



**Topic:** Stratified by HSDA: Analyzing patterns of health care utilization among people who overdose from illegal drugs in British Columbia

**Date:** April 9, 2018

**Data Source:** B.C. Provincial Overdose Cohort

**Background:**

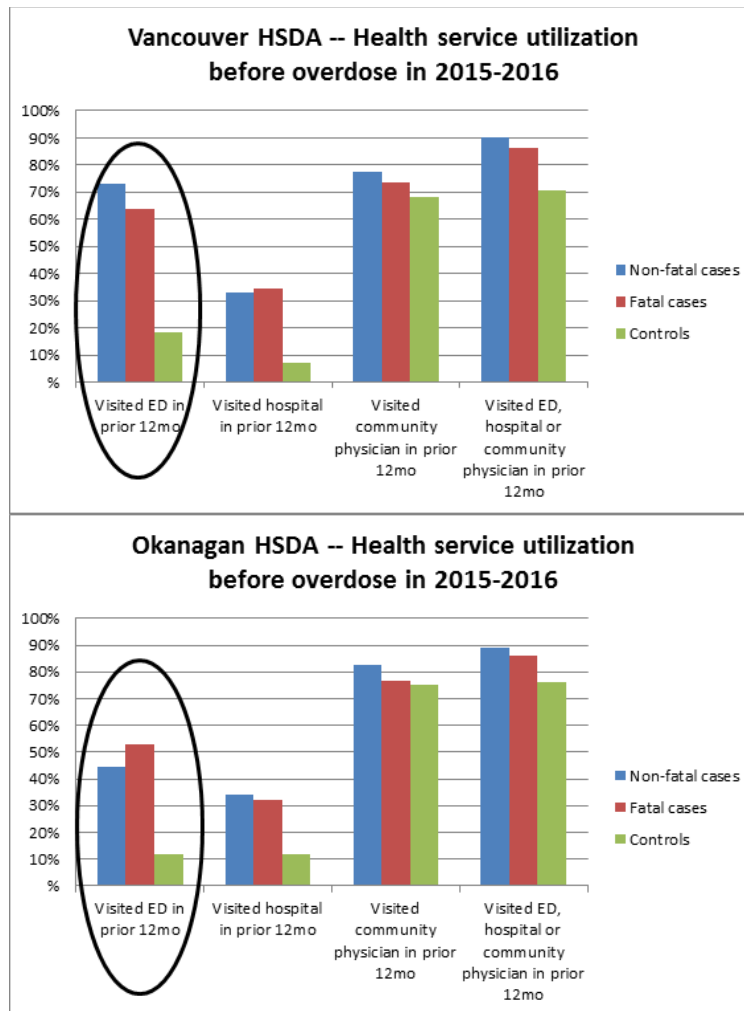
- This information follows up on an earlier Knowledge Update released on March 5, 2018, and stratifies those preliminary results by Health Service Delivery Areas (HSDA) in B.C.
- The B.C. Provincial Overdose Cohort is a set of linked datasets related to overdose events, including death, ambulance, emergency room, hospital, physician, and prescription records. The datasets were brought together to better understand factors associated with overdose to enhance the targeting of provincial, regional, and local response activities.
- Understanding how people who overdose use the healthcare system helps to identify points of contact for engagement in supportive care and delivery of evidence-based interventions. Furthermore, investigating healthcare diagnoses may reveal patterns that indicate a high risk of overdose or provide information on comorbidities that increase risk of overdose death.
- Overdose cases refer to people with at least one drug-related overdose that occurred between January 1st, 2015 and November 30, 2016. This group includes approximately 10,000 individuals, most of whom experienced a non-fatal overdose.
- Matched controls are a set of randomly selected B.C. residents who are of same sex, age, and reside in the same local health authority as those who overdosed. This group is used as a comparator for patterns of health service utilization of overdose cases during the same calendar period. It includes approximately 50,000 individuals.
- These preliminary findings summarise patterns of healthcare use in the year prior to first recorded overdose based on administrative health data from emergency departments, hospitals and community physicians in B.C.

**Findings & Examples:**

- Notable variations by HSDA are seen in the proportion of cases accessing emergency department (ED) services and in the proportion frequently accessing outpatient physicians.
- As an example of the data now available by HSDA, Figure 1 (below) compares health service utilization in the year before overdose in Vancouver and Okanagan (Figure 1). This comparison suggests:



- In both regions, a larger proportion of cases than controls visit acute care services, but cases and controls are largely similar in the proportions visiting outpatient physicians.
- Differences in health care utilization between fatal and non-fatal cases are minimal in both regions.
- Compared to Vancouver, a smaller proportion of cases in the Okanagan visited an emergency department in the year before overdose. This suggests there may be differences between the regions in the utility of ED-based screening and outreach services.



**Figure 1:** A comparison of health service utilization in the year before overdose in Vancouver and Okanagan. The number of reporting hospitals in each HSDA varies, and this variation might in part reflect differences between the two areas.



**Full Dataset Available:**

The full dataset, available as an Excel document on the Sharepoint Results Catalogue, includes the following for each HSDA:

- Past year visits to the emergency department, hospital, and outpatient physicians by fatal cases, non-fatal cases, and controls.
- ICD diagnoses most frequently associated with each visit type.

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