

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

PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM

Version: 19 Aug 2022

CASE ID: _____

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

SIGNS/SYMPTOM HISTORY	
Category of signs/symptoms	Check all that apply:
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: _____

CLINICAL INFORMATION											
<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>											
Patient Height: _____ <input type="checkbox"/> ft/in <input type="checkbox"/> cm <input type="checkbox"/> Unknown		Patient Weight: _____ <input type="checkbox"/> lbs <input type="checkbox"/> Kg <input type="checkbox"/> Unknown									
Date of initial evaluation (for this illness): ___/___/___ <input type="checkbox"/> Unknown											
Where was the patient first identified?	<input type="checkbox"/> Primary care provider	<input type="checkbox"/> Hospital	Name of facility: _____								
	<input type="checkbox"/> Urgent care	<input type="checkbox"/> Unknown									
	<input type="checkbox"/> Emergency department	<input type="checkbox"/> Other, specify _____									
	<input type="checkbox"/> Hepatologist/subspecialty appointment										
Was the patient hospitalized for this illness? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown											
<i>If patient was hospitalized:</i>											
Hospital: _____		Medical Record #: _____									
Admission Date (Initial Hospital): ___/___/___ <input type="checkbox"/> Unknown admission date											
Was the patient transferred from another hospital? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown											
<i>If yes, which hospital?</i> _____		Transfer Date: ___/___/___ <input type="checkbox"/> Unknown									
Final patient outcome: <input type="checkbox"/> Survived, discharge home <input type="checkbox"/> Survived, discharged other location <input type="checkbox"/> Died <i>If yes, was an autopsy performed?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Unknown											
Date of discharge / death: ___/___/___ <input type="checkbox"/> Unknown date of discharge/death											
<i>If patient was hospitalized:</i>											
ICD-10 discharge codes:											
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;"> <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>									
Were there additional codes beyond those listed above: <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>			
Was the patient diagnosed with any of the following measures of severity of hepatitis/liver disease:			
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
Was the patient diagnosed with pneumonia at time of clinical presentation/hospitalization? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Did patient receive a liver transplant?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn	If yes, which hospital? _____	Date of 1st Transplant: ____/____/____ <input type="checkbox"/> Date Unknown
Did patient receive a second transplant?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unkn	If yes, which hospital? _____	Date of 2nd Transplant: ____/____/____ <input type="checkbox"/> Date Unknown
Was the patient treated with:	...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	If treated with steroids, please specify: _____	
	... Intravenous Immunoglobulin (IVIg)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		

UNDERLYING HEALTH CONDITIONS	
Did the patient have any of the following underlying health conditions? <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

PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM

Version: 19 Aug 2022

CASE ID: _____

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		

HEPATITIS VIRUS TESTING		
If specimen collection date is not available, use date of laboratory result		
Diagnostic Test	Tested/Result	Date Specimen Collected (mm/dd/yyyy)
Hepatitis A		
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	
Hepatitis 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	
Hepatitis C		
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	
Hepatitis D		
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	
Hepatitis E		
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	

GASTROINTESTINAL TESTING		
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 ____/____/____
Gastrointestinal 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 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)

PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM

Version: 19 Aug 2022

CASE ID: _____

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"/> <i>Bordetella pertussis</i> <input type="checkbox"/> <i>Chlamydia pneumoniae</i> <input type="checkbox"/> <i>Mycoplasma pneumoniae</i> <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:	

PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM

Version: 19 Aug 2022

CASE ID: _____

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 ⁹ /L)				
Total Lymphocyte Count (Cells x 10 ³ /µL)				
Absolute Neutrophil Count (Cells x 10 ³ /µL)				
Hemoglobin (HGB, g/dL)				
Platelets (Plt, Cells x 10 ⁹ /L)				
Sodium (Na, mEq/L)				
Chloride (Cl, mmol/L)				

PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM

Version: 19 Aug 2022

CASE ID: _____

Potassium (K, mEq/L)				
Carbon dioxide (CO2, 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 |

PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY MEDICAL CHART ABSTRACTION FORM

Version: 19 Aug 2022

CASE ID: _____

...Was there hepatocellular necrosis? <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:
...What were the results for Adenovirus immunohistochemistry/immunostaining? <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	
...Was other immunohistochemistry performed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If other immunohistochemistry performed, what were the results:	
Pathogen	Tested/Result
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
... Was adenovirus PCR testing conducted? <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	
... Was adenovirus in situ hybridization conducted? <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	
Native liver explant (post liver transplant) (Complete below for liver explant specimens)	
Liver explant specimen collected <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Specimen collection date:
If yes... What were the findings from the liver explant (check all that apply)	
<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	
...Was there hepatocellular necrosis? <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:
...What were the results for Adenovirus immunohistochemistry/immunostaining? <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	
...Was other immunohistochemistry performed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If other immunohistochemistry performed, what were the results:	
Pathogen	Tested/Result
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
... Was adenovirus PCR testing conducted? <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	
... Was adenovirus in situ hybridization conducted? <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

Version: 19 Aug 2022

CASE ID: _____

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