# Suicide Risk and the COVID-19 Pandemic: Transforming threat to skills for safer living

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St. Michael's





### Get to Know Your Mind...

- 1. What are some of the risk factors for suicide that you had not considered?
- 2. What are some of the key elements of intervention?

### What is Suicide?

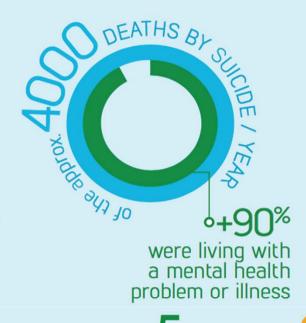
- Not a feeling; behaviour
- Reaction to deep emotional pain
- Not about wanting to die
- Seeing no options out of the pain

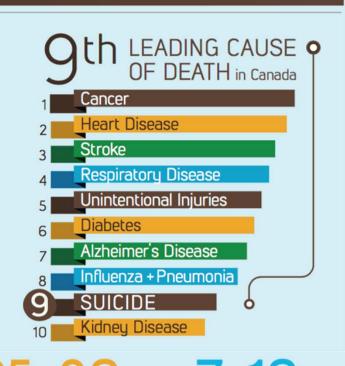


### SUICIDE in Canada

### **CURRENT CONTEXT**

An average of **PEOPLE** die by suicide EACH DAY in Canada





FOR EVERY SUICIDE **DEATH** 

THERE ARE:

SELF-INFLICTED **INJURY HOSPITALIZATIONS** 



### Poll: Pandemic Suicide Risk

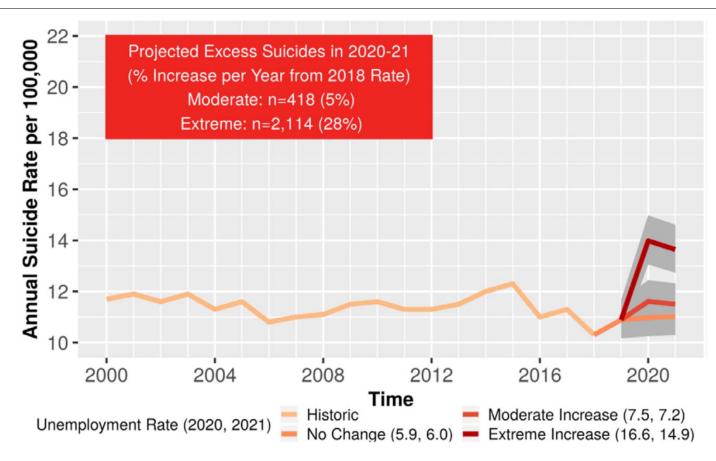
#### What impact has COVID had on thoughts of suicide?

- A. No effect, suicidal ideation rates have not changed
- B. Slight increase
- C. Doubled
- D. Tripled
- E. Quadrupled

### Suicide and COVID-19

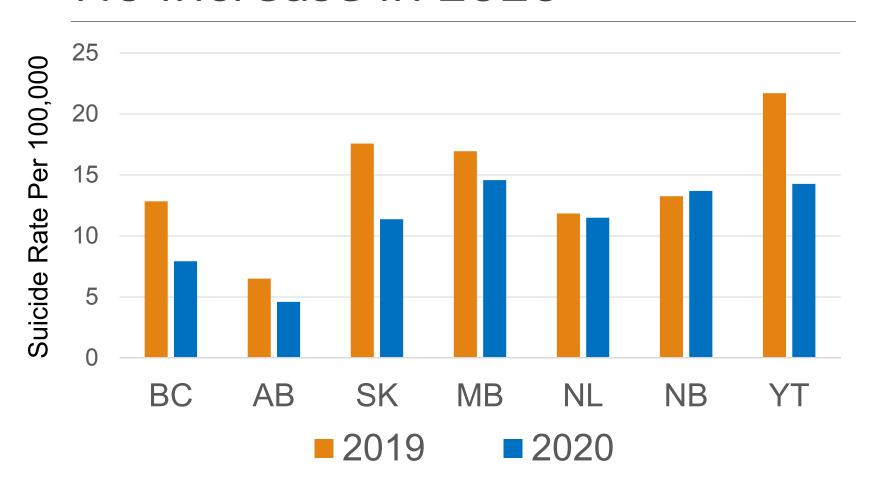
- The pandemic has exacerbated known risk factors for suicide (Reger et al., 2020; Gunnell et al., 2020)
  - Financial strain
  - Job loss
  - Social isolation
  - Stress
- Decreased access to mental health services

