Opioid Agonist Therapy 101: An Introduction to Clinical Practice Workshop

A Review of Opioid Use Disorder and Emerging Inpatient and Community Disease Patterns

Adapted from a presentation developed by: Dr. Ginette Poulin
Speaker: Dr. Marina Reinecke MBChB, CCFP(AM), ISAM

Faculty/Presenter Disclosure

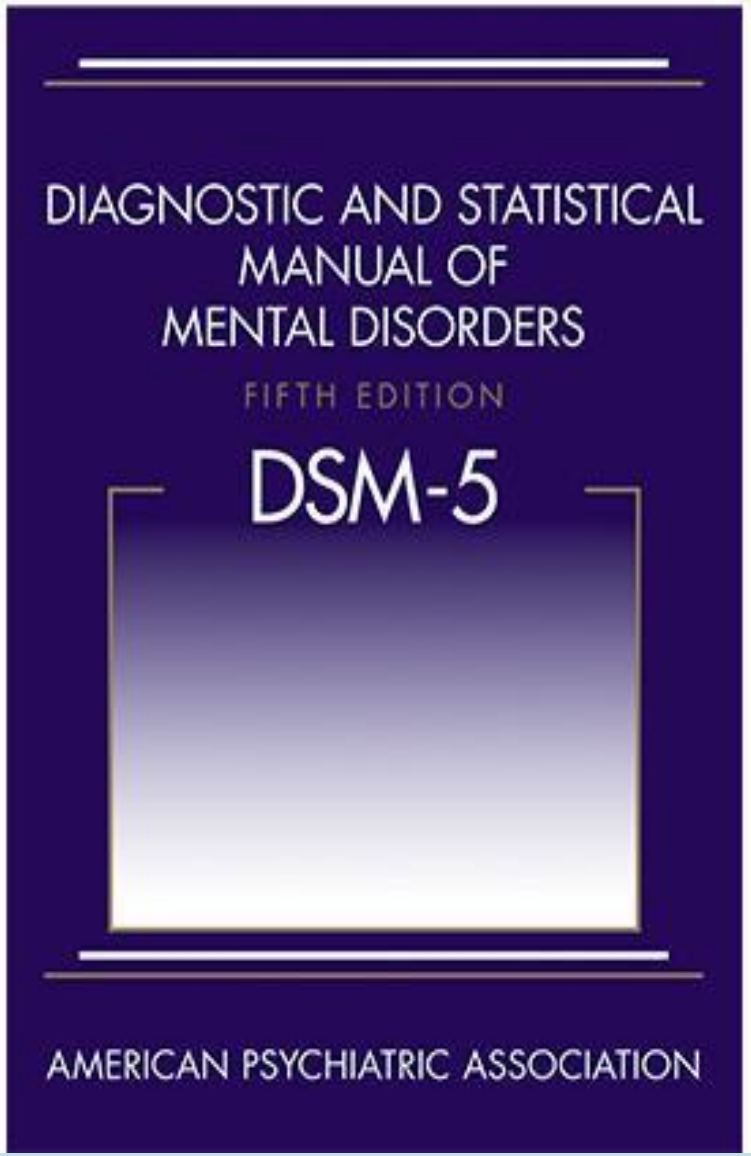
- **Faculty: Dr. Marina Reinecke**
- **Relationships with commercial interests: None**

Learning Objectives

Upon completion of this educational activity the participant will be able to:

- Comprehend Addiction as a chronic illness
- Define Opioid Use Disorder (OUD)
- Review historical and current opioid use trends and explain its impacts on individuals and society
- Identify common complications of Substance Use Disorders (SUD) and intravenous drug use (IDU)
- Distinguish Harm Reduction versus Abstinence
- List the benefits and challenges associated with OAT

Diagnosis


DIAGNOSTIC AND STATISTICAL
MANUAL OF
MENTAL DISORDERS
FIFTH EDITION
DSM-5
AMERICAN PSYCHIATRIC ASSOCIATION

Substance Use Disorder – DSM V

- In DSM-V, criteria for Substance Abuse and Dependence combined into "(Substance) Use Disorder"

- Levels of severity:
  - Mild: Presence of 2-3 symptoms
  - Moderate: Presence of 4-5 symptoms
  - Severe: Presence of 6 or more symptoms

Substance Use Disorder – DSM V

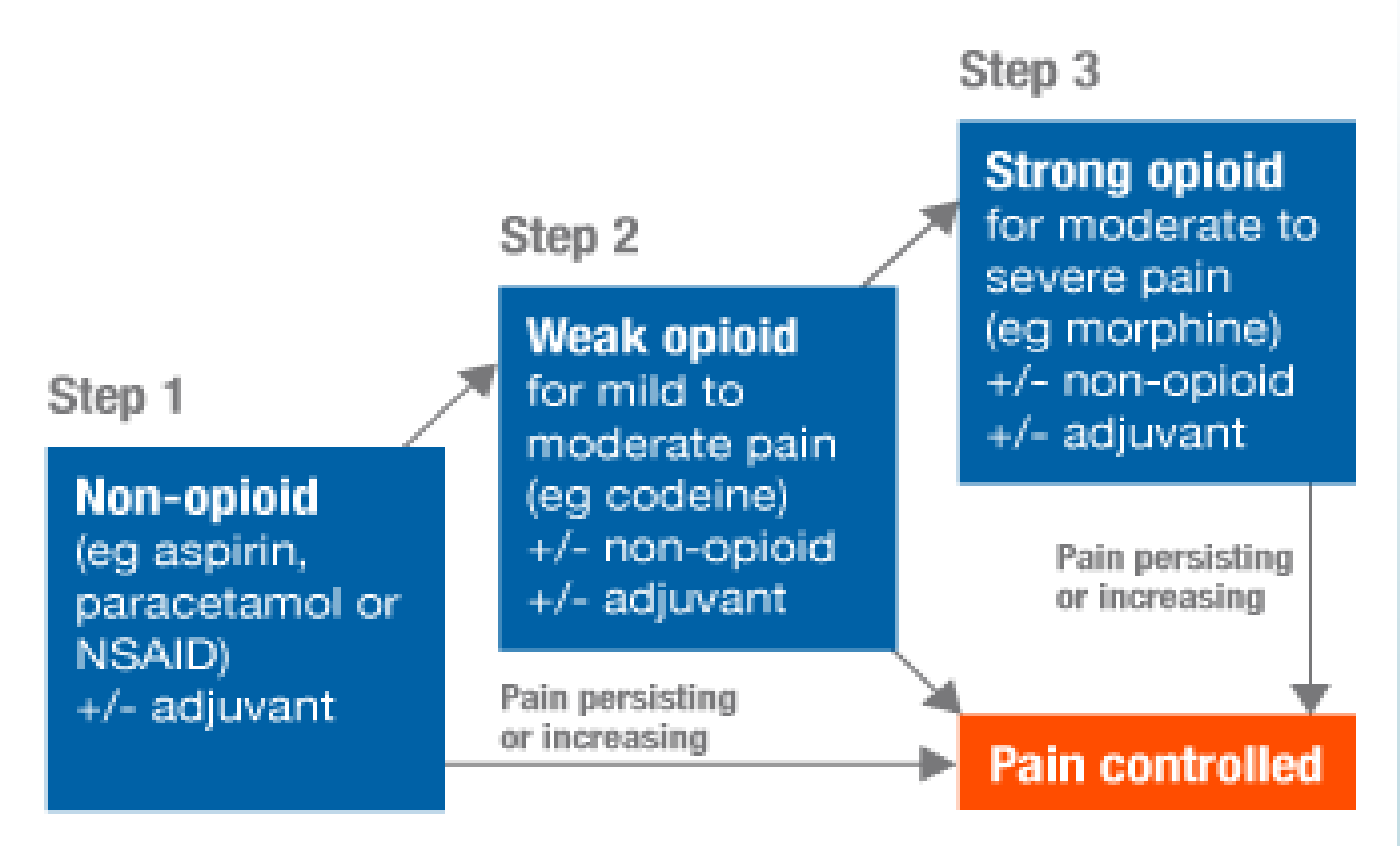
A. A problematic pattern of substance use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

