

Session #4

Public Health Update:

Opioid Update & National Overdose Response Services (NORS)

April 20, 2023 13:30 - 15:00



Indigenous Services Services aux Canada Autochtones Canada Canada

Outline

- 1. MOH Update: COVID-19 Update
- Dr. Lauren Bilinsky
- 2. MOH Update: Opioid Crisis Update
- Dr. Chris Sarin
- 3. National Overdose Response Services
- Dr. Monty Ghosh
- 4. Questions



Questions: VChelp@FNTN.ca



MOH Update: COVID-19 Update

Dr. Chris Sarin Senior Medical Officer of Health





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Overview of Confirmed COVID-19 Cases in First Nations Communities on Reserve in Alberta

Source: FNIHB COVID-19 ER System via Synergy in Action (April 18, 2023)



These do not include cases confirmed with only rapid antigen test in communities

COVID-19

Severe outcomes:

 Hospitalizations have been decreasing since November 2022.

Variants:

Figure 5: Number of current COVID-19 cases in hospital (ICU and non-ICU)

Majority of Covid isolates are now XBB.1.5

Vaccines:

- Primary series is available is for ages 6 months and older.
- Bivalent boosters are available for ages 5+.
- Additional bivalent booster dose available for high-risk individuals including 65+ and immunocompromised

COVID-19 Wastewater Tracking

Source: https://covid-tracker.chi-csm.ca/

Edmonton Wastewater Sampling

MOH Update: Opioid Crisis Update

Dr. Chris Sarin Senior Medical Officer of Health

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Opioid Crisis Update

- On March 29, 2023, Dr. Mark Joffe, Chief Medical Officer of Alberta presented an updated Opioid Response Surveillance Report: First Nations Peoples in Alberta to the Health Co-Management Committee.
- Between January 1, 2021 and June 30, 2022:
 - 64% of the First Nations deaths occurred in Edmonton and Calgary
 - 72% of the non-First Nations deaths occurred in Edmonton and Calgary
 - The proportion of apparent unintentional opioid poisoning deaths among females was higher among First Nations peoples (41% vs 23% for non FN).
 - 51% of deaths among First Nations peoples were in aged 20-39 years.
- In 2022, First Nations peoples accounted for 20% of apparent unintentional opioid poisoning deaths in Alberta despite accounting for 3.4% of the Alberta population.

Apparent unintentional opioid poisoning death rate per 100,000 persons among First Nations Peoples and Non-First Nations Peoples by year.

Apparent unintentional opioid poisoning death rate per 100,000 persons by year and zone among First Nations Peoples and Non-First Nations Peoples.

Albertan

Opioid Data: Clients Registered to Alberta Bands with NIHB Opioid Agonist Therapy (OAT) Claims and NIHB Paid Fee-for-Service Claims for OAT

Source: Health Information and Claims Processing Services (HICPS III) system (February 27, 2023)

- From 2017 to 2022, the number of clients registered to Bands in Alberta with NIHB paid fee-for-service claims for opioid agonist therapy increased over 200% from 1,178 to 3,623 individuals.
- From 2017 to 2022, the total number of NIHB paid fee-for-service claims for opioid agonist therapy for clients registered to Bands in Alberta increased from 153, 947 to 267,524 total claims.

Opioid Data: Clients Registered to Alberta Bands with Prescribed Opioid Medication NIHB claims and NIHB Paid Feefor-Service Claims for Prescribed Opioid Medications.

Source: Health Information and Claims Processing Services (HICPS III) system (February 27, 2023)

- From 2017 to 2022, there has been a decrease in the number of individuals accessing prescription opioid medications as well a decrease in the total number of prescribed opioid claims.
- Note: prescription opioid claims excludes opioid agonist therapy medications.

Taking Action: Responding to the Opioid Crisis

- Nasal Naloxone Distribution
 - ISC-AB is currently completing a second distribution of nasal naloxone distribution, available to all First Nations in Alberta.
 - ISC-AB is undertaking an evaluation of the nasal naloxone distribution initiative in collaboration with provincial colleagues.
- Opioid Task Force
 - Task Force is planning to launch strategy in April following engagement and validation of priorities with subcommittee and Health Co-Management.
- Data Availability
 - ISC-AB is working with partners to enhance the availability and presentation of relevant data
- Working with partners to enhance collaborative opioid response efforts, including a significant increase in wellness funding to support community-led action.

