

# Opioid Stewardship

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Institute for Safe Medication Practices Canada



# ISMP Canada

The Institute for Safe Medication Practices Canada is an independent not-for-profit organization dedicated to reducing preventable harm from medications.



[www.ismp-canada.org](http://www.ismp-canada.org)

# Objectives

- Provide an overview of the opioid crisis in Canada, its history and the Joint Statement of Action to Address the Opioid Crisis.
- Describe Opioid Stewardship knowledge translation strategies.

What is the definition of an opioid crisis?

## HEALTH CRISIS

# Opioid deaths to hit 4,000

At least 1,460 Canadians have died from opioid-related overdoses in the first half of 2017 — a number that's expected to rise, as not all provinces have reported final data for the period, the Public Health Agency of Canada said Monday.

Dr. Theresa Tam, chief public health officer of Canada, said Ontario, Quebec and Manitoba are yet to report all of their opioid-related overdose deaths for the first half of the year.

But based on figures reported by the other provinces and territories, Tam said the number of overdose deaths are on pace to surpass 4,000 by the end of the year — far above last year's tally of 2,861 opioid-related fatalities.

"It's an extremely complex whole-of-society issue that we're dealing with. This is a national public health crisis," Canada's top doctor said in an interview from Ottawa.

SMP Canada 2017  
THE CANADIAN PRESS

How did we get to an opioid crisis?

# Background Information

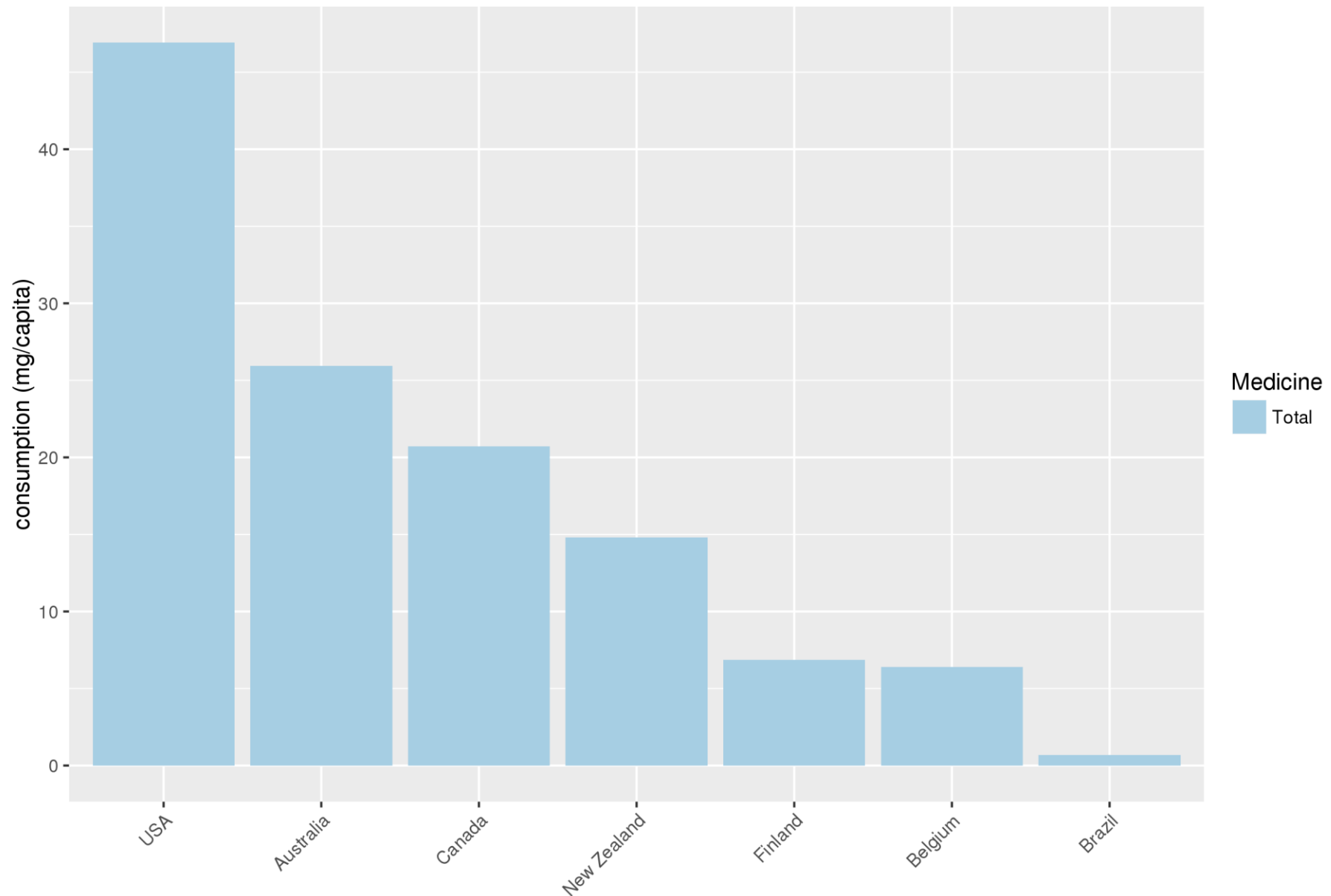
- Opioid therapy has not been shown to be safe and effective for long-term treatment for pain
- Long-term opioid therapy is often overprescribed for patients with chronic non-cancer pain
- Many patients are receiving opioids at high daily dosages
- Increasing trends in opioid addiction (opioid use disorder) and opioid-related overdose

# Background Information

- Patients who take opioids develop tolerance to the drugs. This often leads the patient or prescriber to increase the dose.
- Physical dependence can make it difficult to lower the dose or stop therapy. The drugs are then continued - to prevent opioid withdrawal symptoms.
- Few physicians and even fewer patients appreciate that opioid-induced hyperalgesia can occur. Increasing the dose further increases pain and risk.



