



Northern Health Physicians Partners in Wellness

Public Health Newsletter for Northern Health Physicians

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Influenza Update

During week 50, influenza activity remains elevated in BC, with ongoing A (H1N1)pdm09 predominance.

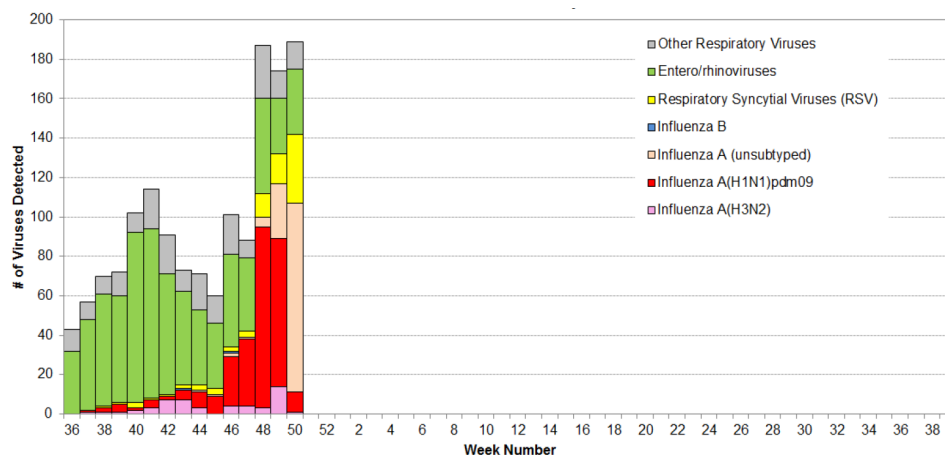
In week 50, 34% of specimens tested by laboratories in BC were positive for influenza, a further increase from recent prior weeks. Among influenza viruses typed at the BCCDC PHL since week 40, virtually all have been influenza A and, among those subtyped, just under 90% have been A(H1N1)pdm09.

Children less than 10 years of age and non-elderly adults comprise 80% of all A (H1N1)pdm09 detections to date, with children in particular disproportionately involved. Conversely, elderly adults are overrepresented among A(H3N2) detections in BC, accounting for three quarters of detections thus far.

Since our last bulletin in week 49, no further outbreaks in long term care facilities (LTCF) have been reported (Since week 40, there have been a total of 3 lab-confirmed LTCF outbreaks this season (two attributable to A(H3N2), one of unknown subtype). In contrast, between weeks 40 and 50 of the A(H3N2) dominant 2016-17 and 2017-18 seasons, 16 and 10 lab confirmed LTCF outbreaks, respectively had been reported. The lower number to date this season is consistent with fewer LTCF outbreaks expected during seasons of dominant A (H1N1)pdm09 compared to dominant A(H3N2) circulation.

Please note that this will be the last bulletin of the 2018 calendar year. Reporting will resume in the New Year.

Figure 6: Influenza and other virus detections among respiratory specimens submitted to BCCDC Public Health Laboratory, 2018-19



Source: BC Centre for Disease Control Influenza Surveillance Bulletin:
Report No. 6, December 9-December 15, 2018

Inside this Issue:

- Influenza Update*----- p.1
- Pertussis Immunization Booster in Pregnancy*
----- p.2
- Distribution Update*----- p.2
- AMS Topic of the Month: C Difficile Infection*
----- p.3
- Updated: NH Infant Toddler Nutrition
Guidelines for Health Professionals*---- p.4

Notable Quotable:



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**After hours calls to UHNBC Switchboard
250-565-2000
and ask for the MHO on-call**



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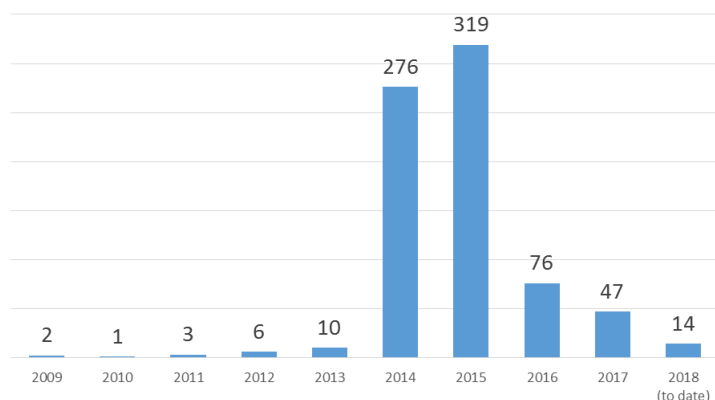
Pertussis Immunization Booster in Pregnancy

A Tdap booster in every pregnancy, ideally at 27-32 weeks gestation, is currently recommended, but not currently funded, in BC.

