

**Viral Hepatitis Case Report Reference  
December, 2007**

**By**

**Acute Communicable Disease Control Program of  
Los Angeles County, Department of Public Health**

# Viral Hepatitis Case Report (VHCR) Reference

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## VIRAL HEPATITIS CASE REPORT



Census tract: \_\_\_\_\_ VCMR ID: \_\_\_\_\_

Patient name-last initial		first	middle	Date of Birth	Age <b>(A)</b>	Sex
Address- number, street			City	State	ZIP Code	
Telephone number Home (      )		Work (      )		Cell (      )		
Race (check one) <input type="checkbox"/> African-American/Black <input type="checkbox"/> Asian/Pacific Islander <input type="checkbox"/> Native American <input type="checkbox"/> White <input type="checkbox"/> Other:				Ethnicity (check one) <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Non-Hispanic/Non-Latino		
If Asian/Pacific Islander, please check one: <input type="checkbox"/> Asian Indian <input type="checkbox"/> Cambodian <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Guamanian <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Laotian <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other:						
Occupation or school (give city/zip code) <b>(B)</b>			Homeless? Yes <input type="checkbox"/> No <input type="checkbox"/> <b>(C)</b>		Sensitive Occupation/Situation(S.O.S)? Yes <input type="checkbox"/> No <input type="checkbox"/> <b>(D)</b>	

This section will be used for collecting case demographic information. This information will be analyzed to understand how the disease occurs by age, race/ethnicity, and gender. Demographic information can help us identify new target groups or areas in which hepatitis prevention programs should be initiated.

- A.** The age of the patient can also give us a clue about where he or she acquired the disease. For example, acute hepatitis B and C are primarily acquired via bloodborne exposure (often associated with sex and/or drugs). If a patient has acute hepatitis B and is <19 years or >55 years, careful history taking is paramount to rule out possible nosocomial exposure since sex and drug exposures will be less likely in these age groups.
- B.** The occupation or school will help us identify a possible cluster or outbreak.
- C.** The definition of being homeless is having no home or permanent place of residence. For example: a person is considered to be homeless if this person lives in any shelters, missions, or temporary housing (such as a motel or hotel), or is in a Single Room Occupancy program (SRO).

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**D.** A Sensitive Occupation/Situation (SOS) is particularly important to investigate. Since hepatitis A spreads via fecal-oral exposure, it is very important to find the patient as soon as possible, so we can stop him/her from spreading the disease. Additionally, their contacts will be able to receive post-exposure prophylaxis in time to prevent the disease.

- ❖ Keep a look out for outbreaks. If you notice an increase in the # of confirmed cases in your census tracts and/or district, please notify ACDC. Take careful note of what the confirmed cases might have in common (demographics, risk factors, etc).

### PRESENT ILLNESS

Diagnosis date: ___/___/___ <b>(E)</b> Was patient jaundiced? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <b>(F)</b> If Yes, start date: ___/___/___	Was the patient hospitalized for hepatitis? <b>(H)</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, admit date: ___/___/___ Facility/Hospital Name:	Medical Record No.
Did patient have symptoms other than jaundice? <b>(G)</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, onset date: ___/___/___ What symptoms? _____	If female: Pregnant? <b>(I)</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, due date: ___/___/___	
	Did patient die from hepatitis? <b>(J)</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, date of death: ___/___/___	

It is important to determine if the patient was clinically ill from acute hepatitis for the following reasons:

1) to decide if the patient meets the case definition of acute hepatitis and 2) to determine the morbidity (hospitalization) and mortality of acute hepatitis in Los Angeles County.

- E.** Diagnosis date: when was patient diagnosed?
- F.** Was patient jaundiced? Yes or No. (Jaundice includes yellowing of the skin or eyes, darkening of urine color, or lightening of feces.) If yes, when did patient become jaundiced?
- G.** Did patient have symptoms other than jaundice?

