WELCOME!

Opioid Use in Ontario: Evidence for Change

September 15, 2015
11:00 AM – 12:00 PM EDT

Co-hosted by: camh Opioid Resource Hub E*net
Your Co-Hosts

- Provides system support and builds capacity through knowledge translation and exchange, training, and professional development in the area of opioid misuse.

- Focuses on a diverse range of health providers and works with people with lived experience and family members.

- Aims to make Ontario's mental health and addictions system more evidence-informed.

- Promotes the use of evidence in decision-making, develops targeted knowledge translation products and tools, and supports interactive exchanges.
Provincial System Support Program

- Part of the Centre for Addiction and Mental Health
- Supports Ontario’s 10-year Mental Health and Addictions Strategy
- Offices across Ontario
- Capacity and expertise in knowledge exchange, information management, implementation, evaluation, and equity and engagement
Outline for Today’s Webinar

1. Background on opioids
2. Overview of opioid use rates in Ontario
   – Data from the CAMH Monitor and OSDUHS
   – Data from DATIS
   – Mortality and morbidity rates
3. Naloxone as overdose treatment
4. Evidence for change
What are opioids?

• Psychoactive chemicals that work by binding to our natural opioid receptors.
• Painkillers, or analgesics, that are sometimes called “narcotic pain relievers.”
• Have risks associated with use and with the drug’s depressant qualities.
**What are Opioids: Four Types**

<table>
<thead>
<tr>
<th>Naturally produced in the body</th>
<th>Opiates, derived from opium poppy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endorphins</td>
<td>Codeine</td>
</tr>
<tr>
<td></td>
<td>Morphine</td>
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<table>
<thead>
<tr>
<th>Fully synthetic</th>
<th>Semi-synthetic</th>
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<tbody>
<tr>
<td>Demerol</td>
<td>Percocet</td>
</tr>
<tr>
<td>Suboxone</td>
<td>Heroin</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>OxyNeo</td>
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<tr>
<td>Methadone</td>
<td>Dilauidid</td>
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<tr>
<td></td>
<td>Percodan</td>
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<tr>
<td></td>
<td>Oxycodone</td>
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</tbody>
</table>
Any Use of Prescription Opioid Pain Relievers, 18+, 2013 (N=2060)

Note: (1) Vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate; (3) no significant difference by sex, by age or by region.

Source: 2013 CAMH Monitor

Nonmedical Use of Prescription Opioid Pain Relievers, 18+, 2013 (N=2060)

Note: (1) Vertical ‘whiskers’ represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate; (3) significant difference by age (p<.05); (4) estimates for certain regions were suppressed.
Source: 2013 CAMH Monitor
Percentage Reporting NM Opioid Pain Reliever Use in the Past Year (Gr. 7-12). 2013 OSDUHS

Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by grade and by region (p<.05), no significant difference by sex

DATIS-Past

• The DATIS was created in 1994 as a project of the Addiction Research Foundation

• Addictions treatment program report client demographic and service utilization data to DATIS
DATIS-Present

- Data is collected through the use of the “Catalyst” Client Management System and DATIS Interface- 175 agencies

- CAMH-DATIS posts provide service providers with clinical tools and reports to assist in the delivery of services, and in turn provided the MoHLTC and LHINs with aggregate data for policy, service planning and accountability purposes
DATIS-Future

• The Catalyst system will be re-built over the next two years to suit the needs of the community addictions service providers and harm reduction services delivered by the 36 PHUs.

• The DATIS team won the Province’s Harm Reduction Client Utilization Database system to support harm reduction services provided by the 36 PHUs.
Impact on Treatment Service Usage

Percentage of new substance abuse admissions with prescription opioids as a problem substance in Ontario 2008-14

- 2008 (n=79123) 15.5%
- 2009 (n=79558) 18.1%
- 2010 (n=79186) 19.9%
- 2011 (n=79543) 20.8%
- 2012 (n=79732) 18.8%
- 2013 (n=73934) 19.3%
- 2014 (n=72580) 18.3%

*Data from DATIS database Aug 30, 2015*
Percentage of all new SA admissions with prescription opioids as a problem substance by LHIN

