Topic: Recent initiation, recent discontinuation and tapering patterns of prescription opioids for pain among people who experienced a drug-related overdose in B.C., 2015-2016

Date: August 15, 2018  
Data Source: B.C. Provincial Overdose Cohort

Background:

- 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 in order to target provincial, regional, and local response activities.
- Overdose cases refer to people with at least one opioid-related overdose that occurred between January 1st, 2015 and November 30th, 2016. This group includes approximately 10,000 individuals, most of whom experienced one non-fatal overdose.
- Matched controls are a set of randomly selected B.C. residents of the same sex, age, and local health authority as those who overdosed. This group is used as a comparator when looking at patterns of health service utilization among overdose cases during the same calendar period. It includes approximately 50,000 individuals.
- In a previous Knowledge Update (February 15th, 2018), prescription drug histories among people who experienced an opioid-related overdose were described. That work reported that among those who overdosed, active prescriptions for opioids for pain at the time of overdose or in the past five years were not common. However, people who overdosed were more likely to have had a prescription for opioid for pain and to have used prescription opioids on a long-term basis at some point over the past five years, compared to the control group.
- The focus of this update is to understand recent initiation, recent discontinuation, and tapering patterns for opioids for pain prior to overdose.

Key Findings:

Recent initiation of opioids for pain

- Recent initiation was defined as a four-week period following the dispensation date of the first opioid prescription during a course of opioid therapy.
- In 2015-16, only 1% of cases recently started taking opioids for pain at the time of overdose (i.e., had initiated therapy in the four weeks prior to their overdose).
- When comparing cases on active opioid for pain therapy at the time of overdose to date-matched controls on active opioids for pain therapy, similar proportions had recently initiated opioids for pain.
Recent discontinuation of opioids for pain

- Recent discontinuation was defined as a six-week period following the date at which the supply of the last prescription would have run out at the end of the course of therapy – a high-risk period during which individuals may experience withdrawal symptoms and may seek alternative sources of opioids.
- Only 1% of cases had discontinued chronic use of prescription opioids for pain within six weeks before the date of overdose.

Tapering of opioids for pain

- Tapering was defined as a period during which a person on long-term chronic opioid for pain therapy experiences a steady dose reduction.
- Only 1.4% of cases were being tapered off of opioids for pain at the time of overdose (Figure 1).
- Tapering trends were similar between cases and controls.
- The average rate of taper was a 9% decrease per two-week period (consistent with guidelines), and cases had been tapering for two months on average.

Key messages and next steps:
The interpretations and conclusions below are those of the BC Overdose Cohort analysis team and the BC Centre for Disease Control.

- Recent initiation, recent discontinuation, or active tapering from opioids for pain, are relatively rare among individuals who overdosed. While they may have been important contributors to some overdose events, these therapy-related factors do not appear to be an important driver of the overall overdose risk in the B.C. population.
- However, prospective multivariate analysis is required to confirm the relative contribution of prescription-drug related therapy risk factors to overdose risk.

Analysis Team:

- Kate Smolina (BCCDC/Observatory)
- Alexis Crabtree (BCCDC)
- Mei Chong (BCCDC)
- Chris Mill (Observatory)
- Mina Park (BCCDC)
- Chris Mill (PHAC/BCCDC/Observatory)
- Bin Zhao (BCCDC)
- Andrew Pacey (FNHA)
- Jennifer May-Hadford (FNHA)
- Tim Chu (VCH)
- Christian Schütz (PHSA/UBC)
Tapering of opioids for pain prior to OD

- Few cases were tapering at the time of OD
- The average rate of taper was 9% decrease per 2 week period (consistent with guidelines), and cases had been tapering for 2 months on average
- Trends were similar between cases and controls

Figure 1: Tapering of opioids for pain prior to overdose.