Blood and Body Fluid Pathogens

Hepatitis C

Notification Timeline:

From Lab/Practitioner to Public Health: Within 72 hours.
From Public Health to Saskatchewan Health: Within 2 weeks.

Public Health Follow-up Timeline: Within 72 hours.

Information

Table 1: Case Definition (Public Health Agency of Canada, 2011)

Confirmed Case: Acute or Recent Infection	Detection of hepatitis C virus antibodies (anti-HCV) or hepatitis C virus RNA (HCV RNA) in a person with discrete onset of any symptom or sign of acute viral hepatitis (see Section 5) within 6 months preceding the first positive HCV test **AND** • negative anti-HAV IgM, and negative anti-HBc IgM or HBsAg tests **AND** • serum alanine aminotransferase (ALT) greater than 2.5 times the upper normal limit **OR** detection of hepatitis C virus antibodies (anti-HCV) in a person with a documented anti-HCV negative test within the preceding 12 months **OR** detection of hepatitis C virus RNA (HCV RNA) in a person with a documented HCV RNA negative test within the preceding 12 months.
Confirmed Case: Unspecified (including chronic and resolved infections)	Detection of hepatitis C virus antibodies (anti-HCV) **OR** detection of hepatitis C virus RNA (HCV RNA).
Confirmed Case: Infants < 18 months**	PCR positive for HCV-RNA.^
HCV PCR is important as individuals who are viremic will be considered for antiviral treatment and is a useful diagnostic tool in immuno-compromised individuals who might not mount an antibody response.	
** In infants < 18 months of age, anti-HCV testing should not be performed as the presence of anti-HCV may represent passive maternal antibody. Cord blood should not be used because of potential cross-contamination with maternal antibody. ^ If testing for HCV-RNA is done, it should be delayed beyond 4-12 weeks in order to avoid false negative HCV-RNA test results (Public Health Agency of Canada, 2009).	

Causative Agent
The hepatitis C virus (HCV) is a small, single stranded, enveloped RNA virus that is classified as a separate genus (*Hepacivirus*) in the Flaviviridae family. Six major genotypes of hepatitis C virus have been identified which are further differentiated into approximately 100 subtypes (Heymann, 2008). HCV is able to evade the body's immune system because it is constantly mutating.

Symptoms
- Onset is insidious. Majority of cases are asymptomatic (more than 90%) or only having mild symptoms which may include anorexia, vague abdominal discomfort, nausea and vomiting (Heymann, 2008).
- Initial signs and symptoms of HCV infection are indistinguishable from signs and symptoms of hepatitis A or hepatitis B virus infections.
- Jaundice occurs in fewer than 20% of patients; progression to jaundice occurs less frequently than with hepatitis B.
- Abnormalities in liver transaminase concentration. Generally these are less pronounced than in those in patients with hepatitis B virus infection.
- Most definable symptoms may begin to appear 20-30 years after the initial infection and can lead to severe complications like liver cirrhosis or cancer.
- The course of chronic hepatitis C is slow and insidious with most patients showing few physical signs of the disease during the first 20 years of infection; people may experience a progression from mild to moderate to severe hepatitis (U.S. Centers for Disease Control and Prevention, 2008).

Complications
- A high percentage of cases (50-80%) develop chronic infection; of chronically infected persons about half will eventually develop cirrhosis or hepatocellular cancer (HCC) (Heymann, 2008).
- Approximately 25% (range 15-25%) of HCV infections will resolve spontaneously; these individuals will typically demonstrate anti-HCV without detectable HCV-RNA (U.S. Centers for Disease Control and Prevention, 2008).
- HCV is the leading cause of liver transplantation in adults in the United States (American Academy of Pediatrics, 2012).

Incubation Period
Ranges from 2 weeks to 6 months with an average 6 to 9 weeks (Heymann, 2008). The time of exposure to the development of viremia is generally 1-2 weeks (American Academy of Pediatrics, 2012).

Reservoir/Source
Humans. Blood, blood products and any body fluid containing blood can be a source of infection. See Table 2.

