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. Joanna Oda, Associate Medical Officer of Health

DATE: August 5, 2021

RE: Outbreak of Hepatitis A infections linked to frozen mangoes

QUICK FACTS

- The Public Health Agency of Canada (PHAC) is collaborating with provincial public health partners, the Canadian Food Inspection Agency (CFIA) and Health Canada to investigate an outbreak of *Hepatitis A* infections occurring in Québec and Nova Scotia.
- Exposure to frozen mangoes has been identified as a likely source of the outbreak. Nature's Touch Frozen Food Inc. is recalling various frozen mangoes from the marketplace due to possible Hepatitis A contamination.
- There are no cases reported in Ontario to date, however the recalled products have been distributed in different provinces including Ontario.
- Post exposure prophylaxis (PEP) is recommended to be given for everyone 6 months of age and over who have been exposed to the recalled frozen mango products within the past 14 days.

KEY MESSAGES FOR HEALTHCARE PROVIDERS

- Consider Hepatitis A in patients with compatible symptoms, including: fever, malaise, loss of appetite, nausea, dark urine and abdominal pain followed by jaundice or elevated aminotransferase levels.
- Persons with a history of lab-confirmed Hepatitis A or two doses of Hepatitis A vaccine are considered immune.
- If Hepatitis A infection is suspected, please order IgG and IgM by selecting “immune status” and “acute infection” for Hepatitis A on a Public Health Laboratory requisition.
- **Please report clinical diagnoses of Hepatitis A to the Health Department by calling 311.** This will enable prompt follow up with the case and arrange for post-exposure prophylaxis for eligible contacts.
- Please refer to the attached memo from the Office of the Chief Medical Officer of Health, Public Health, July 31, 2021 for recommendations regarding hepatitis A post-exposure management in response to Nature’s Touch frozen mangoes.

KEY MESSAGES FOR PATIENTS

- The complete list of the affected products can be found on the CFIA website.
- If you have recalled frozen mangoes in your home, do not eat them. Recalled products should be thrown out or returned to the store where there were purchased.
- Vaccination can prevent the onset of symptoms if given within 14 days of exposure.
- If you were exposed more than 14 days ago, monitor for signs and symptoms. The incubation period ranges from 15 to 50 days (average 28 to 30 days).

ADDITIONAL RESOURCES

National Advisory Committee on Immunization, Public Health Agency of Canada. Part 4- Active Vaccines: Hepatitis A Vaccine. 2018.

Public Health Agency of Canada. Update on the recommended use of Hepatitis A vaccine- An Advisory Committee Statement (ACS) National Advisory Committee on Immunization. Ottawa, ON: Public Health Agency of Canada. May 2016. [cited July 31, 2021].

Please report all suspected/confirmed cases of Diseases of Public Health Significance 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.

Public Health Agency of Canada. Recommendations on the use of COVID-19 Vaccines - An Advisory Committee Statement (ACS) National Advisory Committee on Immunization (NACI). Ottawa, ON: Public Health Agency of Canada. July 22, 2021.

Office of the Chief Medical Officer of Health, Public Health

Recommendations regarding hepatitis A post-exposure management in response to Nature's Touch frozen mangoes (sold under various brands) subject to CFIA food recall

July 31, 2021

The recommendations for post-exposure prophylaxis outlined below reflect guidance issued in 2016 following a similar wide scale response involving a recalled frozen berry product.

Recommendation for post-exposure prophylaxis, if within two weeks of last exposure:

- **Everyone 6 months of age and over** should be offered hepatitis A vaccine as soon as possible (unless contraindicated, fully immunized in the past or already immune– see below for details).

  - Hepatitis A vaccine is not authorized for children less than 1 year of age, however, the National Advisory Committee on Immunization (NACI) recommends its off-label use for children 6 months to 1 year of age for post-exposure prophylaxis.

- **Infants < 6 months of age** require no intervention except for careful attention to hygiene when diapering etc. to prevent fecal oral spread. Considerations should be given to offering hepatitis A vaccine to their family members.

  - Immune globulin, which was previously recommended for infants, is generally not recommended, although could be considered on a case by case basis in infants less than six months of age who are at very high risk for liver complication (e.g. severe liver disease).

Individuals with chronic liver disease should be:

- Offered hepatitis A vaccine if within two weeks of last exposure (unless contraindicated, fully immunized in the past or already immune – see below for details), and advised to consult with their health care provider for advice regarding the need for serum immune globulin. There is a lack of data to support the benefit of serum immune globulin after 14 days from last exposure; any use beyond that time frame should be assessed on a case-by-case basis. If serum immune globulin is determined to be indicated, follow the current GamaSTAN® S/D product monograph which recommends a dose of **0.1 mL/kg**. This differs from the dosing recommended in the Canadian Immunization Guide which has not been updated to align with changes to the product monograph.

- If beyond 14 days of exposure, previously unimmunized individuals with chronic liver conditions should be offered hepatitis A vaccine as per routine recommendations.

According to the Canadian Immunization Guide and the 2016 NACI statement:

- People with immunosuppressive conditions should be offered immune globulin and hepatitis A vaccine because they may not mount as good of a response to the hepatitis A vaccine. However, given the level of risk in this particular type of exposure, hepatitis A vaccine is felt to be sufficient.

Appendix A of the Infectious Diseases Protocol recommends immune globulin and hepatitis A vaccine for those 50 years of age and over:

- Given the level of risk in this particular type of exposure, hepatitis A vaccine is felt to be sufficient.