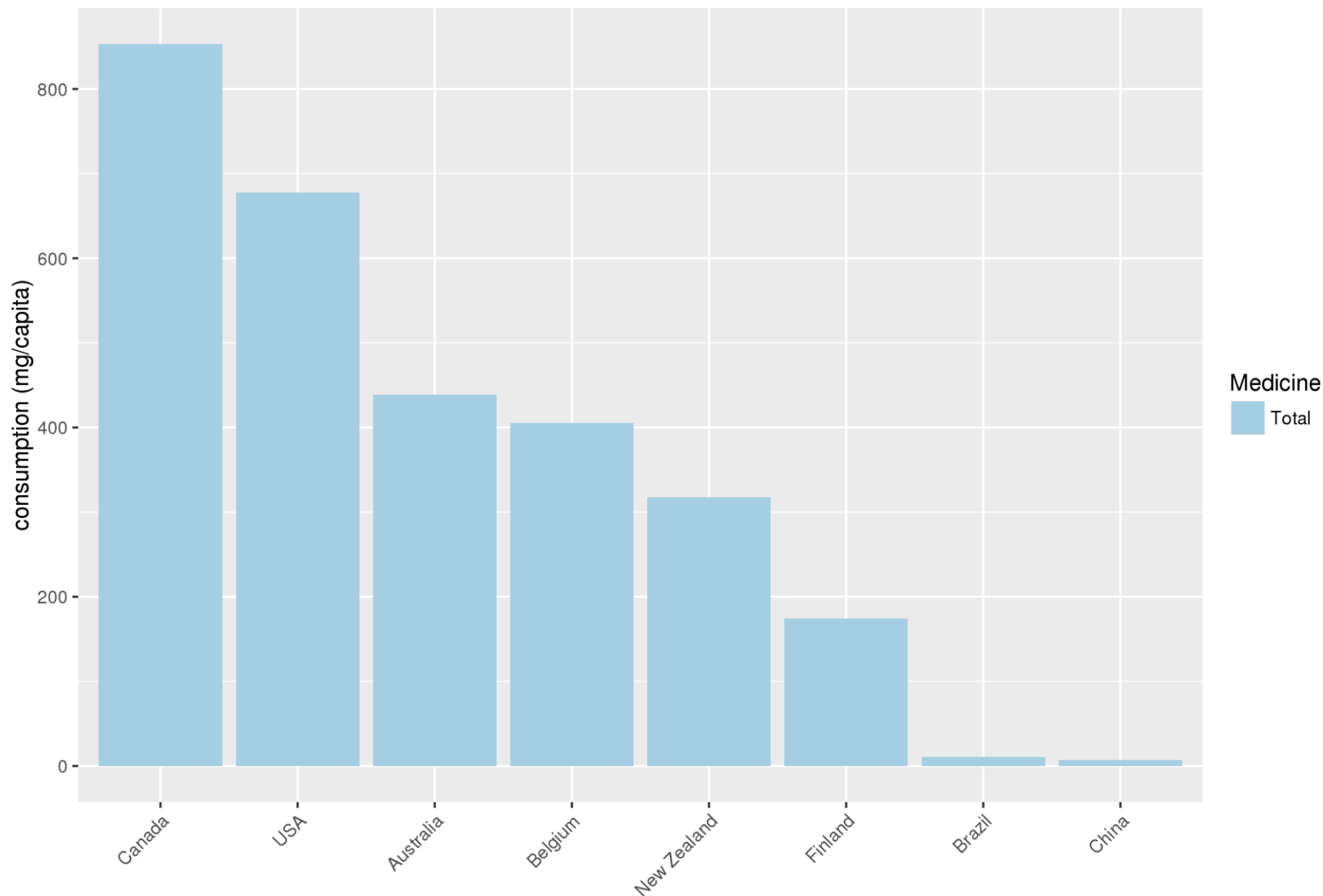
# Total opioid consumption (morphine equivalence mg/capita) 1980



Sources: International Narcotics Control Board; World Health Organization population data

By: Pain & Policy Studies Group, University of Wisconsin/WHO Collaborating Center, 2017

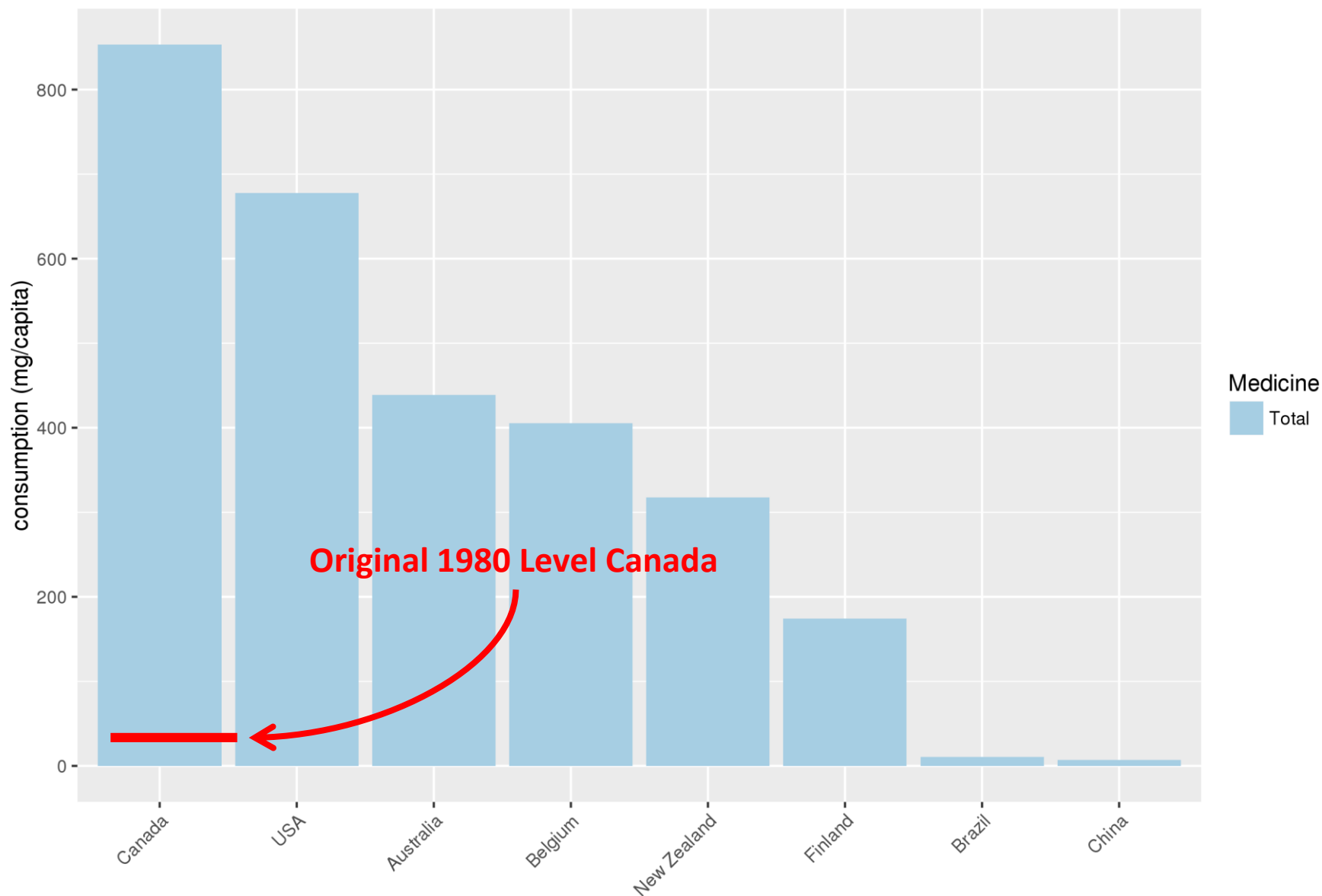
# Total opioid consumption (morphine equivalence mg/capita) 2015



