The Chief Medical Health Officer issued a report on Child Health in Northern BC in April 2016: [https://northernhealth.ca/Portals/0/About/Community_Accountability/documents/Northern-Health-CMHO.pdf](https://northernhealth.ca/Portals/0/About/Community_Accountability/documents/Northern-Health-CMHO.pdf). This report provides a review of the status of health of northern children, from conception to five years of age. A set of 24 life course indicators was identified and data was obtained, analyzed, interpreted and shared in the detailed technical report at: [https://northernhealth.ca/Portals/0/About/Community_Accountability/documents/CMHO-Child-Health-Status-Technical-Report.pdf](https://northernhealth.ca/Portals/0/About/Community_Accountability/documents/CMHO-Child-Health-Status-Technical-Report.pdf)

Key findings - How healthy are most pregnancies in the North?

Compared to the rest of the province, Northern BC reports higher rates of the following conditions, all of which can lead to complications later in the child’s life:

- teen pregnancies;
- exposure to alcohol, tobacco, and stress related to mental health concerns;
- overweight and obesity in mothers and high birth weights of newborns.

Key findings - How healthy are children in the North?

Newborns are generally welcomed safely in Northern BC, but higher rates of infant mortality are reported in the region in the first year of life. Statistics also indicate that:

- Women in Northern BC have the lowest rates of exclusive breastfeeding to six months of age.
- About one-third of children are not emotionally, nor physically, ready for the transition to enter school.
- The region has higher rates of poor oral health in comparison to the rest of the province, including the highest rate of dental surgeries.

The rates of injury hospitalization are among the highest in the province.

Rates of child abuse, neglect, and children in need of protection are also among the highest in the province.

One in five children in the North live in low income families.

Key recommendations for how we can work together to improve the health of our children:

Communities and families can seek to strengthen protective factors for optimal child wellness and reduce or prevent risk factors. Children’s health happens in families and communities, in the settings in which children live, learn and play.

1. Within Northern Health, develop a program focused on children, youth and families within Northern BC.
2. Encourage, promote and highlight collaboration in communities.
3. Strive to achieve high levels of collaboration across sectors.
4. Strengthen the partnership between Northern Health and the First Nations Health Authority.
5. Support communities and families to provide the foundations for early childhood development.
6. Commit to ongoing monitoring of child health data and indicators.

Do you have any stories, ideas, concerns or opportunities about improving the health of children in the north? You can participate in community consultations in your community, weigh in on ThoughtExchange, or submit a story to childhealthconsultation@northernhealth.ca

Submitted by: Chief MHO
Dr. Sandra Allison
**Interim Syphilis Treatment Guidelines during the Benzathine Penicillin Shortage**

**Background**
- The Public Health Agency of Canada (PHAC) has been recently informed of a national shortage of benzathine penicillin G (Bicillin L-A) which is estimated to last until July 2016.
- Pfizer is the only Canadian supplier of Bicillin L-A at present and the shortage is due to a manufacturing issue.
- PHAC recommends conserving available stock of Bicillin L-A and using alternative treatments wherever feasible or possible. Ideally, treatment and follow-up of syphilis should be done in consultation with an STI/Infectious disease specialist or a colleague experienced in syphilis management.
- PHAC is working closely with Health Canada regulators to develop options to mitigate the shortage.
- The following interim treatment recommendations have been developed by PHAC, in collaboration with the Expert Working Group for the Canadian Guidelines on Sexually Transmitted Infections.

These recommendations are intended for use during the Bicillin shortage only and until further notice. They may differ from the preferred and alternative treatment recommendations in the Syphilis chapter of the Canadian Guidelines on Sexually Transmitted Infections. Close clinical and/or serologic follow-up is especially important when non-penicillin regimens are used for treatment. Refer to tables 6 and 7 in the Syphilis Chapter.