A maternal Tdap booster is very effective in reducing the risk of severe pertussis outcomes in infants. However, this risk is already small. The last infant death from pertussis in BC occurred five years ago. The number needed to vaccinate (NNV) in pregnancy, to prevent one infant death, has been estimated at 265,000. The NNV to prevent severe illness requiring hospitalization has not yet been estimated for BC.

In Northern Health, there was a pertussis outbreak in 2014-2015, with close to 600 cases across the region (all ages), particularly in the Northwest. Between outbreak years, pertussis is endemic at low levels.

Number of pertussis cases in Northern Health, 2009-2018 (to date)



In terms of overall health benefits, the top priority in immunization practice should be to ensure that clients are up-to-date for vaccines which are publicly funded, especially individuals who are at higher risk. That said, it is also considered best practice to inform patients about vaccines which are recommended but not publicly funded.

A provincial budgetary decision on public funding of Tdap for this indication is currently pending. In the meantime, it is up to individual clients to decide whether paying for the vaccine themselves, in order to achieve a small reduction in pertussis risk for their child, is the best use of their disposable income.

References:

National Advisory Committee on Immunization (2018). *Update On immunization in pregnancy with Tdap vaccine*. <https://www.canada.ca/en/public-health/services/publications/healthy-living/update-immunization-pregnancy-tdap-vaccine.html>

BC Centre for Disease Control. *Communicable Disease Control Manual: Biological Products (Vaccines and Immune Globulins)*. <http://www.bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual-immunization/biological-products>

ImmunizeBC. *Vaccines Recommended for Adults in BC*. https://immunizebc.ca/sites/default/files/graphics/vaccines_recommended_for_adults_in_bc-screen.pdf

Submitted by: Dr. Andrew Gray,
Northern Interior Medical Health Officer

Distribution Update

It has come to our attention that some physicians are not receiving this newsletter. If you would like to receive this newsletter by email please send an email to NHPhysiciansNewsletter@northernhealth.ca

As of January 1st, 2019 we will no longer be distributing physical copies of newsletters to UHNBC.

All back issues of *NH Physicians*, *Partners in Wellness* newsletters and bulletins are located on the NH Physicians website: <http://physicians.northernhealth.ca/physicianResources/PublicHealth.aspx>



Antimicrobial Stewardship Topic of the Month: C Difficile Infection

NH Research: Retrospective Evaluation of *Clostridium Difficile* Infection Risk Factors and Management at a University Teaching Hospital in Northern BC.

Abstract

Background: *Clostridium difficile* (*C.diff*) is the primary cause of healthcare associated diarrhea and is a major and often preventable threat to patient safety. In Northern Health (NH) during the 2013/2014 fiscal year, the rate of hospital-associated *C.diff* Infection (CDI) acquired at the University Hospital of Northern British Columbia (UHNBC) per 1000 patient days was 0.42, a 35% increase from the previous year. Currently in Northern Health there is no standard policy or protocol for treatment of CDI.

Objective: The primary objective of this research project was to assess if local management of CDI complies with provincial and national standards in the absence of Health Authority CDI management support tools.

Methods: A retrospective chart review of patients with *C. diff* positive stool sample collected greater than 72 hours after admission or less than 72 hours after admission but with a recent discharge from UHNBC within the previous 4 weeks from April 1st, 2010 to March 31st, 2016 was performed. Data pertaining to CDI treatment, modifiable risk factors (presence, spectrum and duration of antibiotics, presence of proton-pump inhibitors or histamine-2 antagonists) and patient outcomes (length of hospital stay, mortality rate and recurrence rate) were analyzed.

Results: A total of 257 patient cases were identified, of which 178 were included for review. The investigators found that the compliance rate to provincial and national standards during the studied period was 32%.

Conclusion: The compliance rate with provincial and national standards was found to be below the pre-

determined acceptable rate of 80%. Modifiable risk factors were identified for the majority of patient cases reviewed. Future studies are required to determine if these directly impact length of hospital stay, recurrence and mortality rates. The results from this study support development and implementation of a CDI management protocol and order set at UHNBC.

The full manuscript is available online on [physician's website](#) or [OurNH](#).

