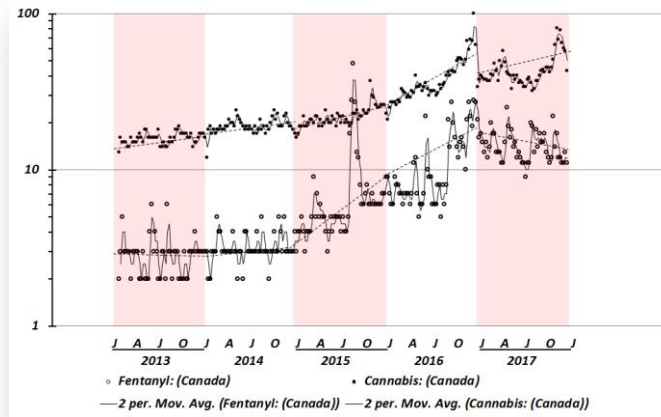
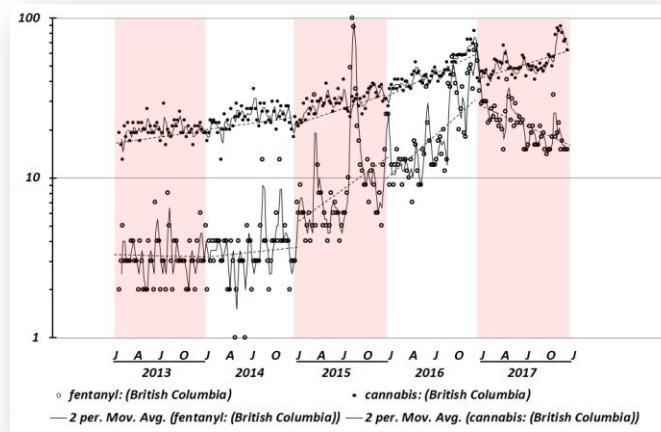


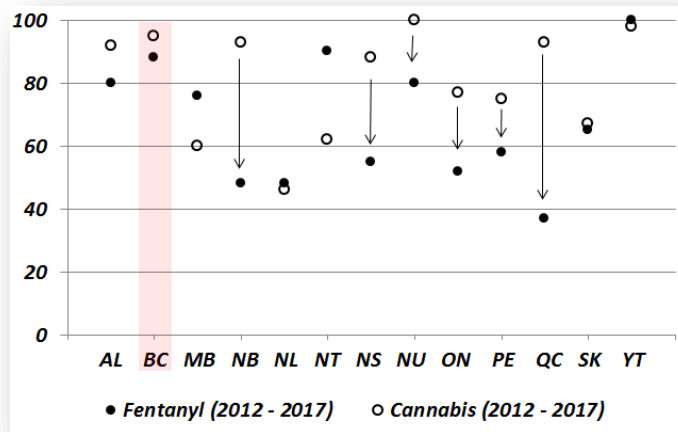
BCTOX's Toxicology Surveillance in BC
 Shifting public interest – Comparison of Fentanyl and Cannabis - 2013-2017



Shifting public interest (2013 to 2017) for the whole Canada. Data points are relative to the maximum search in two week periods. As can be seen, in recent months public searches for *fentanyl* decreased and for *cannabis* increased. These could be related to the fact that we are approaching the date of legalization of *cannabis* in the country.



Shifting public interest (2013 to 2017) for British Columbia. Data points are relative to the maximum search in two week periods. As can be seen, in recent months public searches for *fentanyl* decreased and for *cannabis* increased. These could be related to the fact that we are approaching the date of legalization of *cannabis* in the country. The number of deaths regarding fentanyl overdose has also decreased in recent months in the Province.



Comparing public interest in different Provinces (2012 – 2017). [Figures are relative to the maximum search in two week period] In general, searching for Cannabis was higher in majority of provinces but Manitoba and Northwest Territory.

