

Notification Timeline:

From Lab/Practitioner to Public Health: Immediate.

From Public Health to Ministry of Health: Within 2 weeks.

Immediate if an outbreak is anticipated.

Public Health Follow-up Timeline: Immediate.

Public Health Purpose for Notification of Hepatitis A

- To provide an early detection system of outbreaks;
- To implement prevention and control measures including contact tracing and post-exposure **Immunoprophylaxis**
- To make timely and evidence informed actions on outbreaks;
- To monitor the effectiveness of prevention and control measures;
- To track epidemiology trends of hepatitis A in Saskatchewan including risk populations and distribution;
- To identify locations where increased transmission of hepatitis A may be occurring in order to inform other interventions; and
- To inform the public and medical community about hepatitis A.

Surveillance Case Definition¹ (Public Health Agency of Canada, May 2008)

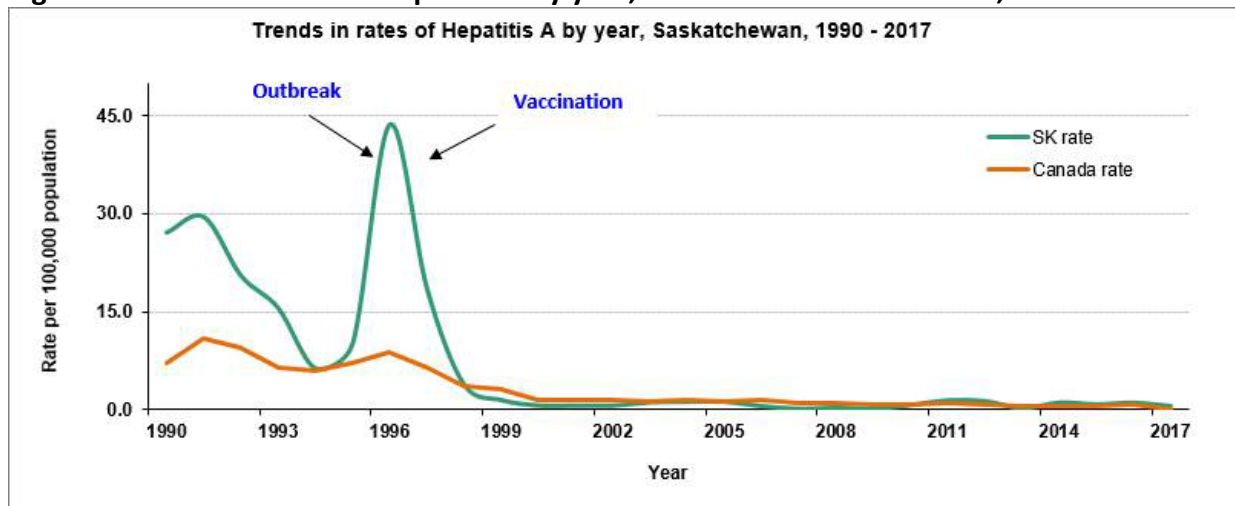
Confirmed Case	<ul style="list-style-type: none"> • detection of immunoglobulin M (IgM) antibody to hepatitis A virus (anti-HAV) in the absence of recent hepatitis A vaccination; AND • acute clinical illness* OR • an epidemiological link to a person with laboratory-confirmed hepatitis A infection.
Probable Case	Acute clinical illness* in a person without laboratory confirmation of infection who is epidemiologically linked to a confirmed case.
<p>*Acute clinical illness is characterized by discrete onset of symptoms including fever, malaise, anorexia, nausea, and abdominal pain followed by jaundice or elevated aminotransferase levels with a few days.</p>	

¹ Surveillance case definitions ensure uniform reporting to allow comparability of surveillance data. The definition is not intended to be used for clinical or laboratory diagnosis or management of cases.

Epidemiology and Occurrence

- Geographically, endemic rates of hepatitis A virus (HAV) have varying levels that can be deemed high, intermediate, or low.
- Higher endemic rates tend to be found in areas where basic sanitation and hygiene is poor; epidemics in these areas are rare due to acquired immunity in adults.
- A large outbreak of hepatitis A was detected in 1996 that lasted for about two years before declining due to implementation of mass immunization, public education and routine Hepatitis A immunization program in northern communities in 1997².
- The Saskatchewan rate has been lower or comparable to Canada rate since 1999.
- The average incidence rate of hepatitis A in Saskatchewan was 0.7 case per 100,000 population (2013-2017) and the majority of cases are related to travel to endemic countries;
- Over the past 15 years, an average number of hepatitis A cases was higher in February and March; this corresponds with peak travel times to tropical countries; and,
- Males and females were affected almost equally, and most cases were reported in children between 5 and 14 years of age during the same period of time.