Table 2: Fluids and tissues capable of transmitting hepatitis C

FLUID	HCV
Lab specimens containing concentrated HBV, HCV or HIV	Yes
Blood, serum, plasma or other biological fluids visibly contaminated with blood	Yes
Pleural, amniotic, pericardial, peritoneal, synovial and cerebrospinal fluids	Yes
Semen, vaginal secretions	Yes
Saliva	No, unless contaminated with blood
Breastfeeding	Biologically plausible, particularly if nipples are cracked or bleeding
Organ and tissue transplants	Yes
Screened donated blood & manufactured blood products	Minimal risk in Canada

(U.S. Centers for Disease Control and Prevention, 2001)

Mode of Transmission

- HCV is primarily transmitted through parenteral exposure to HCV infected blood (Heymann, 2008; American Academy of Pediatrics, 2012).
- Transmission is most efficient through large or repeated percutaneous exposures to blood such as transfusion of blood from unscreened donors or through injection drug use.
- The risk of vertical transmission has been estimated to be between 1 to 6% and only from women who are HCV RNA positive at the time of delivery.
- Although less efficient, occupational and sexual exposures can also result in transmission of HCV.

Risk Groups/Risk Factors
The most common risk factors for acquiring HCV are (American Academy of Pediatrics, 2012):

- injection drug use;
- having multiple sexual partners;
- having received blood products before 1992 (prior to screening and processing of blood products was implemented).

The risk factors for transmission of HCV include:

- sharing of drug use equipment;
- co-infection with HIV increases the risk of sexual transmission of HCV;
- maternal risk factors that increase the risk of transmission include HIV co-infection, history of IDU and high maternal viremia.

Period of Communicability
From one or more weeks before onset of the first symptoms; may persist in most persons indefinitely (Heymann, 2008).

Specimen Collection and Transport
Specimen: serum 2 ml.

Anti-HCV

- Initial test to determine whether a person has ever been exposed to HCV.
- Tested for antibodies to hepatitis C virus.
- May take up to 3 months before these antibodies appear.
- Negative antibody test with no history of exposure in the last 3-4 months means that the person has never been exposed to the hepatitis C virus; no further testing is required for this person unless risk factors change or an exposure occurs.
- Positive antibody screening tests are confirmed using immunoblot tests; positive reports go to the clinician and a copy goes to the Medical Health Officer (MHO).

HCV PCR

- HCV RNA testing should be performed using a sensitive quantitative assay with a low limit of detection (10-15 IU/ml or less) and a broad dynamic range.

- It is recommended that all ELISA hepatitis C positive tests have a second blood sample (plasma) sent to be tested for HCV by PCR to rule out active disease (College of Family Physicians of Canada, Public Health Agency of Canada, 2009):
  - Negative PCR: it is recommended that the test be repeated in 2-4 weeks. If positive, repeat again in 12 weeks.
  - Repeat negative PCR: is consistent with a patient with inactive disease.
  - Positive PCR: means the patient has active HCV disease and should be evaluated further by an individual experienced in hepatitis C management (e.g., infectious diseases specialist).
- Immunocompromised individuals may not develop anti-HCV; therefore these individuals may need to undergo HCV-RNA testing.

Post-natal

- After birth, babies born to mothers positive for hepatitis C antibodies will have passive antibodies; therefore anti-HCV testing should not be performed in infants < 18 months of age, as the presence of anti-HCV may represent passive maternal antibody.
- Cord blood should not be used because of potential cross-contamination with maternal antibody.
- Uninfected infants should usually have cleared these antibodies by 12 to 15 months of age. The higher the level in the mother, the longer they will take to clear (Boucher, 2000).
- Test newborns of HCV-RNA positive mothers at 1 year using HCV-RNA test (College of Family Physicians of Canada, Public Health Agency of Canada, 2009).

Methods of Control/Role of Investigator

Prevention and Education

Refer to the Blood and Body Fluid Pathogens Introduction and General Considerations section of the manual that highlights topics for client education that should be considered.

Health education efforts should include both broad-based campaigns to raise awareness of risk, modes of transmission, and prevention measures, and reduce stigma as well as targeted programs to educate and reduce risk in at-risk populations.

Immunization
There is no vaccine available for the prevention of hepatitis C.

Education
Refer to the Blood and Body Fluid Pathogens Introduction and General Considerations section of the manual that highlights topics for client education that should be considered. Personal service providers should be referred to Saskatchewan Personal Service Facility Best Management Practices (under development) for infection prevention and control measures.

