

## PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL RECORD ABSTRACTION FORM

CaseID: \_\_\_\_\_

Form Approved: OMB No. 0920-1011  
Exp. Date 01/31/2023

Version 19 Aug 2022

### General Instructions:

Please complete the form for all children who meet the case definition: hepatitis of unknown etiology (with or without adenovirus testing) among children <10 years with aspartate aminotransferase (AST) or alanine aminotransferase (ALT) (>500 U/L) since October 1, 2021.

- Yellow fields do not need to be submitted to CDC.
- Greyed out fields do not require information.
- CaseID: Please assign using the letter abbreviation for your state/territory followed by a unique ID (can be either a combination of numeric or alpha characters) assigned by your state
- Several sections may be best completed by a clinician: Clinical Info, Diagnosis & Treatment, Radiologic Findings, Summary of Clinical Assessment.
- Vaccination information should be captured from the state Immunization Information System as the primary source.
- Any relevant information that does not fit in a designated section can be noted in the “Summary of Clinical Assessment” section.
- All dates should be in the format MM/DD/YYYY.

### Reminder about adenovirus testing:

- CDC is recommending adenovirus PCR testing on all specimen types including respiratory, stool, and blood (including whole blood, plasma or serum) specimens.
- CDC requests all residual specimens be submitted to CDC.
- Please refer to the specimen protocol for additional instructions on testing/shipping of specimens. Instructions can be found here: [Instructions for Adenovirus Diagnostic Testing, Typing, and Submission | CDC](#)

### Submission Instructions:

CDC requests submission of completed forms on a rolling basis. Please upload completed forms to the ShareFile folder via one of the following:

1. Scanned/electronic copy of the completed form
2. CSV export from REDCap database (if using CDC REDCap data structure in state/local REDCap instance)

For questions related to form completion or submission instructions, email [ncirddvdgast@cdc.gov](mailto:ncirddvdgast@cdc.gov)

# PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM

Version: 19 Aug 2022

CASE ID: \_\_\_\_\_

<b>Date form completed:</b> ____/____/____	
<b>DEMOGRAPHICS</b> <i>Yellow fields do not need to be submitted to CDC</i>	
<b>Patient's name (Last, First, M.I.)</b> _____	<b>DOB:</b> ____/____/____
<b>Age:</b> _____ <input type="checkbox"/> Days <input type="checkbox"/> Months <input type="checkbox"/> Years	<b>Sex assigned at birth:</b> <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Refused <input type="checkbox"/> Don't know
<b>Street Address:</b> _____	<b>Current gender identity:</b> <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Transgender <input type="checkbox"/> None of these
<b>City:</b> _____	<b>County:</b> _____ <b>State:</b> _____ <b>Zip:</b> _____
<b>Phone (Cell/Home):</b> _____	<b>Phone (Cell/Home):</b> _____
<b>Ethnicity:</b> <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Latino <input type="checkbox"/> Unknown	<b>Race (check all that apply)</b> <input type="checkbox"/> American Indian/Alaska Native <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> Asian <input type="checkbox"/> White <input type="checkbox"/> Black/African American <input type="checkbox"/> Other ( _____ )

<b>SIGNS/SYMPTOM HISTORY</b>	
<b>Category of signs/symptoms</b>	<b>Check all that apply:</b>
First Respiratory sign/symptom Onset: ____/____/____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Cough <input type="checkbox"/> Congestion <input type="checkbox"/> Rhinorrhea <input type="checkbox"/> Sore throat <input type="checkbox"/> Wheezing <input type="checkbox"/> Shortness of breath <input type="checkbox"/> Conjunctivitis (pink eye)
First GI sign/symptom Onset: ____/____/____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Diarrhea <input type="checkbox"/> Nausea <input type="checkbox"/> Vomiting <input type="checkbox"/> Abdominal Pain
First Hepatitis sign/symptom Onset: ____/____/____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Dark-colored urine <input type="checkbox"/> Pale stool <input type="checkbox"/> Jaundice or scleral icterus
Date of systemic sign/symptom Onset: ____/____/____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatigue <input type="checkbox"/> Fever (Max) _____ °F <input type="checkbox"/> Decreased appetite <input type="checkbox"/> Other, specify: _____