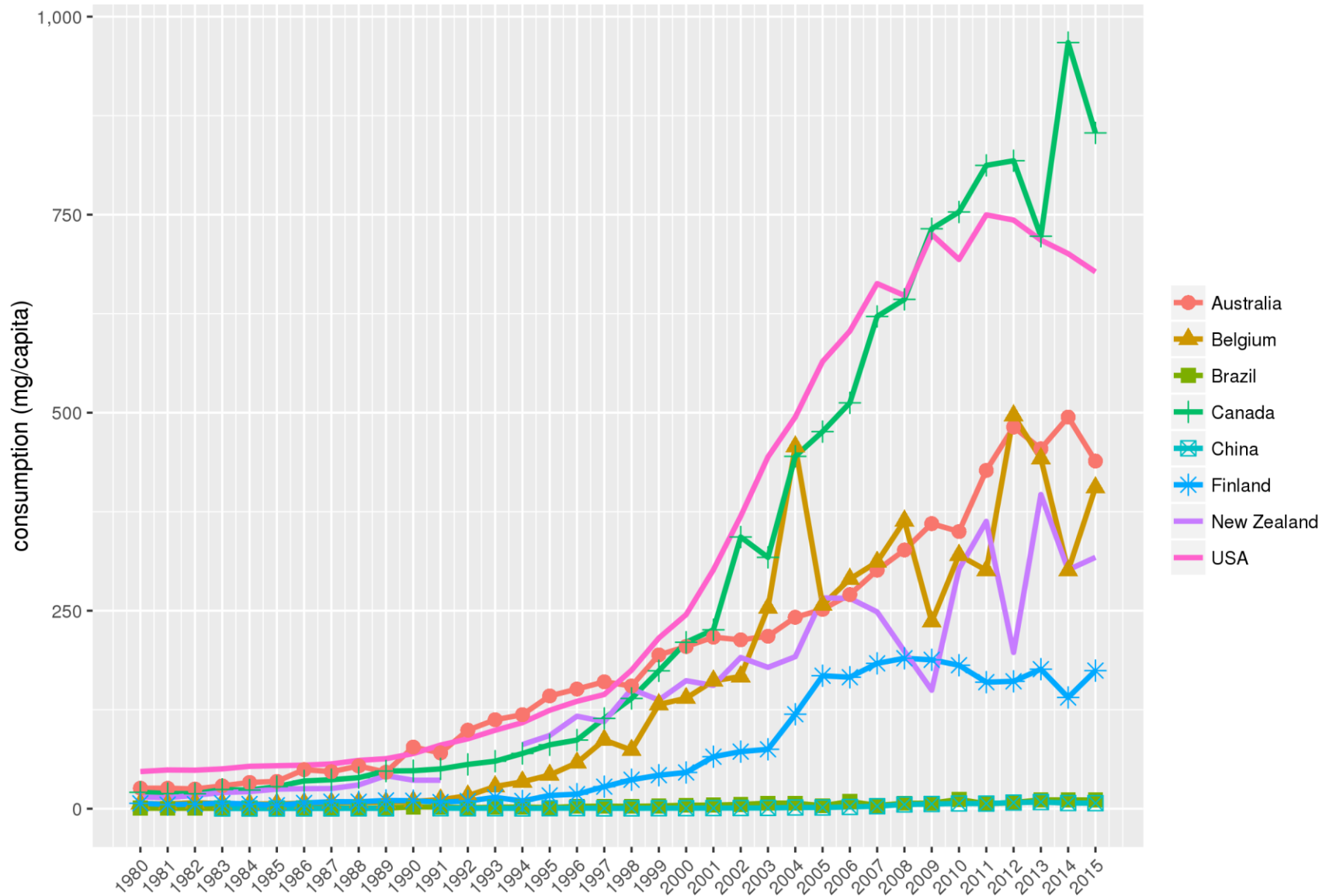
Sources: International Narcotics Control Board; World Health Organization population data

By: Pain & Policy Studies Group, University of Wisconsin/WHO Collaborating Center, 2017

