### Canadian Public Health Association Conference 2015, Vancouver

Title: Health status and risk factors for chronic disease in the homeless population, Metro Vancouver 2013-2014

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#### Background:

The My Health My Community (MHMC) survey was developed to fill a gap in information on health status and local-level population needs, and to better understand how lifestyle, environment and neighbourhood characteristics affect community health and well-being.

### **Objectives:**

To examine differences in health status and chronic disease risk factors between the homeless population in Metro Vancouver (MV) and MV residents overall.

#### Methods:

The MHMC survey, administered online and through community outreach, surveyed 28,320 MV residents aged 18+ years. Of these, 147 identified as homeless. The response frequencies for the homeless subset were compared to frequencies for MV overall. Differences were considered to be statistically significant if 95% confidence intervals were non-overlapping.

#### **Results:**

Compared to MV overall, homeless respondents were 2.5 times more likely to report poor/fair general health, twice as likely to report fair/poor mental health, 4 times more likely to report declining health and twice as likely to report that a physical/mental health condition stopped them from making health improvements over the past year. Homeless respondents were 3 times more likely to report mood/anxiety disorder. Smoking was almost 6-fold higher in homeless respondents and reported binge drinking 1+ times per month was twice as high as MV overall. There were no differences in those reporting 150+ weekly minutes of physical activity or eating 5+ servings of fruits/vegetables per day, although homeless respondents were more than twice as likely to report regular sugary beverage consumption versus MV overall.

#### **Conclusions:**

While response frequencies of most chronic diseases did not vary significantly between the homeless subset and MV overall, the differences in self-perceived health and underlying risk factors for chronic disease were quite striking.

#### What are the implications of your research on practice or policy?

These findings shed light on some upstream opportunities to improve the health of our MV homeless population, namely a focus on smoking, alcohol consumption and access to healthy foods.



## Health status and risk factors for chronic disease in the homeless population, Metro Vancouver 2013-14

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# **Homelessness and health**

- Metro Vancouver homeless count 2014: 2,689 adults
- Homeless at increased risk of...
  - Premature morbidity and mortality
  - Variety of chronic conditions
  - Infectious diseases
- Mental illness and substance use
- Barriers to health services

Results of the 2014 Homeless Count in the Metro Vancouver Region. A Report of the Greater Vancouver Regional Steering Committee on Homelessness, July 31<sup>st</sup>, 2014

Hwang SW. Homelessness and Health. CMAJ. 164 (2), 229-233.



### WHAT MAKES CANADIANS SICK?

50%	YOUR LIFE INCOME EARLY CHILDHOOD DEVELOPMENT DISABILITY EDUCATION SOCIAL EXCLUSION SOCIAL SAFETY NET GENDER EMPLOYMENT/WORKING CONDITIONS RACE ABORIGINAL STATUS SAFE AND NUTRITIOUS FOOD HOUSING/HOMELESSNESS COMMUNITY BELONGING	<b>Ť</b> ŘŤŘŤŘŤŘŤ ŤŘŤŘŤŘŤŘŤ ŤŘŤŘŤŘŤŘŤ				
25%	YOUR HEALTH CARE - ACCESS TO HEALTH CARE HEALTH CARE SYSTEM WAIT TIMES	ŢŦŢŦŢŦŢŦŢ				
15%						
10%		<b></b>				
THESE ARE CANADA'S SOCIAL DETERMINANTS OF HEALTH #SDOH						

Source: Canadian Medical Association - healthcaretransformation.ca

# **Analysis objective**

To examine differences in **health status** and **chronic disease risk factors** between the **homeless** population in Metro Vancouver (MV) **and MV residents overall** 



# **Methods**

- Analyzed data from Metro Vancouver residents that responded to the My Health My Community survey
- Homeless defined as responses indicating:
  - Homeless
  - No permanent dwelling
  - Live in shelter
- Statistically significant differences between MV homeless and MV overall determined by non-overlapping 95% CIs





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my Health my Community

### It's time to see the big picture.

Help shape your community.

