Opioid Agonist Therapy 101:
An Introduction to Clinical Practice Workshop

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

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Faculty/Presenter Disclosure

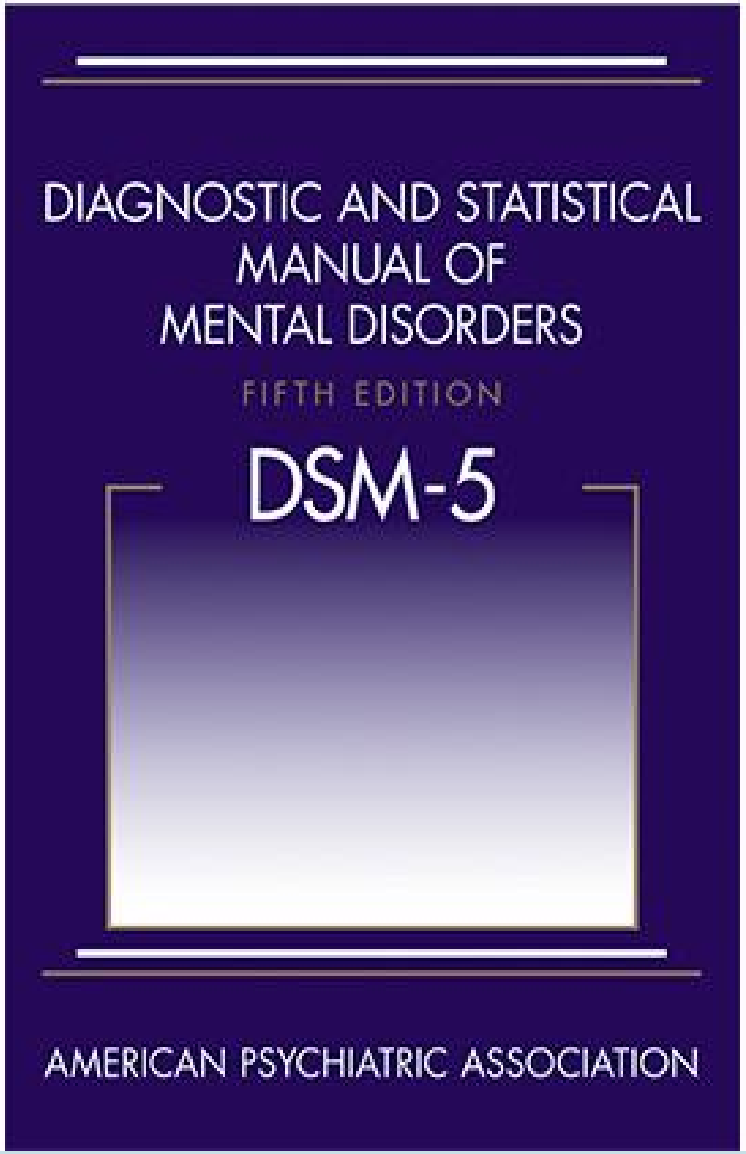
- **Faculty: Dr. Joanna Lynch**
- **Relationships with commercial interests: none**

Learning Objectives

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

- Comprehend Addiction as a chronic illness
- Define Opiate Use Disorder (OUD)
- Review historical and current opioid use trends and explain its impacts on individuals and society
- Identify common complications of Substance Use Disorder (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 Abuse – DSM IV

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

(1) recurrent substance use resulting in failure to fulfill major role obligations at work, school or home

(2) recurrent substance use in situations in which it is physically hazardous (e.g. driving a car or operating machinery while impaired)

(3) recurrent substance-related legal problems

(4) continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g. arguments with spouse, physical fights)

B. The symptoms have never met criteria for Substance Dependence

Substance Dependence – DSM IV

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following occurring at any time in the same 12-month period:

(1) Tolerance (increased amounts needed to get desired effect; or diminished effect with same amount)
(2) Withdrawal (characteristic withdrawal syndrome; or the same or related substance taken to avoid or relieve withdrawal symptoms)
(3) The substance is often taken in larger amounts/over a longer period than was intended
(4) Persistent desire or unsuccessful efforts to cut down or control substance use
(5) A great deal of time spent in activities necessary to obtain the substance, use the substance, or recover from its effects
(6) Important social, occupational or recreational activities are given up or reduced because of substance use
(7) 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

Substance Use Disorder – DSM V

- Studies found that some of the Substance Abuse criteria tended to be present in patients when substance use was more severe
  - e.g. recurrent legal problem