# Total opioid consumption (morphine equivalence mg/capita) 2015



# Total opioid consumption (morphine equivalence mg/capita) 1980-2015

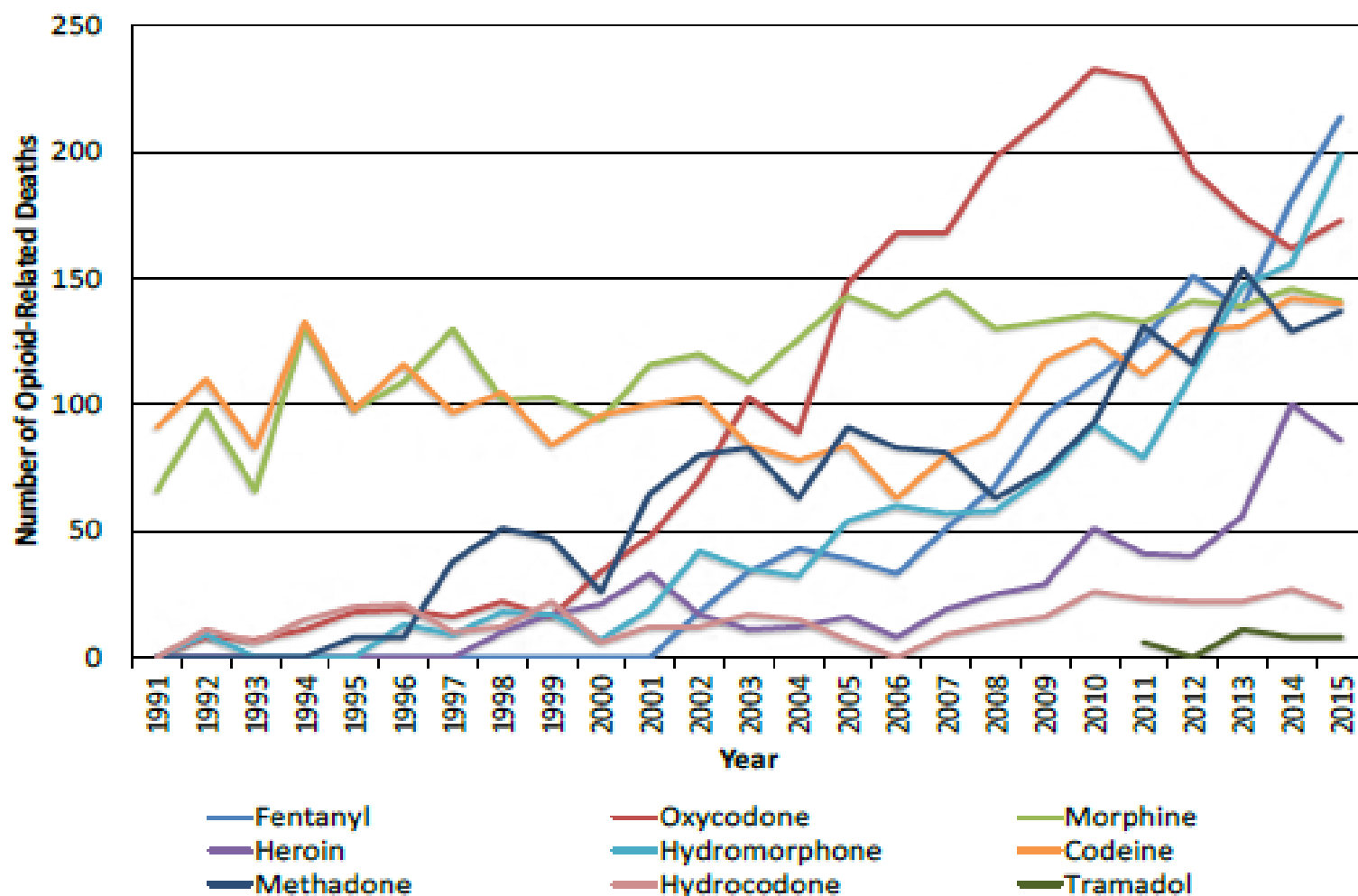


Sources: International Narcotics Control Board; World Health Organization population data

By: Pain & Policy Studies Group, University of Wisconsin/WHO Collaborating Center, 2017

Deaths from opioids are increasing

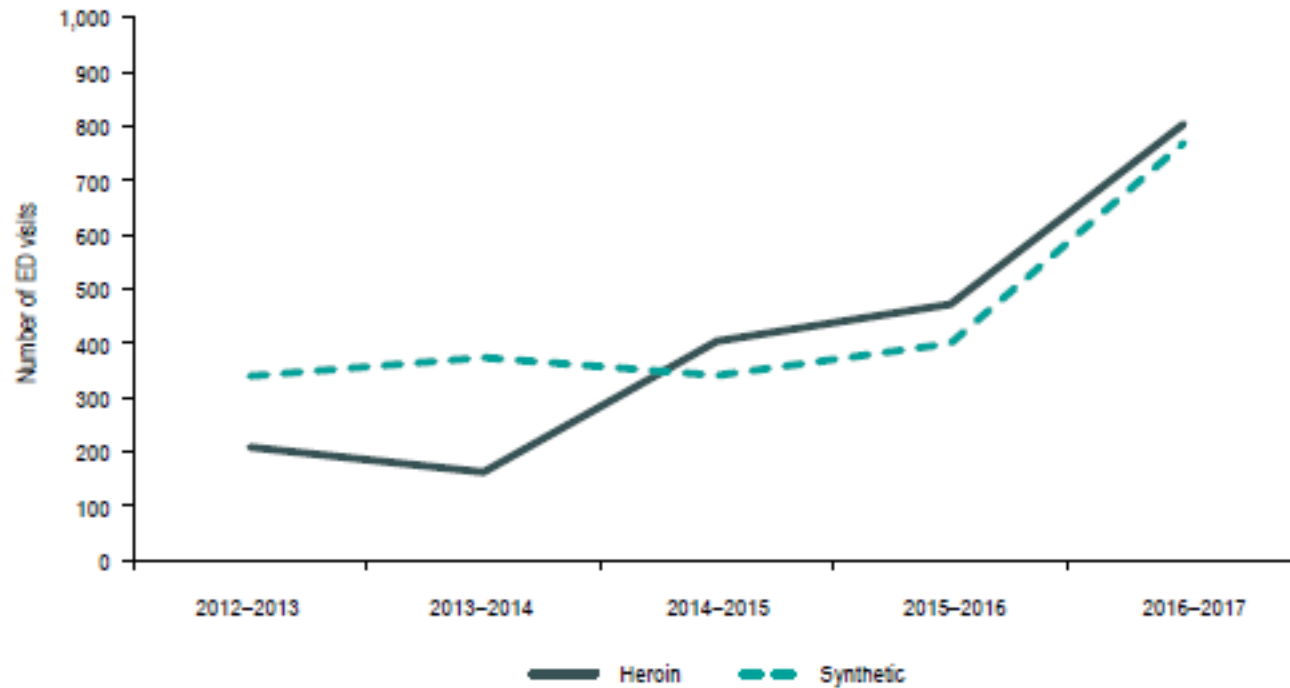
Figure 2: Trend in Opioid-Related Deaths in Ontario by Type of Opioid Involved, 1991 to 2015



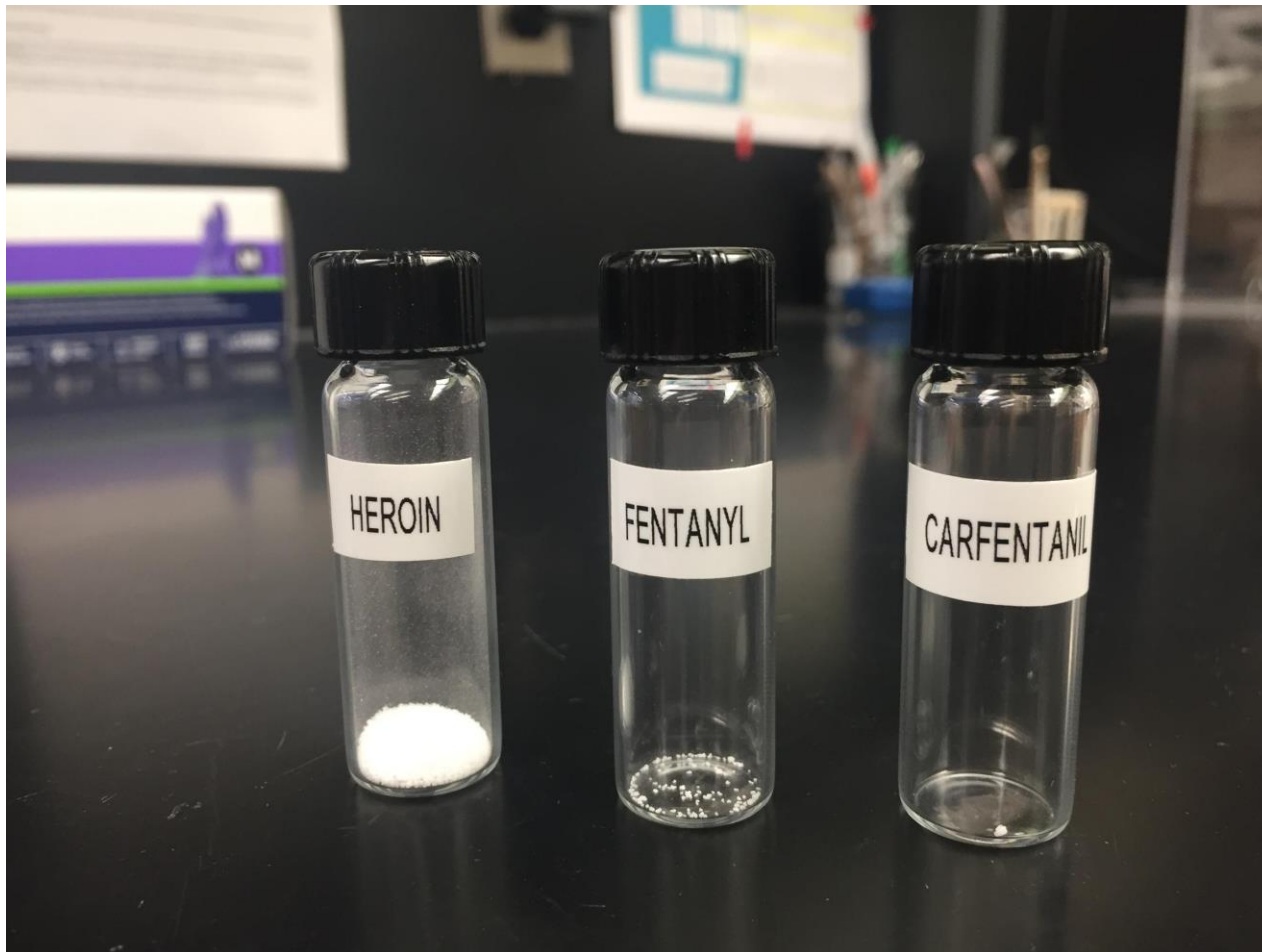
Note: 20 deaths from 2015 where details on specific opioid involvement was unavailable are not reported in this figure.