# Projected Increase in Suicide as a Consequence of COVID-19



<sup>\*</sup> Based on projections in April 2020 using historical data from 2000-2019

# Suicide Rates Across Canada – No Increase in 2020

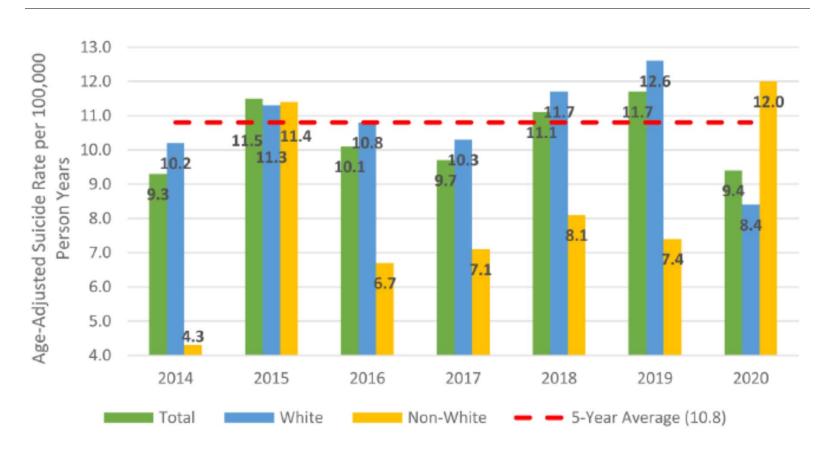


Source: Centre for Suicide Prevention, Feb 2021 https://www.suicideinfo.ca/resource/suicide-stats-canada-provinces/

### Still too early to tell...

- What will be the effects of prolonged lockdown?
- How will risk factors change when things go back to "normal"?
- How are racialized and marginalized groups differentially impacted?

# Early Evidence of Disproportionate Impact on Racial Minorities in US



# Disproportionate Impact on Marginalized Populations in Canada

 Certain subgroups may be more vulnerable to the impacts of COVID-19 on mental health

Indigenous
Racialized
2SLGBTQ+
People with disability

2-4x
AS LIKELY

to have had suicidal thoughts or tried to harm themselves since the outbreak of COVID-19

### Language of Suicide





"Committed suicide"

"Died by suicide"

"Victim of mental illness" "Experiencing mental illness"

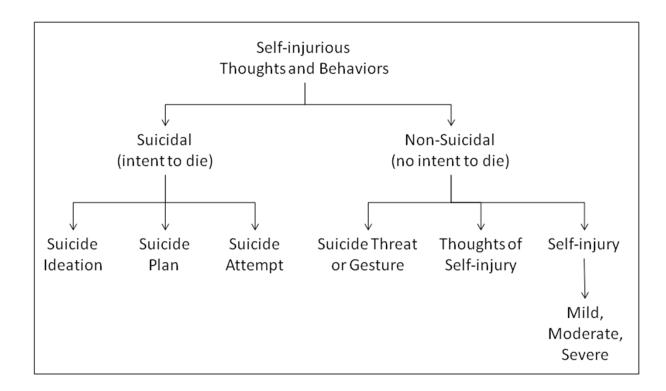
"Unsuccessful suicide"

"Attempted suicide"

