

COGNITIVE IMPAIRMENT DUE TO NARCOTIC USE

Spider Event: March 22, 2019

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LEARNING OBJECTIVES

- 1. COGNITION WHAT ARE WE TALKING ABOUT?
- 2. INTRODUCE SOME OF THE EFFECTS OF SUBSTANCE USE
- 3. REMEDIAL STRATEGIES FOR INDIVIDUALS WITH COGNITIVE IMPAIRMENT

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• FROM ANCIENT GREEK NAPKũ NARKŌ, "TO MAKE NUMB"

 "NARCOTIC" WAS A TERM USED BY PHARMACOLOGISTS TO DESCRIBE PAIN-RELIEVING DRUGS BUT IS NOW PRIMARILY USED IN A LEGAL CONTEXT TO DESCRIBE SUBSTANCES THAT ARE REGULATED UNDER THE CONTROLLED DRUGS AND SUBSTANCES ACT (CDSA)

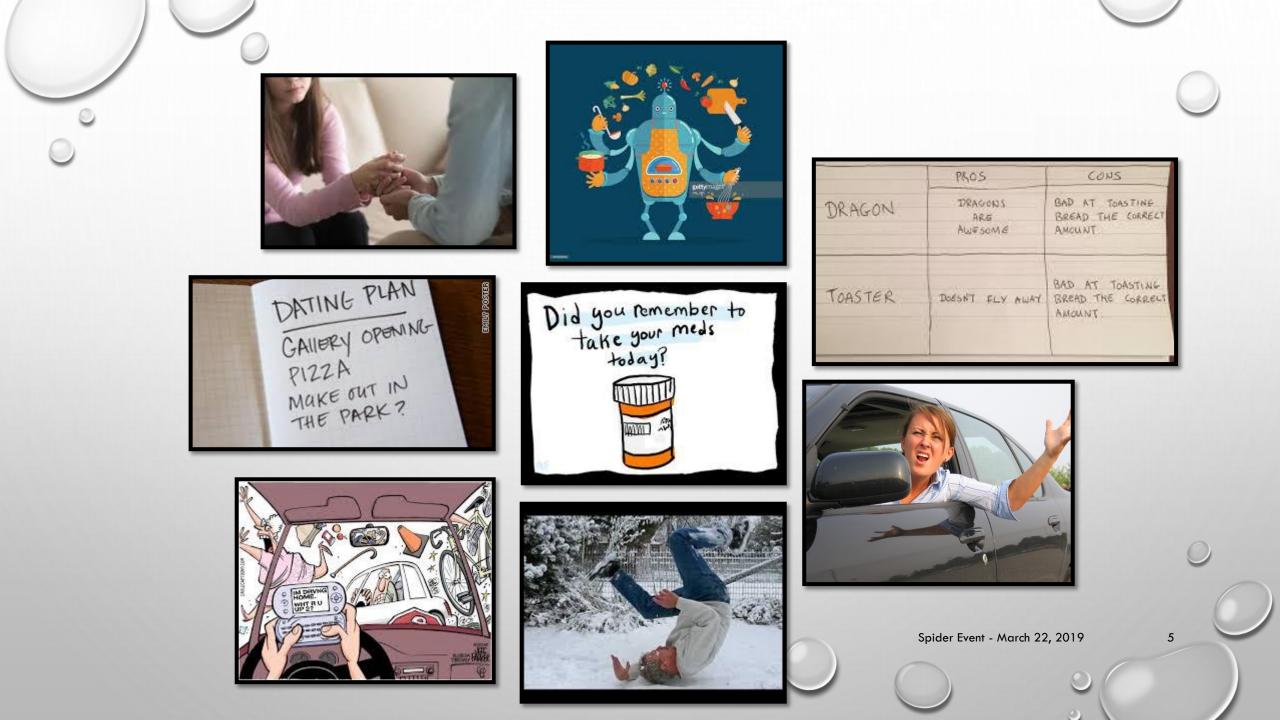
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COGNITION

Neuropsychological Domain	Components
Memory	Ability to learn, perform skills, remember to do something in the future
Attention	Needed for multitasking, avoiding distracted by various environmental stimuli
Executive function	Ability to initiate a behaviour, reason/problem-solve, working memory, be cognitively flexible (change focus to complete tasks), ability to control impulses, self-regulate, gather and evaluate information, setting goals/planning
Psychomotor functioning	Motor strength, hand-eye coordination, balance, fine motor skills, process signals and respond appropriately
Processing speed	Ability to process information automatically
Emotion processing	Ability to recognize, experience and express emotions