Figure 1. Trends in rates of Hepatitis A by year, Saskatchewan and Canada, 1990-2017



² Routine Hepatitis A immunization was introduced for children 1-15 years living in northern health regions or reserves in Saskatchewan (excluding Creighton, Air Ronge, La Ronge) in 1997

Additional Background Information

Causative Agent

Hepatitis A virus (HAV), a non-enveloped, positive stranded RNA virus of the Picornoviridae family. HAV is comparatively heat stable, retains infectivity in feces for up to 2 weeks, resistant to a pH of 3, and remains viable for years at -20°C. It is completely inactivated by formalin or by heating to 100°C for 5 minutes. HAV shows some resistance to inactivation by hypochlorite and can withstand 60°C for 1 hour (Margolis, 1992).

Reservoir/Source

- Main reservoir is humans, and rarely chimpanzees and other primates. Virus is shed in feces of infected humans for up to 2 weeks.

Symptoms

- Although the disease is self-limited, clinical manifestation and expression of illness is age-dependent:
 - Children under 6 years are generally asymptomatic or exhibit mild, non-specific symptoms including nausea, vomiting, malaise, diarrhea, fever, and dark urine.
 - Adolescents and adults infected with HAV tend to develop more classic symptoms of malaise, nausea, vomiting, and loss of appetite, with 50% to 90% having either dark urine, jaundice or both.
- Recovery from illness often takes 4-6 weeks but may take months. Prolonged, relapsing hepatitis lasting for up to a year occurs in 15% of cases, but chronic infection is not known to occur.
- Twenty-five percent of adult cases require hospitalization. Fulminant hepatitis (i.e. an acute liver failure) disease with liver necrosis is rare and tends to occur when a pre-existing chronic liver disease is present.
- IgM antibodies against HAV found in serum of recently or acutely ill individuals will establish the diagnosis. Antibodies will appear 5-10 days after exposure and can be detected 1 week prior to symptoms and 3-6 months after infection.

Incubation Period

Average 28 to 30 days (range 15 to 50 days) (Heymann, 2015).

Period of Communicability

- Persons with HAV are most infectious during the 1-2 weeks before onset of jaundice. Risk of transmission diminished and is minimal by one week after onset of jaundice (American Academy of Pediatrics, 2015).
- Hepatitis A virus can be detected in stool of infants and children for longer periods (up to 6 months), (Heymann, 2015).

Mode of Transmission

- Person-to-person via fecal-oral route including food and water contaminated by infected food handlers or by sewage.
- Outbreaks have been associated with raw or undercooked shellfish; contaminated produce; and ready-to-eat foods prepared by infected food handlers.
- Transmission via household and sexual contact (particularly in heterosexual relationships, unless sexual contact involves anus/oral route) is rare.
- Outbreaks have also been associated with injecting and non-injecting drug use (American Academy of Pediatrics, 2015).

Risk Factors

Risk factors are associated with individual susceptibility and settings or exposures that create opportunities for acquisition or transmission to others. Groups at increased risk of *acquiring* hepatitis A as identified by the American Academy of Pediatrics (2015) and Heymann (2015) include:

- close personal contact (household or sexual) with an person infected with HAV;
- international travellers (particularly to developing countries);
- close contacts of newly arriving international adoptees;
- daycare employees or attendees;
- men who have sex with men;
- oral/anal sex; and
- users of injection and non-injection drugs.

Those at increased risk for *transmitting* infection include:

- food handlers;
- health care/day care workers;
- childcare workers;
- staff involved with personal care;
- children below the age of 5 years in childcare; and

- individuals who are unable to maintain standards of personal hygiene (e.g., mentally or physically challenged).

Specimen Collection and Transport

- Test: hepatitis A Virus IgM antibody (HAV IgM).
- Specimen: 2mL serum.

Refer to the Roy Romanow Provincial Laboratory Compendium of Tests for details at <https://rrpl-testviewer.ehealthsask.ca/>.

Public Health Investigation

I. Case

Refer to [Attachment – Hepatitis A Data Collection Worksheet](#) to assist.

History

- Key elements to inquire about include:
 - Onset of illness – to determine incubation period and period of communicability which helps to identify the possible source and contacts to be followed.
 - Hepatitis A immunization history including number of doses and date(s) administered
- Determine if there is an opportunity for exposure through:
 - Travel, particularly to areas where HAV is endemic (provincially, nationally or internationally);
 - Consumption of water from inadequately treated water supplies;
 - Consumption of contaminated foods (obtain food history);
 - If children in the household attend a childcare facility since asymptomatic children may be the source of illness (Heymann, 2015; American Academy of Pediatrics, 2015).
- Identify household and other potential close contacts. See [Contact Definition](#).
- Identify opportunities for transmission events and contacts exposed during the infectious period:
 - If case employed as a food handler - determine if they prepared or shared food with others 2 weeks prior to becoming symptomatic. Obtain locations, dates, and times of food preparation details.