<b>CLINICAL INFORMATION</b> <i>Yellow fields do not need to be submitted to CDC.</i> <i>For date of initial evaluations, please note the date that the child first sought medical care for this illness.</i>									
<b>Patient Height:</b> _____ <input type="checkbox"/> ft/in <input type="checkbox"/> cm <input type="checkbox"/> Unknown	<b>Patient Weight:</b> _____ <input type="checkbox"/> lbs <input type="checkbox"/> Kg <input type="checkbox"/> Unknown								
<b>Date of initial evaluation (for this illness):</b> ____/____/____ <input type="checkbox"/> Unknown									
<b>Where was the patient first identified?</b>	<b>Name of facility:</b> _____								
<input type="checkbox"/> Primary care provider <input type="checkbox"/> Urgent care <input type="checkbox"/> Emergency department <input type="checkbox"/> Hepatologist/subspecialty appointment	<input type="checkbox"/> Hospital <input type="checkbox"/> Unknown <input type="checkbox"/> Other, specify: _____								
<b>Was the patient hospitalized for this illness?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown									
<i>If patient was hospitalized:</i> <b>Hospital:</b> _____ <b>Medical Record #:</b> _____									
<b>Admission Date (Initial Hospital):</b> ____/____/____ <input type="checkbox"/> Unknown admission date									
<b>Was the patient transferred from another hospital?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown									
<i>If yes, which hospital?</i> _____ <b>Transfer Date:</b> ____/____/____ <input type="checkbox"/> Unknown									
<b>Final patient outcome:</b> <input type="checkbox"/> Survived, discharge home <input type="checkbox"/> Survived, discharged other location <input type="checkbox"/> Died <b>If yes, was an autopsy performed?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Unknown									
<b>Date of discharge / death:</b> ____/____/____ <input type="checkbox"/> Unknown date of discharge/death									
<i>If patient was hospitalized:</i> <b>ICD-10 discharge codes:</b>									
Primary code: <div style="border: 1px solid black; width: 100px; height: 20px; margin-top: 5px;"></div>	Other codes (list up to 10): <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> </tr> <tr> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> </tr> </table>								
<b>Were there additional codes beyond those listed above:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown									

# PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM

Version: 19 Aug 2022

CASE ID: \_\_\_\_\_

DIAGNOSES & TREATMENT			
<i>Yellow fields do not need to be submitted to CDC.</i>			
<b>Was the patient diagnosed with any of the following measures of severity of hepatitis/liver disease:</b>			
Hepatomegaly (enlarged liver)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
Splenomegaly (enlarged spleen)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
Ascites	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
Acute liver failure (rapid loss of liver function)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
Hepatic encephalopathy (loss of brain function due to liver failure)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
Hemophagocytic lymphohistiocytosis (buildup of white blood cells in organs)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
<b>Was the patient diagnosed with pneumonia at time of clinical presentation/hospitalization?</b>			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
<b>Did patient receive a liver transplant?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn	If yes, which hospital? _____	<b>Date of 1<sup>st</sup> Transplant:</b> ____/____/____ <input type="checkbox"/> Date Unknown
<b>Did patient receive a second transplant?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn	If yes, which hospital? _____	<b>Date of 2<sup>nd</sup> Transplant:</b> ____/____/____ <input type="checkbox"/> Date Unknown
<b>Was the patient treated with:</b>	...cidofovir? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	...brincidofovir? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	...steroids? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <i>If treated with steroids, please specify:</i> _____
	... Intravenous Immunoglobulin (IVIg)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		

UNDERLYING HEALTH CONDITIONS	
<b>Did the patient have any of the following underlying health conditions?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
<i>If yes, check all that apply:</i>	
<input type="checkbox"/> Asthma (or Reactive Airway Disease)	<input type="checkbox"/> Other cancer, specify _____
<input type="checkbox"/> Congenital Heart Disease	<input type="checkbox"/> Developmental disorder, specify _____
<input type="checkbox"/> Diabetes Mellitus (Type 1 or 2)	<input type="checkbox"/> Premature Birth (Gestational age at birth: _____ weeks)
<input type="checkbox"/> Leukemia/Lymphoma	<input type="checkbox"/> History of any transplant, specify _____
<input type="checkbox"/> Sickle cell anemia	<input type="checkbox"/> Other condition, specify _____
<input type="checkbox"/> Seizure/Seizure disorder	

