

# Letter from the Office of the Chief Medical Health Officer

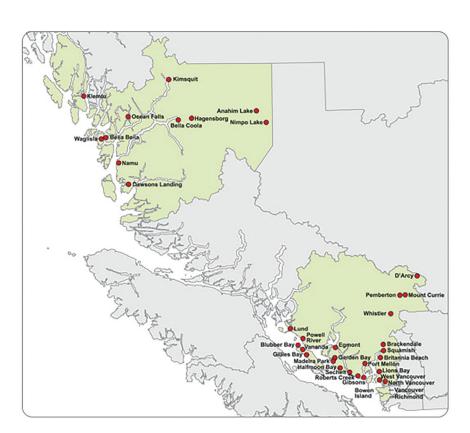


For many of you, when you think about how Vancouver Coastal Health supports our residents in living "healthy lives in healthy communities", you may immediately think of health care services provided in hospitals, doctors' offices, and clinics. However, we know that much of what influences our health and wellness happens outside of the walls of those buildings — in the communities where we live, work, learn, and play. In public health, we work across these various settings to ensure that we are proactively protecting against health risks, preventing injuries and chronic and communicable disease, and promoting health and wellness for our entire population.

This report is intended to give you a glimpse into some of the key issues that we engage with, as well as actions that our teams take to promote health and wellness in the Vancouver Coastal region. While this report only captures a fraction of the work that we undertake, we hope that it provides you with a better understanding of how Public Health supports you and your community in living longer and healthier lives.

### Sincerely,

Dr. Patricia Daly, Chief Medical Health Officer Vancouver Coastal Health





# Focusing on Healthy Early Childhood Environments



The early childhood years (0-5 years old) are one of the most formative periods for brain development.

The experience of trauma and other environmental factors in early childhood contributes to an individual's vulnerability for mental health challenges, substance use, and other negative health outcomes later in life.



### WHAT DOES LOCAL DATA TELL US?

The Human Early Learning Partnership (HELP) at UBC conducts regular surveys using the Early Development Instrument (EDI), which measures children's physical, social, emotional, language, and communication development at age five. A child identified as vulnerable in one of these critical areas of development is more likely to face future challenges in school and society.

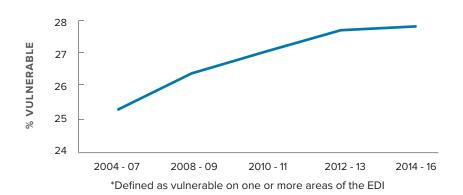


### Complex Vulnerability

1 in 3 BC Kindergarteners are vulnerable in one or more areas of development measured by the EDI. 11% experience vulnerability on three or more areas of development.

### Vulnerability is increasing

### PERCENTAGE OF CHILDREN IN THE VCH REGION IDENTIFIED AS VULNERABLE\*



### WHAT ARE WE DOING?

### Nurse-Family Partnership (NFP)

An evidence-based program that partners specialized public health nurses with first-time mothers, experiencing (or vulnerable to) socioeconomic disadvantage, from early pregnancy into a child's second year of life.

According to the studies from other countries, mothers in the program gain knowledge, skills and confidence to promote stable emotional, social and economic environments and create improved lives for themselves and their children. VCH is currently participating in a province wide study to evaluate the effectiveness of this program in BC.



**142** VCH mothers participated in NFP between April 2012 and March 2017.



On average, each mother receives **64** visits from a nurse

### Support for School Success

A program designed to provide health and developmental screening for children in specific Vancouver neighbourhoods. Early identification of developmental issues means that children can access specialists and other supports.



Of children seen between March 2012 and August 2016: **65%** were flagged for developmental monitoring **30%** were assigned funding for school supports



Rapid mobilization of services – decreased wait for school supports in schools from 2 years in March 2016 to a few months in August 2016

# Improving Immunization Rates

### WHY DO IMMUNIZATION RATES MATTER?



Immunizations are a safe and effective way of preventing serious illnesses.