Management

I. Case

History

Obtain as detailed a history as possible using the Attachment – Hepatitis C Investigation Form. Inquire about history of sexual or needle-sharing contact with someone who has or had HCV. Discuss all potential risks that the case has been exposed to with particular focus on parenteral exposures such as:

- injection drug use;
- tattooing/piercing;*
- medical/dental procedures;*
- transfusions of blood/blood products in Canada (prior to 1992);
- transfusions of blood/blood products outside of Canada.

*It is important to obtain details regarding dates of exposures and names/locations of the facilities in which exposures may have occurred. Consideration of the need to further investigate these facilities is warranted.

Inquire about other factors that are associated with HCV:

- co-infection with other blood borne pathogens or STIs;
- history of multiple sexual partners;
- history of incarceration.

Obtain names and phone numbers of contacts as per Contact Investigation.

Education (College of Family Physicians of Canada, Public Health Agency of Canada, 2009)

Cases should be educated on hepatitis C disease and its signs and symptoms. They should be informed of the complications of hepatitis C and be advised of how to reduce the risk of liver damage:

- limit alcohol intake;
- promote smoking cessation;
- maintain a healthy weight;
- avoid/limit medication use (including over-the-counter medications) that may be hepatotoxic without consulting with a physician or pharmacist;
- ensure immunity to hepatitis A and B.

Cases should be informed of how hepatitis C is spread and to use precautions with their own blood and body fluids to prevent spread and infection to others:

- never donate blood, organs, semen, or tissue;
- never share material used to prepare, inject, or inhale drugs;
- never share sharp instruments/personal hygiene materials with others (e.g., razors, scissors, nail clippers, toothbrush);
- consider the potential health risks of tattooing and body piercing;
- discuss HCV status with drug sharing partners;
- sexual activity is safe unless it involves trauma or higher risk sexual behaviours;
- practice safer sex with new partners;
- breastfeeding by a HCV positive mother is not a risk unless nipples are cracked or bleeding. Breastfeeding should be discontinued until nipples are healed.

Cases should be advised that they should also be tested for HIV and hepatitis B.

Treatment/Supportive Therapy

The treatment of hepatitis C infections is to be prescribed by or in consultation with a specialist with expertise in HCV treatment.

Immunization

Offer immunizations as per Saskatchewan Immunization Manual, Chapter 7.[1]

[1] http://www.ehealthsask.ca/services/manuals/Documents/sim-chapter7.pdf

Exclusion

Not applicable. Standard/Routine Infection Prevention and Control measures apply.

Referrals

Cases should be referred to:

- infectious diseases (ID) specialist or treating practitioner.
- other social programs as agreed to by client (e.g., community agencies that provide support to HCV positive people) or harm reduction programs for needle exchange services and related health services;
- Canadian Blood Services (CBS) should be notified of cases that have a history of donation or receipt of blood or blood products. See Appendix K – Notification to Canadian Blood Services.
- Saskatchewan Transplant Program should be notified of cases that have a history of donation or receipt of tissues. See Appendix M – Notification to the Saskatchewan Transplant Program.

II. Contacts/Contact Investigation

Contact Definition

- High risk contacts are defined as:
  - those who have shared injection drug use and non injection drug use equipment with the case;
  - children born to an infected mother;
  - individuals who have been exposed to blood or body fluids contaminated with blood (sharing razors, toothbrushes, or via bites or needlestick injuries).
- Lower risk contacts are defined as:
  - household contacts;
  - sexual contacts.
- Contacts should be traced back to 6 months prior to onset of symptoms or to onset of risk behaviour for cases who are asymptomatic.
- Children born to women previously identified to be HCV infected should be tested for HCV infection; the duration of presence of passive maternal antibody in infants can be as long as 18 months.
- Exposures to blood and body fluids should be managed as per Saskatchewan Guidelines for the Management of Exposures to Blood and Body Fluids.[2]

[2] http://www.ehealthsask.ca/services/manuals/Pages/hiv-guidelines.aspx

- When personal service or medical/dental facilities are identified as a potential source for exposure, further investigation of other clientele may be warranted.

Education

Contacts should be educated on hepatitis C disease and its signs and symptoms. They should be informed of how hepatitis C is spread and to use precautions with their own blood and body fluids until testing is complete and shows they have not been infected. This may be as long as 6 months due to the long incubation of hepatitis C.