Get involved today!

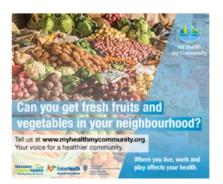
### 1. Socio-demographics

### 2. Health status

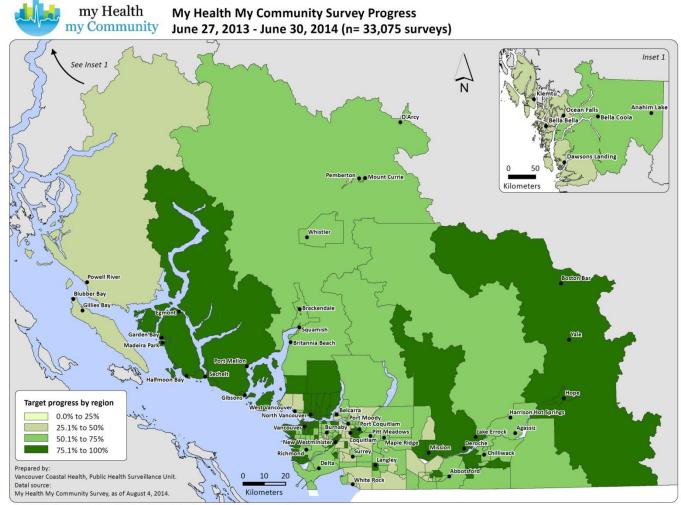
- 3. Health care access
- 4. Lifestyle
- 5. Built environment
- 6. Community resiliency











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# **Data collection**

- Online survey
- 18 years +
- Media and social media promotions



- Community partnerships
- Outreach
- Incentives

# **Ensuring a representative sample**

- 2% population target overall
- Purposeful sampling
- Monitoring of progress
- Outreach
- Post-collection weighting
  - Age, gender, education and geography (municipality)





## **Demographics**

		Homeless n=159	Metro Vancouver n=28,128
<b>60</b>	Male	78.4%	47.7%
	Aged 45-54 years	27.0%	20.1%
$\odot$	Canadian born	84.6%	63.6%
3	Self-identified as Aboriginal	25.5%	4.2%
<b>(3</b> )	Household income >\$40K	90.8%	31.7%
20	A AND		

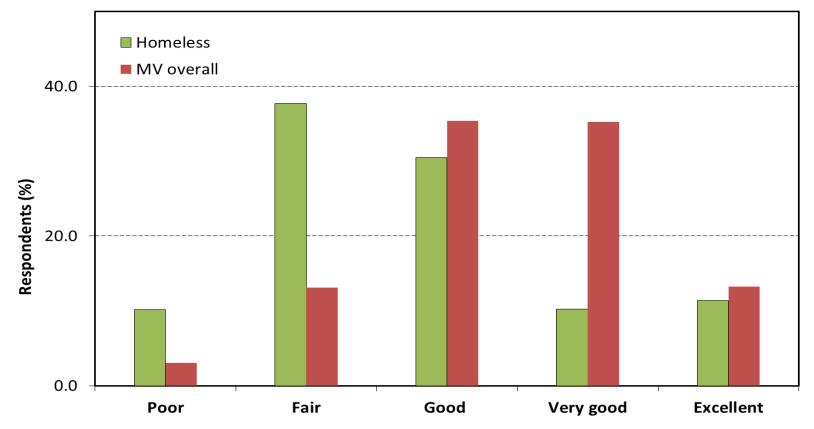
and the

## **Demographics cont'd**

EducationEducationLess than high school41.6%University4.7%Employment29.3%Unemployed39.4%6.4%			Homeless n=159	Metro Vancouver n=28,128
University       4.7%       29.3%         Image: State of the state of th	Education			
S Employment		Less than high school	41.6%	10.7%
		University	4.7%	29.3%
Unemployed <b>39.4%</b> 6.4%	🛞 Employment			
		Unemployed	39.4%	6.4%
Unable to work due to sickness/disability <b>24.8%</b> 4.8%			24.8%	4.8%