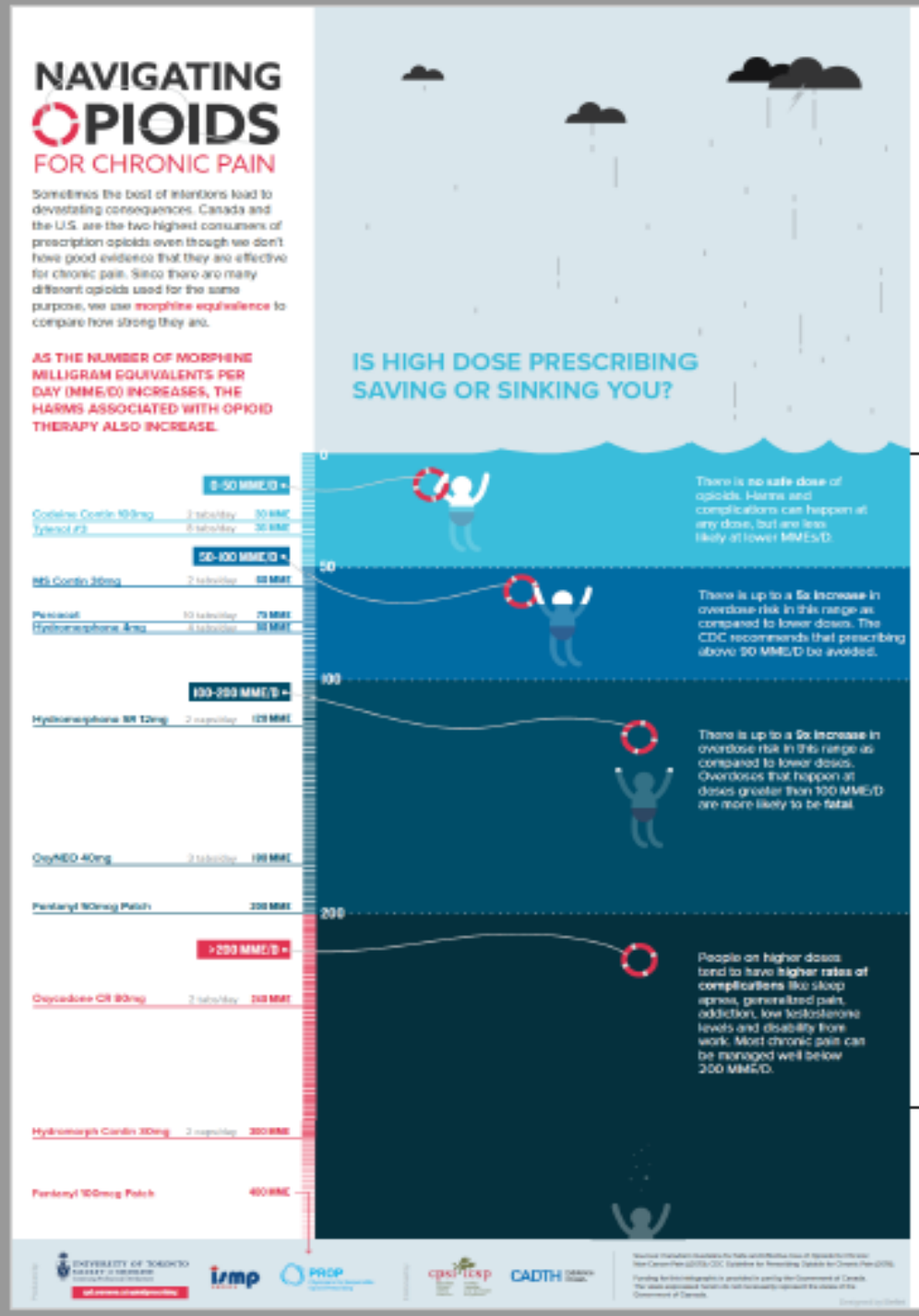
(1) Substance is often taken in larger amounts or over a longer period than was intended.
(2) Persistent desire or unsuccessful efforts to cut down or control substance use.
(3) A great deal of time spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
(4) Craving, or a strong desire or urge to use substance.
(5) Recurrent use resulting in a failure to fulfill major role obligations at work, school or home.
(6) Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.
(7) Important social, occupational or recreational activities are given up or reduced because of use.
(8) Recurrent substance use in situations in which it is physically hazardous.
(9) Substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
(10) Tolerance (increased amounts needed to get desired effect; or diminished effect with same amount).
(11) Withdrawal (characteristic withdrawal syndrome; or the same or related substance taken to avoid or relieve withdrawal symptoms).

