

May 20, 2022

To: All Alberta Medical Officers of Health

RE: REPORTING OF ACUTE, SEVERE HEPATITIS OF UNKNOWN ORIGIN IN CHILDREN

On April 5, 2022, the World Health Organization received a report from the United Kingdom announcing an increase in severe acute hepatitis cases of unknown origin among previously healthy children. Since October 2021, there have been over 600 reported cases of acute hepatitis of unknown origin reported among children up to 16 years of age worldwide.

Cases are aged 1 month to 16 years old. Identified cases presented with acute hepatitis and markedly elevated liver enzymes (aspartate transaminase (AST) or alanine aminotransferase (ALT) greater than 500 IU/L). Some cases reported gastrointestinal symptoms including abdominal pain, diarrhoea and vomiting preceding presentation with severe acute hepatitis. Most cases did not have a fever. Some children have required liver transplantation; at least 14 deaths have been reported.

The usual causes of acute viral hepatitis (hepatitis viruses A, B, C, D and E) have not been detected in any of these cases. Adenovirus has been detected in some of these patients. In the cases with information from molecular testing, some have been identified as adenovirus F type 41. SARS-CoV-2 was the next common pathogen detected, with a small number of cases having SARS-CoV-2 and adenovirus co-infection. Links to international travel or to vaccination, including COVID-19 vaccination, have not been identified as factors based on the currently available information. At this time, the etiology, disease pathogenesis and route of transmission are still unknown.

As of today, ten cases in Canada meeting the national probable case definition have been reported to the Public Health Agency of Canada (PHAC); three of them were reported from Alberta. No deaths have been reported. Alberta Health continues to closely monitoring the situation.

In response to the request from the World Health Organization and PHAC to monitor and report potential cases, and pursuant to the Chief Medical Officer of Health's authority under section 15(1) of the *Public Health Act*, on May 4, 2022 a written notice was issued, making acute severe hepatitis of unknown origin in children a reportable disease in Alberta. The case definition has since been updated and can be found in the Acute Severe Hepatitis of Unknown Origin in Children Public Health Disease Management Guideline (<https://www.alberta.ca/notifiable-disease-guidelines.aspx>).

- **Alberta physicians¹** shall notify the Medical Officer of Health (MOH) in their zone of all probable acute, severe hepatitis cases of unknown origin in children as outlined below within 48 hours of diagnosis (by phone, fax or email) and include:

¹ It is expected that this reporting would typically be done by a pediatric specialist in infectious diseases or hepatology following their investigations.

- name;
 - age;
 - date of birth;
 - gender;
 - personal health number;
 - laboratory report ; and
 - other relevant clinical/epidemiological information.
- **Alberta physicians¹** shall submit the [Acute, Severe Hepatitis of Unknown Origin in Children Case Report Form](#) to the MOH within **7 days** of initial diagnosis.
 - MOHs shall communicate these reporting requirements and processes to all relevant physician groups, including *pediatric and adult infectious disease and hepatology specialists* within their Zone.
 - The MOH/designate of the Zone where the case currently resides shall report all probable and epi-linked cases to the CMOH/designate within **48 hours** by email and will include
 - name;
 - age;
 - date of birth;
 - gender;
 - personal health number;
 - laboratory report ; and
 - other relevant clinical/epidemiological information.
 - The MOH/designate, shall submit the *Notifiable Disease Report (NDR) form* by email or through another mutually agreed upon reporting system (e.g., CDOM) within **7 days** of initial notification. Follow up should be done to determine the evolution of the case's clinical status and the final report shall be submitted within **two weeks** of discharge from hospital or resolution of the case status, which ever occurs first. Report under *Rare or Emerging Communicable Disease*.
 - For out-of-province and out-of-country reports, include:
 - name;
 - date of birth;
 - sex;
 - out-of-province health care number;
 - out-of-province address and phone number;
 - positive laboratory report (if applicable); and
 - other relevant clinical/epidemiological information.

Thank you for your assistance with this surveillance and your cooperation is appreciated. If you have any questions or concerns, please contact me.

Yours sincerely,



Dr. Jing Hu
Acting Chief Medical Officer of Health, Alberta Health

cc: Paul Wynnyk, Deputy Minister, Alberta Health
Trish Merrithew-Mercredi, Assistant Deputy Minister, Public Health and Compliance
Division, Alberta Health
Laura McDougall, Senior Medical Officer of Health, Alberta Health Services
Maureen Devolin, Senior Program Officer, Provincial Population and Public Health
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