ADENOVIRUS TESTING			
<i>Provide information on any repeat testing or multiple sample types in the 'Other sample, specify' fields and write-in the specimen type.</i>			
Diagnostic Test	Tested/Result	Specimen Collection Date (mm/dd/yyyy)	Is specimen available for shipping to CDC?
Stool	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn <i>If tested, specify type:</i> <input type="checkbox"/> Multipanel PCR <input type="checkbox"/> Other PCR <input type="checkbox"/> Antigen		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn
Respiratory or throat	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn <i>If tested, specify type:</i> <input type="checkbox"/> Multipanel PCR <input type="checkbox"/> Other PCR <input type="checkbox"/> Antigen		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn
Whole blood	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn
Plasma	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn
Serum	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn
Other sample, specify _____	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn
Other sample, specify _____	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn
Other sample, specify _____	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn

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Diagnostic test	Value and units	Specimen Collection Date (mm/dd/yyyy)	Specimen type
Blood qPCR	_____ <input type="checkbox"/> copies/mL <input type="checkbox"/> IU/mL		<input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum
	_____ <input type="checkbox"/> copies/mL <input type="checkbox"/> IU/mL		<input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum
	_____ <input type="checkbox"/> copies/mL <input type="checkbox"/> IU/mL		<input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum
	_____ <input type="checkbox"/> copies/mL <input type="checkbox"/> IU/mL		<input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum
	_____ <input type="checkbox"/> copies/mL <input type="checkbox"/> IU/mL		<input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum
Adenovirus typing results	<input type="checkbox"/> Not Sent (not typed) <input type="checkbox"/> Type 41 <input type="checkbox"/> Could not be typed <input type="checkbox"/> Other type, specify _____ <input type="checkbox"/> Pending		

<b>HEPATITIS VIRUS TESTING</b>		
If specimen collection date is not available, use date of laboratory result		
Diagnostic Test	Tested/Result	Date Specimen Collected (mm/dd/yyyy)
<b>Hepatitis A</b>		
IgM anti-HAV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
IgG anti-HAV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
Total anti-HAV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
HAV RNA	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>Hepatitis B</b>		
HBsAg	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
IgM anti-HBc	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
Total anti-HBc	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
HBeAg	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
HBV DNA	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>Hepatitis C</b>		
anti-HCV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
HCV RNA	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>Hepatitis D</b>		
anti-HDV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
HDV RNA	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>Hepatitis E</b>		
IgM anti-HEV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
IgG anti-HEV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
HEV RNA	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	

<b>GASTROINTESTINAL TESTING</b>		
Greyed out fields do not require information. If multiple stool samples were collected/tested, mark pathogens detected on any specimen and provide details in the "Summary of Clinical Assessment" section.		
Was a stool specimen collected for testing?	<input type="checkbox"/> Yes <input type="checkbox"/> No, skip to next section <input type="checkbox"/> Unknown	Date of first specimen collection ____/____/____
<b>Gastrointestinal panel testing</b>		
Test Performed	Test Type	Pathogens Detected (check all that apply)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Luminex xTAG <input type="checkbox"/> Biofire / FilmArray <input type="checkbox"/> Other: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No pathogens detected <input type="checkbox"/> <i>Vibrio</i> <input type="checkbox"/> <i>Vibrio cholerae</i> <input type="checkbox"/> Enteroaggregative E. coli (EAEC) <input type="checkbox"/> Enteropathogenic E. coli (EPEC) <input type="checkbox"/> Enterotoxigenic E. coli (ETEC) <i>lt/st</i> <input type="checkbox"/> Shiga-like toxin-producing E. coli (STEC) <input type="checkbox"/> <i>E. coli</i> O157 <input type="checkbox"/> <i>Shigella</i> /Enteroinvasive E. coli (EIEC) <input type="checkbox"/> <i>Cryptosporidium</i> <input type="checkbox"/> <i>Cyclospora cayetanensis</i> <input type="checkbox"/> <i>Entamoeba histolytica</i> <input type="checkbox"/> <i>Giardia lamblia</i> <input type="checkbox"/> Astrovirus <input type="checkbox"/> Norovirus GI/GII <input type="checkbox"/> Rotavirus A <input type="checkbox"/> Sapovirus (I, II, IV and V)