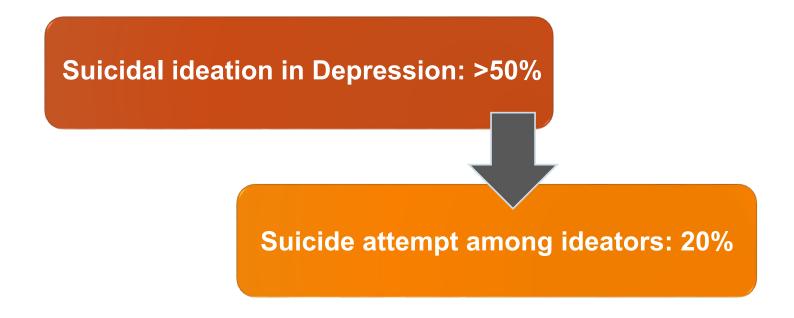
### Attempt vs. Self-harm

**Attempt:** conscious intention to die

**Self-harm (NSSI):** without any conscious suicidal ideation



### Failure to Predict at Risk Groups



### Who is at Risk for Suicide Attempt?



Young Age
Female Gender
Single Status
Low Income
Life Stressors
Social Isolation

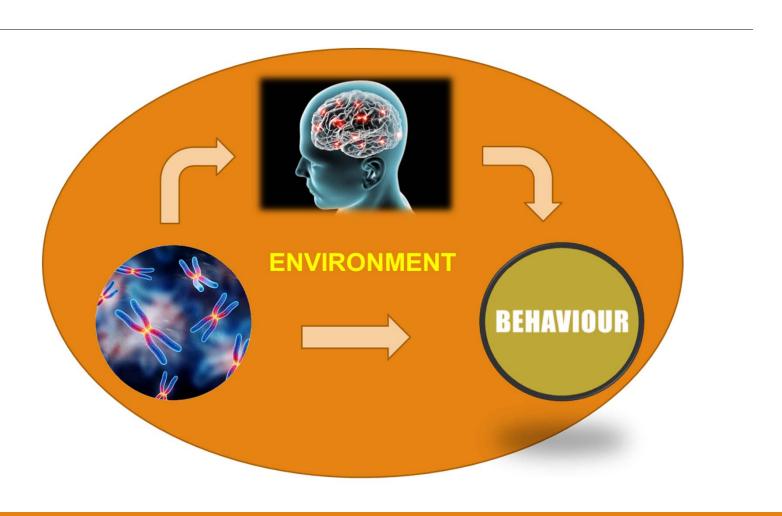


Mood Disorder
Substance Abuse
Trauma History
Hopelessness
Psychache
Impaired Memory
and Attention

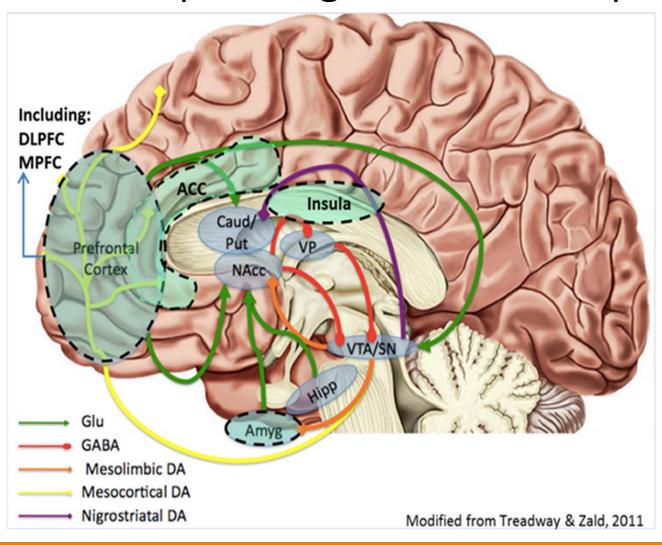


Brain Volume
Brain Activity
Impaired Brain
Chemistry
Inflammation
Genetics

### Role of Brain Biology in Suicide Risk?



### Areas of Overlap Among Suicide and Depression



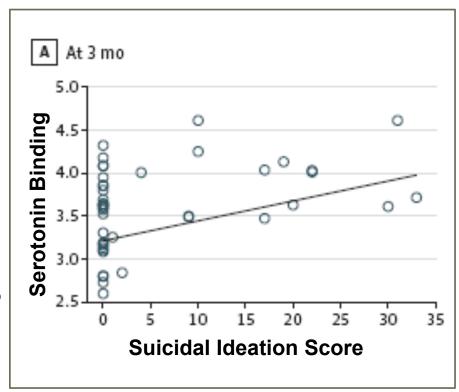
### Neurotransmitters

Mood Serotonin Pleasure Dopamine Attention Norepinephrine **ON** Switch Glutamate **GABA** OFF Switch