- 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

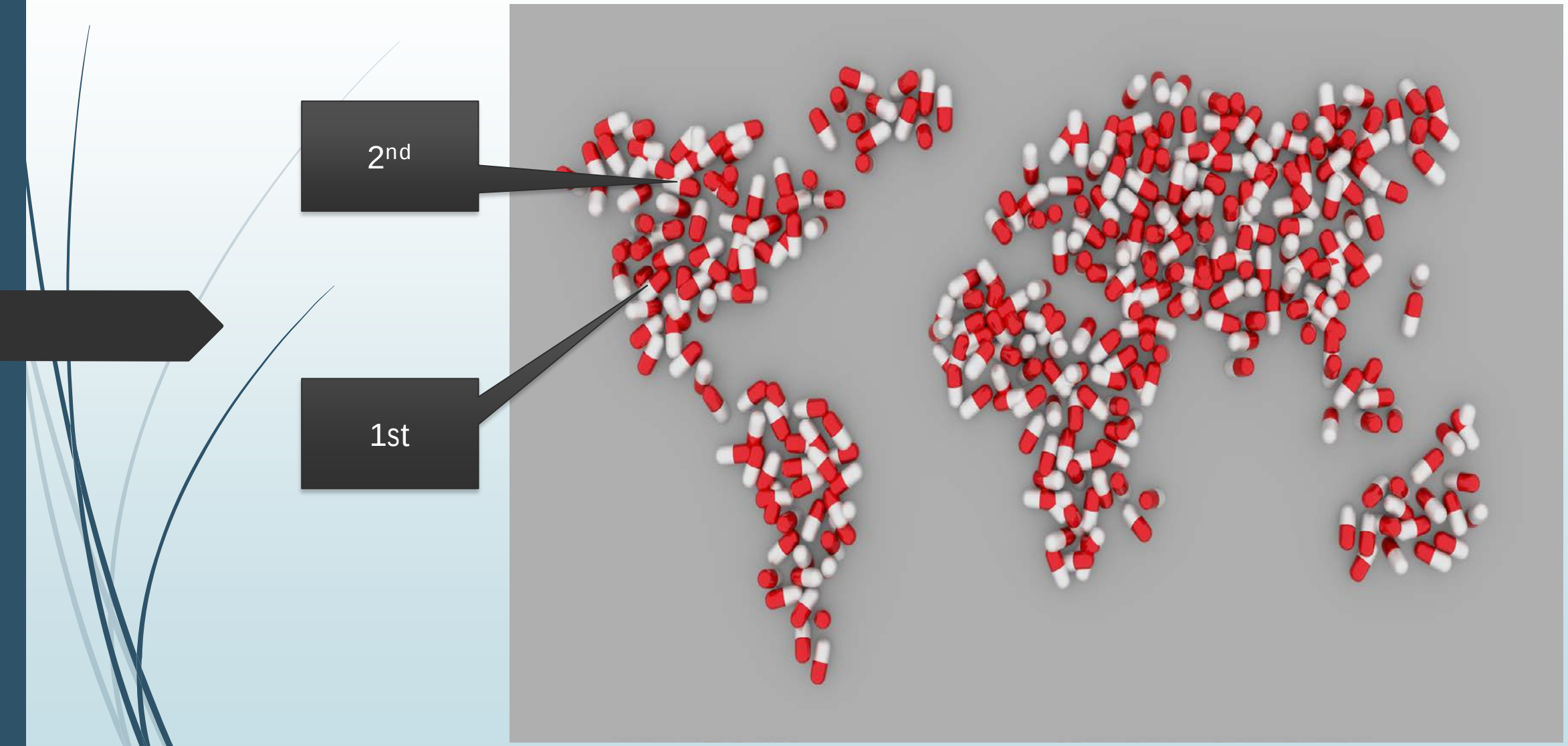
Substance Use Disorder – DSM V

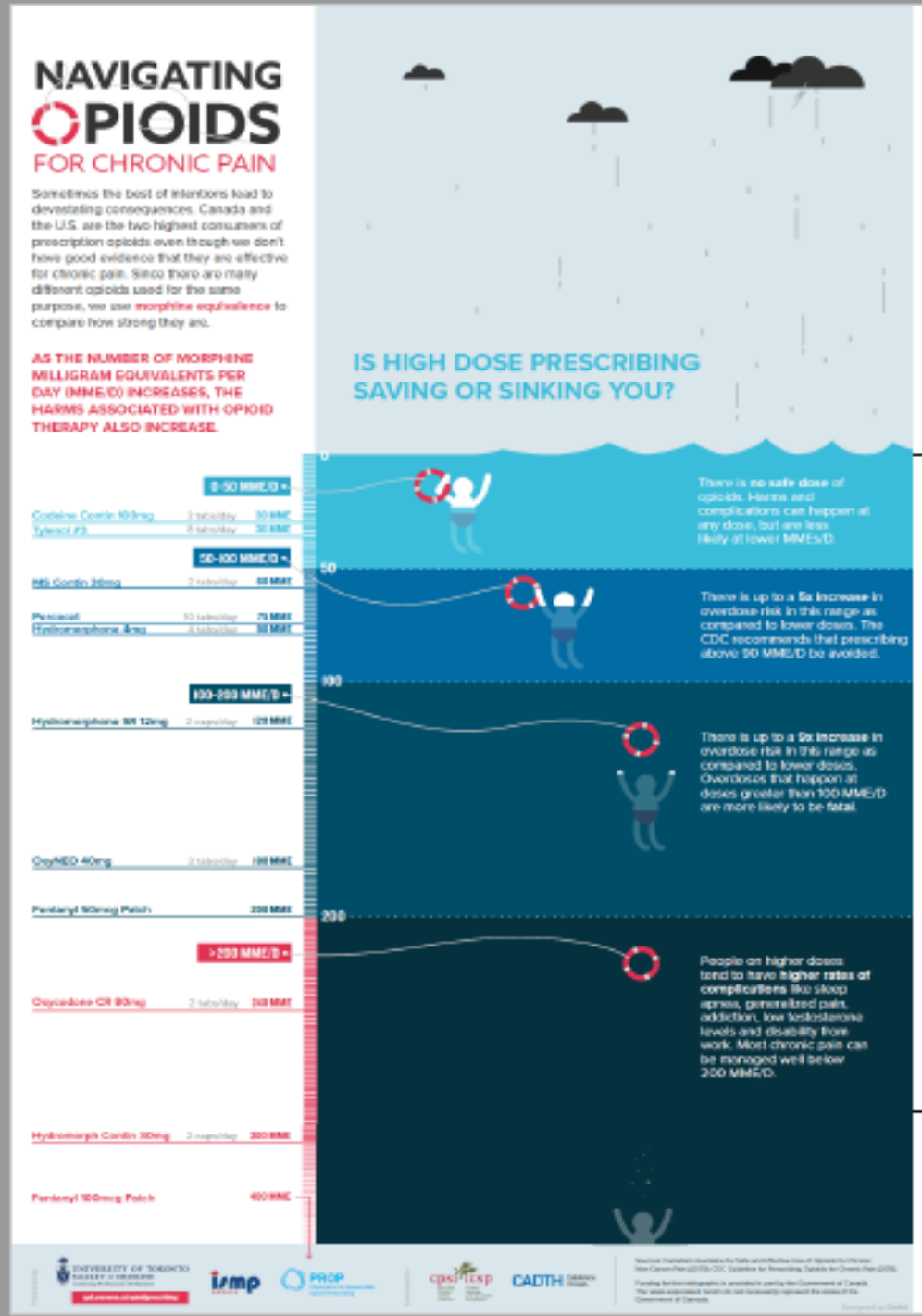
A. A problematic pattern of substance use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