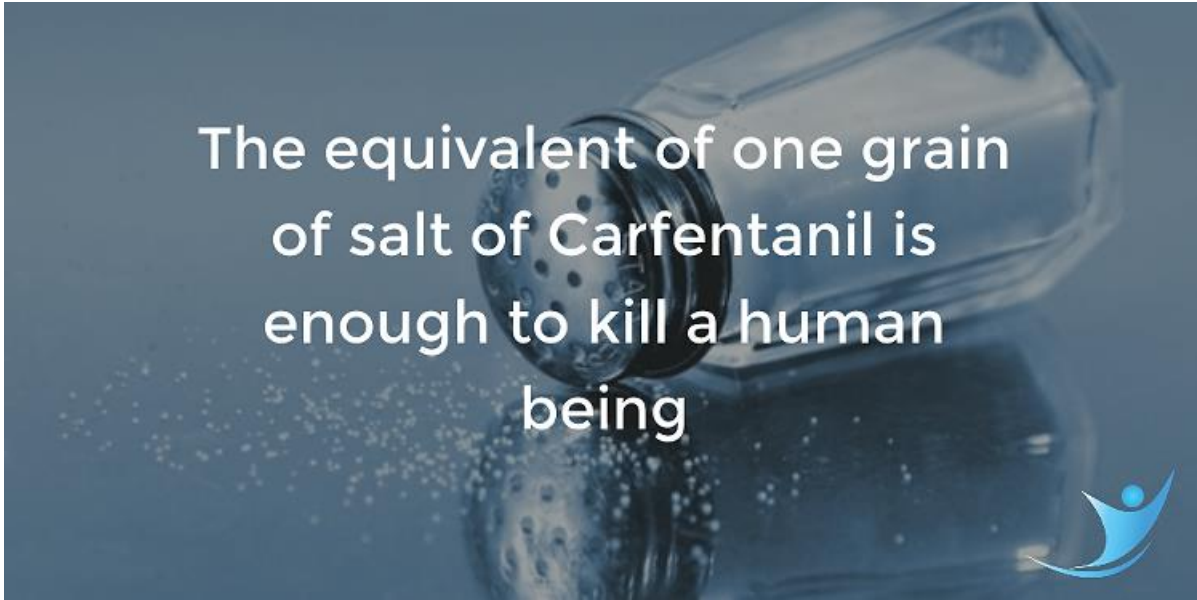
# More harm from non-pharmaceutical opioids

# Ontario Heroin and Synthetic









The equivalent of one grain  
of salt of Carfentanil is  
enough to kill a human  
being

# Some Theories on the Crisis

(these are controversial)

- Porter and Jick letter in the NEJM 1980
  - Very low incidence of addiction
- Organizations became focussed on measuring and dealing with pain
  - 5<sup>th</sup> vital sign
  - Joint Commission, Veteran's Affairs, Pain Societies

# Some Theories on the Crisis

(these are controversial)

- Influence of Pharmaceutical Industry
  - Marketing to prescribers
  - Direct advertising
  - Funding for experts
  - Educational programs
  - Advocacy funding
  - Pain Societies

# Some Theories on the Crisis

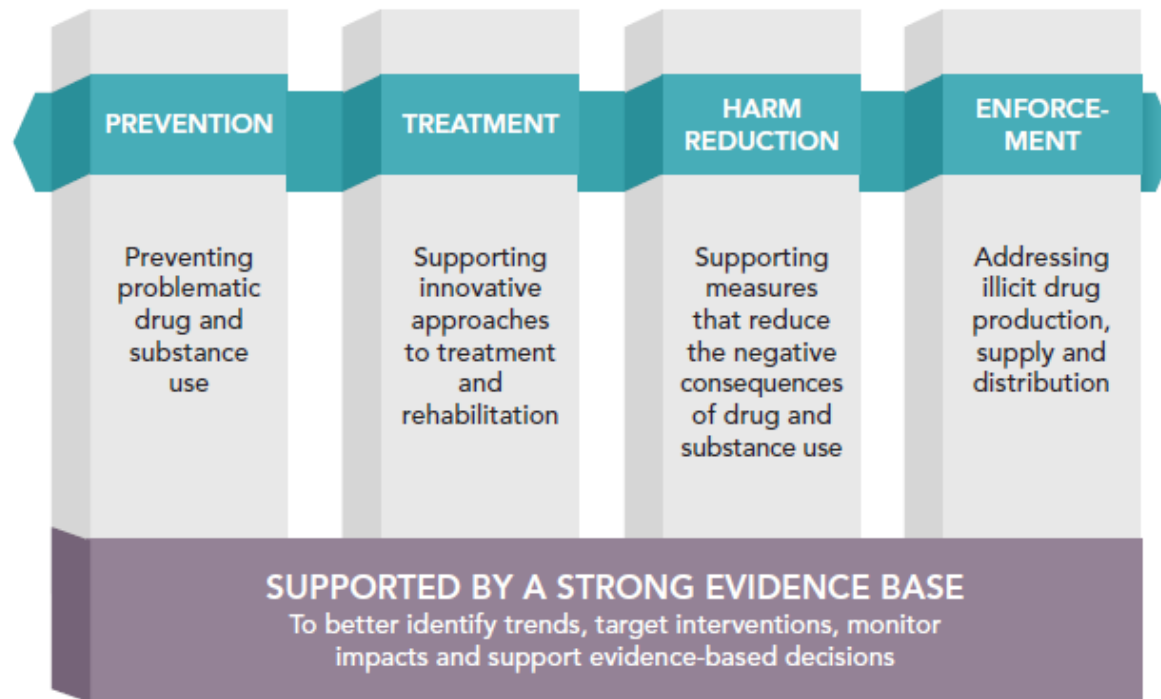
(these are controversial)