BCTOX's Toxicology Surveillance in BC

Shifting public interest - Fentanyl, Heroin, Cocaine and Cannabis - 2017 alone

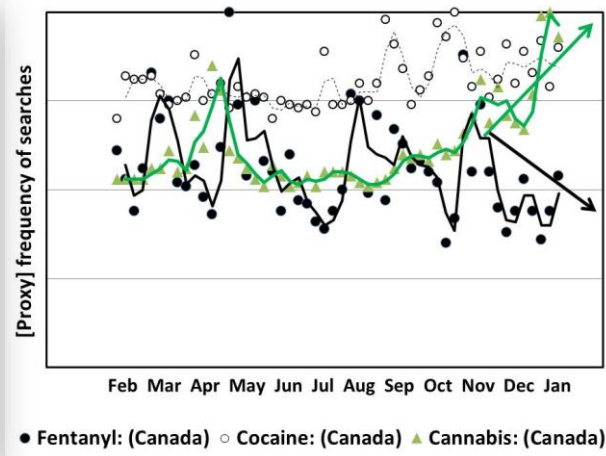
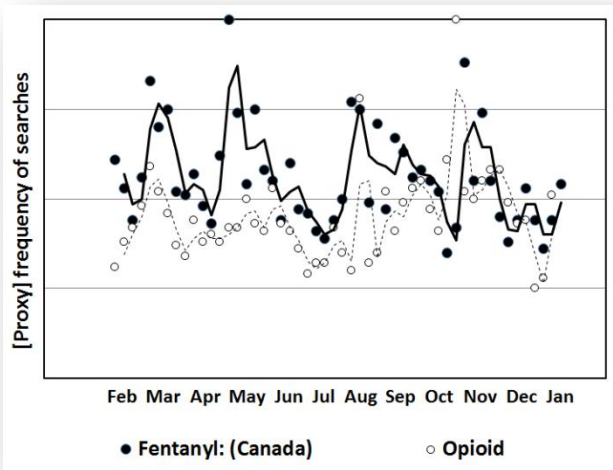
BCTOX is reporting the trends of public interest (Public-&Professional searches) for major toxicology related issues in BC as a new surveillance system using google trends as surrogates of public attitude. The following graphs show the proxy frequency of searches for the keywords from Feb 2017 to Jan 2018. Each variable is compared with itself (the highest frequency of searches over a two week period in 2017 serves as the baseline (highest)). As just the trends (but not the actual numbers) are important and feasible, no values are given for the vertical axis. --- For clarity of the message, the regression lines are presented as moving averages with period of 2.

As can be seen, the public relative interests in "fentanyl" as compared to search term "opioids" are similarly shifted in both Canada and BC (figure A -1 and A-2)[left side].

These findings are also not consistent when fentanyl searches are compared to "cannabis" and "cocaine" (figure B-1 and B-2)[right side]. This is despite the fact that fentanyl overdose induced deaths have remained relatively high, and as we are approaching the cannabis legalization.

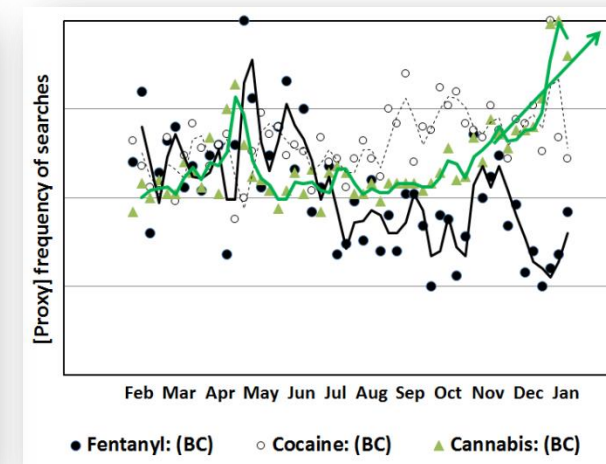
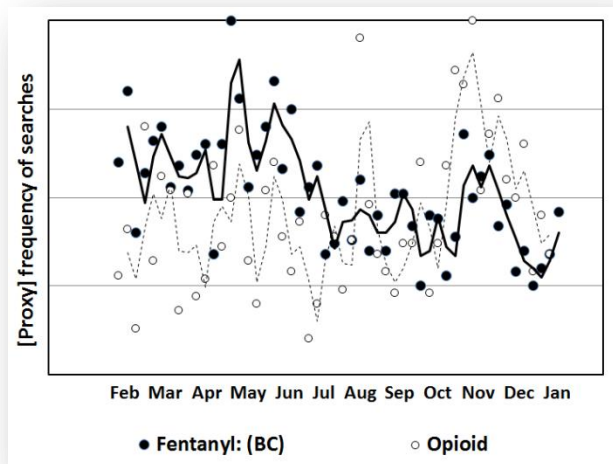
This finding has public health relevance in the province. Measures should be taken to keep engaged public (or avoid social fatigue) regarding the relative importance of "fentanyl" and in the influence of the process of Cannabis legalization.

