

THE OPIOID CRISIS IN CANADA

A focus on the rapidly growing killer: **Fentanyl**



TABLE OF CONTENTS

INTRODUCTION	1
BACKGROUND	2
PROBLEM LANDSCAPE	3
CONTRIBUTION FACTORS	4
SOLUTIONS LANDSCAPE	6
BRIDGING THE GAP	7
GAPS & LEVERS OF CHANGE	7

INTRODUCTION

In recent years, provinces across Canada have been contending with the escalating and exponentially growing fentanyl crisis.

Seemingly, the use of illicit opiates has become an ubiquitous aspect of life across developed nations in the twenty-first century, leading to overdose epidemics and the rapid diffusion of dangerous illicit substances into market through transnational cartel organizations (Hayashi et al, 2018). **Canada is among the hardest hit nations in the world**, with death rates increasing more than 300% since 2008. In addition, hospitals have had an **average of 16 visits per day** being related to overdose from use of illicit fentanyl or other opioids, and these rates have continued to rise (Hayashi et al 2018). Due to the unprecedented scope of this epidemic, policy makers, health care systems, and communities are facing a public health emergency without any clear consensus around effective and long-term solutions.

There are several types of opioids such as heroin, methadone, OxyContin, and fentanyl. However, much of this analysis will focus on **fentanyl as it is implicit in over 65% of drug related overdoses**, and this number is continually on the rise.

What are Opioids?

Opioids are a group of medications that act on opioid receptors in the brain to produce pain relieving effects. Opioids bind to receptors found principally in the central and peripheral nervous system and produce endorphins that create positive feelings and reduce pain. Due to the binding action of opioids, one of their most significant side effects is suppression of respiratory stimulus, and respiratory arrest, making overdose often fatal, and inevitable (Alberta Health Services, 2018). Eventually, with prolonged use, opioids trick the brain into stopping production of these endorphins naturally, and the only way to produce them is to continue to take the drug in question. This is what makes opioids particularly addictive (Alberta Health Services, 2018).





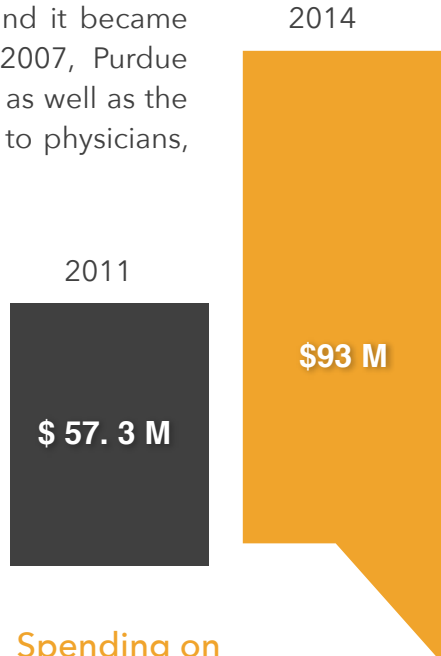
What is Fentanyl?

Fentanyl is a powerful synthetic pain reliever that is chemically similar to morphine, **but about 50 to 100 times more potent** (Jaimet, 2017). The lethal dose of fentanyl for the average individual is 2 mg, this dose is the **equivalent measure to two grains of table salt**. This necessarily makes measurement and dosing exceptionally difficult and imprecise for those using this substance illicitly, and as a result makes it more dangerous (Benedikt, 2018).

Background

The opioid epidemic begins with the introduction to market of OxyContin by Purdue Pharmaceuticals in 1995. At the time, this medication was promoted as an alternative to existing pain therapy regimes that did not produce the same danger of addiction, and that could be used on a frequent basis and for the layman so that individuals no longer had to live with pain (CNN, 2016). Following the massively successful marketing campaign, use of OxyContin skyrocketed and it became one of the fastest growing prescribed medications on the market. In 2007, Purdue pharmaceuticals settled in an unprecedented lawsuit for 600 million dollars, as well as the individual executives settling for 35 million dollars for fraudulent marketing to physicians, patients and the public (ibid).

Due to its increased addictive properties, OxyContin was pulled from the Canadian market in 2012 and as a result prescription of alternative opioid medications such as fentanyl skyrocketed to replace the lost medications, rather than to provide alternative therapies and treatments for pain. The widespread introduction of fentanyl in the form of the spray, known as Subsys, was approved for end stage cancer pain. As well, the required increase in fentanyl prescriptions to replace use of OxyContin fentanyl has permeated the pharmaceutical industry, healthcare systems, and the illicit street drug trade across the country at an alarming rate. As such, there is an urgent need to characterize exposure to illicit fentanyl, and guide policy and clinical practice to reduce harm and improve safety for all.