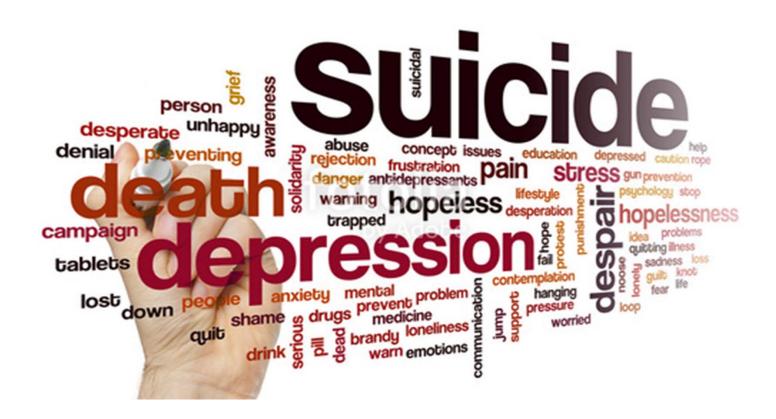
### Suicide and Serotonin

Mood and aggression

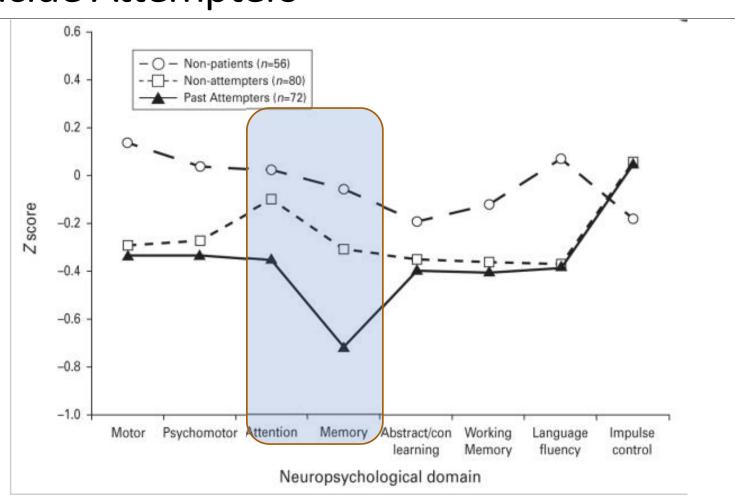
Less serotonin predictive of more lethal suicide behaviour and severity of suicidal ideation over 2 years



### Psychology of Suicide

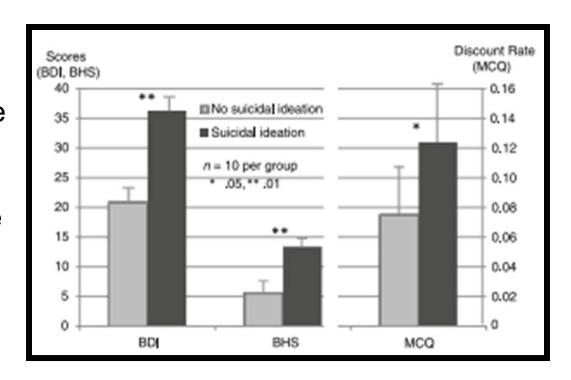


# Specific Cognitive Impairment in Suicide Attempters



### Immediate Reward and Suicide

- Preference for immediate smaller reward higher in suicide ideation group
- Associated with intense psychological pain in those with recent suicide attempt



## Psychological Pain, Physical Pain and Suicide Risk



#### Concept of "Psychache"

- Psychological pain
- Increased levels of psychological pain in suicide attempters, ideators and self-injurers (Rizvi et al, 2017)
- Strongest statistical predictor of suicide compared to depression and hopelessness (Troister & Holden, 2010)

#### **Physical Pain**

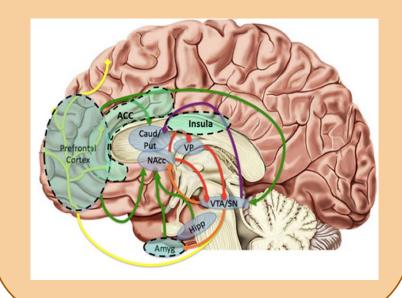
 High suicide risk patients show ↑ psychological pain AND an ↑ physical pain tolerance

# Who is at Risk for Suicide? A Focus on Pain, Reward, Attention

#### **Predictors**

- Gender
- Younger age
- Hopelessness
- Social isolation
- Belongingness
- Depression
- Impaired response to reward
- Deficit in attention
- "Psychache"
- Increased physical pain tolerance

Shared Brain Networks among Depression, Pain and Suicide



### Social Aspects of Suicide



### Social Inequality

- ■LOWER income & education → HIGHER rates of suicide
- Death by suicide is...



for people who experience high social isolation and material deprivation\*



Public Health Agency of Canada. Key Health Inequalities in Canada: A National Portrait. Ottawa: Public Health Agency of Canada; 2018.