As many of you know, jaundice is one sign of hepatitis. However, the CDC/CSTE's definition for acute hepatitis requires that patients have symptoms such as nausea, vomiting, abdominal pain, fever or chills in addition to jaundice or elevated liver enzymes. Jaundice is not considered a

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clinical symptom for this purpose. Determine the onset date of these symptoms with the patient and record the onset date and the type of symptoms on the form. An accurate onset date is very important, especially in the case of hepatitis A and B, when decisions regarding IG have to be made based on the onset date.

### H. Was patient hospitalized?

The purpose of asking this question is to understand the severity of this disease.

### I. Is the patient pregnant?

The purpose of asking this question is to identify pregnant females to prevent perinatal transmission. Sometimes the initial report does not indicate that the patient is pregnant, but the PHN learns about the pregnancy during the interview. If this is the case, PHNs should educate their patients about how to prevent the disease from being transmitted to their newborn and notify the perinatal hepatitis B program if the patient has acute hepatitis B or is HBsAg positive. As we know, pregnant patients sometimes do not deliver their baby by her regular obstetrician.

Therefore, it is very important to educate the patient that her newborn should receive his/her first hepatitis B vaccine within 24 hours to prevent the onset of hepatitis B.

### J. Did patient die from hepatitis?

The purpose of asking this question is to understand the severity of the hepatitis disease and the outcome of the hepatitis disease. This will help us target prevention programs.

## VACCINE HISTORY

	Yes	No	Unk	If Yes, Date dose given. 1 <sup>st</sup> Dose	2 <sup>nd</sup> Dose	3 <sup>rd</sup> Dose
hepatitis A vaccine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___/___/___	___/___/___	
hepatitis B vaccine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___/___/___	___/___/___	___/___/___

Checking vaccine history is helpful to determine if the patient is a valid acute case. Vaccines against hepatitis A and B are very effective. If a case has been fully vaccinated against these diseases, it is unlikely (though not impossible) that they have the disease.

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- PHNs can use this opportunity to check the patient's complete vaccination record. PHNs can refer patients to immunization clinics for free vaccine if they are <19 years old or counsel high risk patients to obtain appropriate vaccines. (In some cases, high risk patients may be able to obtain vaccine from our STD clinics.) Moreover, it will benefit Public Health to see whether vaccines against preventable diseases such as Hepatitis A & B were given to children in a timely manner.

### DIAGNOSTIC TESTS (Check all tests performed and attach laboratory results.)

Reason for testing: (Check all that apply) <b>(K)</b>	Laboratory results:	Pos	Neg	No Test/Unk
<input type="checkbox"/> Symptoms of acute hepatitis	Total antibody to hepatitis A virus (total anti-HAV) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Evaluation of elevated liver enzymes	IgM antibody to hepatitis A virus (IgM anti-HAV) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Follow-up testing for previous marker of viral hepatitis	Hepatitis B surface antigen (HBsAg) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Screening of asymptomatic patient with risk factors <b>(L)</b>	Total antibody to hepatitis B core antigen (total anti-HBc) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Screening of asymptomatic patient with no risk factors <b>(L)</b>	IgM antibody to hepatitis B core antigen (IgM anti-HBc) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Blood/organ donor screening	Antibody to hepatitis C virus (anti-HCV) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Prenatal screening	- anti-HCV signal to cut-off ratio _____			
<input type="checkbox"/> Unknown	Supplemental anti-HCV assay (e.g., RIBA) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other	HCV RNA (e.g., PCR) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specify: _____	Antibody to hepatitis D virus (anti-HDV) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Antibody to hepatitis E virus (IgM anti-HEV) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

  

Liver enzyme results at time of diagnosis: <b>(M)</b> Test Result Date: ___/___/___ ALT (SGPT) _____ AST (SGOT) _____ Bilirubin _____
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Asking the reasons for testing is very important. When PHNs understand the reason why a patient was screened for hepatitis, they can use this information to determine whether they need to continue to investigate the case or not (only acute cases need investigation). This information, along with the clinical symptoms, helps to distinguish true (acute) cases from false cases.