New Guidelines

The IDSA has recently published updated their guidelines for the management of CDI. The main change in this update involves removal of Metronidazole as a first line treatment option for mild/moderate disease including first recurrences, making Vancomycin PO the mainstay therapy for all severities and episodes of CDI. The NH AMS program, including Dr. Hamour, would like to remind prescribers that these new guidelines are based on resistance patterns found primarily in the USA (virulent strains) and that in Canada we have had successful treatment with oral Metronidazole in the past. Therefore, work is currently being done to create a NH specific protocol to help guide clinicians in the management of CDI. It will encourage the use of oral Metronidazole for 1st episode mild CDI, reserving use of Vancomycin PO for all moderate – severe cases, mild cases with no improvement by day 4 on Metronidazole and all recurrent episodes. At this time Fidaxomicin (2nd line after Vancomycin PO) is a non-formulary medication in BC and is a highly cost prohibitive agent.

You can access resources created and or provided by the AMS program by visiting the NH [physician's website](#) or [OurNH](#) or by contacting the AMS program coordinator at 250-565-5956.

Submitted by: Alicia Rahier, Antimicrobial Stewardship Program Coordinator



Updated: NH Infant Toddler Nutrition Guidelines for Health Professionals

Families of infants and toddlers access nutrition information from various sources, and may receive conflicting messages. There are opportunities to support parents and guardians with clear recommendations. For example:

- Recommend the introduction of solid food at around six months, based on infants' signs of readiness
- Advise that, for the majority infants, introduction of common food allergens can start at about six months; delays are generally not recommended
- Recommend iron-rich first foods, such as meats, poultry, eggs, beans, lentils, and iron-fortified cereals. These should be offered two or more times per day from six months onwards
- For children who are no longer receiving breast milk, advise that full-fat, pasteurized cow's milk may replace infant formula starting at 9-12 months
- Advise that lower-fat animal milks and plant-based beverages (e.g. soy, almond, coconut) are not appropriate milk choices for children younger than two years
- Support continued breastfeeding to two years and beyond
- It can be difficult to obtain adequate vitamin D from food sources alone. Recommend a 400 IU (10 mcg) supplement for children who receive breastmilk, or who do not obtain adequate vitamin D from their diets

The NH [Infant Toddler Nutrition Guidelines for Health Professionals](#) is a long-standing resource that serves as a compilation of feeding recommendations from current, evidence-informed sources. It includes information on each of the above topics, and many others, to assist health professionals in supporting families of healthy, young children with common feeding questions and concerns. Key practice points are summarized in the Executive Summary of this document, and supporting information is presented in six chapters:

1. Breastfeeding and Human Milk
2. Human Milk Substitutes
3. Animal Milks and Other Beverages
4. Feeding by Age
5. Issues of Concern
6. Nutrients of Concern

This resource has recently been updated in the Fall of 2018. A summary of changes can be found on page ii. Those who have a previous copy of this resource should consider replacing it with the current, updated version. This resource can be accessed via the [Population Health Nutrition](#) OurNH page, or by

emailing PopHlthNutrition@northernhealth.ca.

In addition to these guidelines, other tools and resources exist to support health professionals in their work to support families regarding infant and toddler feeding:

- The BC [Pediatric Nutrition Guidelines \(Six Months to Six Years\) for Health Professionals](#):
 - ▶ This desk reference is organized by age group (i.e. 6-9 months, 9-12 months, 12-24 months, 2-6 years) and provides a summary of recommendations for food and fluids, as well as nutrition risk indicators.
 - ▶ These provincial nutrition guidelines are concise and are an excellent complement to the NH Infant Toddler Nutrition Guidelines for Health Professionals (which is more comprehensive, and provides additional information, rationale, and resources to support recommendations).
- The NH display: "[Feeding Babies Age 6-12 Months](#)"
 - ▶ This display is comprised of a set of colourful posters, with key recommendations for families, suitable for a bulletin board display or for a tri-fold display board
 - ▶ The backgrounder to this display provides key messages for health professionals, and lists recommended client resources to accompany the display.
 - ▶ The display can be ordered from NH Document Source (order #10-421-6069)
- The list of NH [Population Health Nutrition resources available for order at Document Source](#) features colourful client resources related to a variety of child feeding topics
- The NH [Nutrition webpage](#) includes information for the public on [Nutrition in the First Year](#) and [Nutrition for Toddlers and Preschoolers](#).

The above resources are also featured on the [Population Health Nutrition](#) OurNH page. Comments and questions can be forwarded to: Lise.Luppens@northernhealth.ca

Submitted by: Lise Luppens, Population Health Dietitian, Regional Lead, Early Years Nutrition