For those previously vaccinated with hepatitis A vaccine:

- If two previous doses were provided, no additional doses are recommended.
- If one dose was provided less than 6 months ago, no additional doses are recommended until at least 6 months from the last dose.
- If one dose was provided 6 months or more in the past, one additional dose is recommended.

Is a second dose of hepatitis A vaccine required for post-exposure prophylaxis?

Only **one dose** of hepatitis A vaccine is required for post-exposure prophylaxis. For long term immunity, as would be needed for future travel, a second dose is recommended (see Tables 1 and 2 of the Hepatitis A Chapter of the Canadian Immunization Guide). The second dose can be given 6 months or later after the first dose.

Recommendations for pregnant women

Pregnant women should follow the above recommendations.

Recommendations for breast feeding women

Exposed breast feeding women should continue to breast feed as usual, ensuring proper hand hygiene after using the washroom, before breast feeding and caring for the infants.

Should post-exposure prophylaxis be delayed due to recent COVID-19 vaccination?

No. Individuals should receive hepatitis A vaccine as soon as it is offered for post-exposure prophylaxis, regardless of the timing of the most recent dose of COVID-19 vaccine. Although NACI recommends to wait at least 28 days after any dose of a COVID-19 vaccine before the administration of another non-COVID-19 vaccine, NACI notes that this interval is precautionary and that the receipt of a vaccine for post-exposure prophylaxis is a circumstance in which simultaneous administration or a shortened interval is warranted.

Should hepatitis A vaccine given for post-exposure prophylaxis influence the scheduling of COVID-19 vaccine administration?

NACI recommends to wait at least 14 days after the administration of another vaccine before administering a COVID-19 vaccine. The main rationale for this interval is to prevent erroneous attribution of an adverse event following immunization (AEFI) should this develop. NACI notes that the minimum waiting period between COVID-19 vaccines and other vaccines is precautionary and a shortened interval may be warranted on an individual basis, including in circumstances of receipt of vaccine for post-exposure prophylaxis.

Should hepatitis A immune status be checked?

No. Hepatitis A immune status should not be checked prior to vaccination. If a person has been vaccinated in the past, see above for recommendations regarding need for additional vaccination. If the person indicates that they have had hepatitis A infection in the past, this can be accepted if it was previously laboratory confirmed. If not previously laboratory confirmed, generally these people would be considered susceptible and should be managed as above.

Should exposed individuals in high risk occupations or settings be restricted in their activities?

No restrictions on activities are recommended for exposed individuals, including those who work as food handlers or health care providers or attend or work in child care centres. Extra attention to hand hygiene should be emphasized after using the washroom and before preparing food for others or caring for patients. Individuals should be counselled to stop working immediately should symptoms develop and to seek medical attention.

It is important to note that children less than six years of age are generally asymptomatic or have non-specific symptoms. Extra attention to hand hygiene will be very important in young children to prevent spread from unrecognized infections.

What other recommendations should be provided for people who have been exposed to the recalled frozen mango products?

- **Hand hygiene recommendations:** Hand hygiene after using the washroom or changing diapers (if the child has been exposed to the recalled product) and before preparing food for others should be emphasized.
- **Seeking medical care if symptoms develop:** If symptoms develop in an individual who consumed the recalled product in the past six weeks, they should be advised to:
  - not prepare food for others
  - seek medical attention
  - notify their physician of their exposure
  - ensure blood is submitted for serology, and
  - ensure the local public health unit is notified.

References:

National Advisory Committee on Immunization, Public Health Agency of Canada. Part 4- Active Vaccines: Hepatitis A Vaccine. 2018. In: Canadian Immunization Guide [Internet]. Evergreen ed. Ottawa, ON: Her Majesty the Queen in Right of Canada, [cited July 31, 2021]. Available from: https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-6-hepatitis-a-vaccine.html

Public Health Agency of Canada. Update on the recommended use of Hepatitis A vaccine- An Advisory Committee Statement (ACS) National Advisory Committee on Immunization. Ottawa, ON: Public Health Agency of Canada. May 2016. [cited July 31, 2021]. Available from: https://www.canada.ca/en/public-health/services/publications/healthy-living/update-recommended-use-hepatitis-vaccine.html

National Advisory Committee on Immunization, Public Health Agency of Canada. Part 5- Passive Immunization: Standard immune globulin. 2013. In: Canadian Immunization Guide [Internet]. Evergreen ed. Ottawa, ON: Her Majesty the Queen in Right of Canada. [cited July 31, 2021]. Available from: https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-6-hepatitis-a-vaccine.html

Grifols Canada Ltd. Product Monograph GamaSTAN® S/D [Internet]. Mississauga, ON: Grifols Canada Ltd. [cited July 31, 2021]. Revised March 13, 2019. Available from: https://www.grifols.com/documents/89713601/0/GamaSTAN+-+English+PM+-+2019-03-13.pdf/949b3d34-e658-4700-a49b-0ed17b1cb770

Public Health Agency of Canada. Recommendations on the use of COVID-19 Vaccines - An Advisory Committee Statement (ACS) National Advisory Committee on Immunization (NACI). Ottawa, ON: Public Health Agency of Canada. July 22, 2021. [cited July 31, 2021]. Available from: https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-covid-19-vaccines/recommendations-use-covid-19-vaccines-en.pdf