Contacts should also be educated on how to protect themselves from further exposure to hepatitis C by following certain preventive measures. Refer to the Blood and Body Fluid Pathogens Introduction and General Considerations section of the manual that highlights topics for client education that should be considered.

Testing/Prophylaxis

- All contacts of hepatitis C disease should be tested for hepatitis B and C and HIV.
- Any contacts who are HCV-positive should be followed as a case.
- Contacts who are anti-HCV negative should undergo repeat testing at 4 weeks, 3 months and 6 months following their latest exposure. They should be sure to follow precautions to reduce the risk of spreading the virus to others until infection can be ruled out. See Saskatchewan Guidelines for the Management of Exposures to Blood and Body Fluids.[3]

Infants born to HCV positive mothers:

- Refer to Specimen Collection and Transport – Postnatal.

Prophylaxis

None available.

Immunization

There is no vaccine for hepatitis C. Contacts should be provided immunizations as per the Saskatchewan Immunization Manual, Chapter 5[4] and 7.[5]

[3] http://www.ehealthsask.ca/services/manuals/Pages/hiv-guidelines.aspx
[4] http://www.ehealthsask.ca/services/manuals/Documents/sim-chapter5.pdf
[5] http://www.ehealthsask.ca/services/manuals/Documents/sim-chapter7.pdf

Exclusion
Exclusion is not indicated.

III. Environment

Removal of visible blood/body fluid followed by application of a solution of 1 part bleach and 9 parts water which is then allowed to sit for 10 minutes should be sufficient to deactivate the virus.

Child Care Centre Control Measures
All childcare centre staff should use Standard/Routine Precautions when handling all blood and body fluids. Refer to Infection Control Manual for Childcare Facilities.[6] Children known to have hepatitis C do not need to be excluded from childcare. If the child is known to bite, this should be discussed with the medical health officer (MHO).

Institutional Control Measures
Standard/Routine Precautions should be the standard for all staff working in health care settings. Refer to Regional Infection Control Manual.

Personal Service Facilities
Refer to Saskatchewan Personal Service Facility Best Management Practices (under development).

Epidemic Measures

When two or more cases occur in association with some common exposure, search for additional cases. Screen susceptible contacts and implement measures to interrupt further transmission as appropriate to the situation.

[6] http://www.saskatchewan.ca/live/births-deaths-marriages-and-divorces/starting-a-family/early-learning-and-child-care/child-care.

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Public Health Agency of Canada: Pan Canadian Public Health Network Communicable and Infectious Diseases Steering Committee. (Approved 2011). *Case definitions for communicable diseases under national surveillance*. (Unpublished).

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U.S. Centers for Disease Control and Prevention. (2008). *Hepatitis C information for health professionals*. Retrieved June, 2014 from http://www.cdc.gov/hepatitis/HCV/HCVfaq.htm#section4.

Hepatitis C Notification Form

Panorama QA complete: ☐ **Yes** ☐ **No**
Initials:

A) PERSON REPORTING – HEALTH CARE PROVIDER INFORMATION

Clinic Name: Location: Attending Physician or Nurse: Address: Phone number:	***FOR PUBLIC HEALTH OFFICE USE ONLY:*** **Service Area:** **Date Received:** **Panorama Client ID:** **Panorama Investigation ID:**

B) CLIENT INFORMATION

Last Name:	First Name: and Middle Name:	Alternate Name:
DOB: YYYY / MM / DD Age: _____ Health Card Province: _____ Health Card Number (PHN):	Gender: ☐ Male ☐ Female ☐ Unknown ☐ Other Gender Identity: ☐ Transgender Male-to-female ☐ Transgender Female-to-male ☐ Undifferentiated ☐ Other (specify)	Phone : ☐ Primary Home: ☐ Mobile contact: ☐ Workplace: ☐ Alt Contact: Name: _____ Relationship: _____
Place of Employment/School:	Email Address:	Preferred Communication Method: ☐ Home ☐ Work ☐ E-mail ☐ Text

Address Type: ☐ No fixed ☐ Postal Address ☐ Primary Home ☐ Temporary ☐ Legal Land Description

Mailing (Postal address):

Street Address or FN Community (Primary Home):