- Literature on treatment of non cancer pain with opioids
- Pain guidelines
  - Expanded role of opioids
  - Multiple pain guidelines from many organizations

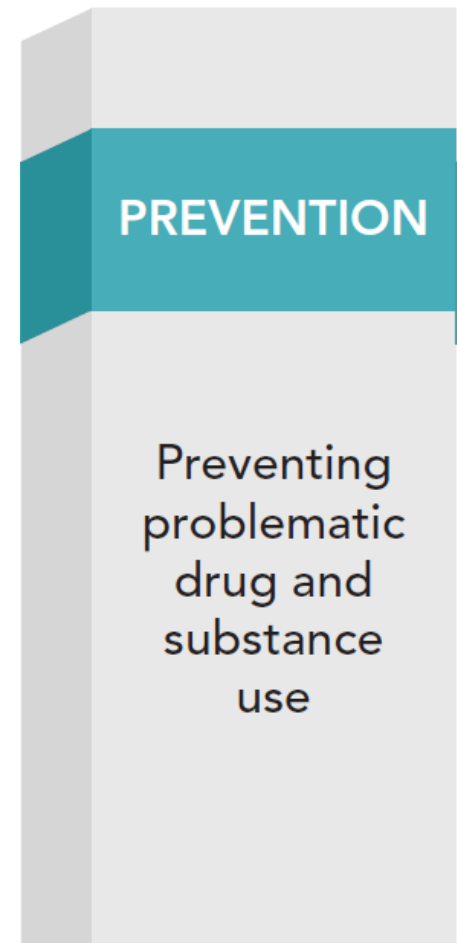
# What is Canada doing about the Opioid Crisis?

# CANADIAN DRUGS AND SUBSTANCES STRATEGY

A COMPREHENSIVE, COLLABORATIVE, COMPASSIONATE  
AND EVIDENCE-BASED APPROACH TO DRUG POLICY



- Prevention
  - Education to patients/consumers
  - Public awareness
  - Prescribing education
  - Investment in non-opioid therapies for pain
    - Pharmaceutical and non-pharmaceutical
  - Tamper resistant formulations





- Treatment
  - Opioid replacement therapy
    - Methadone/buprenorphine
  - Counselling and Support
  - Mental Health wellness programs
  - Health care worker education
  - Addiction is a disease



- Harm Reduction
  - Supervised injection sites
    - Sterile needles and syringes
    - Staff able to respond to overdose
  - Naloxone programs
    - Take home naloxone
    - First responder naloxone

## HARM REDUCTION

Supporting  
measures  
that reduce  
the negative  
consequences  
of drug and  
substance use

- Enforcement
  - More resources to investigation
  - Stronger border controls
  - Control on pre-cursor chemicals
  - Change focus from low-level drug users to higher level distributors and suppliers



## ENFORCEMENT

Addressing  
illicit drug  
production,  
supply and  
distribution

How do we as a society ensure opioid access to those who benefit?

How do we minimize harm?

***Very nuanced and complex issue***

# Joint Statement of Action to Address the Opioid Crisis

- The Joint Statement of Action to Address the Opioid Crisis reflects a combined commitment to act on this crisis.
- We have agreed to work within our respective areas of responsibility to improve prevention, treatment and harm reduction.

# Opioid Stewardship

Coordinated interventions designed to improve, monitor, and evaluate the use of opioids in order to support and protect human health.

Note: We need to explore how other countries manage pain without opioids; we can do better.

# Essential Clinical Skills for Opioid Prescribers



## Safer Opioid **PRESCRIBING**

### **ACUTE PAIN** in the Emergency Department or Walk-in Clinic

- **Avoid opioids if possible.**
- Prescribe a small supply of weak opioids (codeine, buprenorphine patch, tramadol) for only 3 days, until patients can see their family doctor.
- Do not prescribe potent opioids (morphine, oxycodone, hydromorphone, fentanyl) for minor pain, e.g., muscle strains.

### **CHRONIC PAIN: Patient selection**

- Reserve opioids for severe pain that impairs daily function (e.g., spinal stenosis, neuropathic pain) that has not responded to an adequate trial of all appropriate non-opioid treatments.
- Do not prescribe for fibromyalgia, headaches, low back or neck pain.
- Get a second opinion before prescribing to patients at high risk for opioid use disorder (younger, have an underlying psychiatric disorder (e.g., anxiety, PTSD) or have current or past problematic substance use).

## Opioid **TAPERING**

- **High doses (greater than 90 mg MED/D) are not safe and usually not necessary:** Most pain patients respond to doses of 50 mg MED/D or less. High doses increase the risk of overdose, addiction, motor vehicle collisions, and falls.
- Tapering can improve mood, pain, and function in patients with severe pain despite a high opioid dose.
- **Abrupt cessation of high opioid doses is dangerous:** Patients will seek other sources of opioids to relieve withdrawal. Opioid tolerance is lost within days, putting patients at high risk of overdose.

INDICATIONS FOR OPIOID TAPERING:

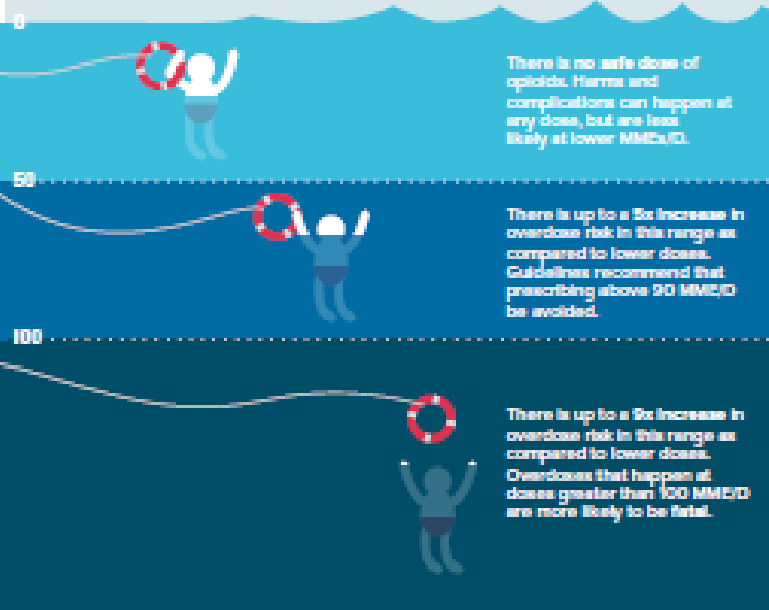
# NAVIGATING OPIOIDS FOR CHRONIC PAIN

Sometimes the best of intentions lead to devastating consequences. Canada and the U.S. are the two highest consumers of prescription opioids even though we don't have good evidence that they are effective for chronic pain. Since there are many different opioids used for the same purpose, we use **morphine equivalence** to compare how strong they are.

