HALTON REGION PUBLIC HEALTH • Office of the Medical Officer of Health

TEL: 905-825-6000 • TOLL FREE: 1-866-442-5866 • FAX: 905-825-1444

TO: Halton Physicians, Nurse Practitioners, Emergency Departments, other Healthcare Providers

FROM: Dr. Deepika Lobo, Associate Medical Officer of Health

DATE: April 28, 2022

RE: Severe acute hepatitis of unknown origin in children and primary care guidance for displaced Ukrainians

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UKRAINIANS ARRIVAL IN ONTARIO

- To support Ukrainians fleeing war, the Ministry of Health has developed resources to support challenges that displaced Ukrainians may be facing while in Ontario and have issued the Primary Care Guidance for Displaced Ukrainians.
- Key health concerns for the Ukrainian population include low COVID-19 vaccination coverage; high rates of TB (including MDR TB), HIV and HCV; and low rates of routine immunization coverage.
- Consider referral to mental health supports in the community as individuals may be experiencing acute psychological distress and Post-Traumatic Stress Disorder.

ACUTE HEPATITS OF UNKNOWN ORIGIN

- Since October 2021, there have been at least 169 cases of acute hepatitis of unknown origin reported among children up to 16 years old in countries throughout Europe, Israel and the US. See attached memo.
- WHO working case definition for a probable case is any person presenting with an acute hepatitis (test negative for hepatitis viruses A, B, C, D and E) with serum transaminase >500 IU/L (AST or ALT), who is 16 years and younger, since 1 October 2021.
- Some of the cases in the UK reported gastrointestinal symptoms, including abdominal pain, diarrhoea and vomiting, and most cases did not have a fever.
- Be vigilant of infants and children up to 16 years of age, presenting with signs and symptoms compatible with acute hepatitis, including new onset of jaundice (yellow skin and/or eyes) and discolouration of urine (dark) and/or faeces (pale). Other symptoms that may be suggestive of hepatitis include:
    - Pruritus
    - Arthralgia/myalgia
    - Fever
    - Nausea, vomiting or abdominal pain
    - Lethargy and/or loss of appetite

Please report all suspected/confirmed cases of Diseases of Public Health Significance (only report COVID-19 cases occurring in high-risk settings) to Public Health immediately by calling 311, 905-825-6000 or toll free at 1-866-442-5866.

PLEASE PROVIDE A COPY TO ALL PHYSICIANS IN YOUR OFFICE AND/OR POST IN EMERGENCY DEPARTMENTS AND PHYSICIAN LOUNGES. IF YOU HAVE ANY ISSUES WITH THIS ATTACHMENT, PLEASE EMAIL DOCTORS@HALTON.CA.

- 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.
- Public Health Ontario has updated their serology test ordering instructions in February 2022. The General Test Requisition form needs to identify the reason for testing.

ADDITIONAL RESOURCES

- Multi-Country – Acute, severe hepatitis of unknown origin in children, World Health Organization
- Ukrainians Fleeing War: Early Assessment Considerations for Primary Care Providers, Ministry of Health
- Healthcare provider resources for displaced Ukrainians, Ministry of Health

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**

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).

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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,

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