		Yes	No
1.	Opioids are often taken in larger amounts or over a longer period than was intended.	☐	☐
2.	There is a persistent desire or unsuccessful efforts to cut down or control opioid use.	☐	☐
3.	A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.	☐	☐
4.	Craving, or a strong desire or urge to use opioids.	☐	☐
5.	Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.	☐	☐
6.	Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.	☐	☐
7.	Important social, occupational, or recreational activities are given up or reduced because of opioid use.	☐	☐
8.	Recurrent opioid use in situations in which it is physically hazardous.	☐	☐
9.	Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.	☐	☐
10.	Tolerance, as defined by either of the following: a. A need for markedly increased amounts of opioids to achieve intoxication or desired effect. b. A markedly diminished effect with continued use of the same amount of an opioid. *Note: This criterion is not considered to be met for those taking opioids solely under appropriate medical supervision.*	☐	☐
11.	Withdrawal, as manifested by either of the following: a. The characteristic opioid withdrawal syndrome b. Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms. *Note: This criterion is not considered to be met for those individuals taking opioids solely under appropriate medical supervision.*	☐	☐

WORLDWIDE OPIATE CONSUMPTION

WHO ANALGESIC LADDER



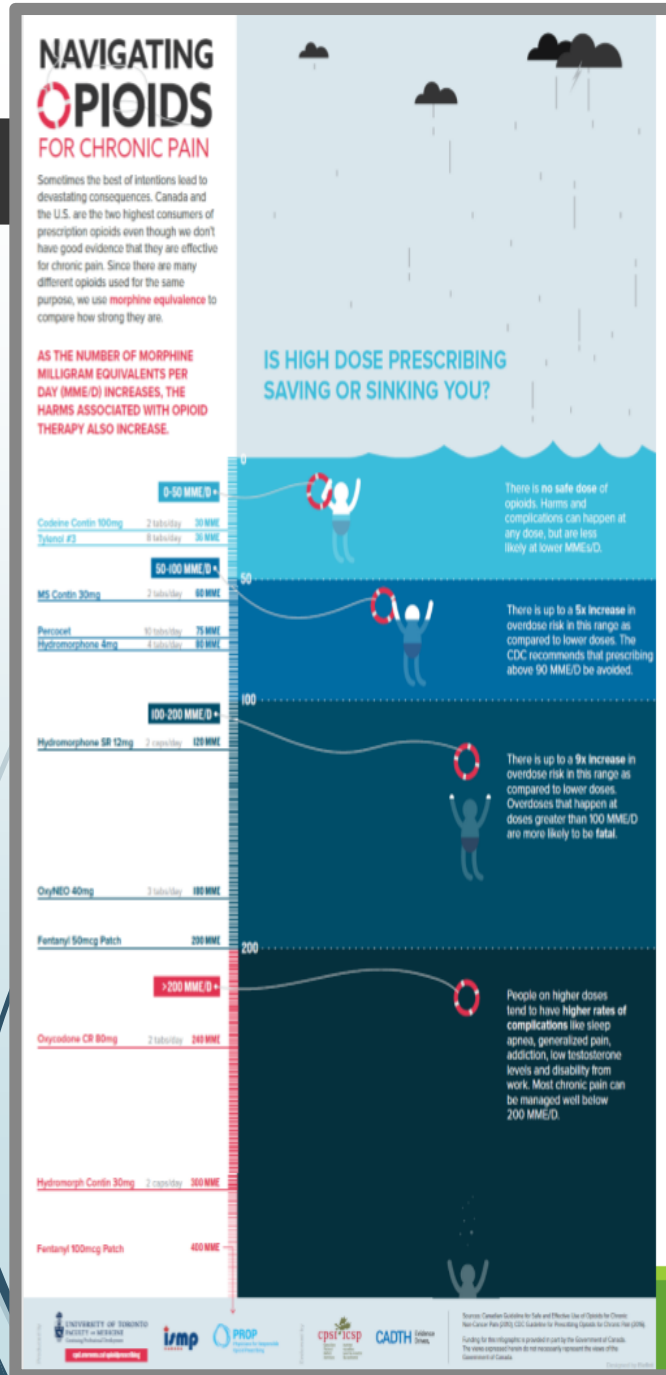


Updated March 1, 2018

Number* of Unique Patients in Manitoba with "Average Morphine Equivalence Per Day"**

Ave. MME Per Day	Q4 2017: Oct. 1 2017 to Dec. 31, 2017		% Var. # Unique Patients from Prev. Year	Q4 2016: Oct. 1 2016 to Dec. 31 2016	
	# Unique Patients	Proportion of Unique Patients		# Unique Patients	Proportion of Unique Patients
0 to 50	4,203	45.2%	↑ 1.8%	4,128	44.5%
50 to 90	2,365	25.5%	↑ 4.0%	2,273	24.5%
90 to 200	1,937	20.8%	↓ (0.7%)	1,951	21.0%
>200	787	8.5%	↓ (14.6%)	922	9.9%
	9,292	**100.0%**	**↓ (2.5%)**	**9,274**	**100.0%**

*Data source is DPIN, excludes Long Term Care & Palliative Care clients; does not include drugs dispensed in hospital. Includes fentanyl.
** MME Per Day Calculated by taking Total MME divided by Days Supply