(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





Updated March 1, 2018

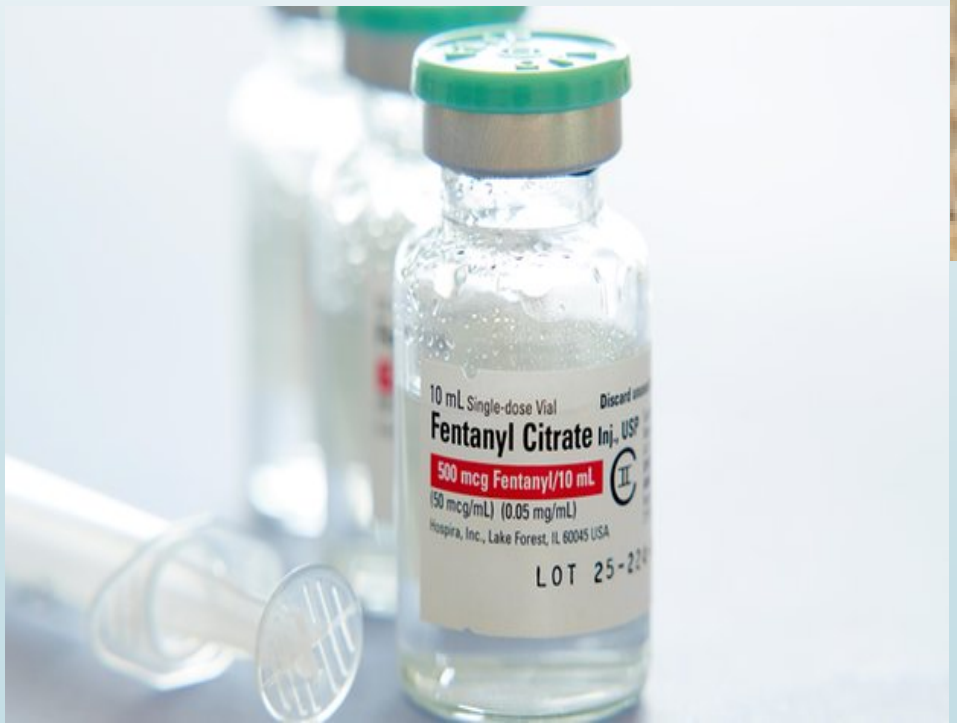
Number* of Unique Patients in Manitoba with "Average Morphine Equivalence Per Day"**