- Waterloo Wellington (n=4069): 10.8%
- Toronto Central (n=12124): 12.5%
- South West (n=4881): 20.8%
- South East (n=3667): 22.1%
- North West (n=3736): 17.4%
- North Simcoe Muskoka… (n=6181): 14.5%
- Erie St. Clair (n=4991): 14.5%
- Champlain (n=4904): 17.8%
- Central (n=1991): 14.9%
- Mississauga Halton (n=2659): 13.1%
- Central West (n=2101): 10.9%
- Central East (n=4904): 10.9%
- Hamilton Niagara Haldimand… (n=9088): 20.6%
- North East (n=3736): 17.4%
- North Simcoe Muskoka… (n=3667): 19.3%
- South West (n=4881): 20.8%
- North East (n=9088): 24.6%
- South East (n=3667): 22.1%
- Central (n=1991): 17.4%
- Central East (n=4904): 17.8%
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- Central East (n=4904): 12.5%
- Central West (n=2101): 14.5%
- Champlain (n=6181): 14.5%

*Data from DATIS database Aug 30, 2015*
Ask the Audience
Percentage prescription opioid SA admissions in 2014 by gender and age group

(n = 13306)

*Data from DATIS database Aug 30, 2015*
Municipal Drug Strategy Coordinators
Network of Ontario

• No conflicts of interest

• Integrated solutions to preventing and/or reducing problematic substance use, harms via:
  » Prevention
  » Harm Reduction
  » Treatment
  » Enforcement and Justice
Opioid Consumption

• Canada and USA lead all nations (per-capita mg/MED)
  1. Canada 812
  2. United States 750
  3. Denmark 483

• Ontario oxycodone prescriptions grew 850% between 1991 and 2007; a 5-fold increase in oxycodone-related mortality was observed
4x increase in prescribing of strong opioids

Prescriptions per thousand individuals per year

Oxycodone
Other opioid
Codeine

73 per 1000
319 per 1000

Slide courtesy of Irfan A. Dhalla
9x increase in oxycodone-related deaths

Before addition of OxyContin onto public drug formulary

After addition of OxyContin onto public drug formulary

Number of deaths per 1,000,000 per year

<table>
<thead>
<tr>
<th>Year</th>
<th>Deaths per 1,000,000</th>
<th>Year</th>
<th>Deaths per 1,000,000</th>
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<td>2006</td>
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<td>1993*</td>
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<td>1.94</td>
<td>2004</td>
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</tbody>
</table>

Slide courtesy of Irfan A. Dhalla
The Dose Makes the Poison
*sola dosis facit venenum*

- WHO: 100mg/d
- Canada: 200mg/d
- Patients taking high-dose opioids are 24x more likely to die of opioid-related causes

“A man taking high-dose opioids is more likely to die from his medication than almost anything else.”

- David Juurlink

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Toronto naloxone program reduces drug overdoses among addicts

Toronto Star, September 9, 2012

A unique program that puts the power to stop a potentially fatal overdose into the hands of addicts has revived at least 40 people since it was introduced a year ago, Toronto public health officials say.

D'Amato: Cold turkey cure for OxyContin abuse gives little support to addicts

Luisa D'Amato

Heroin use may be to blame for six recent deaths, police say

WATERLOO REGION — Six people may have died from heroin overdoses in recent months, as use of the drug increases in the area, Waterloo Regional Police say.

OxyContin replaced by explosion of small-town heroin use

Chemistry major almost died after taking methadone

KITCHENER — An aspiring pharmacist may have to pursue another career after his girlfriend almost died of a drug overdose.

Toronto naloxone program reduces drug overdoses among addicts

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A unique program that puts the power to stop a potentially fatal overdose into the hands of addicts has revived at least 40 people since it was introduced a year ago, Toronto public health officials say.

D'Amato: Cold turkey cure for OxyContin abuse gives little support to addicts

Luisa D'Amato
Total Ontario prescriptions dispensed for:

- **OxyContin**
  - 2010: 1,687,618
  - 2011: 1,724,179
  - 2012: 888,113
  - 2013 (OxyContin: 1,070): 919,048
  - 2014 (OxyContin: 150): 841,806
- **OxyNEO**
  - 2010: 1,009,496
  - 2011: 1,213,119
  - 2012: 538,306
  - 2013: 1,461,507
  - 2014: 1,621,355
- **Hydromorph Contin**
  - 2010: 885,042
  - 2011: 1,213,119
  - 2012: 538,306
  - 2013: 2,381,625
  - 2014: 2,463,311