Public Health Interventions

Assessment

- Assess for contacts paying particular attention to those who may receive post-exposure vaccination to prevent illness.

Communication

- Letters or public communication may be required in the case of food handlers that serve in a public setting.

Education

- All cases should be provided disease information including period of communicability and information on prevention and control measures.
 - the importance of hand washing should be stressed;
 - the case must not prepare food for others during the period of communicability;
 - the case may be excluded from work – see [Exclusion](#);
 - the case should be informed of safer sex practices.

Environmental Health

In the case of an ill food handler, a restaurant inspection may be warranted to review safe food handling requirements. If water is the suspected source, inspection of a private water supply may also be required.

Exclusion

- Exclude food handlers, health care, childcare or other staff involved with personal care, children below the age of 5 years in childcare and individuals who are unable to maintain standards of personal hygiene (e.g. mentally or physically challenged) as follows:
 - if jaundiced, until 1 week after the onset of jaundice;
 - if symptomatic but not jaundiced, for 2 weeks after onset of illness;
 - if asymptomatic with a positive IgM, until 1 week after the IgM test was drawn.

Immunization

- Immunization of cases is not required as HAV infection induces life-long protection against re-infection (Alberta Health and Wellness, August 2011).

Public Health Order

- If a food handler, the case should be excluded from work and order used if necessary.

Referral

- When cases are linked to an outbreak or a food item is highly suspected, consultation with the Medical Health Officer and potentially Canadian Food Inspection Agency may be warranted.

II. Contacts/Contact Investigation

Use the [Contact Investigation Worksheet](#) to support investigation.

Table 2. Definitions of Contacts	
Contact	<p>Individuals who have been in contact with the case during their period of communicability as follows:</p> <ul style="list-style-type: none"> • persons living in the same household as the case; • sexual contacts of the case including men who have sex with men (MSM); • persons who have shared drugs with the case; • persons who have spent 24 hours or more in the same household as the case; • persons who have spent less than 24 hours but consumed food in the house of the case; • persons who have eaten food prepared by the case during the period of communicability; • persons who have attended events where food was shared with the case (e.g., potluck); • others who may have had contact with the feces of the case (e.g., diapered children, incontinent persons) where good standards of hygiene have not been met or proper personal protective equipment (PPE) was not used.
Susceptible Contact	<p>Individuals who have not had:</p> <ul style="list-style-type: none"> • history of confirmed hepatitis A disease; • complete immunization series of hepatitis A vaccine; • one dose of hepatitis A vaccine in the 6-11 months prior to the date of exposure; • history of immune globulin (Ig) within the last 3-5 months prior to the date of exposure. Length of protection varies with the dose received (0.02 ml/kg is effective for approximately 3 months; 0.06 ml/kg is effective for approximately 3-5 months).

Public Health Interventions

Testing

- Testing for IgM and total antibodies should be conducted as soon as possible on all contacts that are symptomatic. **NOTE:** the requisition must indicate contact and symptomatic. Follow all individuals with confirmed disease as a case.
- Serology for hepatitis A immunity prior to immunoprophylaxis can be considered for contacts in the following categories if time permits (Alberta Health and Wellness, 2011):
 - persons born prior to 1945;
 - persons from endemic country;
 - individuals who are hepatitis B and/or C positive.

Immunoprophylaxis

- All HAV vaccines have shown high levels of immunogenicity and at least 90% to 97% efficacy in preventing clinical illness when given as pre-exposure and approximately 80% efficacy when given as post-exposure (Public Health Agency of Canada, 2016).
- Provide immunoprophylaxis with *hepatitis A vaccine*³ to all susceptible contacts if the most recent exposure was within the past two weeks.
- In addition, if the case is a food handler:
 - offer hepatitis A vaccine to other food handlers in the establishment (American Academy of Pediatrics, 2015);
 - patrons of the establishment should ***not routinely*** be offered hepatitis A vaccine **unless**:
 - the worker directly handled food during the period of communicability **AND** if prophylaxis can be provided within 2 weeks of exposure.

*Immune globulin*⁴ (Ig) should be provided to susceptible contacts as follows:

- Infants under six months of age because they are too young to receive hepatitis A vaccine;

³ One dose of hepatitis A vaccine is provided free of charge to individuals who were exposed to HAV. The second dose of the vaccine series will be provided free of charge to individuals who are eligible for publicly funded hepatitis A vaccine. Individuals who are not considered high risk can purchase the second dose from their health care provider in order to induce long-term immunity.

⁴ For post-exposure prophylaxis, dosage for Ig is 0.1 mL/kg (Product Monograph, 2018). Please refer to the product monograph or the Canadian Immunization Guide to verify the appropriate dose for Hepatitis A exposures. A link to the most current monograph can be found in the Saskatchewan Immunization Manual – Chapter 10.