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Non-panel tests			
Pathogen	Tested/Result	Test Type	Details
Bacterial culture	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		If positive, pathogen:
Norovirus	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	<input type="checkbox"/> GI <input type="checkbox"/> GII <input type="checkbox"/> Not specified
Sapovirus	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	<input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV <input type="checkbox"/> Not specified
Astrovirus	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	<input type="checkbox"/> Type: <input type="checkbox"/> Not specified
Rotavirus	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> EIA <input type="checkbox"/> Other: _____	<input type="checkbox"/> Genotype: <input type="checkbox"/> Not specified
Ova & Parasite	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		If positive, pathogen isolated: _____
C. difficile	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	Name of test: _____	

RESPIRATORY TESTING			
<i>Greyed out fields do not require information</i>			
Was a respiratory specimen collected for testing?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If yes, specify specimen type _____	Date of specimen collection ____/____/____	
Respiratory panel testing			
Test Performed	Test Type	Pathogens Detected (check all that apply)	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Luminex NxTAG RPP <input type="checkbox"/> Luminex NxTAG RPP + SARS-CoV-2 <input type="checkbox"/> Luminex VERIGENE RP Flex <input type="checkbox"/> Biofire / FilmArray RPP <input type="checkbox"/> Biofire / FilmArray PN <input type="checkbox"/> Other: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No pathogens detected <input type="checkbox"/> Coronavirus HKU1 <input type="checkbox"/> Coronavirus NL63 <input type="checkbox"/> Coronavirus 229E <input type="checkbox"/> Coronavirus OC43 <input type="checkbox"/> SARS-CoV-2 <input type="checkbox"/> Human Metapneumovirus <input type="checkbox"/> Human Rhinovirus/Enterovirus <input type="checkbox"/> Influenza A <input type="checkbox"/> Influenza A/H1 <input type="checkbox"/> Influenza A/H3 <input type="checkbox"/> Influenza A/H1-2009 <input type="checkbox"/> Influenza B <input type="checkbox"/> Respiratory Syncytial Virus <input type="checkbox"/> Parainfluenza Virus 1 <input type="checkbox"/> Parainfluenza Virus 2 <input type="checkbox"/> Parainfluenza Virus 3 <input type="checkbox"/> Parainfluenza Virus 4 <input type="checkbox"/> Bordetella pertussis <input type="checkbox"/> Chlamydia pneumoniae <input type="checkbox"/> Mycoplasma pneumoniae <input type="checkbox"/> Other :	
Other respiratory specimen tests conducted			
Pathogen	Tested/Result	Details	Date (mm/dd/yyyy)
SARS-CoV-2 PCR	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
SARS-CoV-2 Antigen	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
SARS-CoV-2, Serology (anti-nucleocapsid)	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
SARS-CoV-2, Serology (anti-spike)	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
SARS-CoV-2, Other specify _____	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
Other test (specify): _____	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	If positive, pathogen isolated:	
Other test (specify): _____	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	If positive, pathogen isolated:	

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OTHER VIRAL TESTING			
Pathogen/ Test Type	Tested/Result	Test/Specimen Type	Date (mm/dd/yyyy)
Cytomegalovirus- PCR	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> Whole blood PCR <input type="checkbox"/> Plasma PCR	
Epstein-Barr virus (EBV)- PCR	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> Whole blood PCR <input type="checkbox"/> Plasma PCR	
EBV- Viral Capsid Antigen IgG	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
EBV- Viral Capsid Antigen IgM	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
EBV- Nuclear Antigen (EBNA) IgG	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
EBV- Early antigen (EA) IgG	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn		
Human herpesvirus 6	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Human herpesvirus 7	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Varicella-zoster virus	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Enterovirus	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Human immunodeficiency virus	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Parvovirus B19	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Herpes simplex virus-1	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Herpes simplex virus-2	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Measles	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	
Leptospirosis	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	<input type="checkbox"/> PCR <input type="checkbox"/> Other:	