C) IMMIGRATION INFORMATION

Country Born In: _____

Country Emigrated from: _____ Arrival Date: YYYY / MM / DD OR Arrival Year YYYY

D) DISEASE EVENT HISTORY

Staging: ☐ Acute (19 months of age and older) ☐ Chronic (19 months of age and older) ☐ Unstaged (less than 19 months of age)
☐ Resolved (19 months of age and older) ☐ Unstaged (19 months of age and older)

E) SIGNS & SYMPTOMS (NOTE: For Public Health - Do not select "ONSET" symptom)

Description	No	**Yes** **Date of onset**	**Add'l Info**
Asymptomatic			
Jaundice			
Lab – aminotransferase levels - elevated			
Lethargy (fatigue, drowsiness, weakness, etc.)			
Loss of appetite (anorexia)			
Nausea			
Pain - Abdominal			
Urine – dark			
Vomiting			
Weight loss			
Other – specify			

Hepatitis C Notification Form

Panorama QA complete: ☐ **Yes** ☐ **No**
Initials:

F) RISK FACTORS Please complete *all* Risk Factors from LAST KNOWN NEGATIVE result –specify dates as needed) **N—No, NA–Not asked, U–Unknown**

DESCRIPTION	Yes Start date	N, NA, U	Add'l Info
Contact – Hepatitis C	YYYY / MM/DD		
Exposure – Invasive body art (e.g. tattoo, body piercing, scarification)	YYYY / MM/DD		
Exposure – Blood and body fluids (not otherwise listed) (Add'l Info)	YYYY / MM/DD		
Occupation – Health Care Worker – IOM Risk Factor			
Risk Behavior – Sharing injection drug equipment	TE		
Risk Behavior – Sharing non-injection drug equipment	TE		
Sexual Behaviour – More than 2 sexual partners in past 3 months	TE		
Sexual Behaviour – MSM	TE		
Sexual Behaviour – Sex with a known case (Add'l Info)	YYYY / MM/DD		
Sexual Behavior – Sex with person from endemic country (Add'l Info)	YYYY / MM/DD		
Sexual Behavior – Sex with person who injects drugs	TE		
Special Populations – Correctional Facility resident			
Special Population – From or residence in an endemic country			
Special Population – Infant born to infected mom	TE		
Special Population – Pregnancy			
Special Population – Self-reported indigenous			
Substance Use – Alcohol			
Substance Use – Injection Drug Use (including Steroids)			
Substance Use – Illicit non-injection drug use	AE		
Travel – Outside of Canada (Add'l Info)	YYYY / MM/DD		
Other risk factor (Add'l Info)	TE		
Medical Treatment – Blood, blood product or tissue recipient (Add'l Info)	YYYY / MM/DD INTERVENTION		
Medical Treatment – Other (transplant, surgery, dental, oscopy, artificial insemination etc.) (Add'l Info)	YYYY / MM/DD INTERVENTION		
Blood, blood product, tissue or transplant ***donor***	*Document referral in Interventions and complete Appendix K – Referral to CBS, and upload into Document Management*		

G) UNKNOWN/ANONYMOUS CONTACTS

Anonymous contacts:_____ (number of contacts that the individual cannot name)

Include known contacts on the following pages

Hepatitis C - Contacts

Case Name:

Page _____ of _____

Please complete **all** sections.

Please include information on additional contacts on a separate sheet

A) CONTACTS

Last Name:	First Name: and Middle Name:	Alternate Name:
DOB: YYYY / MMM / DD Age: _____ HSN: _____	Gender: ☐ Male ☐ Female ☐ Unknown ☐ Other	
Phone #: ☐ Primary Home: ☐ Workplace: ☐ Mobile contact: ☐ alternate phone: Relationship:	**e-mail Address:**	
Online Names: Site/Service: User Name:		
Place of Employment/School:	**Is contact pregnant?** ☐ Yes ☐ No ☐ Unknown **Is contact HIV positive** ☐ Yes ☐ No ☐ Unknown **Is this contact Hep C positive?** ☐ Yes ☐ No ☐ Unknown	
Address Type: ☐ No fixed ☐ Postal Address ☐ Primary Home ☐ Temporary ☐ Legal Land Description **Mailing** (Postal address): **Street Address** or **FN Community** (Primary Home):		
Exposure Dates: 1st YYYY / MMM / DD to YYYY / MMM / DD **Exposure Type**: ☐ Sexual ☐ Sharing Injection/Non-injection Drug Equipment ☐ Household		
Comments:	**INTERVENTION** **Testing** ☐ Advised ☐ Received ☐ **Referral** (Specify)	