- Individuals with contraindications to hepatitis A vaccine; and
- Immunocompromised individuals (to provide immediate passive protection until they actively respond to vaccination).
- Within 14 days of exposure to individuals with chronic liver disease, in addition to HA vaccine.

Ig may be *considered* as a supplement to HA vaccine for susceptible household or close contacts who are 60 years of age and older, provided it is given within 14 days of the last exposure.

Exclusion

Symptomatic contacts that are food handlers, health care, childcare, or other staff involved with personal care, children below the age of 5 years in childcare and individuals who are unable to maintain standards of personal hygiene (e.g., mentally or physically challenged) should be excluded as and treated as a case.

Have IgM blood work done to confirm the diagnosis.

III. Environment

Child Care Centre Control Measures

- Advise parents of childcare attendees of the illness and instruct them to inform public health if any family members develop symptoms. A standard letter can support this education.
- A Public Health Inspector should inspect the facility to ensure adequate infection control measures are implemented. Refer to the Saskatchewan Ministry of Health Infection Control Manual for Child Care Facilities.⁵
- As illness can go undetected in many children, children in these settings should avoid contact with individuals who have not yet been exposed for six weeks.
- Hepatitis A vaccine should be provided to susceptible staff and attendees in childcare facilities if (American Academy of Pediatrics, 2015):
 - one or more cases of hepatitis A occur in staff or attendees OR
 - cases occur in two or more households of centre attendees.
 - **NOTE:** if there are no diapered children in the facility, only the children in the classroom of the index care require immunoprophylaxis. If there are two or more households affected, the household members of childcare attendees who are diapered should also be provided hepatitis A vaccine.

⁵ <http://publications.gov.sk.ca/documents/11/96181-infection-control-manual-child-care-centres.pdf>

- cases should be excluded as per [Exclusion](#) or until the immunoprophylaxis program has been completed.

Food Services Establishments

- If the case is a food handler, discuss with the Medical Health Officer to determine if post-exposure prophylaxis should be offered to staff and patrons.

Institutional Control Measures

School/Office: contacts in elementary and secondary schools as well as workplace settings do not require post-exposure prophylaxis, unless an outbreak is suspected.

Residential Facilities

Immunoprophylaxis is not routinely recommended. Individuals in these institutions should be managed based on their direct contact with the case.

IV. Epidemic Measures

- Determine mode of transmission, identify exposed populations, and eliminate common sources of exposure.
- Outbreak Control: HAV vaccine should be considered as an important control measure in a coordinated public health response to hepatitis A outbreaks in the community and in institutions.

Prevention Measures

Refer to the [Enteric Introduction and General Considerations](#) section of the manual that highlights topics for client education that should be considered as well as provides information on high-risk groups and activities.

Immunization

- Offer immunizations to eligible individuals as per the Saskatchewan Immunization Manual Chapter 5 – Immunization Schedules⁶ and Chapter 7 – Immunization of Special Populations⁷;

⁶ <http://www.ehealthsask.ca/services/manuals/Documents/sim-chapter5>.

⁷ <http://www.ehealthsask.ca/services/manuals/Documents/sim-chapter7>

- Considering the majority of cases in Saskatchewan are travel related, referral of individuals to an appropriate travel health consultant is advisable as part of planning for international trips.

Education

- Education should be provided regarding safe food handling and the importance of hand washing.
- Public education regarding personal hygiene practices including handwashing and sanitary disposal of feces.
- Education of food handlers.
- Safer sex practices.
- Counselling of susceptible individuals traveling to intermediate or high endemic areas regarding safeguarding themselves from infection.

Environmental Health Measures

- Sanitary disposal of sewage.
- Proper water treatment and protected water distribution systems.

Revisions

Date	Change
February 17, 2022	<ul style="list-style-type: none">• Updated the Immune globulin dosage from 0.02 ml/kg to 0.1 ml/kg based on Gamma Stan product monograph and Canadian Immunization Guide.
September 2018	<ul style="list-style-type: none">• Updated to align with Panorama configuration.• Clarified the purpose for notification of cases to public health.• Incorporated an Epidemiology and Occurrence section to the chapter.• Rearranged and updated the style into the new format of the Manual.• References reaffirmed or updated as necessary.
Nov 2017	Updated recommendation on use of Ig to include use among susceptible contacts with chronic liver disease in alignment with April 2016 NACI Statement.
Sept 2017	Updated recommendations on use of Ig based on April 2016 NACI Statement. Updated into new format of manual and reviewed/updated references.