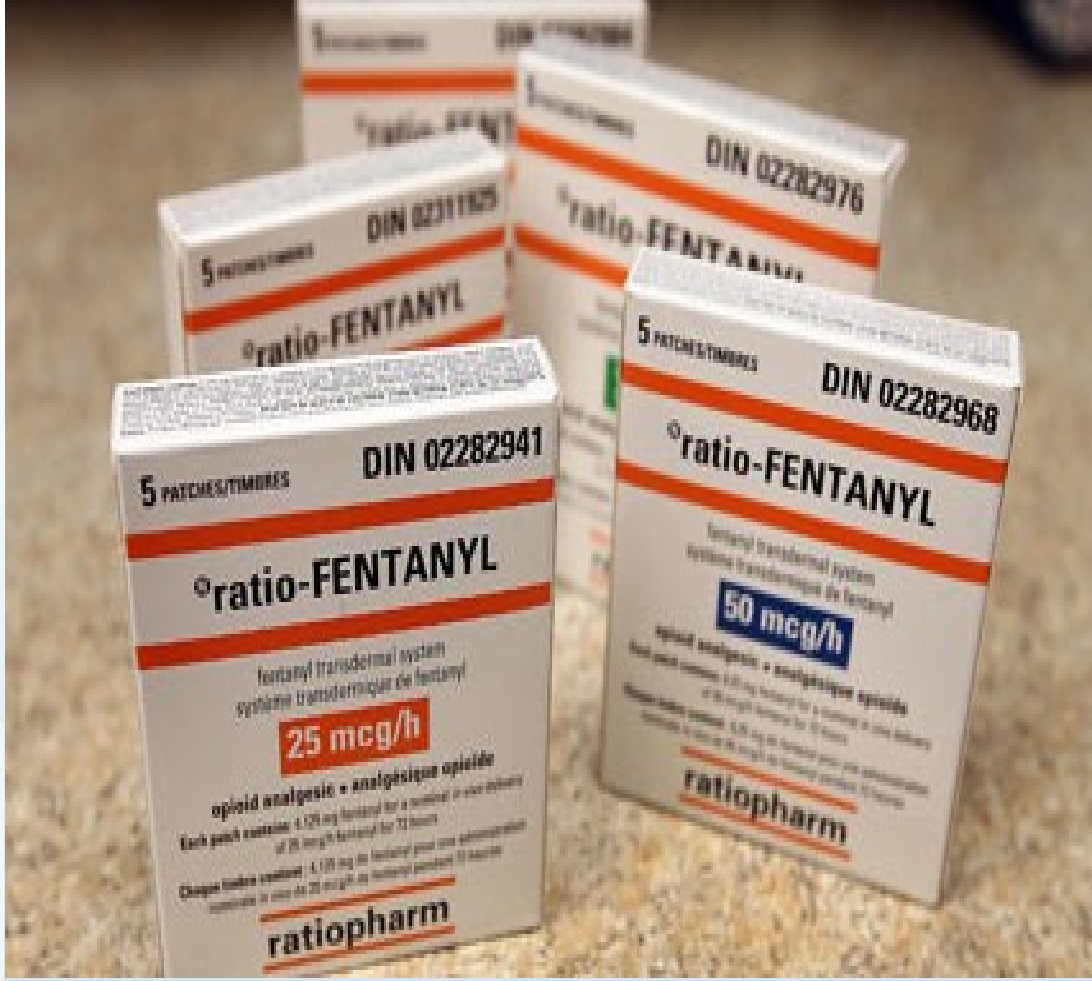
Ave. MME Per Day	Q4 2017: Oct. 1 2017 to Dec. 31, 2017		% Var. # Unique Patients from Prev. Year	Q4 2016: Oct. 1 2016 to Dec. 31 2016	
	# Unique Patients	Proportion of Unique Patients		# Unique Patients	Proportion of Unique Patients
0 to 50	4,203	45.2%	↑ 1.8%	4,128	44.5%
50 to 90	2,365	25.5%	↑ 4.0%	2,273	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