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FENTANYL

- SYNTHETIC OPIATE \rightarrow 50-100X STRONGER THAN MORPHINE
- WHITE, ODOURLESS, TASTELESS POWDER
- MIXED WITH OTHER DRUGS SUCH AS HEROIN TO AMPLIFY THE HIGH
- RESPONSIBLE FOR ~4,000 OVERDOSE DEATHS IN CANADA IN 2017

LONG-TERM:

- RISK OF OVERDOSE AND DEATH
- EXACERBATION OF PRE-EXISTING MENTAL HEALTH CONDITION
- RISK OF ANOXIC INJURY DUE TO DECREASED OXYGEN (RESPIRATORY SUPPRESSION) AND PARALYSIS OF CHEST MUSCLES
- INCREASED RISK OF STROKE
- DAMAGE TO PERSONAL LIFE AND RELATIONSHIPS



Signs of Fentanyl Overdose

Physical signs of fentanyl overdose include:

- Severe sleepiness/sedation
- Slow, shallow breathing
- nausea
- respiratory arrest
- Lips and nails turn blue
- confusion
- · Person is unresponsive or unconscious
- Gurgling sounds or snoring
- Cold and clammy skin
- Tiny pupils
- Drowsiness/respiratory depression
- coma
- death

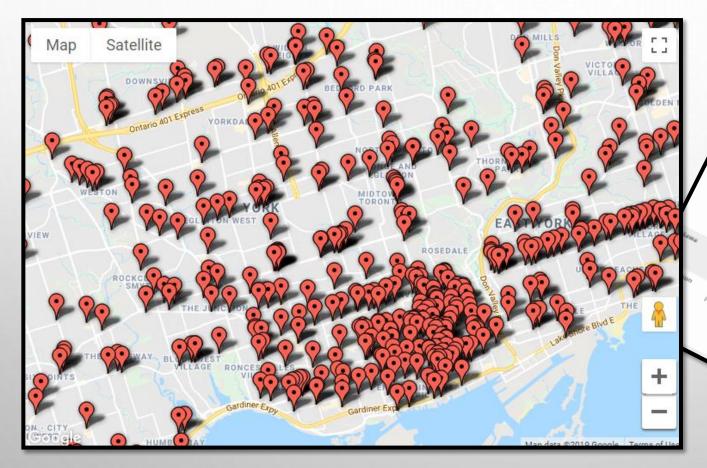


Overdoses of fentanyl should be treated immediately with an opioid antagonist, like Naloxone.



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• FREE NALOXONE KITS ARE AVAILABLE



https://www.ontario.ca/page/where-get-free-naloxone-kit



METHAMPHETAMINE

- A STIMULANT WITH SIMILAR CLINICAL SYMPTOMS AS COCAINE
- WHITE, ODORLESS, BITTER-TASTING POWDER THAT MAY BE SNORTED, SWALLOWED, SMOKED OR INJECTED
- 2010 2017 THERE WAS A 590% INCREASE IN DRUG OFFENCES AND SEIZURES RELATED TO METH





LONG-TERM:

- RISK OF OVERDOSE AND DEATH
- TOXICITY: ABNORMAL HEART RHYTHMS, SEIZURES, RESPIRATORY ARREST, BRAIN HEMORRHAGE
- PSYCHOSIS/PSYCHOTIC SYMPTOMS: VIOLENT BEHAVIOUR, PARANOIA, HALLUCINATIONS, DELUSION
- IMPAIRMENT TO REWARD CENTRES
- MEMORY LOSS, MOTOR SKILLS, LANGUAGE, MOOD FLUCTUATIONS, CONCENTRATION DEFICITS, IMPAIRED EXECUTIVE FUNCTIONING ARE COMMON
- TOOTH DECAY, HEART DISEASE, LUNG COMPLICATIONS, ACUTE RENAL FAILURE, INTESTINAL DISORDERS, HORMONAL IRREGULARIES ETC.
- RISK OF INFECTION VIA NEEDLES OR UNPROTECTED SEX
- DAMAGE TO PERSONAL LIFE AND RELATIONSHIPS