References

- Alberta Health and Wellness. (2018). *Alberta public health notifiable disease management guidelines: Hepatitis A*. Retrieved May, 2018 from <https://open.alberta.ca/dataset/6a24f515-21e8-4d97-9a85-5459e435f363/resource/4bc9051f-2f7e-48f1-ab74-6b785b250606/download/nd-hepatitis-a-2018-04.pdf>
- American Academy of Pediatrics. (2015). *Red book: 2015 Report of the Committee on Infectious Diseases* (30th ed.). Elk Grove Village, IL: Author.
- Heymann, D. L., (Ed.). (2015). *Control of communicable diseases manual* (20th ed.). Washington, DC: American Public Health Association.
- Margolis, Harold S. (1992). Viral hepatitis. In Last & Wallace, *Maxcy-Rosenau-Last: Public Health and Preventive Medicine* (13th ed.) pp.131-133. Norwalk: Appleton & Lange.
- Public Health Agency of Canada. (2016). Update on the recommended use of Hepatitis A vaccine. *An Advisory Committee Statement National Advisory Committee on Immunization*. April, 2016. Retrieved May, 2018 <https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/hepatitis-a-vaccine-update-recommended-use-2016-eng.pdf>
- Public Health Agency of Canada. (2018). *Canadian immunization guide* (Evergreen ed.). Ottawa, Canada: Public Works and Government Services Canada. Retrieved May, 2018 <https://www.canada.ca/en/public-health/services/canadian-immunization-guide.html>.
- Public Health Agency of Canada. (2008). Case definitions for communicable diseases under national surveillance. *Canada Communicable Disease Report (CCDR)*, 35S2, November 2009. Retrieved May, 2018 from http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s2/Hep_A-eng.php.
- U.S. Centers for Disease Control and Prevention. Diagnosis and management of foodborne illnesses: A primer for physicians and other health care professionals.
-

Morbidity and Mortality Weekly Report (MMWR), 53(RR04); 1-33, April 16, 2004.
Retrieved May, 2018 from
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5304a1.htm>.

Hepatitis A Data Collection Worksheet

Please complete all sections.

Panorama QA complete: Yes No
 Initials: _____

Panorama Client ID: _____
 Panorama Investigation ID: _____

A) CLIENT INFORMATION

LHN -> SUBJECT -> CLIENT DETAILS -> PERSONAL INFORMATION

Last Name:	First Name: and Middle Name:	Alternate Name (Goes by):
DOB: YYYY / MM / DD Age: _____	Health Card Province: _____ Health Card Number (PHN): _____	Preferred Communication Method: (specify - i.e. home phone, text): Email Address: <input type="checkbox"/> Work <input type="checkbox"/> Personal
Phone #: <input type="checkbox"/> Primary Home: <input type="checkbox"/> Mobile contact: <input type="checkbox"/> Workplace:		
Place of Employment/School:	Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/> Unknown	
Alternate Contact: _____ Relationship: _____ Alt. Contact phone: _____	Address Type: <input type="checkbox"/> No fixed <input type="checkbox"/> Postal Address <input type="checkbox"/> Primary Home <input type="checkbox"/> Temporary <input type="checkbox"/> Legal Land Description Mailing (Postal address): Street Address or FN Community (Primary Home): Address at time of infection if not the same:	

B) INVESTIGATION INFORMATION

LHN-> SUBJECT SUMMARY-> ZOONOTIC & VECTORBORNE GROUP->CREATE INVESTIGATION

Disease Summary Classification:	Date	Classification:	Date	LAB TEST INFORMATION:
CASE		CONTACT		Date specimen collected:
<input type="checkbox"/> Confirmed	YYYY / MM / DD	<input type="checkbox"/> Contact	YYYY / MM / DD	YYYY / MM / DD
<input type="checkbox"/> Does Not Meet Case	YYYY / MM / DD	<input type="checkbox"/> Not a Contact	YYYY / MM / DD	Specimen type:
<input type="checkbox"/> Person Under Investigation	YYYY / MM / DD	<input type="checkbox"/> Person Under Investigation	YYYY / MM / DD	<input type="checkbox"/> Blood
<input type="checkbox"/> Probable	YYYY / MM / DD			<input type="checkbox"/> Stool
Disposition:				
<i>FOLLOW UP:</i>				
<input type="checkbox"/> In progress	YYYY / MM / DD	<input type="checkbox"/> Complete	YYYY / MM / DD	
<input type="checkbox"/> Incomplete - Declined	YYYY / MM / DD	<input type="checkbox"/> Not required	YYYY / MM / DD	
<input type="checkbox"/> Incomplete - Lost contact	YYYY / MM / DD	<input type="checkbox"/> Referred - Out of province	YYYY / MM / DD	
<input type="checkbox"/> Incomplete - Unable to locate	YYYY / MM / DD	(specify where)		
REPORTING NOTIFICATION		Location:		
Name of Attending Physician or Nurse:				
Physician/Nurse Phone number:		Date Received (Public Health): YYYY / MM / DD		
Type of Reporting Source: <input type="checkbox"/> Health Care Facility <input type="checkbox"/> Lab Report <input type="checkbox"/> Nurse Practitioner <input type="checkbox"/> Physician <input type="checkbox"/> Other _____				