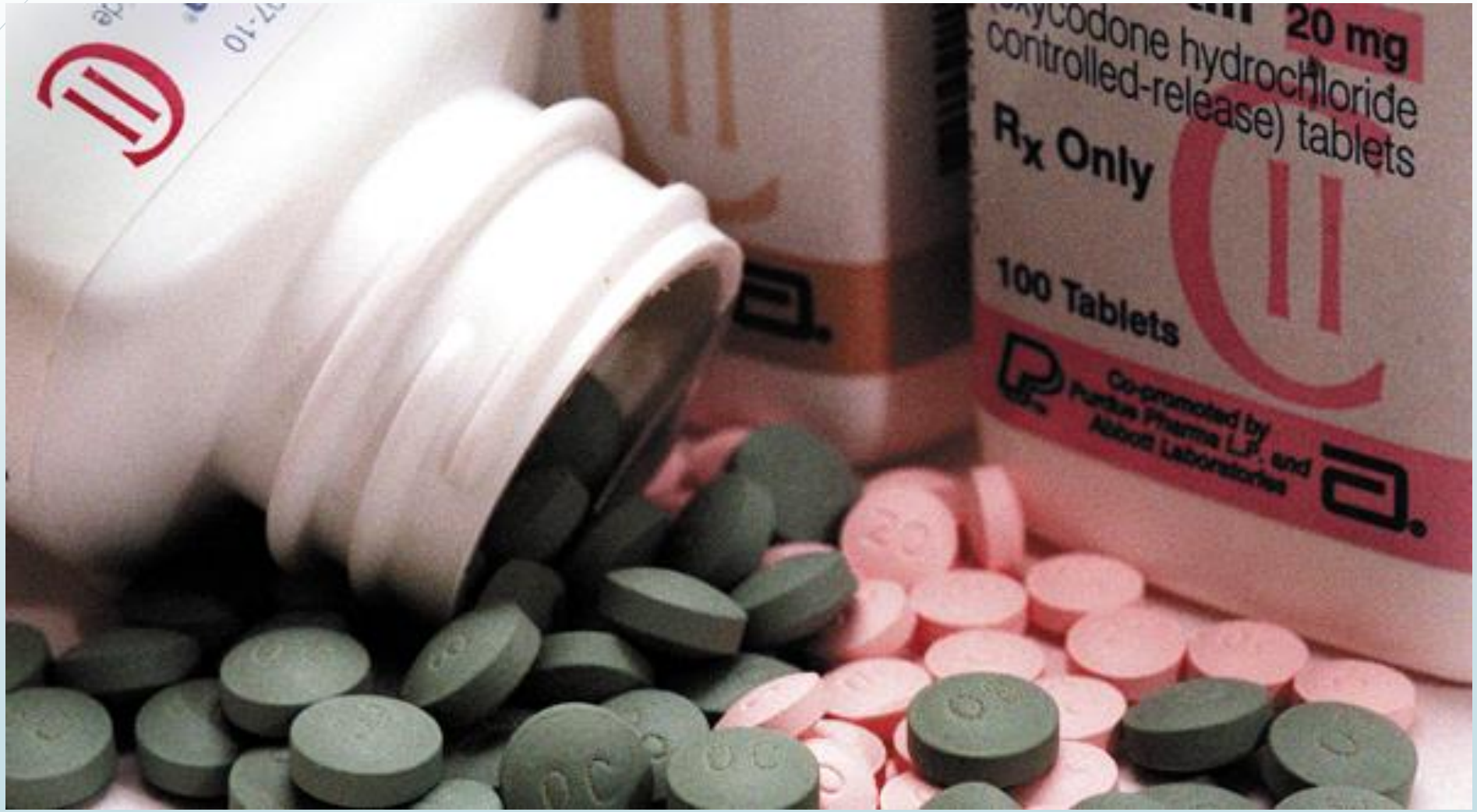


Number* of Unique Patients in Manitoba with "Average Morphine Equivalence Per Day"**

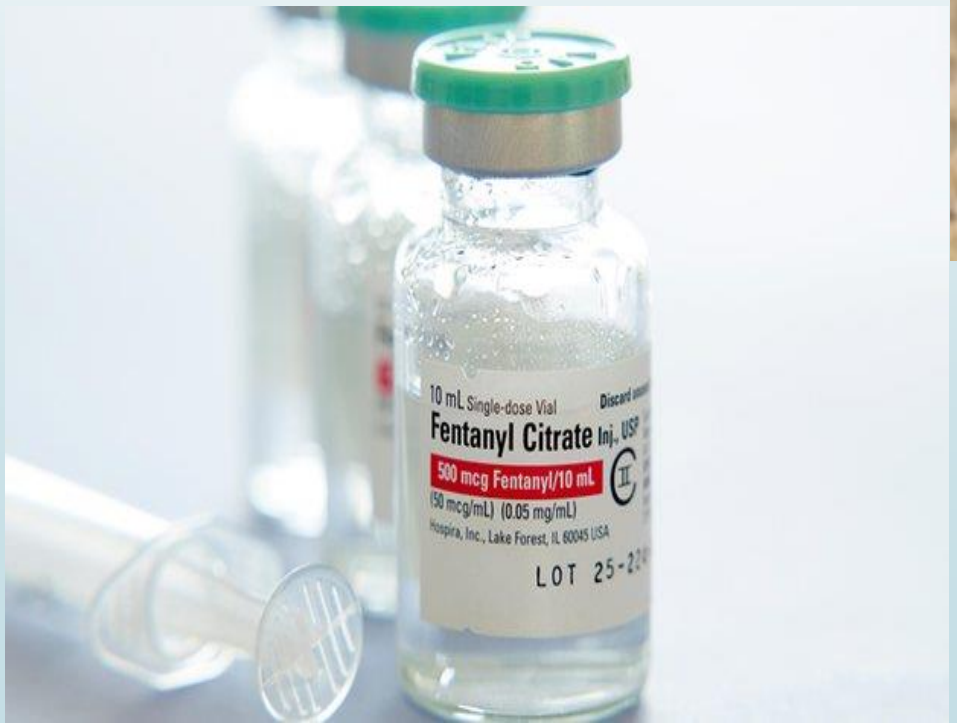
Ave. MME Per Day	Q4 2020: Oct 1 2020 to Dec 31, 2020 WITH codeine and Percocet	
	# Unique Patients	Proportion of Unique Patients
0 to 50	49,102	89.5%
50 to 90	4,238	7.7%
90 to 200	1,167	2.1%
>200	349	0.6%
	54,856	**100.0%**

*Data source is DPIN, excludes Long Term Care & Palliative Care clients; does not include drugs dispensed in hospital. Includes fentanyl.
** MME Per Day Calculated by taking Total MME divided by Days Supply. Average MME at the patient level, not the average MME per prescriber.

