CANADIAN FEDERATION OF MENTAL HEALTH NURSES
peace of mind

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SUICIDE RISK ASSESSMENT IN CHILDREN AND ADOLESCENTS: USING THE EVIDENCE

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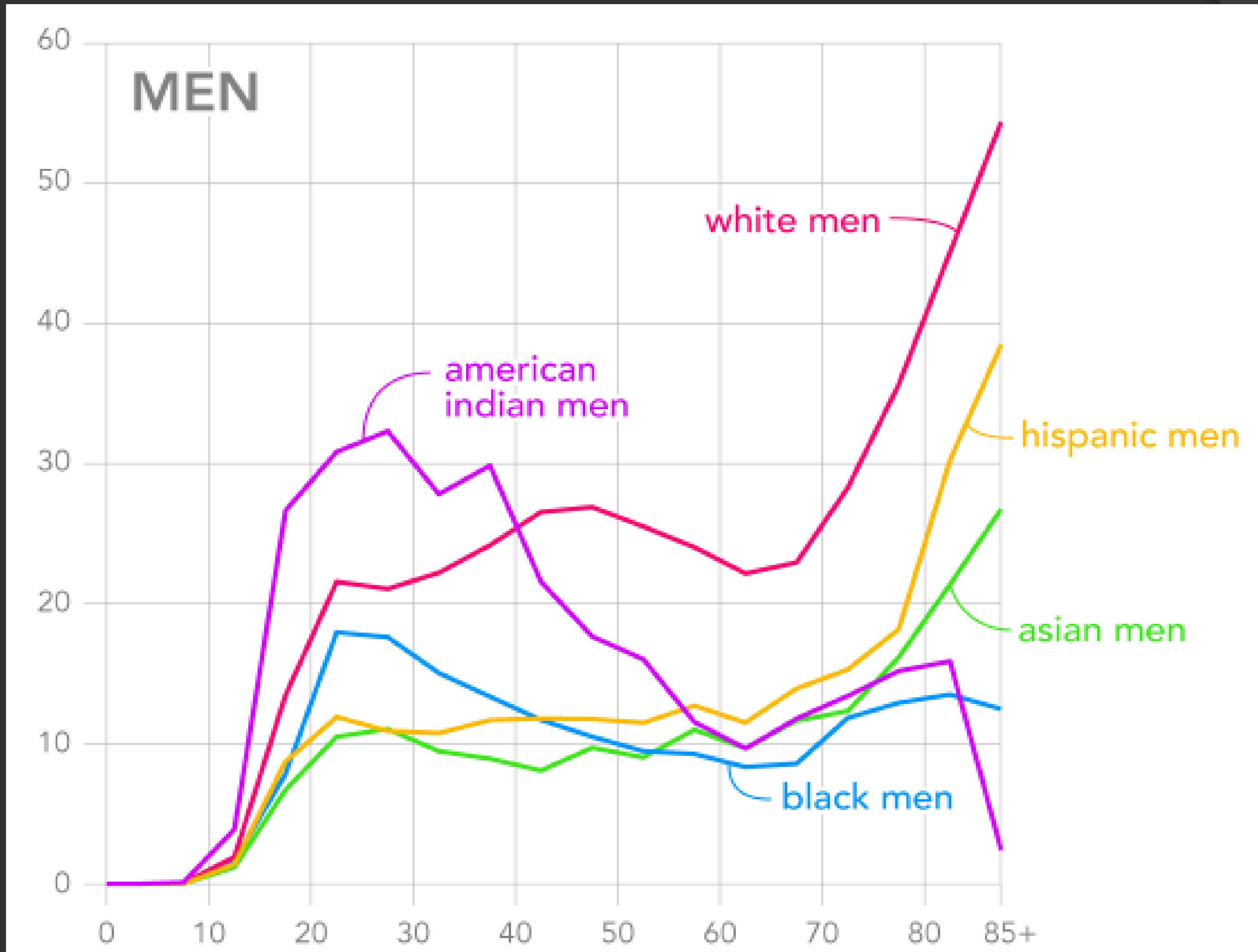
Objectives

1) Epidemiology of suicide
2) Motivations for suicide
3) How to assess suicide risk
4) What does “suicide prevention” mean?