B) CONTACTS

Last Name:	First Name: and Middle Name:	Alternate Name:
DOB: YYYY / MMM / DD Age: _____ HSN: _____	Gender: ☐ Male ☐ Female ☐ Unknown ☐ Other	
Phone #: ☐ Primary Home: ☐ Workplace: ☐ Mobile contact: ☐ alternate phone: Relationship:	**e-mail Address:**	
Online Names: Site/Service: User Name:		
Place of Employment/School:	**Is contact pregnant?** ☐ Yes ☐ No ☐ Unknown **Is contact HIV positive** ☐ Yes ☐ No ☐ Unknown **Is this contact Hep C positive?** ☐ Yes ☐ No ☐ Unknown	
Address Type: ☐ No fixed ☐ Postal Address ☐ Primary Home ☐ Temporary ☐ Legal Land Description **Mailing** (Postal address): **Street Address** or **FN Community** (Primary Home):		
Exposure Dates: 1st YYYY / MMM / DD to YYYY / MMM / DD **Exposure Type**: ☐ Sexual ☐ Sharing Injection/Non-injection Drug Equipment ☐ Household		
Comments:	**INTERVENTION** **Testing** ☐ Advised ☐ Received ☐ **Referral** (Specify)	

Government of Saskatchewan

Hepatitis C – Public Health Follow-Up

PANORAMA

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:
DOB: YYYY / MM / DD Age: _____	Gender: ☐ Male ☐ Female ☐ Unknown ☐ Other	PHN:

B) INVESTIGATION INFORMATION

LHN -> SUBJECT SUMMARY-> STBBI ENCOUNTER GROUP-> CREATE INVESTIGATION

Disease Summary Classification: CASE:	Date	*Classification: CONTACT:*	*Date*	*LAB TEST INFORMATION:*
☐ Lab Confirmed	YYYY / MM / DD	☐ *Contact*	*YYYY / MM / DD*	*Date specimen collected:*
☐ Suspect	YYYY / MM / DD	☐ *Not a Contact*	*YYYY / MM / DD*	*YYYY / MM / DD*
☐ Person Under Investigation	YYYY / MM / DD	☐ *Person Under Investigation*	*YYYY / MM / DD*	

Disposition: *FOLLOW UP:*

☐ In progress	YYYY / MM / DD	☐ Complete	YYYY / MM / DD
☐ Incomplete - Declined	YYYY / MM / DD	☐ Not required	YYYY / MM / DD
☐ Incomplete – Lost contact	YYYY / MM / DD	☐ Referred – Out of province	YYYY / MM / DD
☐ Incomplete – Unable to locate	YYYY / MM / DD	(Specify where)	YYYY / MM / DD

C) INTERVENTION

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

Intervention Type and Sub Type:

Assessment:
- ☐ Assessed for contacts — Investigator name — YYYY/ MM /DD
- ☐ Client aware of diagnosis — Investigator name — YYYY/ MM /DD

Communication:
- ☐ Phone call (morning) — Investigator name — YYYY/ MM/ DD
- ☐ Phone call (afternoon) — Investigator name — YYYY/ MM/ DD
- ☐ Phone call (evening) — Investigator name — YYYY/ MM/ DD
- ☐ Text Message sent — Investigator name — YYYY/ MM/ DD
- ☐ E-mail — Investigator name — YYYY/ MM/ DD
- ☐ Home visit — Investigator name — YYYY/ MM/ DD
- ☐ Letter Sent — Investigator name — YYYY/ MM/ DD
- ☐ Letter (See Document Management) — YYYY/ MM/ DD — Investigator name
- ☐ Ordering practitioner contacted — YYYY/ MM/ DD — Investigator name
- ☐ Other communication (See Investigator Notes) YYYY/ MM/ DD — Investigator name

General: Investigator name
- ☐ Disease-Info/Prev-Control — YYYY/ MM / DD
- ☐ Disease-Info/Prev-Cont/Assess'd for Contacts — YYYY/ MM / DD

Education/counselling:
- ☐ Prevention/Control measures — Investigator name — YYYY/ MM /DD
- ☐ Disease information provided — Investigator name — YYYY/ MM /DD
- ☐ Other (specify) — YYYY/ MM /DD