The Kindergarten Booster provides protection from tetanus, diphtheria, pertussis, and polio. These are serious diseases that if contracted can result in major health issues, including death.



### WHAT WAS THE ISSUE?



In 2011, there was a drop in immunization coverage among children living in urban communities on the North Shore.



Less than **60**% of children on the North Shore were fully protected against these illnesses as they entered kindergarten.

This was significantly lower than both the VCH and BC average.

### WHAT WE HAVE BEEN DOING ABOUT IT?

Our immunization team has been working hard to increase vaccination coverage in the region, by focusing on the following:



Increasing access to kindergarten drop-in clinics in community locations



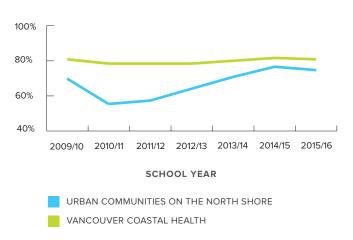
Immunizing kindergarten students in schools



Promoting immunizations in the media to support vaccine readiness

### Kindergarten Booster Coverage

Our actions helped to close the gap in vaccine coverage rates between urban communities on the North Shore and the rest of VCH.



# Diagnosing and Treating HIV Earlier

# EARLY DETECTION AND TREATMENT OF HIV HELPS TO

- Prevent the spread of HIV
- Improve quality of life and health of those living with HIV
- Reduce health expenditures

### 

Since the expansion of HIV testing, including routine HIV testing in health care (implemented in 2010), late HIV diagnoses have declined. Overall, the number of people diagnosed with HIV has declined with a higher proportion of people diagnosed in the earliest stages of infection.

# The Risks of Lead Exposure in Drinking Water

### WHY DOES REDUCING EXPOSURE TO LEAD MATTER?



Exposure to lead at unsafe levels can lead to health issues, including developmental delays in children, and cardiovascular and kidney issues in adults.

Much has been done in the past 50 years to reduce lead exposure, such as removing lead from gasoline and paint.





Before 1989 lead was commonly used in water pipes as a component of solder. Therefore, the potential for lead contamination of drinking water remains a concern, especially in buildings with older pipes.

### **OUR APPROACH TO THE ISSUE**



Drinking Water Officers assess the safety of water systems in a "Source to Tap" approach by reviewing the entire spectrum of source protection, treatment

**Monitoring & Responding to Complaints** 



VCH Health Protection routinely monitors the levels of various chemicals, including lead, contained in our public water systems at the community level.

and disinfection of water systems.



### **Training and Mitigation**

You can prevent exposure in buildings where lead is present in pipes, by flushing the pipes on a regular basis. That reduces the time that water spends in contact with lead before being consumed.

### WHAT DOES THIS LOOK LIKE ON THE GROUND?

# **Monitoring:** 2016 Testing lead levels at older schools across the VCH Region



The current Maximum Acceptable Concentration for lead is 10  $\mu$ g/L according to the Guidelines for Canadian Drinking Water Quality.



Of the older schools tested in 2016, 21% exceeded this level before flushing pipes, but all were below the level after flushing pipes.

**Mitigation Solution:** Support schools in developing a regular pipe flushing program. "VCH School Flushing Program Development Guide" was provided to assist school districts on how to assess their school's water system in order to develop a regular flushing program.

## READ MORE ON HOW TO PROTECT YOURSELF FROM LEAD EXPOSURE IN DRINKING WATER:

http://www.vch.ca/Documents/Lead-in-drinking-water-protecting-yourself.pdf

### **RESPONDING TO COMPLAINTS**

Last year in Pemberton there were public concerns about potential lead exposure after private testing showed high levels of lead in numerous buildings in the community.



Drinking Water Officers and Medical Health Officers participated in a town hall meeting, with residents, Council and Mayor, where they addressed concerns and discussed measures to ensure that the public is protected.

The public was assured that the issue was mostly due to pipes in some buildings, and materials were developed outlining how to reduce exposure through flushing. We are currently working with the municipality to introduce a system to reduce the corrosivity of the water.