OXYCONTIN and Pharma



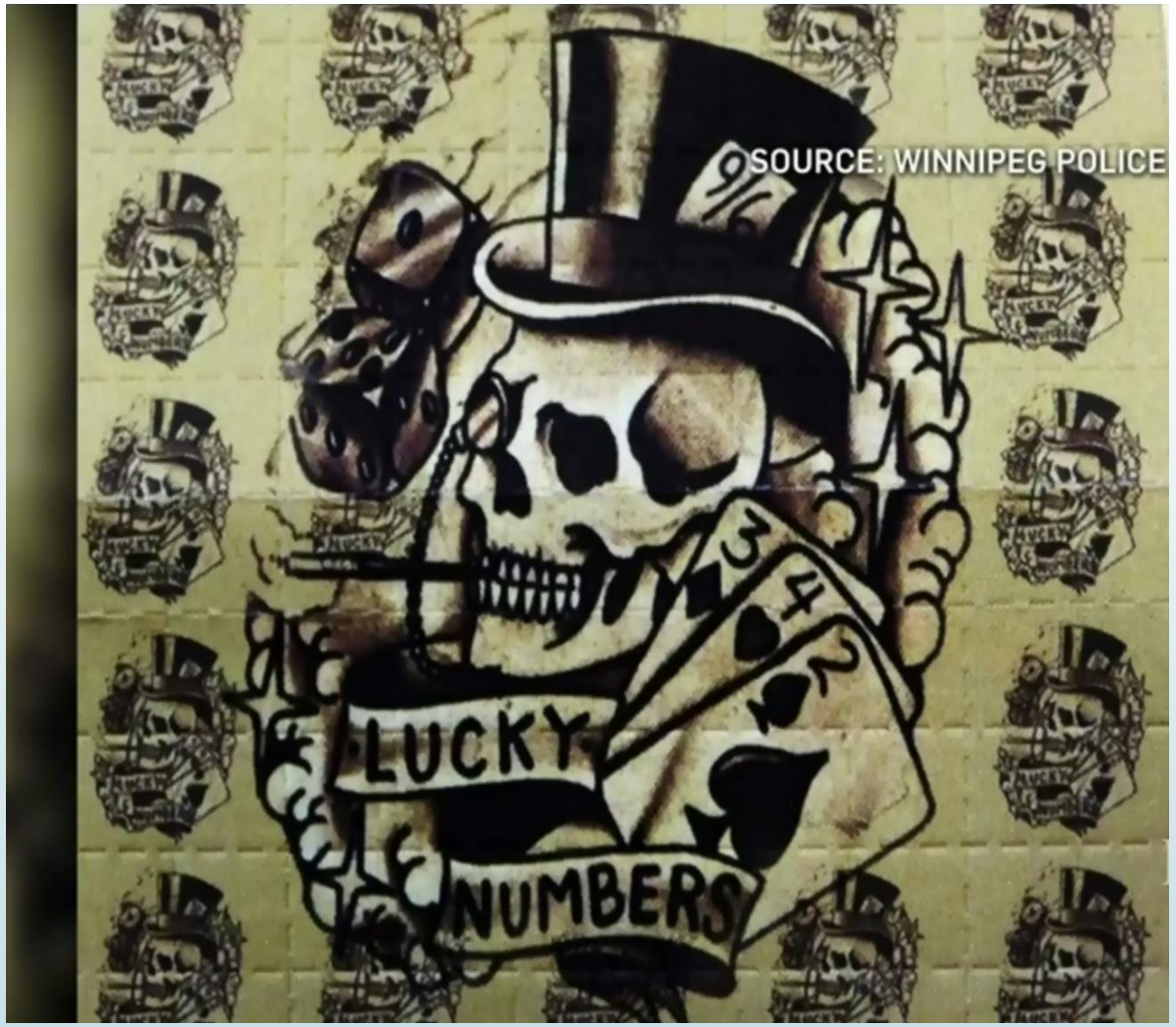
FENTANYL


10 mL Single-dose Vial
Fentanyl Citrate Inj, USP
500 mcg Fentanyl/10 mL
(50 mcg/mL) (0.05 mg/mL)
Hospira, Inc., Lake Forest, IL 60045 USA
LOT 25-2


DIN 02282976
DIN 02282941
5 PATCHES/TIMBRES
ratio-FENTANYL
25 mcg/h
opioid analgesic • analgésique opioïde
ratiopharm
DIN 02282968
50 mcg/h