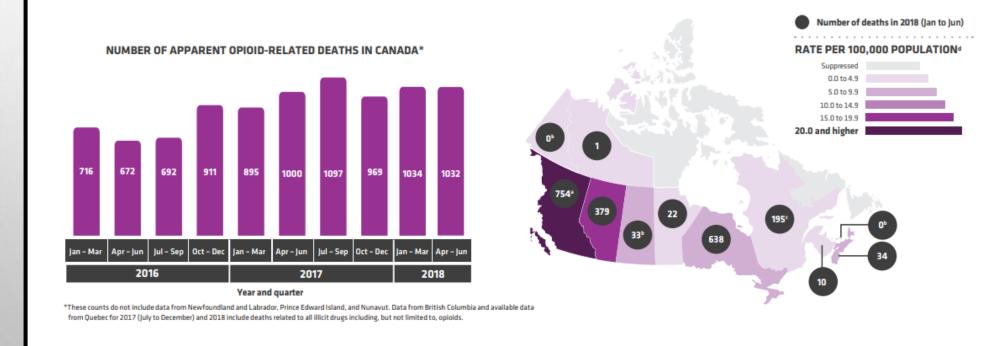
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OVERDOSE

DEATHS

In the first half of 2018, **2,066** apparent **opioid-related deaths** occurred.

This means more than **9,000** lives were lost between January 2016 and June 2018 related to opioids.



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LONG-TERM EFFECTS

POLYSUBSTANCE USE (MORE THAN ONE SUBSTANCE)

IMPAIRMENTS IN:

- MEMORY
- ATTENTION
- EXECUTIVE FUNCTION
- IMPULSE CONTROL
- LEARNING
- EMOTIONAL PROCESSING
- PROCESSING SPEED
- IMPAIRMENTS ARE MOST PREVALENT FOLLOWING MEDICAL CRISIS

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What if 000

- WE ADD SCHIZOPHRENIA...
- WE ADD INTELLECTUAL DISABILITY...
- WE ADD LEARNING DISABILITY...
- WE ADD DEMENTIA...
- WE ADD A BRAIN INJURY...



• YES! INDIVIDUALS WITH ID & THE ELDERLY ARE AFFECTED BY SUDS.

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REMEDIAL STRATEGIES

- VISUAL REMINDERS:
 - SIGNS, STEP BY STEP INSTRUCTIONS, LABELLED DRAWERS, CALENDARS, PHONE NUMBERS AND APPOINTMENTS.
- AUDIO REMINDERS:
 - WATCH/PHONE ALARMS, TALKING ALARM CLOCKS, PHONE CALLS/TEXTS
- VISUAL INFORMATION:
 - LABEL HOOKS FOR IMPORTANT ITEMS SUCH AS KEYS
 - MARK FOOD WITH EXPIRY DATES
 - WHITE BOARD WITH DATE & SEASON/WEATHER
 - KEEP WRITTEN INFORMATION SIMPLE AND CLEAR



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REMEDIAL STRATEGIES

- REMOVE DISTRACTIONS:
 - REMOVE UNNECESSARY ITEMS, NOISE OR VISUAL STIMULI
 - KEEP VERBAL INSTRUCTIONS OR QUESTIONS SIMPLE AND CLEAR
- GIVE FREQUENT BREAKS FROM TASKS
- ALLOW SUFFICIENT TIME TO PROCESS REQUESTS AND QUESTIONS
- ARRANGE THE ENVIRONMENT IN WAYS THAT ENCOURAGE SUCCESS
 - HOOKS BY THE DOOR FOR COAT, KEYS, BAGS
 - TEACH HOW TO PREPARE LOW EFFORT, INEXPENSIVE MEALS

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REMEDIAL STRATEGIES

- REPETITION IS KEY:
 - REPEAT INFORMATION AS MANY TIMES AS NEEDED
 - PRACTICE SKILLS / ROLE-PLAYS WITH LOTS OF PRAISE AND ENCOURAGEMENT
 - ASK INDIVIDUAL TO PARAPHRASE TO CHECK FOR UNDERSTANDING
- EMOTIONAL SUPPORT:
 - IF YOU'RE NOT SURE HOW THEY ARE FEELING, ASK. "YOU'RE FACIAL EXPRESSION IS TELLING ME THAT YOU'RE ANGRY. IS THAT TRUE?"
 - IF YOU DON'T THINK THEY UNDERSTAND HOW YOU FEEL, TELL THEM.

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MORE TIPS...