- K.** If a patient had a hepatitis panel for symptoms of acute hepatitis, then he/she has a high possibility of being an acute case.
- L.** Asymptomatic patients, with or without risk factors, who have positive IgM tests while being screened for previous (chronic) hepatitis, blood/organ donation, prenatal screening, will not meet the CDC/CSTE case definition for acute hepatitis and are unlikely to be true cases of acute

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hepatitis. This initial assessment can provide PHNs the information to determine whether they should continue to investigate the case.

**M.** Evaluation of elevated liver enzymes: cases must have elevated liver enzymes or jaundice to qualify as an acute case of hepatitis. It is very important that all efforts are made to obtain the liver function test results on the cases. \*\*\*PHNs are expected to call the laboratory or the healthcare provider of the patient to obtain these results. \*\*\* Note that ALT levels must be  $\geq 400$  to qualify as a case of acute hepatitis C.

It is important to record results of tests for the other forms/types of acute hepatitis, especially in the case of acute hepatitis C, which, according to the case definition, requires negative tests for IgM anti-HAV and IgM anti-HBc (if done) and HBsAg. Therefore it is important to record negative results along with positive results.

Hepatitis A, B, and C cannot be differentiated from each other on the basis of clinical or epidemiologic features alone. Serologic testing is necessary to establish a diagnosis for hepatitis.

- Confirmation of acute hepatitis A: patient needs to be IgM anti-HAV positive (unless they are an epidemiologic contact of a confirmed case of acute hepatitis A).
- Confirmation of acute hepatitis B: patient needs to be HBsAg positive or IgM anti-HBc positive.
- Confirmation of acute hepatitis C: patient needs to be anti-HCV positive with either a signal to cut-off ratio  $\geq 3.8$  for EIA, a signal to cut-off ratio  $\geq 8$  for CIA, or RIBA positive, or HCV PCR positive. According to CDC/CSTE's acute case definition, to qualify as a case of acute hepatitis C, the patient must also have negative tests for IgM anti-HAV and IgM anti-HBc (if done) and HBsAg.

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### PUBLIC HEALTH NURSING INITIAL ASSESSMENT AND EVALUATION

If acute hepatitis (check here ) , please complete the appropriate acute hepatitis A or acute hepatitis B and C sections.

If not acute hepatitis (check here ) , please go to **Final Diagnosis** section and complete. Do **NOT** complete the acute hepatitis sections.

After PHNs do their initial assessment, they should be able to determine whether the patient has acute, past, or chronic infection with viral hepatitis.

- If PHNs identify the patient as an acute case, then they will continue to complete the appropriate acute hepatitis A or acute hepatitis B and C sections.
- If PHNs marked any of the other boxes; then, they will go to the final diagnosis section and complete it. There is no need to ask risk factor questions of those who do not meet to screening criteria for acute hepatitis.

### HOUSEHOLD/CLOSE CONTACTS

Name Relationship to case	Age	Occupation	S.O.S.			Onset date __/__/__	Comments (include Prophylaxis and Vaccine)
			Yes	No	Unk		
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	__/__/__	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	__/__/__	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	__/__/__	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	__/__/__	

Identifying contacts of patient who might require post-exposure prophylaxis is one of the goals of hepatitis surveillance. Administered in a timely fashion, post-exposure prophylaxis might prevent a potential outbreak.

Hepatitis A post-exposure prophylaxis for contacts at risk of infection, including household, sexual, and other close contacts (drug sharing partners), includes three options:

- Vaccination for contacts between 12 months-40 years
- IG for contacts <12 months
- IG and vaccination for contacts >40 years

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Hepatitis B post-exposure prophylaxis for household, sexual, and needle sharing partners:

- Prophylactic treatment to prevent infection after exposure to HBV should be considered in the following situations: perinatal exposure of an infant born to an HBsAg positive mother, inadvertent percutaneous or permucosal exposure to HBsAg positive blood, unprotected sexual exposure to an HBsAg positive person, and household exposure of an infant 12 months of age to a primary care-giver who has acute hepatitis B.
- Sexual partners of pregnant women with HBsAg+ and all susceptible household contacts are referred by Immunization Program to clinics where they can receive HBV vaccine.