--- Public searches for "fentanyl" (Fu-F)" (less potent) and carfentanyl (more potent) analogs of fentanyl were not included.



A-1. Canada

B-1. Canada



A-2. British Columbia

B-2. British Columbia

"Fentanyl" public searches as compared to "opioids" as a whole (Past 12 month to Jan 22, 2018)

"Fentanyl" public searches as compared to "Cannabis" and "Cocaine" (Past 12 month to Jan 22, 2018)

BCTOX's Toxicology Surveillance in BC

Shifting public interest - CO, Mushroom, Plant, bites, and air, water, soil and food poisoning or pollution - 2017

Figure C shows that public was more concern of carbon monoxide poisoning during colder months of the year.

Figure D suggests that public searches start earlier for plant poisoning as compared to bites and stings followed by mushroom. "Plant" and Mushroom" was used as surrogates for "plant poisoning" and "mushroom poisoning".

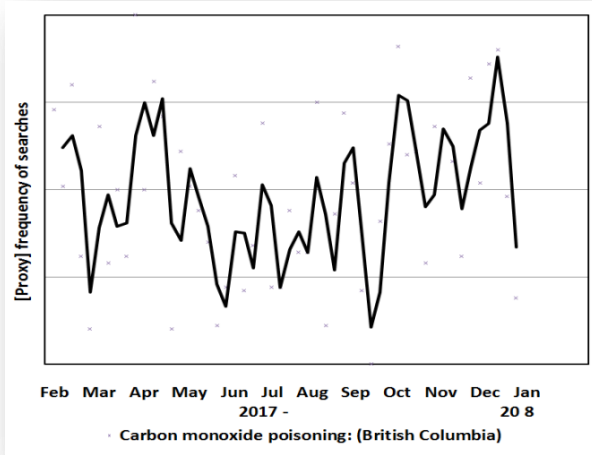


Fig C. Public interest in carbon monoxide poisoning during the past 12 months) (frequency of searches from Feb 2017 to Jan 2018)

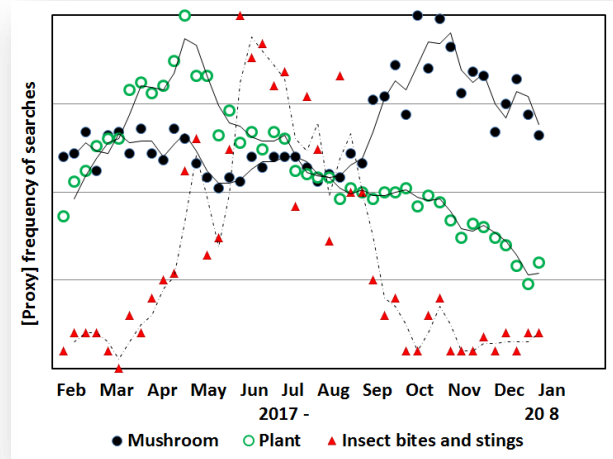
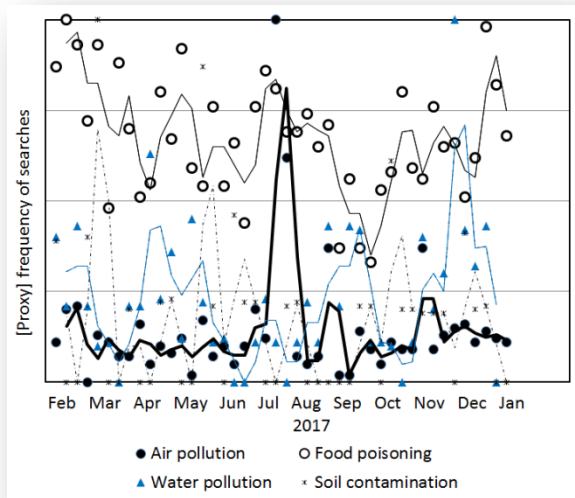


Fig D. Public interest in "Bites or stings" as compared to "plants" and "mushroom" (frequency of searches from Feb 2017 to Jan 2018)



The pattern of public interest for "air pollution" was disrupted in July and August, which coincide with forest wildfires (figure E).

Fig E. "Air pollution" as compared to other routes of exposure to contaminants (frequency of searches from Feb 2017 to Jan 2018)