2019 New Brunswick Measles Outbreak

Canadian measles incidence declined markedly after the introduction of the measles vaccine. However, measles remains endemic in some parts of the world. Large outbreaks with mortality are ongoing in many countries that had previously eliminated or interrupted endemic transmission. Thus, Canadian outbreaks continue to occur due to travel to these areas from Canadians who are not fully immunized.

After a few travel-related cases in the last several years, New Brunswick declared a measles outbreak in Saint John on May 12, 2019. The index case travelled to Europe and became ill after returning to New Brunswick. Prior to diagnosis, the case had multiple visits to health-care emergency services. This sparked the spread of this highly communicable disease and the implementation of extensive public health outbreak strategies. Over five weeks, measles spread to 11 other individuals in the region. The last case was confirmed on May 31st, 2019.

Public Health used various measures to contain the outbreak such as acquiring additional vaccine, providing mass immunization clinics, and targeting communications to the public and health-care providers. Collaboration with hospital and community health-care professionals such as the New Brunswick Extra-mural Program, laboratory services, Tele-Care, and primary care providers, played a major role in managing the outbreak. The outbreak was declared officially over on July 8, 2019.

New Brunswick has not launched an active measles immunization catch-up program in 2019. Therefore, health-care practitioners should follow the recommendations for routine immunization in the New Brunswick Immunization Program Guide.

Consider mechanisms to identify the most vulnerable people in your practice who require immunization. Two doses of measles-containing vaccine are important for those travelling outside of Canada, living or working in group care settings, or working in the allied health professions, childcare and education.

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The measles outbreak highlighted the importance of routine infection prevention and control measures. Actions such as posting signs that ask patients to wear a mask if they have a cough or rash with fever; asking patients about a travel history; and isolating febrile patients from the main waiting area can reduce disease spread in clinical settings. Suspected cases of measles should be reported immediately to Public Health to help facilitate safe, expedient laboratory testing. You can protect yourself as a health-care worker by ensuring you have documented measles immunity, or two doses of vaccine, or a history of laboratory-confirmed measles infection. You can reinforce to your patients, the importance of keeping written immunization records secure. Clinicians can access resources on measles testing, frequently asked questions, and Public Health measles communications at the Government of New Brunswick webpage for health professionals.
Several amendments made in 2018 to the Public Health Act (PHA) impacted health-care provider practices. One of these legislative changes modified how diseases are named. The act now refers only to “notifiable diseases” and no longer refers to “communicable” diseases. All notifiable diseases are required to be reported to a Medical Officer of Health (or their designate).

Some triggers that clinicians can use to remind themselves to report or consult the list include: communicability clusters of similar cases, unusual presentation or severity, and not expected to occur in NB.

Under the Reporting Disease Regulation, Schedule A, new diseases and events have been added to the list of notifiable diseases. Toxoplasmosis is an example of a new notifiable disease. Some diseases have a different timeframe for reporting to the Medical Officer of Health (refer to Notifiable Diseases and Events Posters and Forms). For example, under the new amendments, invasive meningococcal disease must be verbally reported to a Medical Officer of Health within one hour instead of within 24 hours.

The Office of the Chief Medical Officer of Health may now request reporting by pharmacists, veterinarians and coroners (Section 27.1) in certain specific disease outbreak situations. Hospital laboratories may also be requested to report aggregate data in special situations (Section 30.1).

When treating a person with a notifiable disease, or someone who has suffered a notifiable event, a medical practitioner, nurse practitioner, midwife, or nurse is required to report the person’s contacts to a Medical Officer of Health when relevant. This also applies post-mortem (Section 31). This information helps enable public health contact-tracing, outbreak investigation and disease prevention actions.

Medical Officers of Health have new explicit authority (Section 64.1) to collect and use personal or personal health information without individual consent, if this information is required to prevent or contain the spread of a notifiable disease or to mitigate a health hazard. This section of the PHA prevails over other privacy legislation.

The amendments have removed some of the uncertainty around proof of environmental health hazards for reporting and investigation. A health hazard is a condition of a premises; a substance, thing or plant or animal other than a human; a solid, liquid, gas or combination of any of them; or a noise, vibration or radiation that has or is likely to have an adverse effect on the health of a person. A person having reasonable grounds to believe that a health hazard exists is required to report this to the Regional Medical Officer of Health (Section 4). Reporting of health hazards to Public Health can facilitate identification of potential harms to the public. Public Health can then generate interventions to eliminate or reduce the exposures that could result in human disease. Clinician reports have been important to initiate public health hazard management of environmental risks such as lead in drinking water sources, carbon monoxide leaks and mould in public buildings.

We welcome feedback and suggestions for topics. Please submit them to our editor Dr. Lamptey, Medical Officer of Health at: Na-Kosie.Lamptey@gnb.ca

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