

MEDICAL RECORD ABSTRACTION FORM: PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY



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.

- Greyed out fields to not require information.
- 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 Puerto Rico Department of Health (PRDOH) 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:

- PRDOH is recommending adenovirus PCR testing on all specimen types including respiratory, stool, and blood (including whole blood, plasma or serum) specimens.
- PRDOH requests all positives to be submitted for typing. Please, reach out to the contacts below to coordinate the shipment or delivery to PRDOH of the positive specimens.

Submission Instructions:

- PRDOH is requesting the submission of completed forms on a rolling basis. Please sent the encrypted completed forms thought email at: crodriguez@salud.pr.gov and cc the regional epidemiologist.
- PRDOH is currently working on a Spanish version of this form.

| | | |
|---------------------|---------------------------|---------------------------|
| Melissa Bello Pagán | Metro Region | mbello@salud.pr.gov |
| Jazmin Román Sierra | Caguas Region | jroman@salud.pr.gov |
| Edna Ponce Pérez | Fajardo Region | eponce@salud.pr.gov |
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| María Ramos Zapata | Ponce Region | maramos@salud.pr.gov |
| Diego Samot Bidot | Mayaguez/Aguadilla Region | diego.samot@salud.pr.gov |

Case ID: _____

Version 1.1 rev. 5/2/22

**MEDICAL RECORD ABSTRACTION FORM:
PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY**

**DEMOGRAPHICS***Yellow fields do not need to be submitted to CDC*

| | | |
|--|--|---|
| 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"/> Unkn | |
| Street Address: _____ | Current gender identity: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Transgender <input type="checkbox"/> None of these <input type="checkbox"/> Unkn | |
| 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 _____ |

CLINICAL INFORMATION*Yellow fields do not need to be submitted to CDC.**For date of initial evaluations, please note the date that the child first sought medical care for this illness.*

| | |
|---|---|
| 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? | Name of facility: _____ |
| <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 _____ |
| 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 <input type="checkbox"/> Unknown |
| | Date of discharge / death: ____/____/____ <input type="checkbox"/> Unknown date of discharge/death |

DIAGNOSES & TREATMENT*Yellow fields do not need to be submitted to CDC.***Was the patient diagnosed with any of the following measures of severity of hepatitis/liver disease:**

Case ID: _____

Version 1.1 rev. 5/2/22

**MEDICAL RECORD ABSTRACTION FORM:
PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY**



| | |
|---|--|
| 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 1 st 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 2 nd 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 <i>If treated with steroids, please specify: _____</i> |

UNDERLYING HEALTH CONDITIONS

Did the patient have any of the following underlying health conditions? Yes No Unknown

If yes, check all that apply:

- | | |
|--|--|
| <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

CDC recommends adenovirus testing on all respiratory, stool, and blood specimens. Any specimen that is positive for adenovirus should be sent for typing. Please see the specimen protocol for additional instructions.

Provide information on any repeat testing or multiple sample types in the 'Other sample, specify' fields and write-in the specimen type.

| Diagnostic Test | Tested/Result | Specimen Collection Date (mm/dd/yyyy) | If positive, is specimen available for typing? |
|-----------------------------|---|---------------------------------------|--|
| 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 | | <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 |
| 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 |
| Blood qPCR | _____ (copies/mL) Date ____/____/____ <input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum | | |
| | _____ (copies/mL) Date ____/____/____ <input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum | | |
| | _____ (copies/mL) Date ____/____/____ <input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum | | |
| | _____ (copies/mL) Date ____/____/____ <input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum | | |
| | _____ (copies/mL) Date ____/____/____ <input type="checkbox"/> Whole blood <input type="checkbox"/> Plasma <input type="checkbox"/> Serum | | |

Case ID: _____

Version 1.1 rev. 5/2/22

**MEDICAL RECORD ABSTRACTION FORM:
PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY**



Adenovirus typing results Not Sent (not typed) Type 41 Other type, specify _____ 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 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 | |

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 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 | |

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 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 | |

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 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 | |

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 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 | |

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? Yes No, skip to next section 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>Campylobacter</i> <input type="checkbox"/> <i>Clostridium difficile</i> <input type="checkbox"/> <i>Plesiomonas shigelloides</i> <input type="checkbox"/> <i>Salmonella</i> <input type="checkbox"/> <i>Yersinia enterocolitica</i> <input type="checkbox"/> <i>Vibrio</i> <input type="checkbox"/> <i>Vibrio cholerae</i> <input type="checkbox"/> Enteroaggregative <i>E. coli</i> (EAEC) <input type="checkbox"/> Enteropathogenic <i>E. coli</i> (EPEC) <input type="checkbox"/> Enterotoxigenic <i>E. coli</i> (ETEC) <i>lt/st</i> <input type="checkbox"/> Shiga-like toxin-producing <i>E. coli</i> (STEC) <input type="checkbox"/> <i>E. coli</i> O157 <input type="checkbox"/> <i>Shigella</i> /Enteroinvasive <i>E. coli</i> (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) |