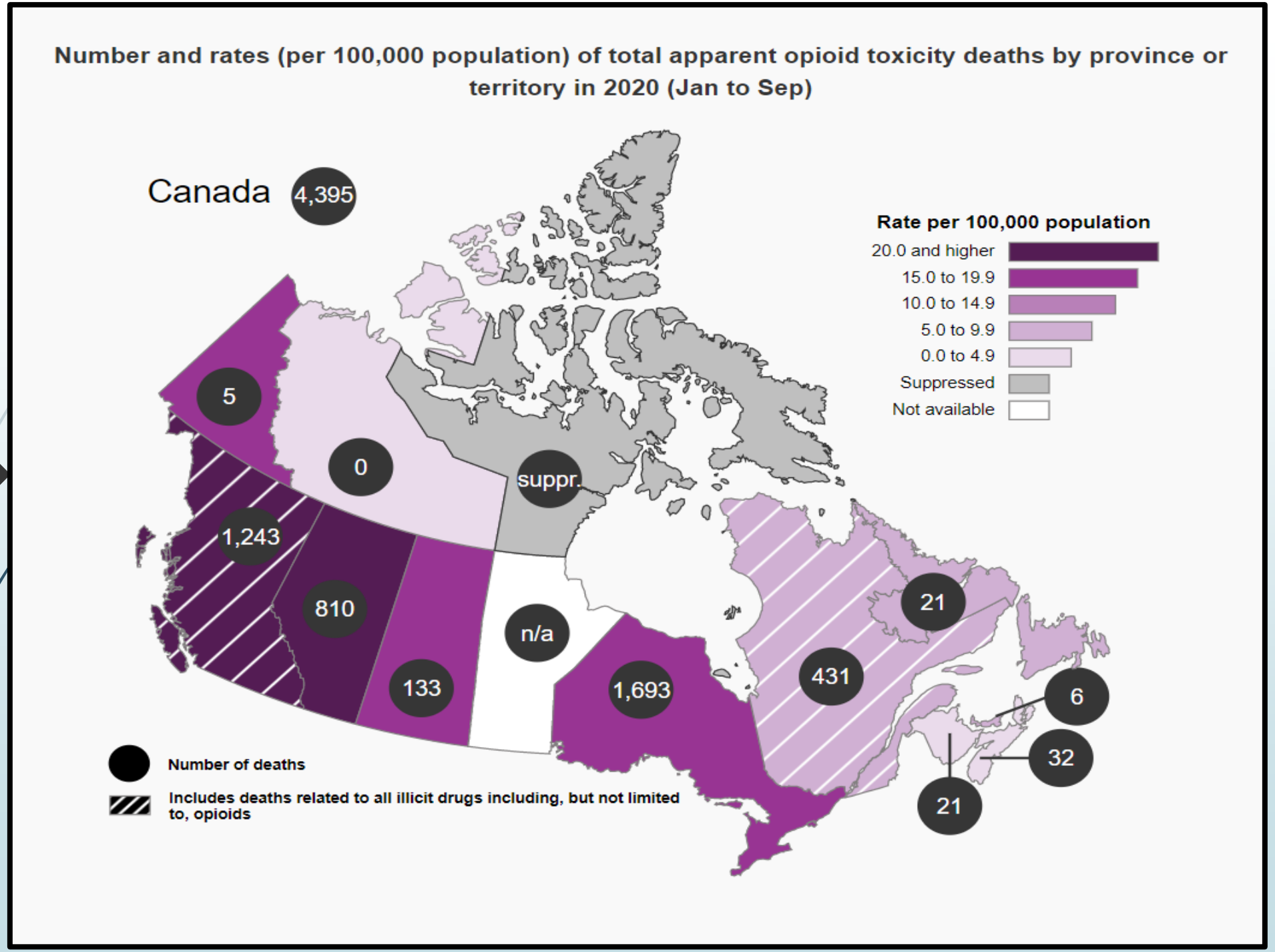
Non-prescription Fentanyl

- Fentanyl smuggled in from China via west coast.
- Different fentanyl analogues with varying strengths (carfentanil)
- Attainable from internet pharmacies – 1 kg goes a long way (100K street value)
- Adulterated into other drugs:
  - West coast heroin 70%
  - Local – adulterated into powdered cocaine, crystal meth, fake oxys.
  - Blotter tabs



OXYNEO and COUNTERFEIT

An Opioid Crisis


Number and rates (per 100,000 population) of total apparent opioid toxicity deaths by province or territory in 2020 (Jan to Sep)
Canada
4,395
Rate per 100,000 population
20.0 and higher
15.0 to 19.9
10.0 to 14.9
5.0 to 9.9
0.0 to 4.9
Suppressed
Not available
5
0
suppr.
1,243
810
133
n/a
1,693
431
21
6
32
21
Number of deaths
Includes deaths related to all illicit drugs including, but not limited to, opioids

Overdose deaths in Manitoba

- **TOTAL NUMBER OF DRUG-RELATED DEATHS:**
- **138 drug-related deaths in 2018**
- **191 drug-related deaths in 2019** (Total opioid-related deaths: 93) (49% of all drug-related deaths)

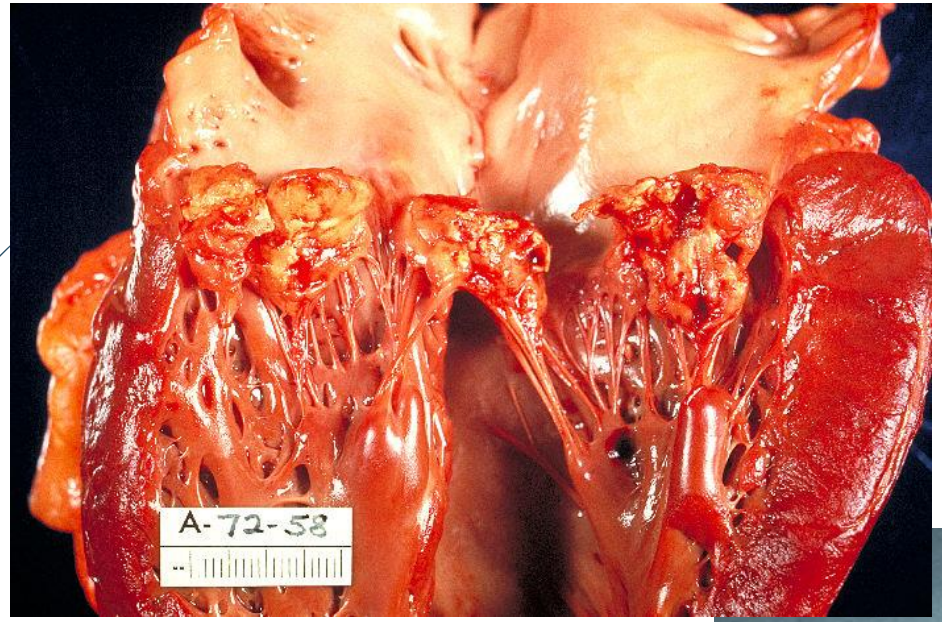
- **259 total drug-related deaths in first 9 months of 2020**
- Primarily due to toxic street supply of fentanyl, cocaine, and methamphetamine
- **We are on track for 300 + deaths in 2020 - most of them young with many years of work and life left to live!**