# Culture Matters for Indigenous Health

The Truth & Reconciliation Commission of Canada has called on the health care system to recognize the value of Aboriginal healing practices, and use them in the treatment of Aboriginal patients.



Richmond, Vancouver, and North Vancouver, as well as the First Nations communities of Kitasoo, Sechelt, and Squamish, have identified a need for increased access to Elders services and other cultural services.<sup>1</sup>

Incorporating Indigenous cultural methods and practices into mental health services has been shown to be an effective approach for working with Indigenous clients, and helping them deal with past traumatic events.<sup>2</sup> In a recent pilot project, Vancouver Native Health Society included Elders as staff at their clinic. Elders worked directly with clients, and participated in the training of Family Practice Residents. Results from that project demonstrate the positive impacts that including Elders in health care can have on clients, physicians and Elders.

"We have had several occasions that having an Elder on site when somebody has been in some form of crisis has been incredibly powerful. I've witnessed this a couple of times and it's been humbling for me to see this happen in the context of a medical clinic" (Physician)

"We as clinicians have felt that that we provide culturally safe and competent care but it's not until we've actually had Elders here and witnessed how they work, how they expect to work, and how they expect to be treated that we're getting a better sense of what that really means."

(Physician)

### What does it mean to be an Elder?

While we often hear the word elder used when discussing an older person, the term Elder (with a capital E) has another meaning in an Indigenous context. While the definition of Elder varies from Nation to Nation, and community to community, an Elder is generally described as a person recognized by their own community as being the carriers of the wisdom and teachings of their culture.

1 Andrews M, Robinson P. Availability and Levels of Access to Primary Health Care Services for the Greater Vancouver Urban Aboriginal and First Nations Population. Vancouver Coastal Health, December 2013.

Andrews M, Robinson P. Availability and Levels of Access to Primary Health Care Services in the 15 First Nations Communities. Vancouver Coastal Health. December 2013.:

Bluesky K. Aboriginal Health, Healing and Wellness in the DTES. City of Vancouver, April 2017

2 Thomas, W., & Bellefeuille, G. (2006). An evidence-based formative evaluation of a cross cultural Aboriginal mental health program in Canada. Australian e-journal for the Advancement of Mental Health, 5(3), 202-215.

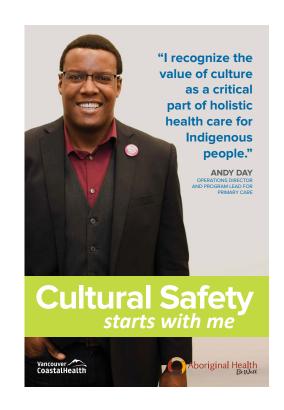
Wright, S., Nebelkopf, E., King, J., Maas, M., Patel, C., & Samuel, S. (2011). Holistic system of care: evidence of effectiveness. Substance use & misuse, 46(11), 1420-1430.



#### WHAT ARE WE DOING ABOUT IT?

In July 2015, VCH created an Aboriginal Cultural Competency Policy, which aims to guide VCH to become a more culturally competent organization by strengthening Aboriginal leadership in health care; ensuring welcoming, inclusive, and respectful environments; and facilitating inclusion of traditional practices, practitioners, and medicines into patient care.

VCH Aboriginal Health is creating Eldersin-Residence programs at various facilities, including Lions Gate Hospital, Sheway, and downtown Community Health Centres. Additionally, VCH is supporting Elders' services as part of the model of care in contracted health centres such as Lu'ma Medical Centre and Vancouver Native Health Society.



# Social Connections Impact our Health



Feeling connected to your community and having people you can turn to for help impacts both mental and physical health.



Increased social connection is associated with lower rates of anxiety and depression, as well as improved cardiovascular health and immune function.

### WHAT DOES LOCAL DATA TELL US?

In 2013, we conducted a survey across the VCH Region, called My Health, My Community, which included questions about residents' sense of community belonging and social connection, as well as their health.