4

Public reporting burden of this collection of information is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer, 1600 Clifton Road NE, MS D-74 Atlanta, Georgia 30333; ATTN: PRA (0920-1011)

Case ID: _____

Version 1.1 rev. 5/2/22

MEDICAL RECORD ABSTRACTION FORM: PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY



| 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

Greyed out fields do not require information

Was a respiratory specimen collected for testing? Yes No 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 parapertussis</i> <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: | |

OTHER VIRAL TESTING

Case ID: _____

Version 1.1 rev. 5/2/22

**MEDICAL RECORD ABSTRACTION FORM:
PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY**



| Pathogen | Tested/Result | Test Method | Date (mm/dd/yyyy) |
|------------------------------|--|-------------|-------------------|
| Cytomegalovirus | <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 | | |
| Epstein-Barr 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |

PATIENT HISTORY OF COVID-19

List the most recent positive test. Any additional positive tests can be noted in the "Summary of clinical assessment" section.

Has this patient previously 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

Greyed out fields do not require information

| 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) | | | | |
| INR (International Normalized Ratio) | | | | |
| Alkaline phosphatase (ALP, U/L) | | | | |
| Prothrombin time (PT) | | | | |
| Fibrinogen | | | | |
| C-reactive protein (CRP, mg/dL) | | | | |
| Erythrocyte Sedimentation Rate (ESR, mm/hr) | | | | |
| White blood cell (WBC) count (Cells x 10 ⁹ /L) | | | | |
| Total Lymphocyte Count (Cells x 10 ³ /μL) | | | | |
| Absolute Neutrophil Count (Cells/mm ³) | | | | |
| Hematocrit (HCT, %) | | | | |
| Platelets (Plt, Cells x 10 ⁹ /L) | | | | |
| Sodium (Na, mEq/L) | | | | |
| Chloride (Cl, mmol/L) | | | | |
| Potassium (K, mEq/L) | | | | |
| Carbon dioxide (CO ₂ , mmol/L) | | | | |
| Calcium (mg/dL) | | | | |

6

Public reporting burden of this collection of information is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road NE, MS D-74 Atlanta, Georgia 30333; ATTN: PRA (0920-1011)

Case ID: _____

Version 1.1 rev. 5/2/22

**MEDICAL RECORD ABSTRACTION FORM:
PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY**



| | | | | |
|--|--|--|--|--|
| Glucose (mg/dL) | | | | |
| Creatinine (mg/dL) | | | | |
| Blood urea nitrogen (BUN, mg/dL) | | | | |
| Albumin (g/dL) | | | | |
| Uric acid (UA, mg/dL) | | | | |
| 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 | | |

PATHOLOGIC FINDINGS

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

Liver biopsy

Specimen collected Yes No (If no, skip to native liver explant section) Unkn Specimen collection date: _____

If yes... What were the findings (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 |

...Was there hepatocellular necrosis? Yes No 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? Pos Neg Not done Unknown

...Was other immunohistochemistry performed? Yes No 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 |

Case ID: _____

Version 1.1 rev. 5/2/22

**MEDICAL RECORD ABSTRACTION FORM:
PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY**



| | | | | | | |
|--|---|--|----------------------------------|-----------------------------------|----------------------------------|-------------------------------|
| 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 |
| Native liver explant (post liver transplant) | | | | | | |
| Specimen collected | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown | Specimen collection date: | | |
| If yes... What were the findings (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 | | | | |
| ...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 | Other findings, specify: | | | | |
| <input type="checkbox"/> Piecemeal | <input type="checkbox"/> Diffuse/Massive | | | | | |
| ...What were the results for Adenovirus immunohistochemistry/immunostaining? <input type="checkbox"/> Pos <input type="checkbox"/> Neg <input type="checkbox"/> Not done <input type="checkbox"/> Unknown | | | | | | |
| ...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 |

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?

Case ID: _____

Version 1.1 rev. 5/2/22

**MEDICAL RECORD ABSTRACTION FORM:
PEDIATRIC HEPATITIS OF UNKNOWN ETIOLOGY**



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* | | | | | |

**past year only*