**Effective immediately it is recommended that the use of Bicillin L-A be restricted to:**

**Pregnant patients (all stages)** Primary, secondary, early latent syphilis

Benzathine penicillin G 2.4 m.u. IM as a single dose

Late latent, latent of unknown duration, tertiary syphilis (not involving the central nervous system)

Benzathine penicillin G 2.4 m.u. IM weekly x 3 doses

Notes:
- There is no satisfactory alternative to penicillin in pregnancy; strongly consider penicillin desensitization in patients reporting anaphylactic reactions to penicillin.
- Given the complexity of accurately staging early syphilis, some experts recommend that primary, secondary and early latent cases in pregnancy be treated with two doses of benzathine penicillin G 2.4 m.u. 1 week apart; the efficacy of this regimen in preventing fetal syphilis is not known.
- Infectious cases (primary, secondary and early latent syphilis), regardless of HIV status, if adherence to treatment and follow-up is uncertain.
- Benzathine penicillin G 2.4 m.u. IM as a single dose

**Note:**
- A single dose of Benzathine penicillin G long-acting is adequate for HIV positive patients with early syphilis.

**Sexual contacts (within 90 days) of infectious cases of syphilis if pregnant OR adherence to treatment and follow-up is uncertain**

Benzathine penicillin G 2.4 m.u. IM as a single dose

**Note:**
- There is no satisfactory alternative to penicillin in pregnancy; strongly consider penicillin desensitization in patients reporting anaphylactic reactions to penicillin.

**The following patients (including HIV infected) should be preferentially treated with oral doxycycline if adherence to treatment AND follow-up is expected.**

Primary, secondary and early latent syphilis cases and their sexual contacts (non-pregnant adults)

Doxycycline 100 mg PO BID x 14 days

Late latent, latent of unknown duration, tertiary syphilis (not involving the central nervous system) in non-pregnant adults

Doxycycline 100 mg PO BID x 28 days

Notes:
- In the case of late latent syphilis, if there is uncertainty regarding the staging, (i.e., there is a possibility that it could be an infectious case of syphilis), some experts would recommend the use of Bicillin 2.4 m.u. IM in a single dose followed by the routine doxycycline regimen.
- If there is no uncertainty regarding staging of late latent syphilis, clinicians may opt to defer treatment until the supply of Bicillin is re-established.

In the event that no Bicillin L-A is available, the following treatment guidelines are recommended (including HIV infected)

**Pregnant patients (all stages)**

Penicillin G 4 m.u. IV q 4 h x 10 days

**Primary, secondary, early latent syphilis cases and their sexual contacts (non-pregnant adults)**

Doxycycline 100 mg PO BID x 14 days

Notes:
- If suboptimal adherence is suspected some experts would recommend the addition of azithromycin 2 g PO in a single dose followed by the routine doxycycline regimen.
- Treatment failures have been reported following the use of azithromycin to treat early syphilis, and resistance has been observed in Canada. As such, close clinical follow-up is especially important if early or incubating syphilis is suspected. Monotherapy with azithromycin is not recommended for the treatment of syphilis.

**Alternative treatments**
- Penicillin-G 4 m.u. IV q 4 h x 10 days OR Ceftriaxone 1 g IV q 24 h x 10 days
- Late latent, latent of unknown duration, tertiary syphilis (not involving the central nervous system) in non-pregnant adults
- Doxycycline 100 mg PO BID x 28 days

**Alternative treatments**
- Penicillin-G 4 m.u. IV q 4 h x 10 days OR Ceftriaxone 1 g IV q 24 h x 10 days
In recent years, there has been a significant increase in the number of overdose deaths in British Columbia, rising from an annual total of 274 deaths in 2012 to 480 in 2015. At the current rate, a total of over 750 overdose deaths can be expected to occur in the province by the end of this year. The presence of illicit fentanyl and related compounds such as W-18, opioid analogues that can be up to 1000-fold more powerful than morphine, are believed to be driving the current epidemic. A majority of people who use drugs in BC (73%) are not aware that they are using these compounds. The BC Coroners Service has detected fentanyl in increasing proportions of illicit drug deaths. In 2012, the drug was identified in 5% of these cases. The proportion thus far in 2016 is 49%.