5 83

### Self-reported general health, Metro Vancouver homeless and MV overall, My Health My Community Survey, 2013-2014

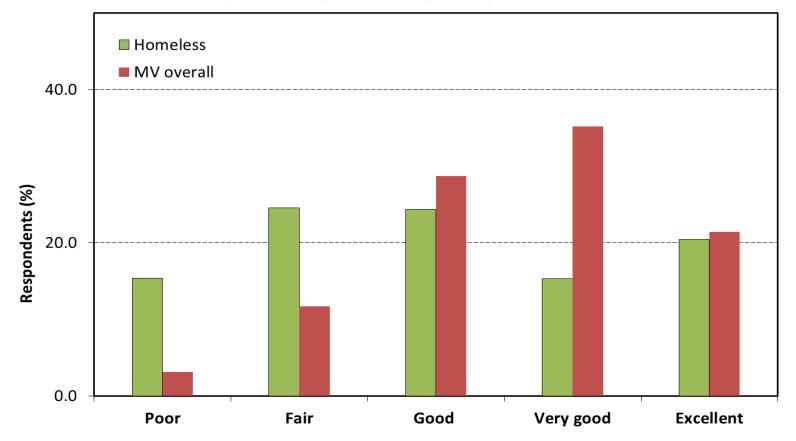


# **Declining health**

- MV homeless almost 3x more likely to report declining health in the past year (41.5% vs. 16.0%)
  - 2.5x more likely to report physical or mental health condition stopped them from making health improvements (34.5% vs. 13.6%)



### Self-reported mental health, Metro Vancouver homeless and MV overall, My Health My Community Survey, 2013-2014



Source: My Health My Community Survey. Data as of August 14, 2014. Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit, May 21, 2015.

# **Chronic disease**

(self-report of physician diagnosis)

- Diabetes, high blood pressure, heart disease
  - No significant difference
- Chronic breathing condition

   Higher (not statistically significant)
- Mood or anxiety disorder

- Almost 2.5x higher (38.9% vs. 16.3%)

## **Risk Factors – Chronic Disease**

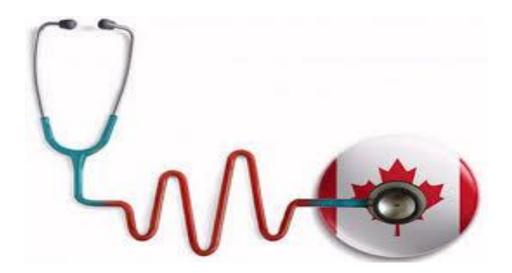
- Smoking (daily or occasionally) 7 x higher (71.9% vs. 10.6%)
- Alcohol consumption
  - Frequency of consumption no different
  - Homeless report more "binge drinking"
- Healthy eating
  - No significant difference in daily fruits & veg (average 3.4 servings)
  - 3+ sugary beverages per week 3x higher (42.6% vs. 14.1%)
  - 3+ baked goods per week 2x higher (55.2% vs. 26.5%)
- Physical activity 150+ minutes per week
  - 150+ minutes per week no difference

Walking for recreation or commute – 2x higher



# **Regular Family Doctor**

- Homeless: 48.5%
- MV: 83.1%





# Conclusions

- Chronic disease freq. did not vary significantly
- Differences in self-perceived health & underlying risk factors for chronic disease striking
- Upstream opportunities for health improvements within our homeless population
  - Smoking, alcohol, access to healthy foods
- Useful and relevant data for health authorities, municipal gov't, community organizations



## Project Team (since 2013)

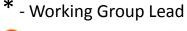
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# acknowledgements

- VCH and FH Medical Health Officers and other staff involved in the project
- Municipal partners
- Community organizations
- All of our survey respondents!