- WHEN IN DOUBT, ASSUME THE INDIVIDUAL YOU ARE SUPPORTING IS NOT ABLE TO PERFORM THE BEHAVIOUR RATHER THAN SIMPLY "REFUSING" –CONSIDER DEFICITS AND BARRIERS FIRST!
- PRAISE/ACKNOWLEDGE ALL SUCCESSES, REGARDLESS OF HOW SMALL.
- BE AWARE OF YOUR OWN BIASES, BODY LANGUAGE AND TONE OF VOICE.
- BE PATIENT. BE PATIENT SOME MORE. AND THEN ADD SOME PATIENCE TO THAT.
- IF YOU DON'T KNOW HOW YOU CAN HELP, ASK THE PERSON. IF THE PERSON DOESN'T KNOW HOW YOU CAN HELP THEN ASK A PROFESSIONAL ☺

THANK YOU!

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ADDICTION SERVICES - CAMH

Women's Addiction & Concurrent Disorder Service
This service delivers group therapy to women experiencing concurrent addiction and mental illness concerns.
Home / Your Care / Programs & Services / Women's Addiction and Concurrent Disorder Service
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Intended For Women experiencing concurrent addiction and mental illness concerns.
Referral Requirements: Self-referral accepted through Access CAMH, call 416-535-8501 press 2 Services Offered As: Outpatient Location: Oueen Street Site - 60 White Squirrel Way

WEBSITES

- <u>HTTPS://WWW.CAMH.CA/EN/YOUR-CARE/PROGRAMS-AND-SERVICES/METRO-ADDICTION-</u> <u>ASSESSMENT-REFERRAL-SERVICE-MAARS</u>
- <u>HTTPS://WWW.CAMH.CA/EN/YOUR-CARE/PROGRAMS-AND-SERVICES/WOMENS-ADDICTION-</u> <u>AND-CONCURRENT-DISORDER-SERVICE</u>
- <u>HTTP://WWW.CCSA.CA/RESOURCE%20LIBRARY/CCSA-CANADIAN-DRUG-SUMMARY-</u> <u>METHAMPHETAMINE-2018-EN.PDF</u>
- <u>HTTPS://WWW.FOUNDATIONSRECOVERYNETWORK.COM/WHAT-ARE-NARCOTICS-AND-WHY-ARE-</u> <u>THEY-ADDICTIVE/</u>
- <u>HTTPS://WWW.ONTARIO.CA/PAGE/GET-NALOXONE-KITS-FREE</u>

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REFERENCES

- BRANDS, B., MARSHMAN, J., & SPROULE, B. (1998). DRUGS & DRUG ABUSE: A REFERENCE TEXT. ADDICTION RESEARCH FOUNDATION= FONDATION DE LA RECHERCHE SUR LA TOXICOMANIE.
- FERNANDEZ-SERRANO, M. J., PÉREZ-GARCÍA, M., & VERDEJO-GARCIA, A. (2011). WHAT ARE THE SPECIFIC VS. GENERALIZED EFFECTS OF DRUGS OF ABUSE ON NEUROPSYCHOLOGICAL PERFORMANCE?. NEUROSCIENCE & BIOBEHAVIORAL REVIEWS, 35(3), 377-406.
- HAGEN, E., ERGA, A. H., HAGEN, K. P., NESVÅG, S. M., MCKAY, J. R., LUNDERVOLD, A. J., & WALDERHAUG, E. (2016). ASSESSMENT OF EXECUTIVE FUNCTION IN PATIENTS WITH SUBSTANCE USE DISORDER: A COMPARISON OF INVENTORY-AND PERFORMANCE-BASED ASSESSMENT. JOURNAL OF SUBSTANCE ABUSE TREATMENT, 66, 1-8.
- HERBECK, D. M., & BRECHT, M. L. (2013). SUBSTANCE USE AND MENTAL HEALTH CHARACTERISTICS ASSOCIATED WITH COGNITIVE FUNCTIONING AMONG ADULTS WHO USE METHAMPHETAMINE. JOURNAL OF ADDICTIVE DISEASES, 32(1), 11-25.
- LEZAK, MURIEL DEUTSCH, HOWIESON, DIANE B., BIGLER, ERIN D., TRANEL, DANIEL. (2012). NEUROPSYCHOLOGICAL ASSESSMENT; 5TH EDITION.
 OXFORD UNIVERSITY PRESS. NEW YORK, NEW YORK.
- LOOKATCH, S. J., ELLEDGE, L. C., ANDERSON, S., SHOREY, R. C., STUART, G. L., & MOORE, T. M. (2017). COGNITIVE AND PSYCHOLOGICAL CHANGES DURING 28-DAY RESIDENTIAL SUBSTANCE USE TREATMENT. ADDICTION RESEARCH & THEORY, 25(4), 334-341.

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