The Provincial Health Officer, Dr. Perry Kendall, declared the overdose situation in BC a Public Health Emergency on April 14, 2016. The declaration allows the PHO or Minister of Health additional powers, including powers regarding reporting, making regulations and implementing emergency measures, including overdose report-ability and greater access to more detailed Coroner’s data for health authorities.

Local physicians play a key role in surveillance efforts and in preventing overdose deaths due to fentanyl/fentanyl analogues; prevention efforts include Take Home Naloxone (THN) programs, advocating for local Safe Injection Services (SIS), screening for substance use disorders or predisposition towards one, providing Opioid replacement therapy, and optimizing safe prescribing practices.

Naloxone: The Take Home Naloxone program provides training in overdose recognition, response and naloxone injection. THN kits are available for those that use opioids or for friends and family of users. Supervised injection services (SIS): SIS have demonstrated benefit in terms of improved health, stability, access to social services and addictions treatment, as well as the prevention of overdose mortality and a reduction of impact on the health, enforcement and legal sectors. SIS decreases the risk of overdose; provide stabilization and referrals which can be the first step on the road to recovery. Local physicians can play a role in advocating for this gap in harm reduction services to increase awareness that these services be expanded to meet the needs of our northern communities.

Opioid Replacement Therapy (ORT): ORT involves the use of pharmaceutical-grade long-acting prescription opioids as a treatment for patients with opioid use disorder. Vancouver Coastal Health Opioid Addiction Guidelines released in November 2015 recommend Suboxone (buprenorphine/naloxone) over methadone as first-line treatment. Risk of overdose on Suboxone is six-fold lower than on methadone. Currently in BC, permission to prescribe Suboxone requires a methadone exemption. However, it is expected that the College of Physicians and Surgeons of BC will be changing this requirement to increase access to this treatment option.
A Treatment Option for the Opioid Dependent Patient

Speaker: Dr. Mandy Manak

- Understand and appreciate the chronic relapsing disease state of opioid dependency
- Recognize the options available in treating opioid dependencies with medically-assisted therapies
- Identify patients who may be appropriate candidates for opioid replacement therapy
- Complete accreditation process to offer opiate replacement therapy with Suboxone

Saturday, June 4, 2016
8:30am – 3:00pm
Delta Vancouver Suites,
Thompson Room, 2nd Floor,
550 West Hastings St, Vancouver

Please contact Kathleen MacDonald (Kathleen.macdonald@indivior.com) for more information.

Antimicrobials—Handle with Care:
A note from the Antimicrobial Stewardship Program

Prescribing antimicrobials without culture results can be difficult, especially in situations where cultures are not possible or useful (e.g. cellulitis). Choosing an antimicrobial with empiric sensitivity to the most likely pathogens is integral to successful management of these infections. There are resources and references which can help point prescribers in the right direction (e.g. The Sanford guide to Antimicrobial Therapy) but there is also data from the local health region which may help to further refine treatment options. This local data is referred to as an Antibiogram or an annual antimicrobial susceptibility report, and is created based on culture results produced by NH’s microbiology lab. The Antibiogram is created using a cumulative summary of antimicrobial susceptibility testing data collected during the previous calendar year. This year’s NH Antibiogram contains data collected between January 1, 2015 and December 31, 2015. The data is organised into 3 separate reports, based on the 3 health services delivery areas within Northern Health, in order to capture any regional differences.

For more information about Northern Health’s Antimicrobial Stewardship program, contact Alicia Ridgewell the program coordinator/lead pharmacist at 250-565-5956 or via email: alicia.ridgewell@northernhealth.ca

Submitted by:
Alicia Ridgewell
Antimicrobial Stewardship Program