Mythbusting

Race and Suicide



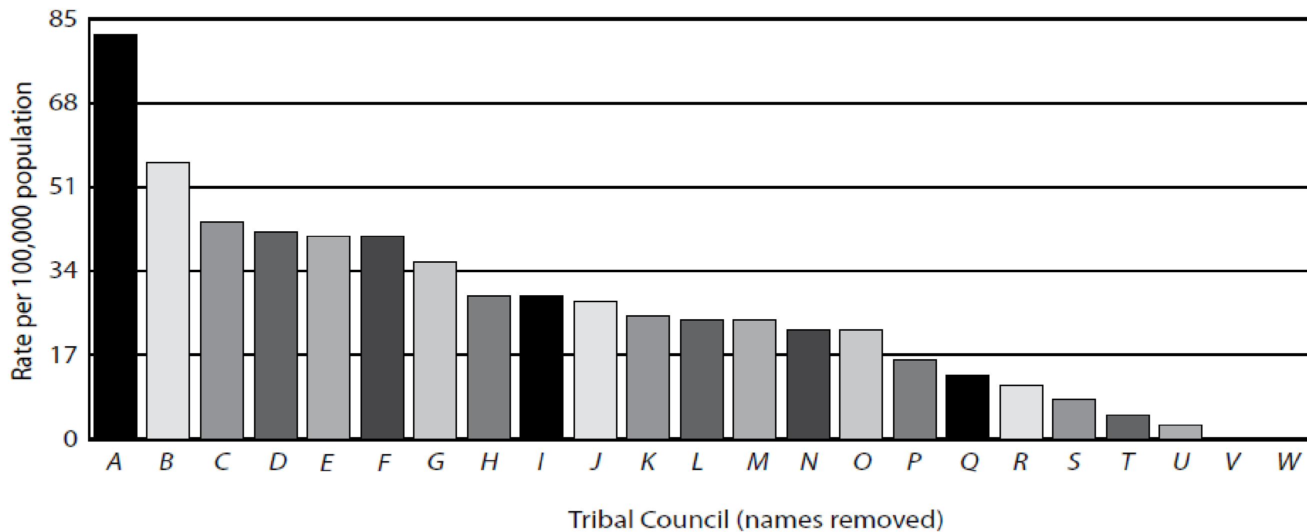
Rate of Suicide (# per 100,000 per year)

Age (years)

U.S. Data (2006), census.gov

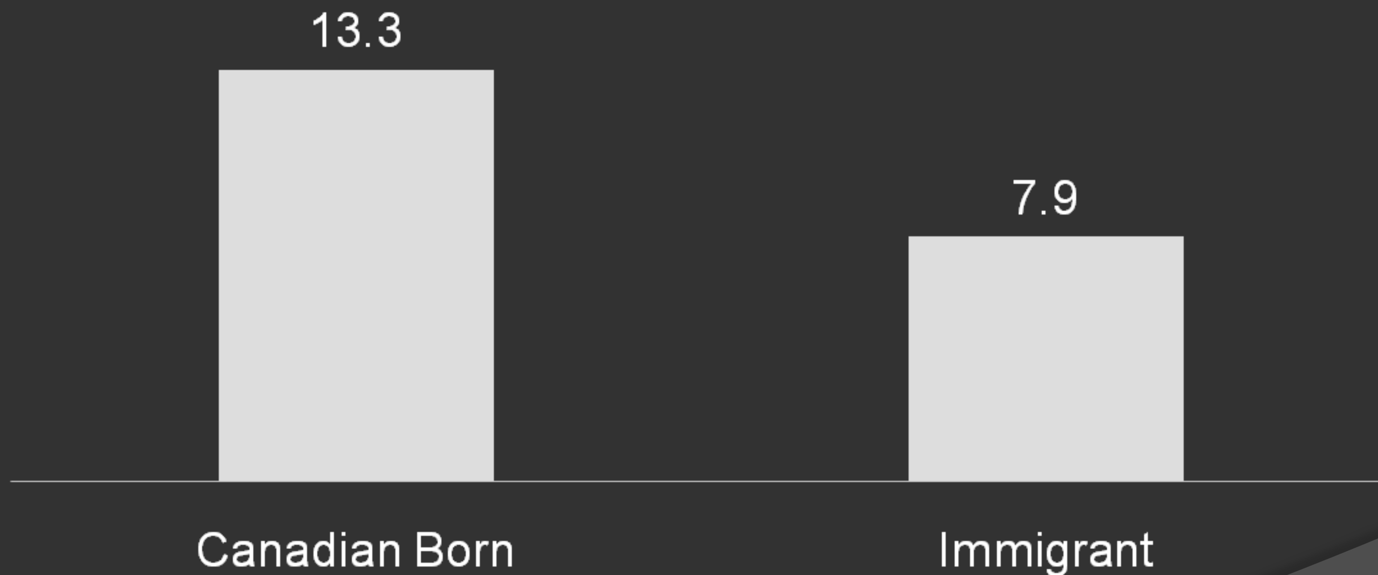
Caution: “Aboriginal”

Figure 2-6) Average Annual Suicide Rate in British Columbia First Nations by Tribal Council, 1993–2000



Source: Lalonde, 2001.