OXYCONTIN and Pharma

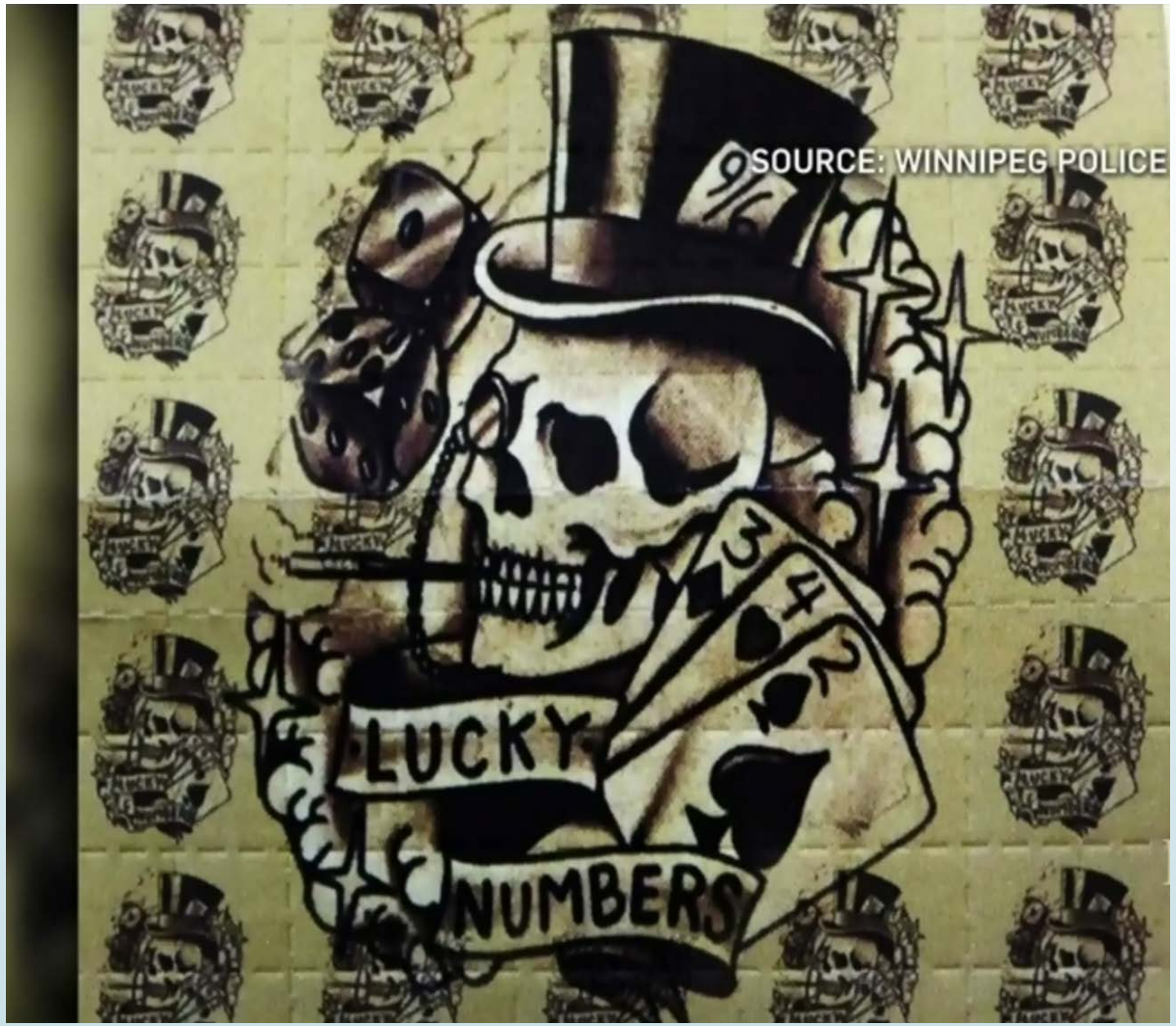
FENTANYL


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 25-22


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

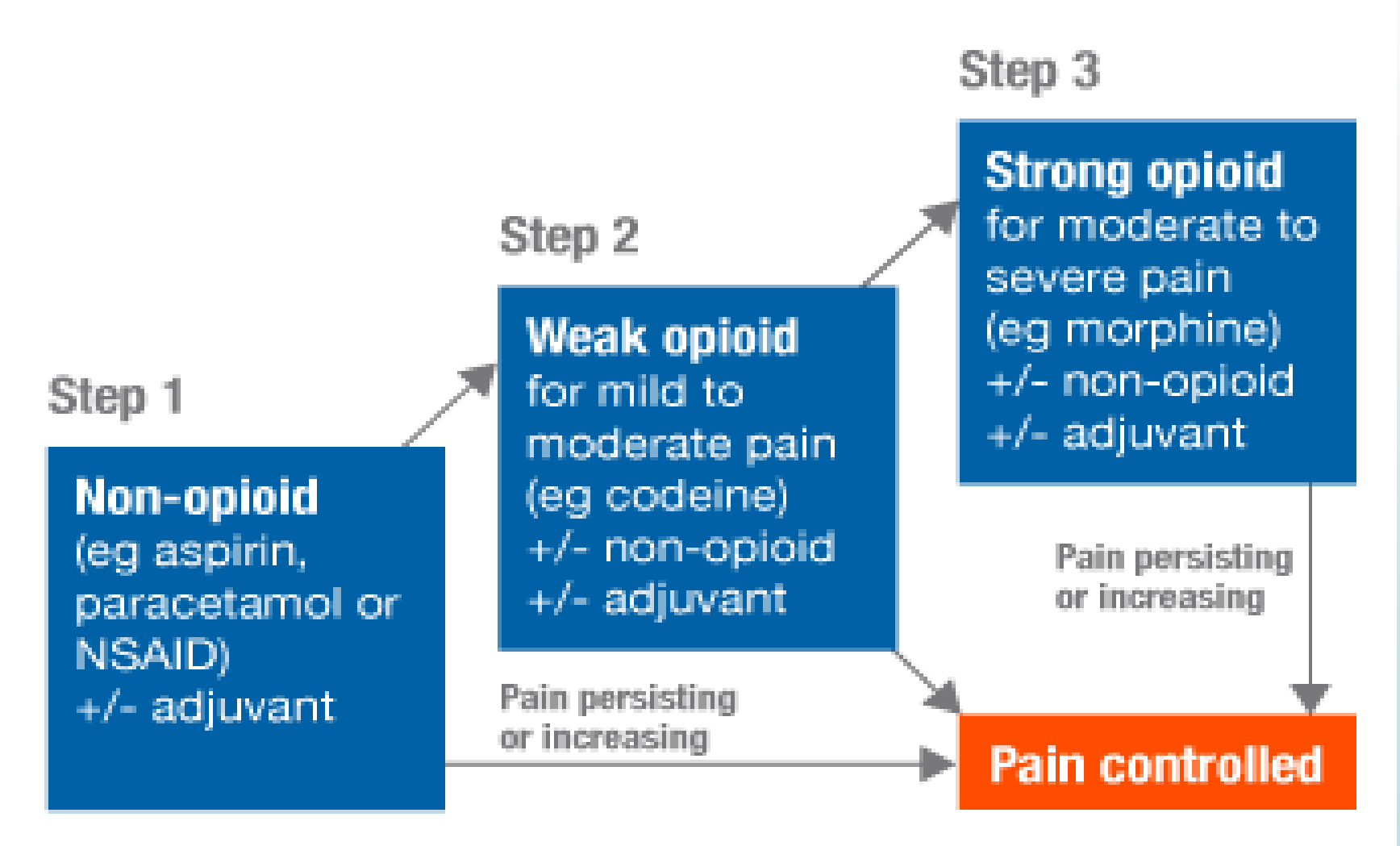
Non prescription Fentanyl

- 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

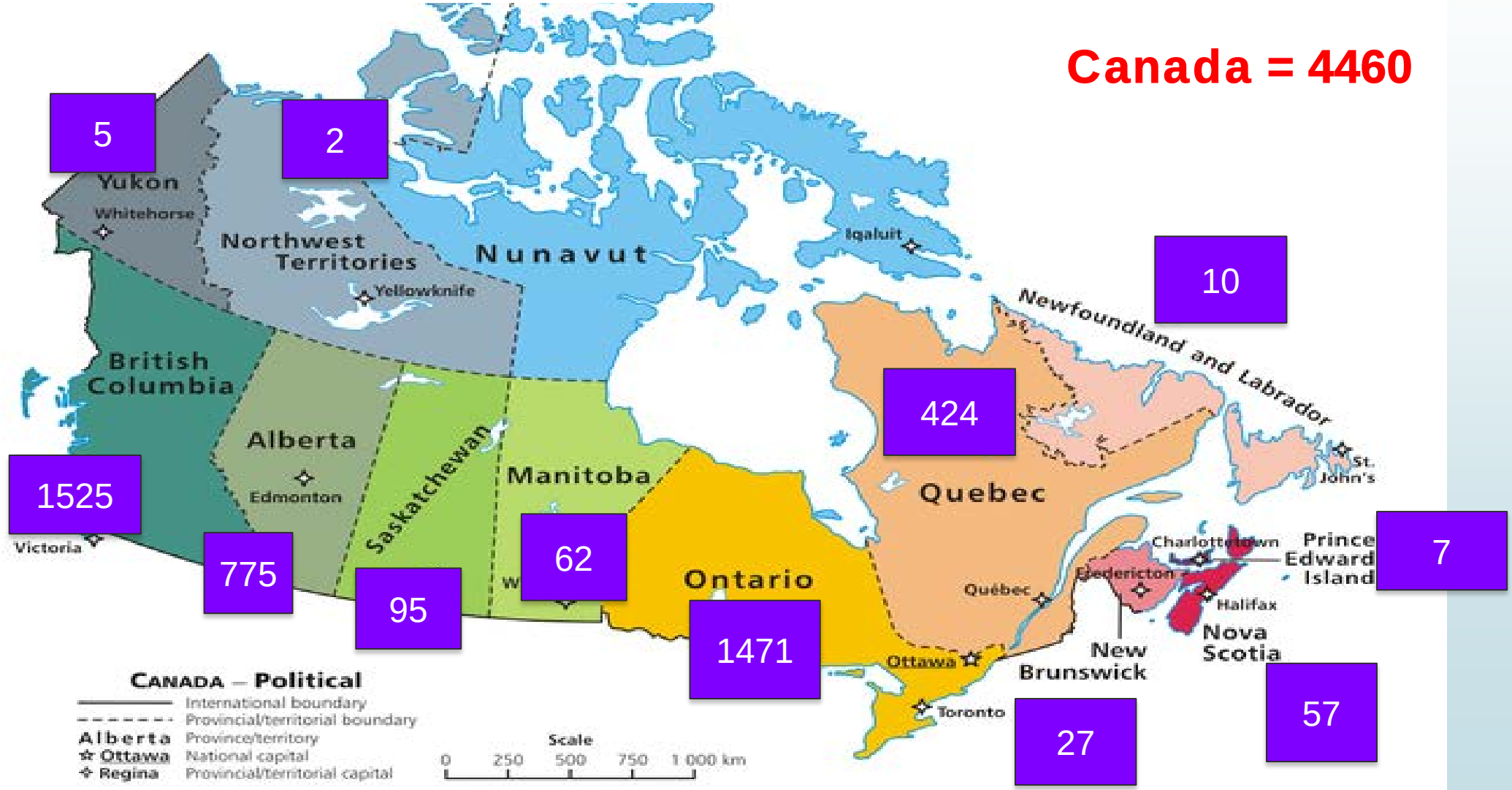
WHO ANALGESIC LADDER



WHERE DOES THAT LEAVE US… AN OPIOID CRISIS

Apparent opioid-related deaths by province or territory, in 2018

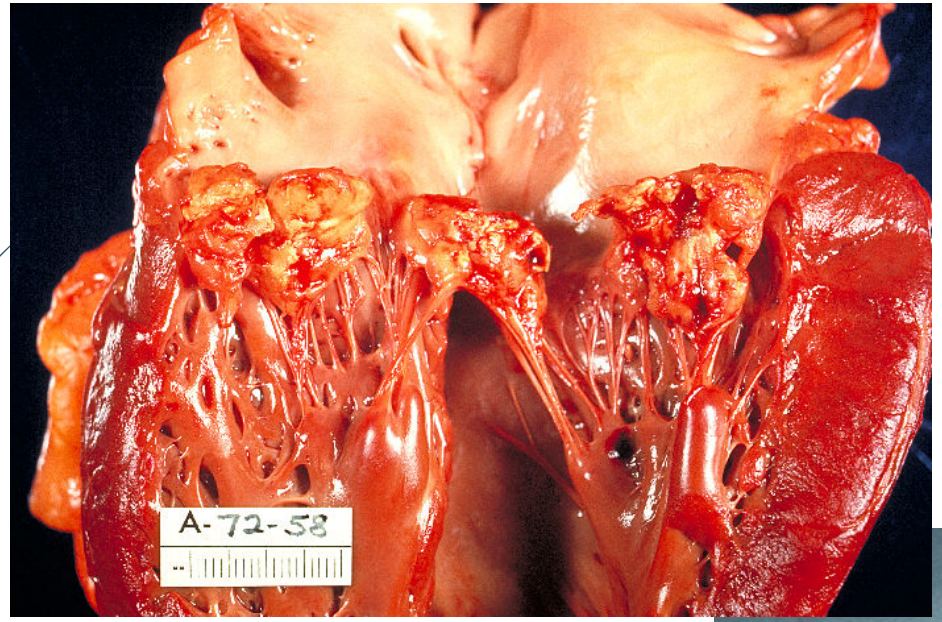
Canada = 4460

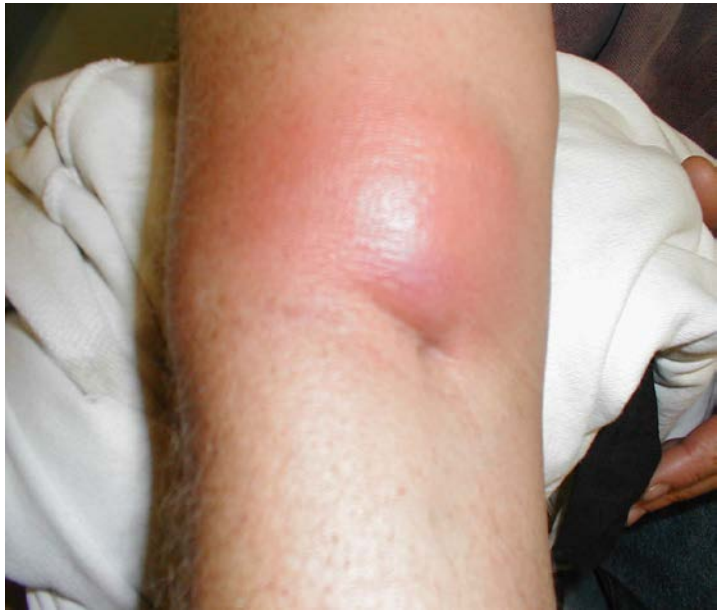


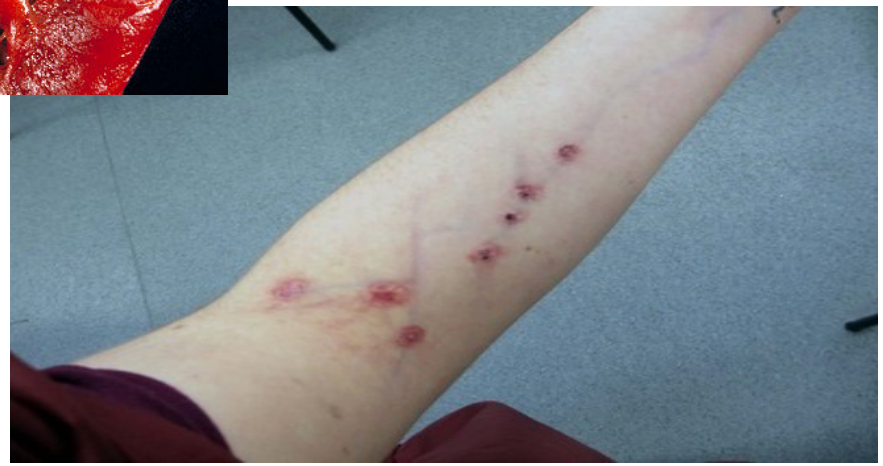