Hepatitis A Data Collection Worksheet

Please complete all sections

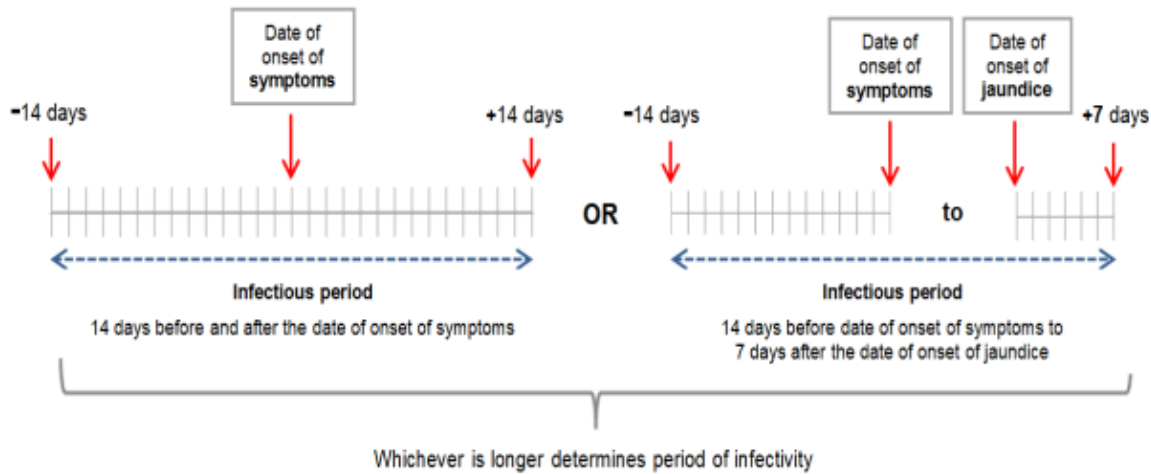
Panorama Client ID: _____
Panorama Investigation ID: _____

C) SIGNS & SYMPTOMS (Bold supports confirmed case definition)

LHN-> INVESTIGATION->SIGNS & SYMPTOMS

Description	No	Yes - Date of onset	Description	No	Yes - Date of onset
Asymptomatic		YYYY / MM / DD	Loss of appetite (anorexia)		YYYY / MM / DD
Fever		YYYY / MM / DD	Malaise		YYYY / MM / DD
Jaundice		YYYY / MM / DD	Nausea		YYYY / MM / DD
Lab - liver enzymes - elevated		YYYY / MM / DD	Pain - abdominal		YYYY / MM / DD
Other signs and symptoms if applicable			Urine - dark		YYYY / MM / DD

Figure 6-1. Determining period of infectivity



D) INCUBATION AND COMMUNICABILITY

LHN-> INVESTIGATION->INCUBATION & COMMUNICABILITY

Incubation for Case (period for acquisition):	
Earliest Possible Exposure Date: YYYY / MM / DD	Latest Possible Exposure Date: YYYY / MM / DD
<i>Exposure Calculation details:</i>	
Communicability for Case (period for transmission):	
Earliest Possible Communicability Date: YYYY / MM / DD	Latest Possible Communicability Date: YYYY / MM / DD
<i>Communicability Calculation Details:</i>	

E) RISK FACTORS (during risk period) (continued on next page)

LHN-> SUBJECT->RISK FACTORS

DESCRIPTION	YES	N - No NA - not asked U - Unknown	DESCRIPTION	YES	N - No NA - not asked U - Unknown
Contact - At risk population (international travellers or immigrants)	YYYY / MM / DD		Special Population - Attends childcare	TE	
Contact - Persons with similar symptoms	YYYY / MM / DD		Special Population - From or residence in an endemic country (Add'l Info)	YYYY / MM / DD	
Contact to a known case (Add'l Info)	YYYY / MM / DD		Travel - Outside of Canada (Add'l Info)	YYYY / MM / DD AE	
Immunocompromised - Related to underlying disease or treatment			Travel - Outside of Saskatchewan, but within Canada (Add'l Info)	YYYY / MM / DD AE	
Occupation - Child Care Worker	TE		Water - Bottled water (Add'l Info)		
Occupation - Food Handler	TE		Water - Private well or system (Add'l Info)		

Hepatitis A Data Collection Worksheet

Please complete all sections

Panorama Client ID: _____
Panorama Investigation ID: _____

DESCRIPTION	YES	N – No NA – not asked U - Unknown	DESCRIPTION	YES	N – No NA – not asked U - Unknown
Occupation - Health Care Worker IoM Risk Factor	TE		Water - Public water system (Add'l Info)		
Occupation - Personal Care Worker	TE		Water - Untreated water		
Sexual Behaviour - MSM	YYYY / MM / DD		Water (Recreational) - Pond, stream, lake, river, ocean		
Sexual Behaviour - Oral-anal	YYYY / MM / DD		Water (Recreational) – Private (swimming pool/whirlpool)	TE	
Sexual Behaviour - Sex with a person from endemic Country (Add'l Info)	YYYY / MM / DD		Water (Recreational) - Public (swimming/paddling pool/whirl pool)	TE	