### REMARKS

Educated patient according to B-73 on the following:			
<u>Mode of Transmission:</u>	<u>Prevention:</u>	<u>Other:</u>	
<input type="checkbox"/> Fecal-Oral	<input type="checkbox"/> Household Contacts		
<input type="checkbox"/> Blood to Blood	<input type="checkbox"/> Vaccine		
<input type="checkbox"/> Sexual	<input type="checkbox"/> Personal Hygiene		
<input type="checkbox"/> Maternal Infant Transmission	<input type="checkbox"/> Immunoglobulin (IG)		

This section is use for PHNs to document patient education. It is a great opportunity to document good public health practice.

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FINAL DIAGNOSIS			
<input type="checkbox"/> Acute Hepatitis A <input type="checkbox"/> Chronic Hepatitis B <input type="checkbox"/> Unable to locate (UTL) <b>(Q)</b> <input type="checkbox"/> Acute Hepatitis B <input type="checkbox"/> Chronic Hepatitis C <input type="checkbox"/> Could not confirm: <b>(Q)</b> <input type="checkbox"/> Acute Hepatitis C <input type="checkbox"/> False Hepatitis A <b>(N)</b> Explain why? _____ <input type="checkbox"/> Acute Hepatitis D <input type="checkbox"/> False Hepatitis B <b>(O)</b> _____ <input type="checkbox"/> Acute Hepatitis E <input type="checkbox"/> False Hepatitis C <b>(P)</b>			<b>Acute Hepatitis Case Definition:</b> An acute illness with: discrete onset of symptoms and jaundice or abnormal serum aminotransferase levels <u>Hepatitis A:</u> IgM anti-HAV positive <u>Hepatitis B:</u> IgM anti-HBc positive or HBsAg positive and IgM anti-HAV negative if done. <u>Hepatitis C:</u> Serum aminotransferase (ALT) levels greater than 400 U/L and IgM anti HAV negative, and IgM anti-HBc negative or if not done HBsAg negative, and RIBA positive or PCR for HCV RNA positive or anti-HCV positive with a signal to cut-off ratio $\geq 3.8$ for the EIA
Investigator's name (print)		Investigator's signature	Date
Health District		Supervisor signature	Area Medical Director's signature
Telephone number (    )			

The acute hepatitis definitions above are from the CDC/CSTE surveillance criteria for acute hepatitis. It is very important to close cases according to the criteria in order to standardize surveillance, determine who is truly at risk for disease, and better compare rates of disease between jurisdictions. This final diagnosis section is used for closure. PHNs will close suspected hepatitis cases according to the CDC/CSTE acute hepatitis case definition. The PHNS and Area Medical Director will review and approve the PHN's final diagnosis before the record is sent to the registrar.

- Acute cases: see definitions to the right of this section
  - The definition of chronic hepatitis B is: a case had a positive test for HBsAg, but did not meet the acute case definition.
  - The definition of chronic hepatitis C is: a case had a positive PCR or RIBA test or an EIA signal to cut-off ratio of  $\geq 3.8$  (or CIA  $\geq 8.0$ ), but did not meet the acute case definition.
  - False case: a case doesn't meet either the acute or chronic definition.
- N.** False hepatitis A: if the case had a positive test for IgM anti-HAV, but did not meet the acute case definition, the case should be close as false.
- O.** False hepatitis B: if the case had a positive test for IgM anti-HBc, but did not meet the acute or chronic case definition, the case should be closed as false.

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- P.** False hepatitis C: if the case had a positive test for anti-HCV, but did not meet the acute or chronic case definition, the case should be closed as false.
- Q.** The two terms, “Unable to locate” and “Could not be confirmed” are to be used in the final diagnosis section when appropriate, for example, an acute, or a chronic or a false hepatitis case has been confirmed, but case is unable to be located by either the post-office search or PHI search is unsuccessful to locate the case would require the “Unable to locate” box to be checked. Likewise, if a case was not confirmed to be acute or chronic hepatitis, then the “could not be confirmed” box would be checked. Could not be confirmed includes “acute hepatitis A or B” patients with only total anti-HAV or total anti-HBc and no results of an IgM test or hepatitis C patients with no or a low signal to cut-off ratio reported