**AS THE NUMBER OF MORPHINE MILLIGRAM EQUIVALENTS PER DAY (MME/D) INCREASES, THE HARMS ASSOCIATED WITH OPIOID THERAPY ALSO INCREASE.**

<b>0-50 MME/D</b>		
Codaine Contin 100mg	2 tablets	30 MME
Tylenol #3	8 tablets	30 MME
<b>50-100 MME/D</b>		
M3/Codine/Pain	2 tablets	60 MME
Percocet	10 tablets	70 MME
Morphine Sulfate 10mg	10 tablets	100 MME
<b>100-200 MME/D</b>		
Hydromorphone SR 12mg	2 capsules	100 MME
OxyNEO 40mg	2 tablets	100 MME

## IS HIGH DOSE PRESCRIBING SAVING OR SINKING YOU?



Available from: [www.ismp-canada.org/opioid\\_stewardship/](http://www.ismp-canada.org/opioid_stewardship/)



# Family Practice Resource for Pain Management

2017 EDITION




## Pain Management Guidelines for Family Medicine

Pain Management Review Panel

Bibliography

### Appendix C – The McGill Top 3 Exercises

#### Exercises to Consider in Patients with Low Back Pain

- Bird Dog**

  - Position yourself on all fours with knees underneath the hips and wrists under the shoulder
  - Extend one leg until it is straight out in line with your hips while also raise and straightening your opposite arm until it is parallel to the floor
  - Keep head and shoulders aligned at times
  - Hold for about 10 seconds and alternate
- Side Plank**

  - Lie on your side
  - Fully extend your legs with one resting on top of the other (may have knees on floor)
  - Bend the arm at floor level to 90 degrees; your upper arm should be parallel to your body, while your forearm is at 90 degrees (this is the start position)
  - Lift your body off the ground and balance on your forearm and the side of your foot while keeping your body in a straight line (may choose to balance knees instead of feet if easier)
  - Hold for about 10-20 seconds
- Modified Curl Up**

  - Place yourself on your back and place your hands on either side of your head and bend knees
  - Preserve natural curve of the back; do not flatten the back and imprint it to the floor because it may stress the discs
  - Raise the head and shoulders 1 cm off the ground
  - Hover the head and shoulders; do not curl up and flex as this may actually contribute to back pain in some individuals
  - Hold for about 10 seconds

#### References:

<http://www.cbc.ca/player/play/954336323803>  
<https://www.aefitness.org/pdfs/LowBackStabilization.pdf>  
<http://www.aha.uwaterloo.ca/~mcgill/fitnessleadersguide.pdf>

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#### Pain Management Guidelines for Family Medicine

Sub-Class	Specific Agent (Brand Name)	Usual Dosage Range (Daily Max)	Available Products
<b>Oral Non-Steroidal Anti-Inflammatory Agents</b> (The Medical Letter 2014; RxFiles 2016)			
<b>PHENYLACETIC ACIDS</b>	Diclofenac sodium (Voltaren)	25-50 mg BID-TID (200 mg)	25, 50 mg EC tab 75, 100 mg SR tab 50, 100 mg supp
	Diclofenac potassium (Voltaren Rapide, Cambia)	50 mg TID-QID (150 mg)	50 mg tab 50 mg/pack powder for oral solution
	Diclofenac + Misoprostol (Arthrotec)	One tab BID-TID (200 mg + 800 µg)	50 mg + 200 µg
		One tab daily-BID (200 mg + 800 µg)	75 mg + 200 µg
<b>PROPIONIC ACIDS</b>	Flurbiprofen (Ansaid)	50-100 mg TID-QID (300 mg)	50, 100 mg tab
	Fenoprofen (Nalfon)	300-600 mg TID-QID (3.2 g)	300 mg cap 600 mg tab
	Ibuprofen (Advil, Motrin)	200-800 mg TID-QID (3.2 g)	OTC: 200, 400 mg tab, 100 mg/5 mL Rx: 600 mg tab
	Ketoprofen (Orudis)	25-100 mg TID-QID (300 mg)	50, 100 mg EC tab 200 mg SR tab 50 mg cap 50, 100 mg sup
	Naproxen (Naprosyn, Aleve, Anaprox)	125-500 mg BID (1.5 g)	125, 250, 375, 500 mg tab 750 mg SR tab 125/5mL susp 500 mg sup
	Naproxen + Esomeprazole (Vimovo)	One tab BID (1000 mg + 40 mg)	375 mg + 20 mg
		One tab BID (1000 mg + 40 mg)	500 mg + 20 mg
<b>PYRANOCARBOXYLIC ACIDS</b>	Oxaprozin (Daypro)	600-1800 mg daily (1.8 g)	600 mg cap
	Tiaprofenic Acid (Surgran)	200-300 mg BID (600 mg)	200, 300 mg tab
	Etoricoxib (Ultradol)	200-600 mg BID (1.2 g)	200, 300 mg cap
	Ketorolac (Toradol)	10 mg QID x 7 days maximum (40 mg)	10 mg tab
<b>PYRROLIZINE CARBOXYLIC ACID</b>		10-30 mg IM q4-6h (120 mg)	30 mg injectable
	Acetylsalicylic Acid (Aspirin)	325-650 mg q4-6h (4 g)	80, 325 mg tab
	Acetylsalicylic Acid EC (Entrophen)	325-975 mg QID (4 g)	81, 325, 650, 975 mg EC tab 650 mg supp
	Diflunisal (Dolobid)	250-500 BID (1.5 g)	250, 500 mg tab

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# Opioid Pain Medicines

## Information for Patients and Families

You have been prescribed an opioid pain medicine that is also known as a narcotic. This leaflet reviews some important safety information about opioids.

Patients, family, friends, and caregivers can play an important role in the safe use of these medicines; share this information with them.

With opioids, there is a fine balance between effective pain control and dangerous side effects.



