Important Reminder: Poliovirus Prevention, Management and Control

Dear Health Care Provider:

In July 2022, the Centers for Disease Control and Prevention (CDC) were notified of a polio case in an unvaccinated adult from Rockland County, New York. Vaccine-derived poliovirus type 2 (VDPV2) was detected in stool specimens of the case. Type 2 poliovirus was also detected in wastewater in the patient’s county of residence and in nearby Orange County. The case resides in a historically under-vaccinated community and had no history of international travel reported. Full details of the case are available at: www.cdc.gov/mmwr/volumes/71/wr/mm7133e2.htm.

Epidemiological review

- The last locally acquired case of wild poliovirus in Canada was detected in 1977. In 1994, Canada was certified as being free of wild poliovirus.
- More recent cases of paralytic polio in Canada have been associated with importations of wild poliovirus and the use of oral polio vaccine (OPV), which contains the live poliovirus and can cause vaccine-derived disease. The last nationally reported case of paralytic polio in Canada occurred in 1995 and was related to OPV receipt.
- In the mid-1990s, all jurisdictions in Canada including MB switched to using the inactivated polio vaccine (IPV), which is incapable of causing disease.
- In Canada, poliomyelitis vaccine coverage is high (91.9% among two year olds in 2019), and according to the World Health Organization, meets the threshold for herd immunity (80%). It is unlikely for vaccine-derived poliovirus type 2 (VDPV2) to cause an outbreak in Canada due to good sanitation and high polio vaccination rates. However, there is a risk of an importation event in Canada because of cross-border travel.
- Polio remains endemic in Afghanistan and Pakistan, with outbreaks in other countries listed by the WHO at https://polioeradication.org/polio-today/polio-now/.

Guidance for health care providers in the management and control of polio in MB

- In light of the situation, we are reminding clinicians to be alert for all cases of poliovirus and acute flaccid paralysis (AFP), particularly if the individual:
  - Is unvaccinated or under-vaccinated against poliovirus;
  - Has recent travel in countries with ongoing polio transmission or in locations where cases have been recently reported and identified as a risk for further cases (e.g., Rockland County);
  - Was exposed to a person who travelled/resided in any of these areas.
The provincial polio protocol (updated August 2019) provides information on the prevention, management and control of polio, with information on testing, treatment and case/contact management. The protocol is available at: www.gov.mb.ca/health/publichealth/cdc/protocol/poliomyelitis.pdf.

Ensure your patients are up-to-date on their polio (IPV) immunizations

Manitoba’s routine publicly-funded childhood immunization schedule for polio is as follows:

- DTaP-IPV-Hib vaccine (Pediacel®) at 2, 4, 6 and 18 months of age
- Tdap-IPV vaccine (Boostrix-Polio®) at 4-6 years of age
- The recommended immunization schedule for children previously unimmunized can be found at: www.gov.mb.ca/health/publichealth/cdc/div/not.html

For adults, the National Advisory Committee on Immunization (NACI) recommends (www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-17-poliomyelitis-vaccine.html):

- Unimmunized adults receive a primary series of IPV-containing vaccine if a primary series of tetanus toxoid-containing vaccine is being given or if the adult is at increased risk for exposure to poliovirus; otherwise, administer polio with routine tetanus and diphtheria booster doses.
- Previously immunized adults at increased risk of exposure to polio (e.g., those travelling to, or planning to work in areas that have wild polio or vaccine-derived polio outbreaks), receive a single lifetime booster dose of IPV-containing vaccine.
- MB publicly funds the polio vaccine for adults aged ≥ 18 years who are:
  - Hematopoietic stem cell transplant recipients
  - Patients currently under the care of a haematologist or oncologist from CancerCare Manitoba who have the following conditions and have been provided a CCMB directed Immunization Schedule:
    1. Malignant neoplasms (solid tissue and haematological) including leukemia and lymphoma, or clonal blood disorder, and who will receive or have completed immunosuppressive therapy including chemo therapy or radiation therapy, or
    2. Hypo- or asplenic (sickle cell disease, etc.)

To help with assessing polio vaccine coverage in MB, patients presenting with proof of polio vaccinations that are NOT included in the provincial immunization registry (PHIMS) may be entered into PHIMS by advising patients to contact their local public health office. A listing of local public health offices is available at: www.gov.mb.ca/health/publichealth/offices.html.

Please share this information with all colleagues in your clinic/facility.

Sincerely,

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