NATIONAL OVERDOSE RESPONSE SERVICE

We acknowledge that this program is taking place on the unceded and traditional territories of thousands of First Nations, Metis, Inuit, and Indigenous First Peoples.

In loving memory of Rebecca Morris-Miller

NORS-Co-founder Advocate Harm Reductionist **Co**-conspirator Friend Colleague

NORS is operated by:

Grenfell Ministries Hamilton, Ontario

Region	Number	Crude rate	Age-adjusted rate
Canada	5,360	19.0	19.3
British Columbia	1,712	42.9	43.0
Alberta	1,105	32.4	32.0
Saskatchewan	182	20.3	21.5
Manitoba	Not available	Not available	Not available
Ontario	1,853	16.4	16.5
Quebec	396	6.1	6.2
New Brunswick	25	4.1	4.4
Nova Scotia	52	6.8	6.9
Prince Edward Island	3	2.3	2.2
Newfoundland and Labrador	14	3.5	3.7
Yukon	15	45.7	42.3
Northwest Territories	3	8.8	8.2
Nunavut	Suppressed	Suppressed	Suppressed

Crude rate (per 100,000 population) of total apparent opioid toxicity deaths by province or territory in 2022 (Jan to Sep)

REFERENCE: Alberta Health. Opioids and Substances of Misuse. Alberta Report 2020 Q2.

The Good News

Opioid overdoses can be reversed using Naloxone

Supervised consumption services reduce mortality, but they have geographic limitations.

Virtual Overdose Prevention Services

Drug poisoning crisis still a major issue in Canada

Losing 21 Canadians a day ⁽¹⁾

SCS/ OPS- Supervised consumption sites/ Overdose prevention sites

- Use substances under the supervision of trained staff who can respond and reverse a poisoning.
- Shown to be effective in saving lives in the neighbourhoods they are located (2-4)

VOPS- Making SCS virtual by connecting clients to supervisors using technology

- Based on the common peer practice of "drug-spotting" which is often over the phone or webcam⁽⁵⁾
- Early adopter: Never Use Alone in the USA.

NORS

NORS is a peer-led VOPS that operates in Canada

- National Overdose Prevention Service
- Funded through the Canadian SUAP grant

Steps:

- Clients call the service and are connected to a trained operator (usually a peer)
- Establish an emergency response plan (EMS or a trusted friend or neighbour) and make their location easily accessible
- Use their substances and engage in friendly conversation with the operator
- Will stay on the line for approx. 15-30 minutes
- If the client indicates distress or stops responding, the operator will activate the emergency response plan and help verbally guide the responders to the client's location.
- Operators are also knowledgeable about harm reduction tips and nearby community resources

OUR TARGET POPULATIONS

- ✓ Individuals who use Substances alone
- English and French speaking individuals (although we will accommodate all

languages if we can)

- ✓ Urban, Suburban, Rural communities
- ✓ Blue Collar and Construction Industry Workers
- ✓ Indigenous Communities

Others who may indirectly benefit:

- Front line service providers working with individuals who use substances.
- Community based agencies who support individuals who use substances.
- Families of individuals who use substances.

NATIONAL OVERDOSE RESPONSE SERVICE

BARRIERS THIS SERVICE REMOVES

NVRS

- Geographic Distance barriers for clients to reach a supervised consumption service.
- Stigma and fear of being seen concerns for individuals worried about going to supervised consumption services.
- Time barriers as this service provides additional options for clients near SCS sites with limited hours of operations
- Limited mandates of SCS that do not allow for some routes of consumption, including inhalation

LIMITATIONS OF THE SERVICE

- Individuals who may be drowsy but not overdosing may have emergency services dispatched for them if they do not respond to prompts.
- For some jurisdictions in the country, police may come to the call out. This may be problematic if a client has a warrant for their arrest or children.
- Paraphernalia may be confiscated by police services if they come.
- Some people can overdose quite quickly and emergency services may not coming in time.

NATIONAL OVERDOSE RESPONSE SERVICE

Program Description – What the Research Team tracks to make sure NORS is Working Well

Seeking to describe the uptake, usage trends and health outcomes of NORS.