### Signs of Overdose

**Stop taking the drug and get immediate medical help if you experience the following:**

- Severe dizziness
- Inability to stay awake
- Hallucinations
- Heavy or unusual snoring
- Slow breathing rate

**Your family member or caregiver needs to call 911 if:**

- You can't speak clearly when you wake up
- They can't wake you up

# Opioids for pain after surgery: Your questions answered



## Opioids for pain after surgery: Your questions answered



### 1. Changes?

**You have been prescribed an opioid.**

Opioids reduce pain but will not take away all your pain. Ask your prescriber about other methods of reducing pain including using ice, stretching, physiotherapy, or non-opioid drugs like acetaminophen or ibuprofen. Know your pain control plan and work closely with your prescriber if your pain does not improve.



### 2. Continue?

**Opioids are usually required for less than 1-2 weeks after surgery.**

As you continue to recover from your surgery, your pain should get better day by day. As you get better, you will need less opioids. Consult your doctor or pharmacist about how and when to reduce your dose.



### 3. Proper Use?

**Use the lowest possible dose for the shortest possible time.**

Overdose and addiction can occur with opioids. Avoid alcohol and sleeping pills (e.g. benzodiazepines like lorazepam) while taking opioids. Do not drive while taking opioids.



### 4. Monitor?

**Side effects include: sedation, constipation, nausea and dizziness.**

Contact your doctor or pharmacist if you have severe dizziness or inability to stay awake.



### 5. Follow-Up?

**Ask your prescriber when your pain should get better.**

If your pain is not improving as expected, talk to your healthcare provider.

To find out more, visit: [OpioidStewardship.ca](http://OpioidStewardship.ca) and [DeprescribingNetwork.ca](http://DeprescribingNetwork.ca)

## It is important to:



Never share your opioid medication with anyone else.



Store your opioid medication in a secure place; out of reach and out of sight of children, teens and pets.



Ask about other options available to treat pain.



Take unused medications back to a pharmacy for safe disposal. Talk with your pharmacist if you have questions. For locations that accept returns: ☎ 1-844-535-8889 🔗 [healthsteward.ca](http://healthsteward.ca)

## Did you know?



About 16 Canadians are hospitalized each day with opioid poisoning.  
— Canadian Institute for Health Information, 2017

## Examples of opioids used for pain after surgery:

hydromorphone

morphine

codeine

oxycodone

tramadol

## Notes:

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# Storage and Disposal

**PREVENT MEDICATION ACCIDENTS**

**1. Store medications out of sight and reach of:**

Children and teens      Visitors      Pets



**2. Place unused medications in a bag and bring to a pharmacy.**



**3. For locations that accept returns:**

☎ 1-844-535-8889      🌐 healthsteward.ca

Ask a healthcare provider if you have questions.

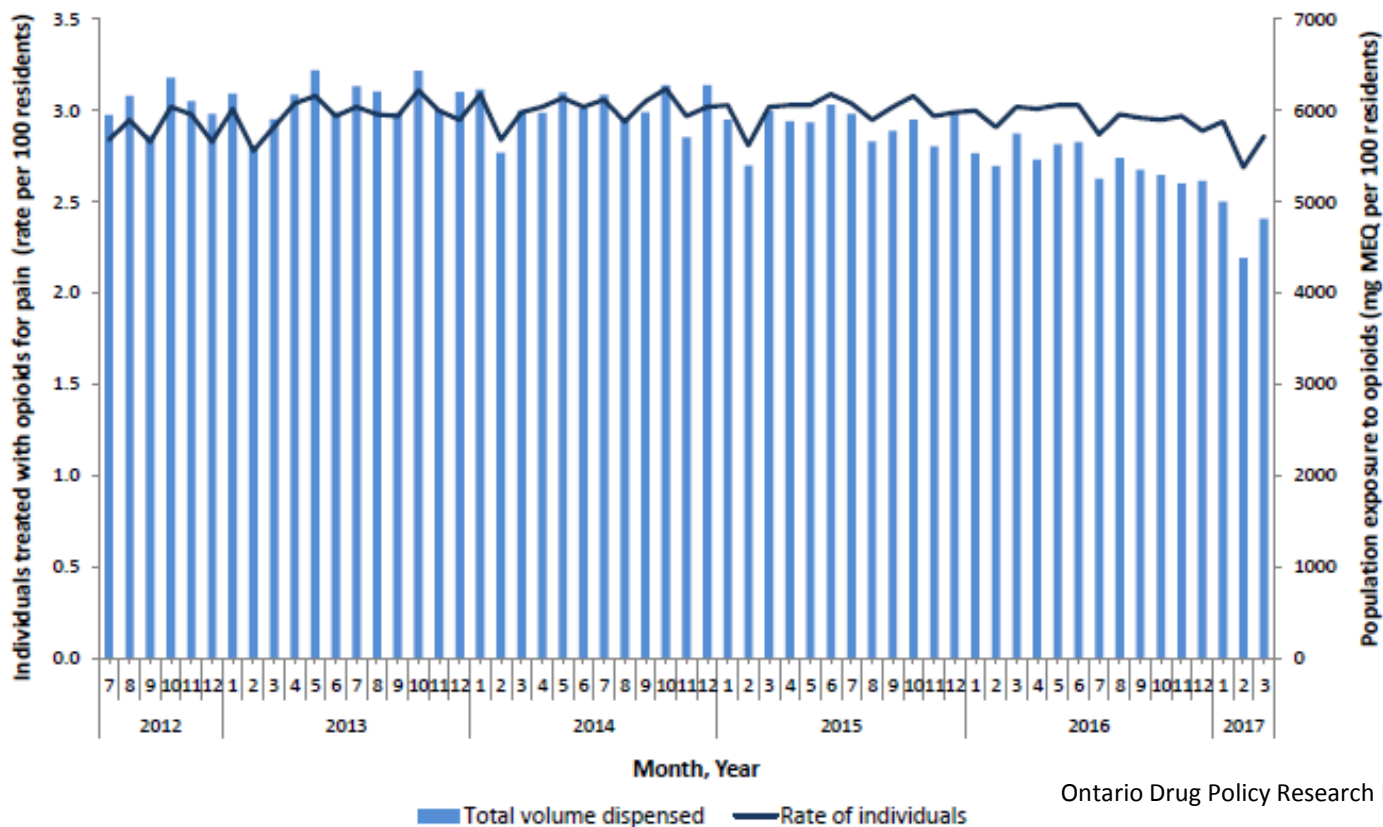


Download from <https://www.iamp-canada.org/download/OpioidStewardship/storage-disposal-information.pdf>

Available from: [www.ismp-canada.org/opioid\\_stewardship/](http://www.ismp-canada.org/opioid_stewardship/)

# Opioid Prescriptions Over Time

Figure 5. Patterns in opioids dispensed to treat pain



Ontario Drug Policy Research Network

# *Thank You*

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