Spending on medications used for addiction to prescription painkillers and illicit opioids

Problem Landscape

In 2017, fentanyl was responsible for more deaths in Canada than motor vehicle accidents, these deaths most often occur in those aged 30-39.

This makes this crisis a killer of the young, and it is imperative that policy and programming is directed and targeted at younger audiences to engage in early education and health promotion. 2018 has already seen the request of over 100,000 naloxone kits across Canada. While these kits are lifesaving medicines that are essential, **they do nothing to treat the underlying cause** of the problem, but rather **place a band-aid on a severe symptom of that cause**. Over 4000 people died in Canada in 2017 as a result of overdose. Currently, the rate of death due to overdose in Canada is 8.8 individuals per 100,000. This number is continually rising each year, and if not remedied, opioid related deaths are on trajectory to become a leading cause of death in developed nations across the world.



Fentanyl is not just deadly to users.

Several law enforcement officers and first responders have overdosed during investigations. Touching or accidentally inhaling fentanyl is enough to cause an overdose.



Fentanyl nicknames include:

Apache, China Girl, China White, Dance Fever, Friend, Goodfella, Green beans, Jackpot, Murder 8, Shady 80s, TNT, and Tango and Cash



Overdose signs and symptoms include:

Severe sleepiness, slow and shallow breathing, lips and nails turn blue, person is unresponsive, gurgling sounds or snoring, cold and clammy skin, tiny pupils.

Contributing Factors

There are several factors that contribute both to the complexity and perpetuation of this epidemic. The scale and multi-national nature of producers makes financial incentives high, regulation increasingly difficult, and enforcement nearly impossible at a large-scale level due to the nature of these organizations.

Canada receives the majority of its fentanyl supply from either China directly, or through Mexico. Mexico receives the chemicals required to produce fentanyl from China and pinpointing the root of production in organizations that are this globally spread is not possible without multi-level partnerships between governments and many international partners and organizations.

Additionally, due to the manufacturing time associated with utilizing poppy plant resin to make non-synthetic opioids, fentanyl is seen as even more cost effective because production times are reduced and actual outputs are larger and have higher street value in real terms.

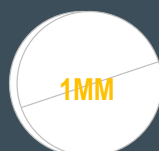
There is **mass market production of fentanyl** in China and Mexico which can be **ordered off the internet with guaranteed delivery requiring nothing but a shipping address.**

Often, packaging of fentanyl in an undetectable manner is quite simple: Since **1 kilogram of product is worth over 20 million dollars** in street value, and thus very **small quantities can be creatively camouflaged and hidden in relatively small and unambiguous packaging.** One way this often occurs is through placing smaller quantities of fentanyl in silica packages that accompany other medical deliveries such as urine test strips. This makes detection by Canadian Border Services highly unlikely and is maintaining and increasing the street supply at an alarming rate. Canadian Border Services are not permissible to search packages under 30 grams without first receiving permission from the supplier. This is a **massive gap in regulatory and detection abilities** that further perpetuates the massive supply and demand of fentanyl onto the Canadian market (Globe and Mail, 2016).

Another significant problem is the **cyclical nature of government** experienced in representative democracy. Elected individuals have only four years to create large-scale federal-level programs as well as to find appropriate resources to fund these programs. Often, a change in government means a cutting of social programming due to competing ideologies and alternative prioritization. Within Canadian governments, Liberal party leadership is more likely to create and fund the types of harm reduction programs required to alleviate this public health emergency, while these programs are often severely scaled back or cut in Conservative leadership in favour of austerity.



FENTANYL
\$12,500 CAD



\$20/TABLET



\$20 MILLION
PROFIT

Healthcare systems within Canada also **severely lack the capacity** to deal with a problem of this magnitude independently. In addition, there is a lack of education between healthcare providers and communities perpetuating judgement and social exclusion that often leads to a cyclical worsening of the problem. There is also a lack of capacity of existing programs to treat addiction to opioids because current programs are generalized to meet the needs of addicts, and not specific to the particular complexities that come with opiate addiction such as the lack of endorphin production, significant chemical dependency, as well as the identification of the cause of addiction in the first place. Another area of significant concern is the sheer number of individuals who **unknowingly ingest fentanyl** because it is used as a filler in many other medications to reduce production time and costs.



The use of opiates is at an all-time high within healthcare systems. The **pharmaceuticalization of Western society** always requiring an antidote or pill to solve medical and physical ailments, means many individuals are placed on opioids when in the healthcare system for very real illness and injury. In some cases, these individuals are taking these medications for long enough periods to develop dependence and **become addicted as a result of it being a part of their medical treatment.** Alternative therapies, and stringent policies related to length of and appropriate indication of use, are absolutely paramount in combating this epidemic.

