ☐ No ☐ Unknown *If yes*, specify school name, type and location.	
Lives in communal setting: ☐ Yes ☐ No ☐ Unknown *If yes*, facility name, type and location.	
Specify facility/school name, type and location: _____	
I. OUTCOME AT TIME OF REPORTING	
☐ Fully Recovered ☐ Not yet recovered/recovering ☐ Fatal *If died*, date of death: _____ *YYYY/MM/DD*	
☐ Other, *specify below* ☐ Unknown ☐ Permanent disability, *specify below*	Record in >Investigation >> Outcomes (Section M)
Specify other outcome / permanent disability: _____	
J. CLASSIFICATION	
☐ Confirmed ☐ Probable ☐ Suspect	
☐ Person Under Investigation ☐ Not a Case ☐ Out of Province	Record/Update in >Investigation >>Investigation Details >>>Disease Summary
See page 4 for case definitions.	
K. NOTES	
	Record in >Notes

In order to have the note linked to the investigation, ensure the investigation is in context when creating the note. |

L.   CASE DEFINITIONS

Invasive Group A Streptococcal Disease		**Reportable?**
Confirmed case	Laboratory confirmation of infection with or without clinical evidence* of invasive disease:	Yes
	• isolation of group A streptococcus (*Streptococcus pyogenes*) from a normally sterile site (blood, CSF, pleural fluid, pericardial fluid, peritoneal fluid, deep tissue specimen taken during surgery [e.g. muscle collected during debridement for necrotizing fasciitis], bone or joint fluid excluding the middle ear and superficial wound aspirates [e.g. skin and soft tissue abscesses]).	
	When fetal demise occurs in association with puerperal infection, isolation of group A streptococcus from the placenta, amniotic fluid and/or endometrium is also considered confirmatory for both the mother and fetus.	
Probable case	Clinical evidence* of invasive disease in the absence of another identified aetiology and with non-confirmatory laboratory evidence of infection:	Yes
	• isolation of group A streptococcus from a **non-sterile** site (non-sterile sites include: throat, sputum, bronchoalveolar lavage (BAL), vagina, superficial skin lesion, middle ear, or superficial abscess or wound specimens (e.g., aspirate or from incision and drainage)) OR • positive group A streptococcus antigen detection	
Suspect case **Person under investigation** **Not a case**	These are general classifications of cases included in the Panorama user interface. Cases that fall into these classifications are not reportable. Refer to Panorama documentation for definitions.	No

Out of province	**Out of province cases** should be notified to the BC Centre for Disease Control by to enable reporting to their home jurisdiction:
	• By phone if immediate public health follow-up may be warranted
	    o Weekdays - 604-707-2519 (Immunization and Vaccine Preventable Diseases Service)
	    o Evenings and weekends - 604-312-9220 (nurse/physician on call)
	• By fax (604-707-2515) or e-mail (vpd.epi@bccdc.ca) if immediate action is not required	

* Clinical evidence of invasive disease may be manifested as one or more of several conditions indicative of severe disease:
- streptococcal toxic shock syndrome
- soft-tissue necrosis, including necrotizing fasciitis, myositis or gangrene
- meningitis
- fetal death and clinical evidence of maternal illness compatible with invasive group A streptococcal disease
- death caused by iGAS

Notes regarding GAS pneumonia:
- Report GAS pneumonia in Panorama/PARIS as a confirmed case only when the isolate is from a sterile site (e.g. aspiration from an empyema, blood culture).
- Providing no other cause has been identified, report GAS pneumonia in Panorama/PARIS as a probable case when the isolate is from sputum or a bronchoalveolar lavage (BAL), as sputum and BAL are not considered sterile site specimens.
- When the GAS isolate is from sputum or a BAL, regard GAS pneumonia as a form of severe invasive disease for the purposes of public health management

M. PANORAMA DATA ENTRY DETAILS

If the ***infant is affected in a puerperal case***, create a Transmission Event for the mother on the Exposure Summary screen (under Investigation on the left hand navigation) using the Transmission Event Quick Entry section.

> Exposure Name: XXX-Vertical Transmission *where XXX is the Health Authority identifier (FNHA, IHA, VIHA, FHA, or NHA)*
> Exposure Start: Infant's date of birth
> Location Name: *same as Exposure Name*
> Setting Type: Vertical transmission/congenital

Create a case investigation for the infant, with the infant's Acquisition Event linking to the mother's Transmission Event.

Training Materials (https://panoramacst.gov.bc.ca): Exposures-Reference Guide-Investigations
System Guidelines (https://panoramacst.gov.bc.ca): Congenital/Neonatal/Vertical Transmission-Data Capture Guideline - Investigations, Exposures-Data Capture Guideline-Investigations

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If the infection was ***acquired in hospital***, create an Acquisition Event on the Exposure Summary screen (under Investigation in the left hand navigation) using the Create Acquisition Event button to get to the Maintain Acquisition Event Details screen.

> Exposure Name: XXX-Nosocomial *where XXX is the Health Authority identifier (FNHA, IHA, VIHA, FHA, or NHA)*
> Potential Mode of Acquisition: Airborne/droplet
> Nature of Exposure: Nosocomial
> Exposure Start: Admission date/date visited hospital or 7 days prior to onset of symptoms *(select the most recent)*
> Exposure Location Name: *same as Exposure Name*
> Exposure Setting Type: Facility - non-recreational
> Exposure Setting: Hospital

Training Materials (https://panoramacst.gov.bc.ca): Exposures-Reference Guide-Investigations
System Guidelines (https://panoramacst.gov.bc.ca): Exposures-Data Capture Guideline-Investigations

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If the case ***lives in a communal setting or attends child care, school or university***, and follow-up of contacts from these settings is required, create a Transmission Event on the Exposure Summary Screen (under Investigation in the left hand navigation) using the Create Transmission Event button to get to the Maintain Transmission Event Details screen.

> Exposure Name: XXX-NameOfFacility-[DiseaseName] *where XXX is the Health Authority identifier (FNHA, IHA, VIHA, FHA, or NHA)*
> Exposure Start: 7 days prior to onset of symptoms
> Exposure Location Name: *same as Exposure Name*
> Exposure Setting Type: "Facility – non-recreational" or "Congregate/communal living settings"
> Exposure Setting: most appropriate selection based on list filtered by Exposure Setting Type
> Address: fill in details for facility

When required, create investigations for ***close contacts*** of ***severe*** iGAS cases (refer to Communicable Disease Control Manual). Contacts can be created as indeterminate clients until all required personal identifiers are known.

Training Materials (https://panoramacst.gov.bc.ca): Exposures-Reference Guide-Investigations, Maintain Client-Quick Steps-Shared Services
System Guidelines (https://panoramacst.gov.bc.ca): Exposures-Data Capture Guideline-Investigations
Data Standards (https://panoramacst.gov.bc.ca): Client Identification-Data Standard-Shared Services

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

> Outcome: Fatal
> 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 fatal***, the outcome date is the date public health was made aware of the outcome.

NOTE: Additional relevant training materials and data standards are available on the Panorama Solution Partner Portal (https://panoramacst.gov.bc.ca).