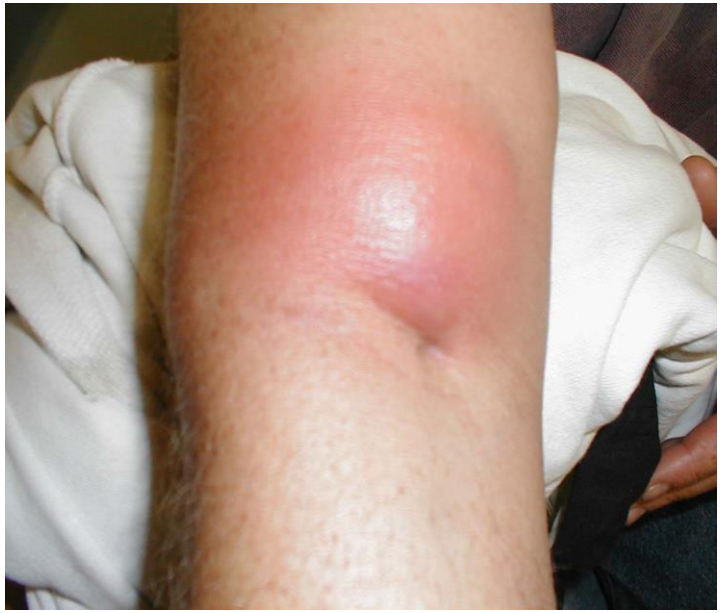
- **2021 is of grave concern**

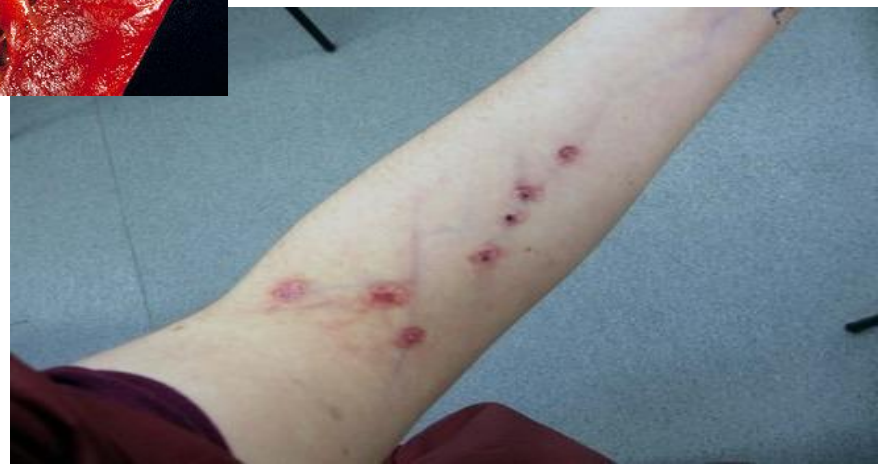
OUTCOMES:

- Overall poorer health status
- Infections (skin, heart, bones)
- Hepatitis C, HIV
- Trauma (MVA)
- Violence
- Death
- Neonatal opioid withdrawal
- Crime and cost of policing, incarceration (theft, prostitution)
- Reduced education and employment rates
- Increased family dysfunction and apprehensions (CFS)
- Higher societal burden (social assistance and taxation)
- Increased Health Care Costs

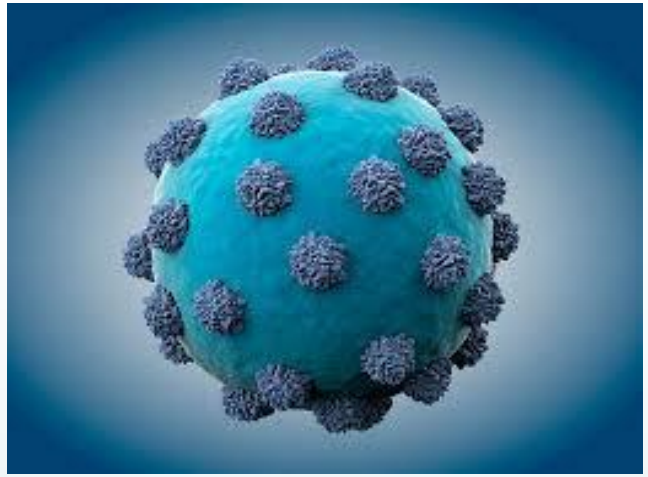
Cellulitis, abscesses, infective endocarditis, osteomyelitis in IDU population



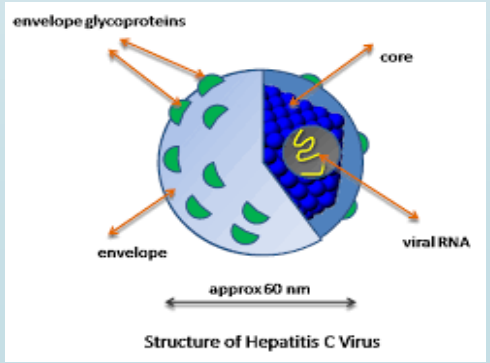




Hepatitis C



Almost all HCV transmission is by parenteral or percutaneous exposure to HCV-infected blood (5). In economically developed countries, most new HCV infections are related to illicit injection drug use (6). Non-injecting drug use (e.g., through sharing of inhalation equipment for cocaine) is also associated with a higher risk of HCV infection (9). HCV may be transmitted by other percutaneous exposures not associated with drug use (e.g., tattooing or syringe reuse) (6).



In 2019, there were 121 new cases of HIV reported in Manitoba, equating to a 13.1% increase compared to last year.

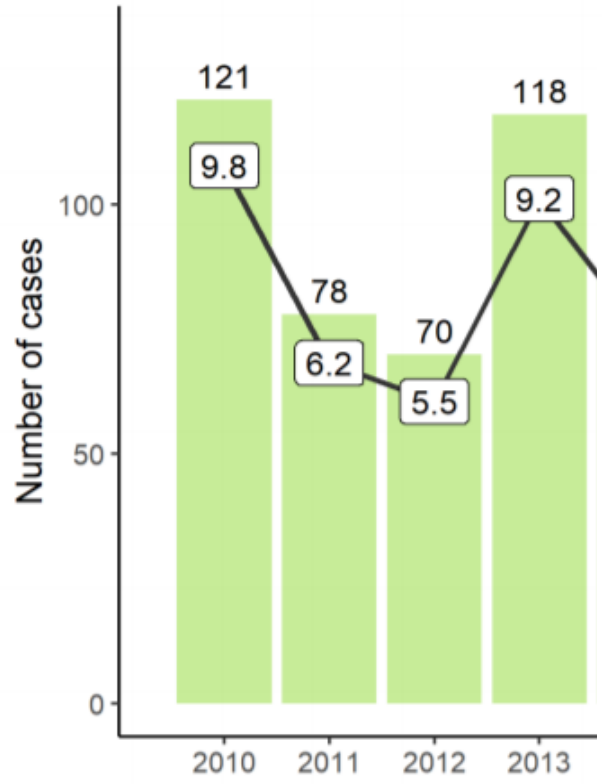


Figure 1. Annual number and crude rate of

The PWID category is a growing concern in terms of the risk of HIV transmission in Manitoba:

- PWID was the primary risk exposure category for almost half (49.1%) of all females.
- The year 2019 was the first time the PWID risk exposure category was more commonly reported among males than MSM.
- Of the 44 cases whose primary risk exposure was PWID, 43 were newly diagnosed in Manitoba, only one was an introduced case.