OUTCOMES:

- 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

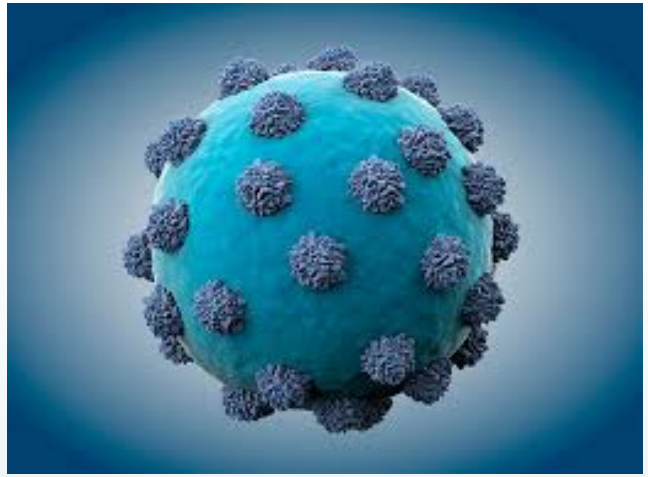
Cellulitis, abscesses, infective endocarditis, osteomyelitis in IDU population



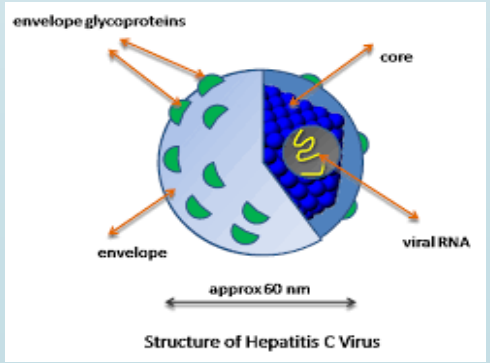




Hepatitis C



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).



Manitoba Primary Mode of Transmission of HIV and AIDS

Males	Females
1. MSM + IDU	1. IDU
2. MSM	2. Endemic
3. IDU	3. Recipient of Blood/Blood Products prior to 1985
4. Endemic	4. Heterosexual Contact
5. Recipient of Blood/Blood Products prior to 1985	5. Occupational
6. Heterosexual Contact	6. Perinatal
7. Occupational	7. No Identifiable Risk (NIR)
8. Perinatal	
9. No Identifiable Risk (NIR)	


DISORDER
TENSION
AWARENESS
NERVOUS
TEMPER
DEPRESSION
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 the OAT system across Canada, it has been estimated only 25% of opioid dependent individuals are enrolled in an OAT program

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

In Manitoba, wait times for the Winnipeg most program range are anywhere from a couple days to a year.

Settings for OAT service delivery

OAT can occur in a number of different settings, including:

- specialty addiction 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.

OAT currently available in Manitoba

Number of Manitoba Physicians with exemption(s) for Addiction:

Methadone only for Opioid Use Disorder : 12

Methadone and Suboxone for OUD: 75

Suboxone only for OUD: 5

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 with those dependent on opioids & NOT receiving treatment, 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

Recent analysis of adult methadone clients - every dollar spent on methadone treatment produced $38 in related economic benefits.

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