- Provides a summary of the current state and possibly future directions
- Can help inform policy makers and future VOPS
- Expanding off data that is in-press with CMAJ
 - Virtual overdose monitoring services: a novel harm reduction approach for addressing the overdose crisis

Data Sources

• Using call log data collected by the operators after each call

Monthly Uptake

Total calls: 6063

Unique callers: 404

Study Limitation: clients often conceal their identity, leading to inaccuracies on unique users

			Mental health			
Year	Month	SCS calls	calls	Information calls	Other	Total
2020	Dec	2	0	5	20	27
2021	Jan	33	0	19	2	54
	Feb	68	25	14	0	107
	Mar	146	78	13	11	248
	Apr	172	71	21	24	288
	May	225	86	21	24	356
	Jun	174	36	12	56	278
	Jul	198	49	22	32	301
	Aug	142	74	13	25	254
	Sep	238	82	25	29	374
	Oct	194	102	27	36	359
	Nov	156	101	17	43	317
	Dec	175	113	33	38	359
2022	Jan	129	102	28	32	291
	Feb	122	110	12	41	285
	Mar	98	36	14	22	170
	Apr	102	61	15	8	186
	May	145	48	13	10	216
	Jun	136	53	10	19	218
	Jul	164	62	9	31	266
	Aug	128	57	11	21	217
	Sep	86	20	15	2	123
	Oct	95	24	12	4	135
	Nov	95	34	36	2	167
То	tal	3223	1424	417	532	5596

(3362) SCS- Supervised consumption calls

(1463) Mental health- peer support, mental health crisis support (314) Info- All informational calls including general inquiries, harm reduction education

(437) Other- All other calls

*This list does not include: NORS internal operational calls and training, prank calls, immediate hang ups, automated calls, and wrong numbers or calls to and from other harm reduction agencies

NATIONAL OVERDOSE RESPONSE SERVICE

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Call Types

NORS: All call types N: 5294

NATIONAL OVERDOSE RESPONSE SERVICE

Total Gender Uptake Over Time

This data involves extrapolation of previous callers

NORS: Gender of callers, all call types, Dec 2020 - Nov 2022							
Year	Month	Female	Gender Diverse	N	1ale L	Jnknown	Total
2020	Dec		0	0	0	27	27
2021	Jan		0	1	1	52	54
	Feb		42	0	0	65	107
	Mar	1	31	2	0	115	248
	Apr		91	5	11	181	288
	May		89	27	38	202	356
	Jun		85	68	60	65	278
	Jul		86	76	61	78	301
	Aug	1	07	21	66	60	254
	Sep	1	11	97	61	105	374
	Oct	1	54	47	71	87	359
	Nov	1	21	61	45	90	317
	Dec	1	37	97	33	92	359
2022	Jan	1	22	57	39	73	291
	Feb		99	110	27	49	285
	Mar		47	69	15	39	170
	Apr	1	00	21	8	57	186
	May	1	16	21	15	64	216
	Jun	1	67	13	0	38	218
	Jul	1	53	38	47	28	266
	Aug	1	12	30	36	39	217
	Sep		89	4	10	20	123
	Oct		75	16	31	13	135
	Nov		74	21	41	31	167
Total		23	08	902	716	1670	5596

Rural, Remote, Indigenous Communities

- Vast majority of callers are from urban areas (4788, 86.6%)
- 4.3% of callers
 identify as
 Indigenous

Caller Location

Most calls came from

- Ontario (66%)
- Quebec (12%)
- Alberta (11%)

Location	Total	%
Ontario	3694	66%
Quebec	655	12%
Alberta	613	11%
Missing	249	4%
British Columbia	166	3%
Manitoba	101	2%
United States	27	0%
Newfoundland and Labrador	16	0%
Undisclosed	13	0%
Yukon	12	0%
Nova Scotia	9	0%
Saskatchewan	8	0%
New Brunswick	5	0%
Prince Edward Island	2	0%
Northwest Territories	2	0%
Canada	2	0%
United Kingdom	1	0%
Other region	1	0%
Nunavut	0	0%
Total	5576	100%

Substance Use Trend

Substances used:

Opioids (76%)

Cocaine (9.2%)

Methamphetamines (6.8%)

Only 3.8% of SCS sessions involved multiple different types of substances (polysubstance)

Route used

Injection (56%)

Smoking (32%)

Oral (2.8%)

33 Mental health emergency responses

- Most mental health crisis events were handled by NORS staff (55%)
- 5 "other" incidents handled by the staff (fires, home invasions, domestic issues)
- 7 cases where people called NORS during a poisoning and were connected to regional poison control services

Discussion:

- NORS shows comparable outcomes to SCS/OPS sites in BC and Alberta^(6,7)
- Likely providing support for people who smoke substances
- Hopeful results of engaging laypeople.
 - All were successful at reversals
- Requires more research in the rural, remote or Indigenous communities
- Further investigation into the unique experiences of the operators