**Total**: 2010: 2,572,660
2011: 2,733,675
2012: 2,639,538
2013: 2,381,625
2014: 2,463,311

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TRISH McALASTER / THE GLOBE AND MAIL  SOURCE: PAIN PHYSICIANJOURNAL.COM, IMS BROGAN
Total number of prescriptions dispensed for opioids in Canada:

- 2010: 17,542,822
- 2011: 18,215,579
- 2012: 18,333,813
- 2013: 18,659,936
- 2014: 21,716,832

TRISH McALASTER / THE GLOBE AND MAIL
SOURCE: PAIN PHYSICIANJOURNAL.COM, IMS BROGAN
Opioid Overdose Deaths: Ontario

• The 2\textsuperscript{nd} or 3\textsuperscript{rd} leading cause of accidental death

• 2000-2013: 4,984 deaths, up 463%

• 2013: 625 opioid-related deaths or...

• 1 death every 14 hours
An Opioid Overdose is a Medical Emergency

- Victims: as prescribed or not
- OD = more opioids than the body can handle
- Seconds matter: the difference between life, death, injury

An OD victim can NOT save themselves
Naloxone is:

- An opioid antagonist
- (temporarily) reverses an opioid overdose
- The emergency medicine of choice for 40+yrs
- "take-home" naloxone programs limited to NEPs

2 ampules of IM naloxone + kit accessories >>>

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Naloxone is...

- A WHO-recommended Essential Medicine: *The "safest, most efficacious and cost-effective medicine for priority conditions"

- Comparatively inexpensive intervention

- Very few contraindications

- Analogy: Epinephrine (e.g. EpiPen®, Allerject™)

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# Anaphylaxis vs. Opioid-Related Deaths: Ontario

<table>
<thead>
<tr>
<th></th>
<th>Anaphylaxis</th>
<th>Opioid-related</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time Period</strong></td>
<td>1986-2011</td>
<td>2000-2013</td>
</tr>
<tr>
<td><strong>Deaths(^1,)(^2)</strong></td>
<td>92</td>
<td>4984 (up 463%)</td>
</tr>
<tr>
<td><strong>Emergency Rx</strong></td>
<td>Epinephrine</td>
<td>Naloxone</td>
</tr>
<tr>
<td><strong>Formulary?</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

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An Opioid Overdose is a Medical Emergency

Risk Factors

1. opioid use: as prescribed or not
2. a previous overdose
3. a period of abstinence or reduced use

Rx4Life > Widest, lowest-threshold access
Add naloxone to Formularies

- Add naloxone to the Provincial and Federal Formularies; Veterans Affairs Formulary
- 150+ opioid formulations on Ontario Formulary
- Naloxone is not.
Add naloxone to Formularies

Co-prescribing for patient safety

- multiple prescriptions
- Patients on high dose opioids (> 100mg MED)
- Co-occurring conditions
Expand naloxone beyond select Ontario NEPs and HCV programs

- Existing program is limited by administrative arrangement
- Misses most people at risk of opioid OD
- Good Samaritans ineligible
- Minister's Statement of 2012
Prescription for Life:

> Provide naloxone and kits onsite

- Opioid Substitution Clinics, Recovery programs, Withdrawal Mgmt.
- Hospitals: ER and in-patient
  - Canadian Paediatric Society Discharge Protocol
- People exiting correctional facilities
- First Nations

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> Clarify, Communicate and Address 3rd Party Liability Concerns

• An OD victim can NOT save themselves

• Real or perceived = barrier

• Enable access for Good Samaritans

• e.g.: Schoolboard EpiPen policies; SCC 1991; STI medications; oseltamivir
Prescription for Life

> Ensure lifesavers can prescribe and/or administer naloxone

• Pharmacists + Nurses
  ➢ Most Ontario victims saw a physician and a pharmacist in the month preceding their death
  ➢ Include naloxone in Expanded Scope of Practice

• Select Corrections, Detention, Holding Cell staff
Ensure staff can be Lifesavers

Ensure All Paramedics are authorized to administer naloxone

- Expand scope of practice for paramedics
- Non-Advanced Care paramedics
- Rural and remote communities
- Lack of Advance Care accredited paramedics

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Between Life and Death: The Barriers to Calling 9-1-1 During an Overdose Emergency