PATIENT HISTORY OF COVID-19		
<i>List the most recent positive test. Any additional positive tests can be noted in the "Summary of clinical assessment" section.</i>		
Has this patient <u>previously</u> tested positive for SARS-CoV-2? (before current illness)		
Positive test	Test Type	Date (most recent, mm/dd/yyyy)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> PCR <input type="checkbox"/> Antigen <input type="checkbox"/> Serology <input type="checkbox"/> Unknown	<input type="checkbox"/> Date Unknown

LABORATORY MARKERS				
<i>Greyed out fields do not require information</i>				
Test Name	Initial Value	Date (mm/dd/yyyy)	Highest Value	Date (mm/dd/yyyy)
Alanine aminotransferase (ALT, U/L)				
Aspartate aminotransferase (AST, U/L)				
Total bilirubin (mg/dL)				
Conjugated bilirubin (mg/dL)				
Unconjugated bilirubin (mg/dL)				
INR (International Normalized Ratio)				
Alkaline phosphatase (ALP, U/L)				
Ammonia (µg/dL)				
Prothrombin time (PT)				
White blood cell (WBC) count (Cells x 10 <sup>9</sup> /L)				
Total Lymphocyte Count (Cells x 10 <sup>3</sup> /µL)				
Absolute Neutrophil Count (Cells x 10 <sup>3</sup> /µL)				
Hemoglobin (HGB, g/dL)				
Platelets (Plt, Cells x 10 <sup>9</sup> /L)				
Sodium (Na, mEq/L)				
Chloride (Cl, mmol/L)				

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Potassium (K, mEq/L)				
Carbon dioxide (CO <sub>2</sub> , mmol/L)				
Blood urea nitrogen (BUN, mg/dL)				
Creatinine (mg/dL)				
Glucose (mg/dL)				
Calcium (mg/dL)				
Albumin (g/dL)				
Uric acid (UA, mg/dL)				
Fibrinogen				
C-reactive protein (CRP, mg/dL)				
Erythrocyte Sedimentation Rate (ESR, mm/hr)				
Antinuclear antibody (ANA)				
Smooth muscle antibody (ASMA)				
Liver kidney microsomal antibody (LKM)				
Immunoglobulin (IgG)				

### TOXICOLOGY

*Provide highest value (and date) and put information on any additional tests in the "Summary of Clinical Assessment" section.*

Was a test for acetaminophen drug levels conducted?  Yes  No  Unkn      If yes, drug level (mcg/mL): \_\_\_\_\_      Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

### RADIOLOGIC FINDINGS

*This section is best completed by a clinician. If there are multiple ultrasounds/CTs, list the date of first test and enter dates/findings of additional tests in the key findings field for that test (i.e. CT, ultrasound, etc.)*

Were any of the following conducted:

Imaging Study	Conducted	Date (mm/dd/yyyy)	Key Findings
Abdominal ultrasound	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn		
Abdominal CT scan	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn		
Abdominal MRI	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn		
Other, specify _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn		
Other, specify _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn		
Other, specify _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn		
Other, specify _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn		

### PATHOLOGIC FINDINGS

*Please complete the liver biopsy section or native liver explant section (or both) based on the type of liver tissue specimen collected.*

**Did the patient have liver tissue analyzed by pathology?**     Yes     No     Unknown    *(If no, skip to next section)*

**Liver biopsy (complete below for Liver biopsy specimens)**

**Liver biopsy specimen collected**     Yes     No (If no, skip to native liver explant section)     Unkn    **Specimen collection date:**

**If yes... What were the findings of the liver biopsy (check all that apply)**

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Acute/active hepatitis        | <input type="checkbox"/> Fibrosis                 | <input type="checkbox"/> Macrovesicular steatosis      |
| <input type="checkbox"/> Autoimmune hepatitis          | <input type="checkbox"/> Hemophagocytosis         | <input type="checkbox"/> Portal inflammation/hepatitis |
| <input type="checkbox"/> Bile duct injury/inflammation | <input type="checkbox"/> Interface hepatitis      | <input type="checkbox"/> Smudge cells                  |
| <input type="checkbox"/> Chronic hepatitis             | <input type="checkbox"/> Microvesicular steatosis | <input type="checkbox"/> Viral/intranuclear inclusions |