The facts and dangers of fentanyl:

- Heroin, cocaine, oxycodone and other drugs can be cut with fentanyl, in powder, liquid or pill form.
- You can't see it, smell it or taste it.
- It has been used in tablets made to look like prescription drugs.

Solutions Landscape

There are organizations and advocacy groups currently trying to combat the opioid epidemic. Programs such as Safe Works and other **harm reduction** models allow individuals to use under the supervision of healthcare professionals for increased safety, faster intervention, furthered education, and the chance of referral to rehabilitation centres or other community programs. Places like Calgary's Drop-In & Rehab Centre and notably, North America's first supervised injection site, Insite, located in Vancouver's Downtown Eastside, work together to share solutions and attempt to scale up funding to widen the scope of such programs.

The impact of opioids is becoming widely known within healthcare systems, and education programs are being rolled out in order to arm health care providers with the tools and expertise necessary to engage with and help to improve this crisis.

A federal level example is the **Naloxone program** which allows any individual in Canada to walk into a pharmacy and request a Naloxone kit to keep on their person so that they may intervene effectively and efficiently should they come across an individual experiencing an overdose in order to save their life. **More dissemination of recognition of symptoms** and the availability of these kits is essential in upscaling this solution to having a higher impact.

What's Working Elsewhere: Portugal's War on Drugs

By the 1990s, 1 percent of Portugal's population was hooked on heroin. It was one of the worst drug epidemics in the world, and it prompted Portugal's government to take a novel approach: It decriminalized all drugs. Starting in 2001, possession or use of any drug – even heroin – has been treated as a health issue, not a crime. Under the 2001 decriminalization law, drug dealers are still sent to prison. But anyone caught with less than a 10-day supply of any drug – including heroin – gets mandatory medical treatment (Frayser, 2017)



Bridging the Gap

Federal, provincial and territorial ministers of health, along with the other health sector partners, recognized that they also have a particular role to play in tackling the opioid crisis. In fact, no one organization, approach or level of government can effectively address this crisis on their own. There is a **need for collective action to achieve collective impact**.

Gap	Lack of education & dissemination of knowledge
Lever of Change	Education programs and community engagement
Healthcare Systems	Integrate provider education programs into training and annual certification.
Governments (Federal, Provincial, and Municipal)	Provide educational programs in early education.
NGO's	Engage with communities and across sectors to disseminate teaching.
Communities	Share knowledge and engage with programming.
Corporations	Create comprehensive educational material related to products. Market transparently.
Regulation & Policy	Make education related to the danger of opioids policy for all patients taking medications in hospital, and in high schools across Canada.

Gap	Lack of capacity
Lever of Change	Delegation of sufficient resources.
Healthcare Systems	Delegate sufficient time to education of staff, and to the procurement of naloxone and appropriate opioid antidotes
Governments (Federal, Provincial, and Municipal)	Provide sufficient funding to increase capacity of programs to reach larger numbers of individuals.
NGO's	Utilize expertise and lobbying ability to fundraise
Communities	Help in fundraising efforts where plausible.
Corporations	Corporate financial responsibility for the consequences of products by helping to fund rehabilitation and naloxone programs.
Regulation & Policy	Further regulate markets and corporations to reduce unnecessary availability and improve capacity and resilience.

Gap	Lack of Federal policies.
Lever of Change	Development of more comprehensive cross-sectoral partnerships.
Healthcare Systems	Create in hospital policies that favour alternative management of pain were possible
Governments (Federal, Provincial, and Municipal)	Work with provinces to make cross Canada policies increasing regulation of illicit drugs and improving detection of exports.
NGO's	Lobby governments to improve policy and engage with communities.
Communities	Pressure governments to improve on policies and hold them accountable.
Corporations	Transparent and responsible marketing, follow regulations and improve standards.
Regulation & Policy	Promote national level comprehensive regulations and policies.

Gap	Lack of support.
Lever of Change	Community outreach, education, and social inclusion.
Healthcare Systems	Help with community and provider outreach and education.
Governments (Federal, Provincial, and Municipal)	Create more space to engage with the issue locally and nationally.
NGO's	Promote social inclusion and acceptance.
Communities	Engage in self education, and don't participate in social exclusion.
Corporations	Support rehabilitation, education, and community initiatives.
Regulation & Policy	Create inclusive policies that address the needs, and don't exclude individuals based on value judgements of misconceptions.



100 %

Of deaths as a result of fentanyl overdose are
preventable



CARRY A NALOXONE KIT



CALL 9-1-1



#STOPOVERDOSE