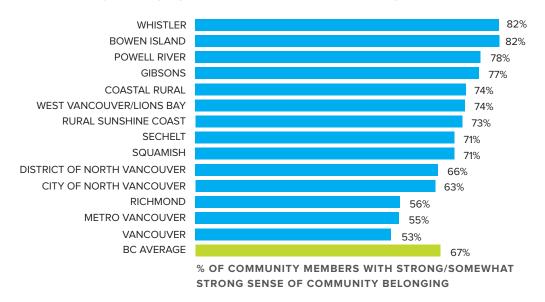


Individuals with a stronger sense of community belonging had 2 times higher odds of having excellent/very good mental and general health than those with a weaker sense of community belonging.



Individuals with four or more confidents had close to 2 times higher odds of having excellent or very good mental health, and close to 1.5 times higher odds of excellent/very good physical health than those with less than 4 confidents.

### Sense of Community Belonging Varies, and Tends to be Stronger in More Rural Communities



### WHAT ARE WE DOING ABOUT IT?

In 2016/2017, VCH Population Health awarded \$3.3 million in grants to 58 organizations to support 68 community-based initiatives strengthening social connectedness within vulnerable populations across VCH.

### Example: Combatting the Social Isolation of Disability

People with disabilities often become socially isolated, inactive, depressed and immersed in the medical system. Since 2002, VCH has been funding Spinal Cord Injury BC's Peer Support Program to connect people with disabilities in community through multi-faceted peer support networks. 1,063 people participated in 2016-2017 with 92% reporting that they made new friends or connected with new people as a direct result.

# Provincial Illicit Drug Overdose Emergency



On April 14th, 2016 the province of British Columbia declared a **public health emergency** due to the rising numbers of illicit drug overdose deaths.

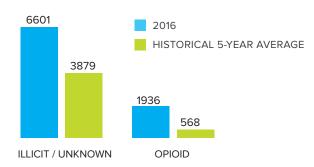
The presence of **fentanyl, carfentanil and other highly potent opioids** in the drug supply is thought to contribute to the unprecedented number of deaths not only in the Downtown Eastside but throughout BC.



### WHAT DOES LOCAL DATA TELL US?

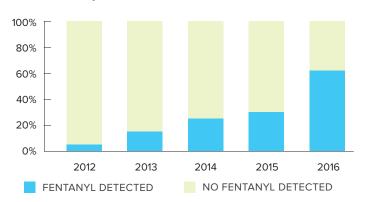
The number of illicit drug overdoses and associated deaths are increasing, according to 2016 data from the BC Coroners Service & VCH

### Overdose Visits in the ER (VCH) (BY OVERDOSE SUBSTANCE)



In 2016, the number of people presenting with illicit /unknown and opioid overdoses to the emergency rooms in the VCH region far exceeds the historical 5-year average.

### Fentanyl Detected Deaths in BC



In 2016, 967 illicit drug overdose deaths occurred in the province. Fentanyl was detected in more than half of all illicit drug deaths.

### WHAT ARE WE DOING?

### New Services



6 Overdose Prevention Sites and the Mobile Medical Unit (MMU) opened. The Overdose Prevention Sites have had 61,768 visits and responded to 438 overdose events between December 2016 and April 24, 2017. The MMU received 2,798 visits and 589 overdose presentations (as of April 7). Health Canada approved an exemption for a new supervised injection service at the Powell Street Getaway, which opened June 28, 2017. A second application is underway.

### Outreach



Spikes on Bikes engages people using illicit drugs in public spaces for both overdose prevention education (including THN) and to intervene in overdose emergencies. The Overdose Outreach Team provides connections to addictions care and support to clients in the VCH region who have recently experienced opioid overdose and/or are at high risk for overdose.



### Naloxone Distribution

16,579 Take Home Naloxone (THN) kits dispensed in the VCH region in 2016.

### Peer & Community Partnerships

Collaboration with peers with lived experience and other partners in the community (e.g., housing) to set up services and programs to prevent and respond to overdose emergencies.