



## MISSED OPPORTUNITIES FOR EARLIER DIAGNOSIS OF HIV IN BRITISH COLUMBIA, CANADA: A RETROSPECTIVE COHORT STUDY

### INTRODUCTION

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Late HIV diagnosis is associated with increased AIDS-related illness and deaths as well as an increased risk of HIV transmission. This study measured and characterized missed opportunities for earlier HIV diagnosis in British Columbia (BC), Canada.

### METHODS

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Eligible individuals were  $\geq 18$  years old, and diagnosed with HIV from 2001-2014. We defined “missed opportunities” as healthcare encounters due to clinical symptoms which may be caused by HIV infection or are frequently present among those with HIV infection, but no HIV diagnosis followed within 30 days. We further developed an algorithm to identify missed opportunities within one, three, and five years prior to HIV diagnosis among people living with HIV (PLWH) in the BC STOP HIV/AIDS population-based cohort.

### FINDINGS

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- We found that 1 in 7 PLWH have experienced several missed opportunities within five years prior to HIV diagnosis.
- Healthcare encounters associated with recurrent pneumonia, herpes zoster/shingles among younger individuals, and anemia, as well as having ever injected drugs, living in Northern BC, being older than 40 years and identifying as heterosexual were associated with an increased risk of experiencing these missed opportunities.

### PUBLIC HEALTH IMPLICATIONS

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- This study demonstrated that HIV-diagnosed individuals in BC have experienced several missed opportunities for earlier diagnosis.
- Further work is required to validate the utility of our newly-developed algorithm.

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