F) USER DEFINED FORM (SEE ATTACHED)

LHN-> INVESTIGATION-> INVESTIGATION DETAILS -> LINKS AND ATTACHMENTS -> HEPATITIS A FORM

G) COMPLICATIONS

LHN-> INVESTIGATION->COMPLICATIONS

Description	Yes Date of onset	Description	Yes Date of onset
Hepatitis - fulminant	YYYY / MM / DD	Other complications	YYYY / MM / DD

H) IMMUNIZATION HISTORY INTERPRETATION SUMMARY

LHN -> INVESTIGATION-> IMMUNIZATION HISTORY INTERPRETATION SUMMARY

Interpretation Date: YYYY / MM / DD	
Interpretation of Disease Immunity: <input type="checkbox"/> IOM - Fully immunized (for age) <input type="checkbox"/> IOM - Unimmunized <input type="checkbox"/> IOM - Unclear immunization history	<input type="checkbox"/> IOM - Partially immunized Valid doses received: _____ Doses needed: _____ <input type="checkbox"/> IOM - Interpretation of history by investigator

I) INTERVENTIONS

LHN-> INVESTIGATION->TREATMENT & INTERVENTIONS->INTERVENTION SUMMARY

Intervention Type and Sub Type:				
Assessment: <input type="checkbox"/> Assessed for contacts Investigator name: _____ YYYY / MM / DD		Exclusion: Investigator name <input type="checkbox"/> Daycare YYYY / MM / DD <input type="checkbox"/> Preschool YYYY / MM / DD <input type="checkbox"/> School YYYY / MM / DD <input type="checkbox"/> Work YYYY / MM / DD		
Communication: <input type="checkbox"/> Other communication (See Investigator Notes) Investigator name: _____ YYYY / MM / DD <input type="checkbox"/> Letter (See Document Management) Investigator name: _____ YYYY / MM / DD		Public Health Order: YYYY / MM / DD <input type="checkbox"/> Other (specify) Investigator name: _____		
General: Investigator name <input type="checkbox"/> Disease-Info/Prev-Control YYYY / MM / DD <input type="checkbox"/> Disease-Info/Prev-Cont/Assess'd for Contacts YYYY / MM / DD		Referral: YYYY / MM / DD <input type="checkbox"/> Canadian food inspection agency <input type="checkbox"/> Consultation with MHO <input type="checkbox"/> Primary care provider Investigator name: _____		
Education/counseling: Investigator name <input type="checkbox"/> Prevention/Control measures YYYY / MM / DD <input type="checkbox"/> Disease information provided YYYY / MM / DD		Symptom monitoring: YYYY / MM / DD <input type="checkbox"/> Symptom monitoring indirect, passive – (contacts as well as cases) Investigator name: _____		
Environmental health: YYYY / MM / DD <input type="checkbox"/> Restaurant Inspection Investigator name: _____ <input type="checkbox"/> Water system inspection		Immunization: Investigator name <input type="checkbox"/> Eligible Immunization recommended YYYY / MM / DD <input type="checkbox"/> Disease-specific immunization recommended YYYY / MM / DD <input type="checkbox"/> Disease-specific immunization given YYYY / MM / DD <input type="checkbox"/> Immunization nurse notified YYYY / MM / DD		
Other Investigation Findings: <input type="checkbox"/> Investigator notes <input type="checkbox"/> Document Management				
Date	Intervention subtype	Comments	Next follow-up Date	Initials
YYYY / MM / DD				
YYYY / MM / DD				
YYYY / MM / DD				

Hepatitis A Data Collection Worksheet

Please complete all sections

Panorama Client ID: _____
Panorama Investigation ID: _____

J) OUTCOMES

LHN-> INVESTIGATION-> OUTCOMES

- | | | | | | |
|---|----------------|---|----------------|--|----------------|
| <input type="checkbox"/> Not yet recovered/recovering | YYYY / MM / DD | <input type="checkbox"/> ICU/intensive medical care | YYYY / MM / DD | <input type="checkbox"/> Hospitalization | YYYY / MM / DD |
| <input type="checkbox"/> Recovered | YYYY / MM / DD | <input type="checkbox"/> Intubation /ventilation | YYYY / MM / DD | <input type="checkbox"/> Unknown | YYYY / MM / DD |
| <input type="checkbox"/> Fatal | YYYY / MM / DD | <input type="checkbox"/> Other _____ | YYYY / MM / DD | | |