Immunization:
- ☐ Eligible Immunization recommended — YYYY/ MM /DD
- ☐ Immunization nurse notified — YYYY/ MM /DD

Investigator name

Environmental health:
- ☐ Personal Service Facility inspection — YYYY/ MM /DD

Investigator name

Referral: Investigator name
- ☐ Canadian Blood Services — YYYY/ MM /DD
- ☐ Child Protective Services — YYYY/ MM /DD
- ☐ Harm Reduction Services — YYYY/ MM /DD
- ☐ Infectious Disease Specialist — YYYY/ MM /DD
- ☐ Primary Care Provider — YYYY/ MM /DD
- ☐ Saskatchewan Transplant Program — YYYY/ MM /DD
- ☐ Consultation with MHO — YYYY/ MM /DD

Other:
- ☐ Other (specify) — YYYY/ MM /DD

Investigator name

Other Investigation Findings
- ☐ Investigator Notes — YYYY/ MM /DD
- ☐ See Document Management — YYYY/ MM /DD

Testing:
- ☐ Laboratory testing recommended — YYYY/ MM /DD
- ☐ STBBI Testing recommended (specify) — YYYY/ MM /DD

Investigator name

Date	Intervention subtype	Comments	Next follow-up Date	Initials
YYYY / MM / DD			YYYY / MM / DD	
YYYY / MM / DD			YYYY / MM / DD	
YYYY / MM / DD			YYYY / MM / DD	
YYYY / MM / DD			YYYY / MM / DD	
YYYY / MM / DD			YYYY / MM / DD	

Hepatitis C – Public Health Follow-Up

Panorama Client ID: _____
Panorama Investigation ID: _____

D) OUTCOMES (optional , except for severe influenza) LHN-> INVESTIGATION-> OUTCOMES

☐ Not yet recovered/recovering	YYYY / MM / DD	☐ ICU/intensive medical care	YYYY / MM / DD	☐ Hospitalization	YYYY / MM / DD
☐ Recovered	YYYY / MM / DD	☐ Intubation /ventilation	YYYY / MM / DD	☐ Unknown	YYYY / MM / DD
☐ Fatal	YYYY / MM / DD	☐ Other _____	YYYY / MM / DD		

Cause of Death: (if Fatal was selected)

E) Transmission Event LHN -> INVESTIGATION-> EXPOSURE SUMMARY -> TRANSMISSION EVENT SUMMARY -> QUICK ENTRY

Transmission Event ID (system-generated can be documented below)	Exposure Name	Setting type Important: (Select the most appropriate setting for the TE; if >1 select multiple settings)	Date/Time(include the earliest transmission date to the latest date)	# of contacts
	Hep C Contacts-Inv ID #__	☐Sexual Exposure ☐Public facilities ☐Multiple settings ☐Household ☐Type of community contact (includes IDU)		

F) Total number of contacts

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

_____ (total number of *unknown* and *known* contacts)

Initial Report completed by:		**Date initial report completed:** YYYY / MMM / DD

CONTACTS

Last Name:	First Name: and Middle Name:	Alternate Name:
DOB: YYYY / MMM / DD Age: _____	Gender: ☐ Male ☐ Female ☐ Unknown ☐ Other	
Phone #: ☐ Primary Home: ☐Workplace: ☐ Mobile contact: ☐alternate phone: Relationship:	**e-mail Address:**	
Online Names: Site/Service: User Name:		
Place of Employment/School:	**Is contact pregnant?** ☐ Yes ☐ No ☐ Unknown **Is contact HIV positive** ☐ Yes ☐ No ☐ Unknown **Is this contact Hep C positive?** ☐ Yes ☐ No ☐ Unknown	
Address Type: ☐No fixed ☐Postal Address ☐ Primary Home ☐Temporary ☐Legal Land Description **Mailing** (Postal address): **Street Address** or **FN Community** (Primary Home):		
Exposure Dates: 1st YYYY / MMM / DD to YYYY / MMM / DD **Exposure Type**: ☐ Sexual ☐ Sharing Injection/Non-injection Drug Equipment ☐ Household		
Comments:	**INTERVENTION** **Testing** ☐ Advised ☐ Received ☐ **Referral** (Specify)	

Complete more contact sheets if needed