Modeling Evaluation:

- Descriptive statistics and chi-square tests were used to identify variable association for adverse events, mental health and acute drug poisoning events.
- We used logistic regression to examine the relationship between various call characteristics and adverse events running separate models for all adverse events, overdose and mental health symptoms.
- Three regression models were created with drug type and route, gender, and size of community they live in.
- In model refinement, insignificant variables were removed and more parsimonious models were developed for each of the three regression models. Adjusted odds ratios were established for each variable.
- All statistics were run through SPSS version software (SPSS Version 28).
- Goodness of fit tests and 95% confidence intervals were also examined to support findings.

Figure 3: The likelihood of a NORS caller experiencing an overdose/ drug poisoning

Modeling Results:

- Lastly, we found that rurality was also associated with increased risk of any adverse event while using the NORS line (aOR 21.101 (2.771-160.658 CI)).
- Statistically significant predictors of overdose were methamphetamine use (aOR 0.244 (0.093-0.642)), opioid use (aOR 0.198 (0.075-0.525 Cl)) and substance use through injection (aOR 0.436 (0.191-0.998 Cl).
- Of these categories, females were more likely to experience an overdose on the NORS line (aOR 2.878 (1.184-6.998 Cl).
- Regarding significant predictors of adverse outcomes relating to mental health, methamphetamine use was the only predictor of adverse mental health events (aOR 0.138 (0.035-0.549 CI))

Beliefs, values and attitudes of people who use substances in the context of virtual overdose monitoring services: a qualitative study

Tyler Marshall, Dylan Viste, Farah Jafri, Amanda Lee, Julia Kim, Oona Krieg, Monty Ghosh

Research objective

To identify and describe the values of people who use substances in the context of novel virtual overdose monitoring services in Canada.

Methods

- Qualitative study using grounded theory with thematic analysis.
- Semi-structured interview guide based on 8 domains of Proctor's framework (Implementation Science) in collaboration with people with lived/living experience.
- One-on-one telephone interviews conducted via snowball sampling existing peer networks.
- Verification strategy: Compared responses between people who had used services previously and those who have not.

Beliefs, values and attitudes of people who use substances in the context of virtual overdose monitoring services: a qualitative study

Variable	Statistic
N enrolled	25
Mean (SD) age, years	38.5 (12.3)
N (%) Male	14 (56.0)
N (%) White	19 (76.0)
N (%) Indigenous	5 (20.0)
N (%) Province/territory of residence	8 (32.0) Alberta 1 (4.0) Quebec 15 (60) Ontario 1 (4) Nova Scotia
N (%) Reside in urban residence	22 (88.0)
N (%) reported previous use of virtual overdose services*	11 (44.0)

Beliefs, values and attitudes of people who use substances in the context of virtual overdose monitoring services: a qualitative study

Results – main themes (n references)

- Awareness (n=307)
 - Applicable service for PWUD
 - Low general awareness
 - Peer-based outreach might be most effective
- Relationships (n=281)
 - Privacy, anonymity (essential)
 - Desire for human connection (mixed)
 - Trust
- Mental health (n=189)
 - Emotional distress (common on phone lines)
 - Comfort (disclosing drug use)
 - Fear/anxiety (police/arrest, guilt, shame, stigma)
- Perceptions of safety (n=160)
 - Concerns about response times (esp. in rural areas)
 - People who used services prev. had less concerns.
- Technology (n=150)
 - Both a potential barrier and facilitator
- Applicable population (n=101)
 - Wide variety of PWUS
 - Unclear if applicable for people with severe mental illness, homeless, rural (no cell service), older populations

KEY THEMES: PWUD perspectives

THEME
Optimistic beliefs around VOMS as an acceptable harm reduction intervention
Willingness to use VOMS may be related to perceptions of privacy/confidentiality and convenience.
Unreliable access to cellular phones and/or cellular service may negatively impact uptake of VOMS.
Concerns around the reliability of emergency response times
Fear and anxiety of legal consequences as barriers
Trusting and non-judgmental relationships are commonly desired between service providers and VOMS clients
Role of mental health, peer support and facilitating connections to additional health and social services
Low public knowledge/awareness about VOMS among many PWUS may contribute to limited uptake

Question: Are VSCS used for reasons other than overdose prevention?