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<b>TO BE COMPLETED FOR ACUTE HEPATITIS A</b>			
<b>EPIDEMIOLOGIC RISK FACTORS</b>			
If patient was not serologically confirmed, is there an epidemiologic link between the patient and a laboratory-confirmed hepatitis A case?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unk <input type="checkbox"/>
Did the patient travel outside of the USA or Canada in the 2-7 weeks prior to onset of symptoms? <b>(A)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, where? <input type="checkbox"/> South/Central America (including Mexico) <input type="checkbox"/> Africa <input type="checkbox"/> Caribbean <input type="checkbox"/> Middle East <input type="checkbox"/> Asia/South Pacific <input type="checkbox"/> Australia/New Zealand <input type="checkbox"/> Other _____			
Duration of stay in days _____			
Did patient receive immune globulin prior to travel? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, when? _____			
Did anyone in the patient's household (family, relatives, friends, sexual partners) travel outside of the USA or Canada in the 3 months prior to onset of symptoms?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If PHNs identify the patient as a case of acute hepatitis A, then they will continue to complete this section.

**A.** In Los Angeles, recent travel outside of the US was the most common risk factor for acute hepatitis A cases. South/Central America (including Mexico) is the most frequent destination. Therefore, collecting patients' and their household contacts' travel information is important to determine source of infection.

During the 2-7 weeks prior to onset of symptoms: If YES, ask patient when and where and record in exposure details.			
Was the patient a household contact of a child or employee in a nursery, day care center or preschool? <b>(B)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, was there an identified hepatitis A patient in a nursery, day care center or preschool? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the patient suspected as being part of a common-source outbreak? <b>(C)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, specify outbreak # _____			

During the 2-7 weeks prior to onset of symptoms:

**B.** Was the patient a child or employee in a nursery, day care center, or preschool or was the patient a household contact of a child or employee in a nursery, day care center or preschool? Children less than 6 years old with hepatitis A are likely to be asymptomatic. Therefore, children may not be sick enough to see a doctor. However, children are still a possible source to pass their disease to other people, such as their parents, nursery workers, or daycare teachers.

## For VHCR page 3 – Hepatitis A

- C.** Check if patient is part of a suspected (or known) common source outbreak- this is important for tracking all who are affected in a given outbreak.

Was the patient employed as a food handler or SOS? <b>(D)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, Did patient work while ill or in week prior to onset? If Yes, call ACDC ASAP.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last day of work: ___/___/___ Employer/Situation _____			
Address, City _____ Phone ( ) _____			

- D.** Determining whether a patient is a food handler or in a sensitive occupation is crucial information to control possible hepatitis A outbreak, because the availability of Immune Globulin and hepatitis A vaccine provides the opportunity to substantially lower disease incidence in persons who were cared for or consumed food prepared by the patient.

Did the patient eat raw shellfish? <b>(E)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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- E.** The proportion of hepatitis A cases in the U.S. that are attributable to foodborne or waterborne outbreaks is small. However, it is important to ask about shellfish consumption because one cause of hepatitis A is the consumption of raw or inadequately cooked shellfish taken from sewage contaminated water. Seafood contaminated with hepatitis A virus has been associated with significant geographic spread due to seafood export patterns. For example, an outbreak of hepatitis A after consumption of raw oysters from Florida resulted in cases in 5 different states.

Did the patient inject drugs not prescribed by a doctor? <b>(F)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient use street drugs but not inject? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, when? _____ What kind of drugs? _____			

- F.** Illicit drug use of any kind (especially methamphetamine smoked or snorted) can be associated with hepatitis A, even if no injections are involved. Injection or IV drug use is also associated with hepatitis B and C. It is important to ask about drug use to determine how many of the acute

## For VHCR page 3 – Hepatitis A

hepatitis cases in LA County are secondary to drug use. This will help in designing prevention programs.

- Note that all drug users are recommended to receive the hepatitis A and hepatitis B vaccines.