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<b>...Was there hepatocellular necrosis?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
select type (check all that apply): <input type="checkbox"/> Single Cell <input type="checkbox"/> Confluent <input type="checkbox"/> Piecemeal <input type="checkbox"/> Diffuse/Massive	Other findings, specify:
<b>...What were the results for Adenovirus immunohistochemistry/immunostaining?</b> <input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>...Was other immunohistochemistry performed?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If other immunohistochemistry performed, what were the results:	
<b>Pathogen</b>	<b>Tested/Result</b>
HSV1	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
HSV2	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
CMV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
VZV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
Measles	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
Other pathogen(s), specify:	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
<b>... Was adenovirus PCR testing conducted?</b> <input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>... Was adenovirus in situ hybridization conducted?</b> <input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>Native liver explant (post liver transplant) (Complete below for liver explant specimens)</b>	
<b>Liver explant specimen collected</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<b>Specimen collection date:</b>
<b>If yes... What were the findings from the liver explant (check all that apply)</b>	
<input type="checkbox"/> Acute/active hepatitis <input type="checkbox"/> Autoimmune hepatitis <input type="checkbox"/> Bile duct injury/inflammation <input type="checkbox"/> Chronic hepatitis	<input type="checkbox"/> Fibrosis <input type="checkbox"/> Hemophagocytosis <input type="checkbox"/> Interface hepatitis <input type="checkbox"/> Microvesicular steatosis
<input type="checkbox"/> Macrovesicular steatosis <input type="checkbox"/> Portal inflammation/hepatitis <input type="checkbox"/> Smudge cells <input type="checkbox"/> Viral/intranuclear inclusions	
<b>...Was there hepatocellular necrosis?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
select type (check all that apply): <input type="checkbox"/> Single Cell <input type="checkbox"/> Confluent <input type="checkbox"/> Piecemeal <input type="checkbox"/> Diffuse/Massive	Other findings, specify:
<b>...What were the results for Adenovirus immunohistochemistry/immunostaining?</b> <input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>...Was other immunohistochemistry performed?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If other immunohistochemistry performed, what were the results:	
<b>Pathogen</b>	<b>Tested/Result</b>
HSV1	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
HSV2	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
CMV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
VZV	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
Measles	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
Other pathogen(s), specify:	<input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn
<b>... Was adenovirus PCR testing conducted?</b> <input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	
<b>... Was adenovirus in situ hybridization conducted?</b> <input type="checkbox"/> Not tested <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Indeterm <input type="checkbox"/> Pending <input type="checkbox"/> Unkn	



**PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM**

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**SUMMARY OF CLINICAL ASSESSMENT**

Use this section to add any additional relevant information and indicate the likely cause of the patient's hepatitis based on the clinician's judgement/assessment

**Based on the diagnostic workup, is there a most likely cause of this patient's hepatitis?**

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Hepatitis D          | <input type="checkbox"/> Adenovirus           | <input type="checkbox"/> Medication toxicity, if yes specify _____ |
| <input type="checkbox"/> Hepatitis E          | <input type="checkbox"/> Herpes simplex virus | <input type="checkbox"/> Other viral infection, specify _____      |
| <input type="checkbox"/> Autoimmune hepatitis | <input type="checkbox"/> EBV                  | <input type="checkbox"/> Other, specify _____                      |
| <input type="checkbox"/> Wilson's disease     | <input type="checkbox"/> CMV                  | <input type="checkbox"/> Remains unknown                           |
|   | <input type="checkbox"/> VZV                  |  |

**Any other clinically relevant information?**

**VACCINATION INFORMATION**

Information on vaccinations received should be captured from the state Immunization Information System as the primary source. For SARS-CoV-2 vaccination, please indicate the vaccine manufacturer for each dose. Greyed out fields do not require information.

Vaccination	Date Dose 1 (mm/dd/yyyy)	Date Dose 2 (mm/dd/yyyy)	Date Dose 3 (mm/dd/yyyy)	Date Dose 4 (mm/dd/yyyy)	Date Dose 5 (mm/dd/yyyy)
Hepatitis B					
Rotavirus					
DTaP/Tdap					
Hib					
PCV13					
IPV					
MMR					
Varicella					
Hepatitis A					
SARS-CoV-2 (add vaccine manufacturer below date)	Manufacturer:	Manufacturer:	Manufacturer:		
Influenza*					
Additional vaccines / doses (list vaccine & date)					

\*past year only