

**Ministry of Health**

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April 26, 2022

**MEMORANDUM**

**TO: Primary Care Providers and Paediatricians**

**FROM: Dr. Kieran M. Moore  
Chief Medical Officer of Health**

**RE: Severe Acute Hepatitis of unknown origin in Children**

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I am writing to notify clinicians and Public Health that there have been cases of severe acute hepatitis of unknown origin in children observed in Europe and the United States.

Since October 2021, there have been at least 169 cases of acute hepatitis of unknown origin reported among children up to 16 years of age in countries throughout Europe (UK, Ireland, Denmark, the Netherlands, Spain, Italy, Norway, France, Romania, and Belgium), Israel, and the United States. The [World Health Organization](#) has issued alerts and a case definition.

These cases test negative for hepatitis viruses A, B, C, D and E, have aspartate transaminase (AST) or alanine transaminase (ALT) levels over 500 U/L, and have no other explanations for their clinical presentation. In the United Kingdom, some of the cases reported gastrointestinal symptoms, including abdominal pain, diarrhoea and vomiting, and most cases did not have a fever. Several cases have required liver transplantation and one death has been reported. In both Scotland and the US, none of the children had any underlying health conditions of note. Overall, information regarding the aetiology of these cases is evolving, although adenovirus has been identified in some cases. No other epidemiological risk factors have been identified to date; however, investigations are ongoing.

The Office of the Chief Medical Officer of Health is requesting clinicians to be vigilant to infants and children up to 16 years of age presenting with signs and symptoms compatible with acute hepatitis, including new onset of the following: jaundice (yellow skin and/or eyes) and discolouration of urine (dark) and/or faeces (pale).

...2

Considering the appropriate clinical context, other symptoms that may be suggestive of hepatitis include:

- pruritis
- arthralgia/myalgia
- fever
- nausea, vomiting or abdominal pain
- lethargy and or loss of appetite

For children presenting with symptoms compatible with acute hepatitis, timely laboratory testing is recommended including CBC, AST, ALT, GGT, direct and indirect bilirubin, albumin and INR.

If acute hepatitis is confirmed on laboratory testing, further laboratory work-up is recommended to assess for potential infectious and non-infectious aetiologies as relevant to the clinical history. For pediatric patients with severe hepatitis of unknown etiology with AST or ALT > 500 U/L, adenovirus testing should be considered, which may include nasopharyngeal swab, stool and/or blood PCR, depending on laboratory test availability.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kieran Moore', with a stylized flourish at the end.

Kieran Michael Moore, MD, CCFP(EM), FCFP, MPH, DTM&H, FRCPC  
Chief Medical Officer of Health