DISORDER
TENSION
AWARENESS
NERVOUS
DEPRESSION
TEMPER
STRESS
FEAR
DESPAIR
AGITATION
INSOMNIA
DEPRESSION
WORRY
PTSD
ANXIETY
FRUSTRATION
SCARED
WITHDRAWAL
FAILURE
NEGATIVE
HEADACHE
MOOD
OVERWHELMED
LONLINESS
PANIC
FATIGUE
NEGATIVE

Harm Reduction vs Abstinence

Harm Reduction

Harm reduction is a set of practical strategies and ideas aimed at **reducing** negative consequences associated with drug use. **Harm Reduction** is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs.

Harm Reduction Programs

CLEANS – ex. Street Connections

Supervised injection sites – ex. Insite (Vancouver)

Naloxone kits

Opiate Agonist Therapy

A Large Demand for OAT in Manitoba

Despite continued efforts to expand treatment access across Canada, it has been estimated that only 25% of individuals with an opioid use disorder are enrolled in an OAT program

Treatment utilization rates in Canada are lower than in most Western European countries

In Manitoba, wait times for Winnipeg programs range anywhere from a couple days to weeks.

Settings for OAT service delivery

OAT can be prescribed in several different settings, including:

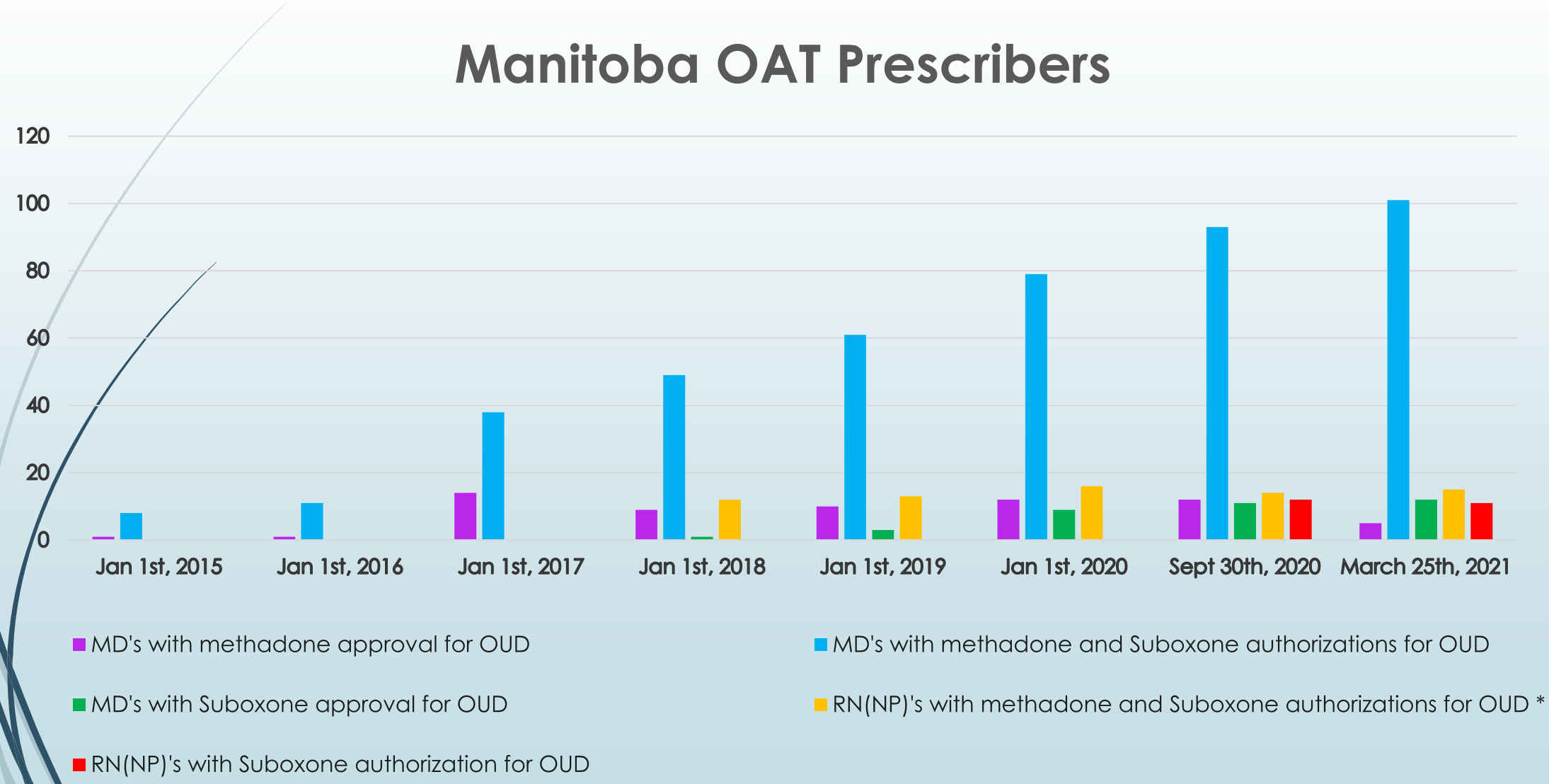
- Specialty addiction clinics/RAAM clinics
- OAT clinics
- Community health centres
- Private medical practice
- Treatment centres
- In-patient
- Corrections

The appropriateness of a particular setting depends largely on patient characteristics at intake (e.g., pattern/length of use, health needs, social needs)

Evidence indicates that patients can improve in any setting

Continuity of treatment from setting to setting is essential.

We are making progress!



GOALS OF OAT

- reduce the harmful and risky use of opioids
- reduce the spread of infectious diseases like HIV and Hepatitis C
- reduce crime rates associated with opioid use
- improve social functioning of clients (employment, education, personal relationships)
- lead to access of other services, including health care and rehabilitation
- Improve overall health

Benefits of OAT

Compared to those with an OUD & NOT receiving treatment, patients treated with OAT will:

- Reduce use of opioids;
- Spend less time involved in criminal activities;
- Reduce injecting and injection related risky behaviours;
- Reduce risk of contracting or transmitting HIV, STIs & hepatitis;
- Improve physical and mental health;
- Improve relationships with others;
- Increase chances of employment;
- Improve quality of life; and
- Significantly reduced death rate

Economic benefit

Barriers to OAT

A number of factors present barriers to accessing services:

- Wait times for programs
- Travel (rural/remote communities)
- Limited number of prescribers
- No OAT services available in region
- Lack of child care
- Misconceptions about OAT
- Stigma