### Age Related Social Factors

#### Youth

-Life stressors (bullying, mental illness with substance abuse, conflict with parents, intimate partner, school, and legal problems)

#### Adult

-Divorce

-Unemployment

-Rural living

#### Elderly

- Use of health services
- High population density
- Higher unemployment
- Lower education

- Alcohol use

- Fertility

### Social aspects of suicide...

Preference for solitude and social isolation had highest risk for suicidal ideation and self-harm

Over 17,000 adolescents screened

		SI		SH	SH		
Model	Adjusted for	OR	95% CI	p value	OR	95% CI	p value
1	PfS	3.7	3.4-4.1	<.001	2.2	1.9-2.6	<.001
2	PfS + demographic factors <sup>8</sup>	3.6	3.3-4.0	<.001	2.2	1.9-2.5	<.001
3	PfS + demographic factors <sup>a</sup> + social isolation	3.1	2.8-3.4	<.001	1.9	1.6-2.3	<.001

### Interventions for Suicide Risk

Medication

Esketamine\*

**Antidepressants** 

Brain Stimulation

**ECT** 

rTMS

**Psychosocial** 

**CBT** 

**DBT** 

# Brief Skills for Safer Brief Living (Brief-SfSL)

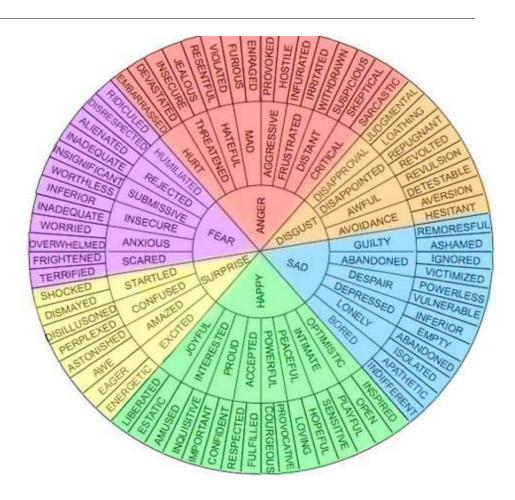
- Single 1-hour individual therapy session
- Adapted from SfSL (a 1.5h weekly, 20 session group therapy)
- Based on the theory supporting SfSL:
  - Once a person accepts the possibility of choosing to live, or not to die right now, they are better able to engage in specific interventions to reduce their suicide risk (Bergmans et al., 2014)
- Is aligned with SfSL goal:
  - To increase a person's understanding and capacity to engage in what would enable them to keep safe, even if thoughts of suicide are present

- 4 main tasks:
  - 1. Understanding the individual's suicidal experience
  - 2. Skills building
  - 3. Developing a safety plan
  - 4. Identifying obstacles to enacting the safety plan

- Skills and concepts:
  - 1. Keeping Safe
  - 2. Emotional Literacy
  - 3. Problem Solving
  - RelationshipManagement

SCALE	FEELINGS	EARLY WARNING SIGNS	STRATEGIES	NETWORKS
1-2	I'm okay	Relaxed, can laugh, want to see people	Go out, enjoy,	My friends
3-4	I'm a little rough	I'm pacing, not sleeping so well, not eating too well	Go for walks, cycle, try to eat small meals frequently	Go to my therapist this week, call Joan and tell her we need to go to a comedy club
5-6	I'm not good, lonely, scared, overwhelmed	Thinking it's not worth it again. No sleep in 3 days, isolating, didn't feed the cat, the	Don't be aloneAsk my friend Amy to come over and help me organize myself and the house. Call the crisis	Amy John Dr. Glahh DO NOT CALL MOM!

- Skills and concepts:
  - 1. Keeping Safe
  - 2. Emotional Literacy
  - 3. Problem Solving
  - Relationship Management



### What Else Can You Do?

#### DO

#### Speak up

"Are you having thoughts of suicide?"

#### **Assess warning signs**

No hope, means, withdrawal

Listen

**Offer Hope** 

#### **DON'T**

#### **Argue**

"You have so much to live for"

"Your suicide will hurt your family"

Lecture on value of life

**Problem fixing** 

Blame yourself

**Promise confidentiality** 

# Key Takeaways for Navigating Suicidality

- Suicide is not about wanting to die
- Factors related to suicide risk are complex
- Often gap in understanding "story" of suicide risk
- Focus on safety and person's early warning signs essential
- Risk factors heightened during COVID-19, especially in marginalized populations

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