How many sex partners did the patient have? (Ask both questions regardless of the patient's gender.) <b>(G)</b>			
Number of male sex partners	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> >5
Number of female sex partners	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> >5
Did the patient know or have contact with anyone with hepatitis A virus infection? ( <input type="checkbox"/> suspected or <input type="checkbox"/> confirmed hepatitis A case) ..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
If Yes, was the contact a: (check all that apply)			
<input type="checkbox"/> Sexual partner	<input type="checkbox"/> Household member (non-sexual)	<input type="checkbox"/> Drug sharing partner	
<input type="checkbox"/> Child cared for by this patient	<input type="checkbox"/> Babysitter of this patient	Kind of drug shared? _____	
<input type="checkbox"/> Playmate	<input type="checkbox"/> Other _____		

**G.** Acute hepatitis A and B has been associated with sexual behavior. Ask the sex question of both genders of all ages. Ask it in a neutral way to remove the stigma from the behavior by not putting a label on the behavior. For example, not calling the patient “homosexual” or “bisexual.”

Most U.S. cases of hepatitis A result from person to person transmission. The most frequently reported source of infection is either household or sexual contact with a person with hepatitis A. Knowing the case had contact with anyone who was diagnosed with hepatitis A will not only provide us the information about the source of the infection but it may also alert us about the possible hepatitis A outbreak.

<b>FOOD HISTORY (2-7 WEEKS PRIOR TO ONSET) (H)</b>			
Name (restaurants, bars, food stores, group meals, bakeries, etc.)	Location (Address, City)	Dates Exposed	Foods Eaten

**H.** Since hepatitis A can be a foodborne disease, food histories are significant sources of information for hepatitis A. Encourage patients to take out their daily calendar or appointment book to

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remember where they ate. Attach additional sheets if necessary (which is likely given the multiple number of exposures to different food sources that people have in 2-7 weeks).

**EXPOSURE DETAILS** Please explain any YES answers in the above section. Please sign your notes. **(I)**

	Suspected Source
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- I.** This section will be used for your progress notes regarding exposure that needs to be further explained from a “yes” answer above or important information that you identified that was not covered in the standard questions. Attach additional sheets if necessary or attach progress notes.

## For VHCR page 4 – Hepatitis B & C

TO BE COMPLETED FOR ACUTE HEPATITIS B AND C			
EPIDEMIOLOGIC RISK FACTORS			
During the 6 months prior to onset of symptoms, was the patient a contact of a person with confirmed or suspected acute or chronic ..... hepatitis B or C virus infection? <b>(A)</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unk <input type="checkbox"/>
If Yes, type of contact: <input type="checkbox"/> Sexual <input type="checkbox"/> Household (Non-sexual) <input type="checkbox"/> Other: _____			

**A.** Source case finding is very significant for disease control. It can prevent the unnecessary spread of disease. Specify if contact had hepatitis B or hepatitis C.

Was the patient EVER treated for a sexually transmitted disease? <b>(B)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....			

**B.** Hepatitis B & C are spread by contact with blood or blood products or body fluids. Among young adults transmission is most frequent via sexual contacts or IVDU. Risk of sexual transmission of hepatitis can increase with the number of partners. Several studies have demonstrated in different groups that the prevalence of hepatitis B markers increases dramatically in subjects who have more than three partners in six months. Similarly, prevalence of hepatitis B markers increases in subjects who have other sexually transmitted diseases. Treatment for a sexually transmitted disease may be a marker for a true case of acute hepatitis B or C. It also is a marker of missed opportunities to have prevented acute hepatitis B with a vaccine in an STD clinic.