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Prescription for Life

Draft a Good Samaritan Law

- Limited immunity from prosecution for victims and witnesses when calling 911
- In Canada, a federal responsibility
- 26 states
- Bi-partisan support

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OD Prevention Strategy

- No strategies; no leadership; no targets; no timelines; little/no funding

- Overdose prevention and intervention absent in government and professional/regulatory policy

- USA: White House, State and County plans
Prescription for Life

> Real Time Monitoring and Surveillance

- Health Canada
- Ontario Coroner
- MCSCS - MOHLTC
- Minister's Promise of 2012
- The era of bootleg fentanyl

"Real time and online"
Bootleg Fentanyl

- Detected in all provinces

- **Alberta: 2015: 4 deaths every 5 days**

<table>
<thead>
<tr>
<th>Year</th>
<th>Edmonton</th>
<th>Alberta</th>
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<tbody>
<tr>
<td>2011</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>2012</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>2013</td>
<td>12</td>
<td>66</td>
</tr>
<tr>
<td>2014</td>
<td>38</td>
<td>120</td>
</tr>
<tr>
<td>As of June 30, 2015</td>
<td></td>
<td>145</td>
</tr>
</tbody>
</table>
Drug Overdoses

- **Purpose**: To track drug overdoses, to assist health and social service agencies, public and private, as well as healthcare providers, in the treatment and rehabilitation of victims of drug abuse.
- **Key Information**: Cause of death attributed to accidental death drug overdoses, the use of naloxone by emergency medical technicians.

**Rhode Island Numbers**

Last updated: September 2, 2015

![Confirmed Accidental Overdose Deaths, 2015](chart)

- **Confirmed Accidental Overdose Deaths, 2015**

![Confirmed Accidental Overdose Deaths, 2014](chart)
Prescription for Life

> Reschedule Naloxone

- Change naloxone to Schedule II medication
- Enable pharmacist and nurse prescribing
Health Canada is concerned with the increasing number of overdoses and deaths related to opioid use in Canada. Misuse and abuse of opioids is a serious public health concern and actions to prevent and address it are being taken on many fronts.

One area Health Canada has begun exploring in co-operation with provinces and territories is increasing access to naloxone, which is used to temporarily reduce the effects of opioid overdose. Naloxone is currently available in Canada by prescription only. Recently, several provinces have requested that it be made available without requiring a prescription in order to facilitate broader access by first responders as well as friends and family members to help them deal with emergency situations.
Joint Statement on Fentanyl - Dr. Supriya Sharma, Health Canada Chief Medical Advisor and Dr. Gregory Taylor, Chief Public Health Officer of Canada

Health Canada and the Public Health Agency of Canada are deeply concerned about recent reports of an increase in overdoses and deaths in Canada due to the illicit use of fentanyl. A recent report from the Canadian Centre on Substance Abuse indicates as many as 655 Canadians may have died between 2009 and 2014 as a result of fentanyl overdoses. Health Canada’s Drug Analysis Service labs have also been detecting fentanyl more and more often in street drugs being sent to them for testing by law enforcement.

Health Canada is working to support provinces, territories and law enforcement on responding to this issue. This includes reviewing the prescription-only status of the opioid overdose treatment Naloxone on an urgent basis.
A Leading Cause of Preventable Death

• a “public health crisis”,
• a “leading public health and safety concern”
• a “State of Emergency”

And a Proven Lifesaver

©MDSCNO 2015
An opioid overdose is a medical emergency.

**CALL 9-1-1**

Provide Naloxone as prescribed.

www.overdoseprevention.ca

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Between Life and Death

An opioid overdose is a medical emergency.

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Provide Naloxone as prescribed.

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Questions
Contact us:

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Jason Guriel
Evidence Exchange Network
Jason.Guriel@camh.ca
References


Resources

Opioid Resource Hub https://www.porticonetwork.ca/web/opioid-resource-hub

EENet http://eenet.ca/

DATIS http://www.datis.ca/

Municipal Drug Strategy Co-ordinator’s Network of Ontario
http://www.drugstrategy.ca/

Government Reports:

The Way Forward: Stewardship for Prescription Narcotics in Ontario

First Do No Harm: Responding to Canada’s Prescription Drug Crisis
Please complete this short evaluation

http://fluidsurveys.com/s/ORHevaluation/