Cause of Death: (if Fatal was selected) _____

K) EXPOSURES

Acquisition Event

LHN-> INVESTIGATION-> EXPOSURE SUMMARY-> ACQUISITION QUICK ENTRY

Acquisition Event ID: _____

Exposure Name: _____

Acquisition Start YYYY / MM / DD to Acquisition End: YYYY / MM / DD

Location Name: _____

Setting Type

- Travel
 Exposure or consumption of potentially contaminated food or water
 Most likely source

Transmission Events

LHN -> INVESTIGATION-> EXPOSURE SUMMARY -> TRANSMISSION EVENT SUMMARY -> QUICK ENTRY

Transmission Event ID	Exposure Name	Setting type (Consider the following settings for TE; if >1 select "multiple settings" in Panorama)	Date/Time	# of contacts
		<input type="checkbox"/> Congregate/Communal Living settings <input type="checkbox"/> Food service establishment <input type="checkbox"/> Health care setting <input type="checkbox"/> Household <input type="checkbox"/> Private Function (Food prep) <input type="checkbox"/> Sexual Exposure <input type="checkbox"/> Type of Community Contact <input type="checkbox"/> Travel		
		<input type="checkbox"/> Congregate/Communal Living settings <input type="checkbox"/> Food service establishment <input type="checkbox"/> Health care setting <input type="checkbox"/> Household <input type="checkbox"/> Private Function (Food prep) <input type="checkbox"/> Sexual Exposure <input type="checkbox"/>		
		<input type="checkbox"/> Congregate/Communal Living settings <input type="checkbox"/> Food service establishment <input type="checkbox"/> Health care setting <input type="checkbox"/> Household <input type="checkbox"/> Private Function (Food prep) <input type="checkbox"/> Sexual Exposure <input type="checkbox"/> Type of Community Contact <input type="checkbox"/> Travel		
	Hep A Contacts – Invest ID _____	<input type="checkbox"/> Multiple Settings	YYYY / MM / DD to YYYY / MM / DD	

L) Total number of contacts

LHN -> INVESTIGATION-> EXPOSURE SUMMARY -> TRANSMISSION EVENT SUMMARY -> TE HYPERLINK -> UNKNOWN/ANONYMOUS CONTACTS

Anonymous contacts: _____ (total number of individuals [including groups that 1:1 follow-up is not required or is not feasible])

Initial Report completed by:		Date initial report completed: YYYY / MM / DD
-------------------------------------	--	---



Hepatitis A Routine Questionnaire - August 2018



Loading...

Record type: Investigation
 Record ID: 134
 Record Name: UDF Investigation

If the case traveled outside of Canada during the entire incubation period (15-50 days before the onset of the first symptom) do not fill out this section. If the case traveled outside of Canada for part of the incubation period, fill out the section below for only that part of the incubation period in which he/she was in Canada.

Food Exposures

[Show/Hide](#)

During the incubation period 15-50 days prior to onset, did you eat...

- Any strawberries?
- Yes
 - Probably
 - No
 - Don't know
 - None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)

- Any blueberries?
- Yes
 - Probably
 - No
 - Don't know
 - None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)

- Any raspberries?
- Yes
 - Probably
 - No
 - Don't know
 - None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)

- Any blackberries?
- Yes
 - Probably
 - No
 - Don't know
 - None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)



Any other raw fruits (e.g. pineapple chunk etc.)?

Yes
 Probably
 No
 Don't know
 None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)

Any ready to eat, pre-washed packaged salad?

Yes
 Probably
 No
 Don't know
 None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)

Any lettuce on a sandwich, burger, or taco from a restaurant or a fast food establishment?

Yes
 Probably
 No
 Don't know
 None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)

Any raw vegetables (e.g., green onions)?

Yes
 Probably
 No
 Don't know
 None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)

Any raw/undercooked shellfish?

Yes
 Probably
 No
 Don't know
 None of the Above

If yes, specify details (E.g., where consumed, type, brand, location)

Restaurants

[Show/Hide](#)

Complete this section only if no clear exposure has been identified. In the period between 15 and 50 days before



onset of the first symptom, did you attend any restaurants (including take-out, cafeteria, bakery, deli, kiosk).

During the incubation period 15-50 days prior to onset, did you attend any restaurants (including take-out, cafeteria, bakery, deli, kiosk)?

- Yes
- No
- Don't know
- Not asked

Click the Add button to add restaurant details

Add

Loyalty card/store issued card (for outbreak investigation only)

[Show/Hide](#)

This section is only for use in some specific outbreak situations, with client consent. It is not a routine question for sporadic cases.

Has the client given consent (written or verbal)?

- Yes
- No
- Not applicable

Loyalty card details (names and numbers)

Interviewer Details and Notes

[Show/Hide](#)

Interviewer Name

Interview date

Any special notes regarding this interview

Save as Draft

Submit

Clear