During the 6 months prior to onset of symptoms: If YES, ask patient when and where and record in exposure details			
Did the patient undergo hemodialysis? <b>(C)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the patient a resident of a long term facility (e.g. nursing home)? <b>(D)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient receive fingersticks? <b>(E)</b> .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient have an accidental stick or puncture with a needle or other object contaminated with blood? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient receive blood or blood products (transfusion)? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient receive any IV infusions and/or injections in the outpatient setting? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Did the patient have dental work or oral surgery?	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient have any diagnostic medical procedure or surgery?	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient have other exposure to someone else's blood?	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the patient employed in a medical or dental field involving direct contact with human blood? <b>(F)</b>	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, frequency of direct blood contact? <input type="checkbox"/> Frequent (several times weekly) <input type="checkbox"/> Infrequent Was the patient employed as a public safety worker (fire fighter, law enforcement/correctional officer) having direct contact with human blood? <b>(F)</b>	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, frequency of direct blood contact? <input type="checkbox"/> Frequent (several times weekly) <input type="checkbox"/> Infrequent Did the patient undergo acupuncture?	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient receive a tattoo?	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, where was the tattooing performed? <input type="checkbox"/> Commercial parlor/shop <input type="checkbox"/> Correctional facility Did the patient have any part of their body pierced (other than ear)?	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, where was the piercing performed? <input type="checkbox"/> Commercial parlor/shop <input type="checkbox"/> Correctional facility <input type="checkbox"/> Other Did the patient inject drugs not prescribed by a doctor?	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did the patient use street drugs but not inject?	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, when? _____      What kind of drugs? _____ How many sex partners did the patient have? (Ask both questions regardless of the patient's gender.)	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of male sex partners <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2-5 <input type="checkbox"/> >5 <input type="checkbox"/> Unk	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of female sex partners <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2-5 <input type="checkbox"/> >5 <input type="checkbox"/> Unk	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the patient incarcerated for longer than 24 hours? <b>(G)</b>	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Yes, what type of facility (Check all that apply) <input type="checkbox"/> Prison <input type="checkbox"/> Jail <input type="checkbox"/> Juvenile facility	.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

➤ Stress to patients that these are questions about exposures in the last 6 months. We don't need to know about exposures more than 6 months ago.

If the patient answers "yes" to any of the risk factors, please record the first and last date of exposure to each identified risk factor in the comments section. As you can see, there are several new questions for

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hepatitis B and C based on new understanding of how these viruses are transmitted. However, these questions are similar to questions that have been asked in the past.

- C.** Patients on hemodialysis therapy are at a relatively high risk of exposure to hepatitis B (HBV) or hepatitis C (HCV) infection. HBV or HCV can be transmitted in the dialysis setting through blood exposure. In addition, HBV can be transmitted through environmental surfaces. Furthermore, hemodialysis patients are immunosuppressed which increases their susceptibility to infection, and they require frequent hospitalizations and surgery, which increases their opportunities for exposure to nosocomial infections.
- D.** If a patient has acute hepatitis B and is < 19 years or > 55 years, careful history taking is paramount since these age groups are less likely to participate in risky behavior. Nosocomial transmission should be carefully investigated for patients > 55 years.
- E.** Many outbreaks of acute hepatitis B and C have been reported due to re-use of medical equipment, in dialysis centers, in clinics that give IV medications, acupuncture, or among diabetics that receive glucose fingersticks. For example, from 1999-2003, there were 4 reported outbreaks in LA County of acute hepatitis B in diabetics that lived in nursing homes.
- F.** The risk of acquiring hepatitis B or C from the workplace depends on the amount of exposure to human blood or blood products, or other body fluids known to transmit with the HBV or HCV. Occupational groups with possible increased risk include public safety workers (fire fighter, law enforcement, and correctional officer) and health care workers (nurse, doctor, lab tech, dentists, dental assistants, and dental hygienists) who are repeatedly exposed to blood or blood products or those who are at risk of needlestick injury.
- G.** The reason for asking a patient incarcerated for longer than 24 hours is that there are multiple studies documenting outbreaks of hepatitis B in correctional facilities. Therefore, the current CDC

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recommendations are that people who enter correctional facilities should receive the hepatitis B vaccine.

<b>EXPOSURE DETAILS</b> Please explain any YES answers in the above section. Please sign your notes. <b>(H)</b>
<div style="text-align: right; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Suspected Source</div>

**H.** This section will be used for your progress notes regarding exposure that needs to be further explained from a “yes” answer above or important information that you identified that was not covered in the standard questions. Attach additional sheets if necessary or attach progress notes.