KEY THEMES: Beyond Overdose Support

Ν	THEME
1	Mental Health Support and Community Referral are a useful aspect to VOMS
2	Methamphetamine Agitation and Psychosis De-Escalation could be done through VOMS
3	Self-Care and Harm Reduction Education could be provided through the VOMS platform
4	Providing a Sense of Community and Peer Support was a key component to VOMS's effectiveness.
5	Optimism about positively impacting Health System

COST EFFECTIVE ANALYSIS

	Pre-Funding	Funded 1	Funded 2	
	Dec 20 - Mar 21	Apr 21 - Mar 22	Apr 22 Dec 22	Total
Total number of service calls	417	3512	1647	5576
Total number of substance use phone calls	249	2023	1090	3362
Fotal number of mental health phone calls	103	969	391	1463
Total of referrals to other services	17	41	79	137
Total Overdoses	6	45	15	66
Overdose in unknown individuals	0	2	2	4
Overdose in unique individuals	4	13	10	27
Unique + Unknown	4	15	12	31
Fotal EMS call outs for overdoses	6	36	13	55
Fotal community based overdose responses	0	9	2	11
EMS call outs for non overdose emergencies*	0	3	1	4
False positive EMS call outs for assumed emergencies	0	2	0	2

COST EFFECTIVE ANALYSIS

Time period	Cumulative cost of lives that could have been lost	NORS operating costs	Average NORS Operating Cost /month	Total Medical Costs	Average Medical Cost/month	Total Net Benefit	Cost to Benefit Ratio:
Dec 2020 - Mar 2021	2931212.998	0	0	\$25,892.64	\$6,473.16	\$2,905,320.36	113.21
Including Unknown	2931212.998	0	0	\$25,892.64	\$6,473.16	\$2,905,320.36	113.21
April 2021- March 2022	\$9,526,442.24	\$879,680.00	\$73,306.67	\$157,516.84	\$13,126.40	\$8,489,245.40	9.18
Including Unknown	\$10,992,048.74	\$879,680.00	\$73,306.67	\$157,516.84	\$13,126.40	\$9,954,851.90	10.60
May 2022- Sep 2022	\$7,328,032.50	\$712,559.63	\$79,173.29	\$56,350.72	\$6,261.19	\$6,559,122.15	9.53
Including Unknown	\$8,793,638.99	712,559.63	\$79,173.29	\$56,350.72	\$6,261.19	\$8,024,728.64	11.44
TOTAL	\$19,785,687.74	\$1,592,239.63	\$66,343.32	\$239,760.20	\$9,990.01	\$15,048,367.55	9.33
TOTAL Including unknown	\$22,716,900.73	\$1,592,239.63	\$66,343.32	\$239,760.20	\$9,990.01	\$17,979,580.55	10.95

COST EFFECTIVE ANALYSIS KEY FINDINGS:

- If we estimate that 15% of unwitnessed overdoses survive without intervention then:
- NORS had a overall net savings of: \$17,979,580.55
- The overall cost benefit ratio was 9.33-10.95 thus for every dollar invested, we saved the system \$10
- Thus a community response was 34.52 times more cost effective than an EMS based response.

References

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- 6. Government of Alberta. Alberta Substance Use Surveillance System. 2022 [accessed 2022 Oct 28]. <u>https://healthanalytics.alberta.ca/SASVisualAnalytics/?reportUri=%2Freports%2Freports%2F1bbb695d-14b1-4346-b66e-d401a40f53e6§ionIndex=0&sso_guest=true&reportViewOnly=true&reportContextBar=false&sas-welcome=false</u>
- 7. BCCDC. BC Overdose Response Indicators. 2022 [accessed 2022 Oct 28]. <u>http://www.bccdc.ca/health-professionals/data-reports/overdose-response-indicators</u>

NATIONAL OVERDOSE RESPONSE SERVICE

Stakeholder Surve

The National Overdose Response Service (NORS) is a virtual, phone-based supervised consumption service to help protect people who use illicit substances alone.

Please follow the link to complete a 2-minute survey about how you feel about NORS after today's educational presentation.

This survey is completely anonymous.

Survey results are used for NORS internal evaluation and funding requirements.

If you have any questions or concerns, please contact <u>Dylan.viste@ucalgary.</u> <u>Ca</u>

https://survey.ucalgary.ca/jf e/form/SV_8CYu8P2Dho71 BuC

Health Canada

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Questions? VCHELP@FNTN.CA

Canada

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FNIHB Technical Team

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