Epidemiology - Race



Source, “Suicide in Canadian Immigrants”, Statistics Canada, 2004

Myth – Race and Suicide

Myth: Suicides are more common in immigrant and visible minority populations.

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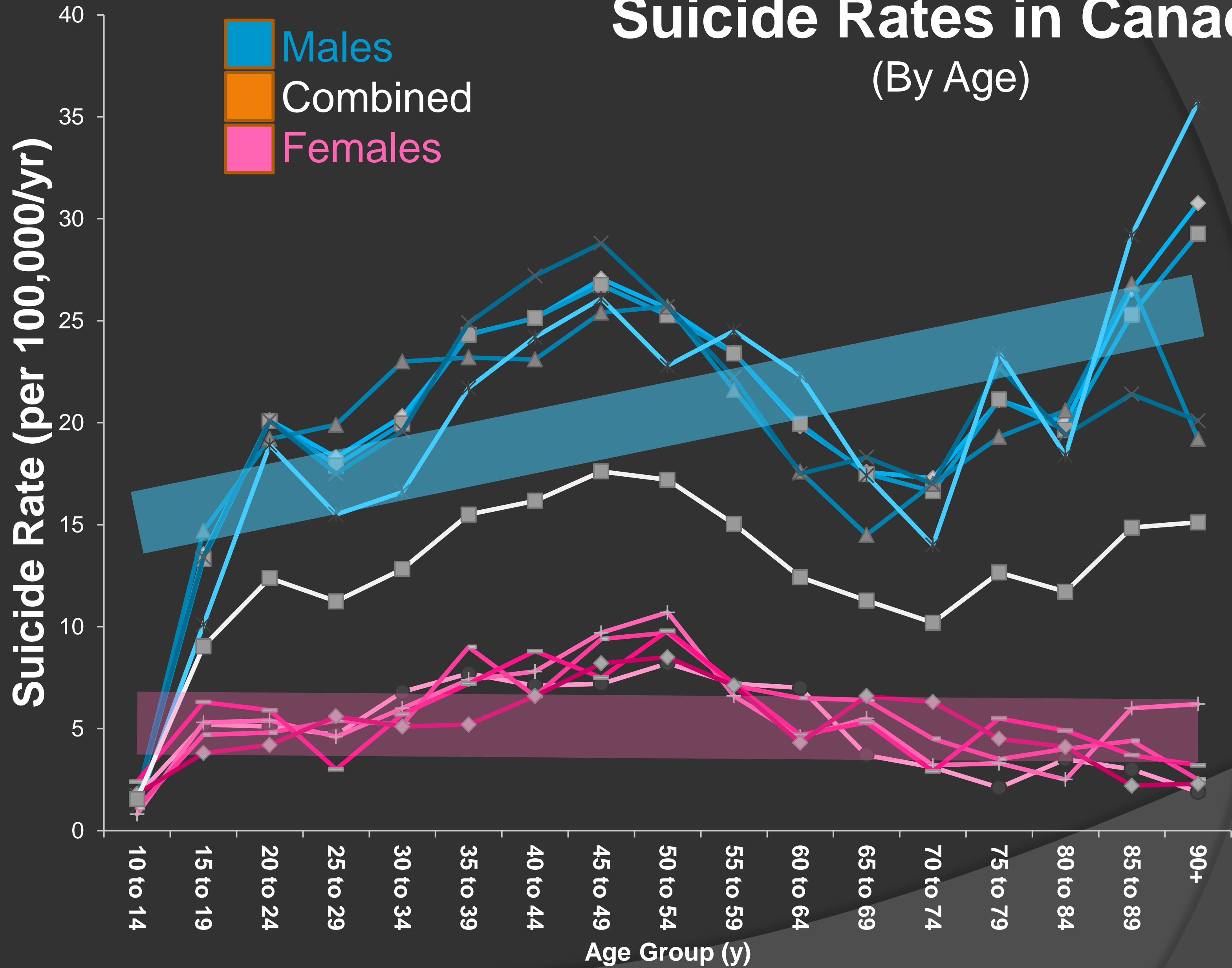
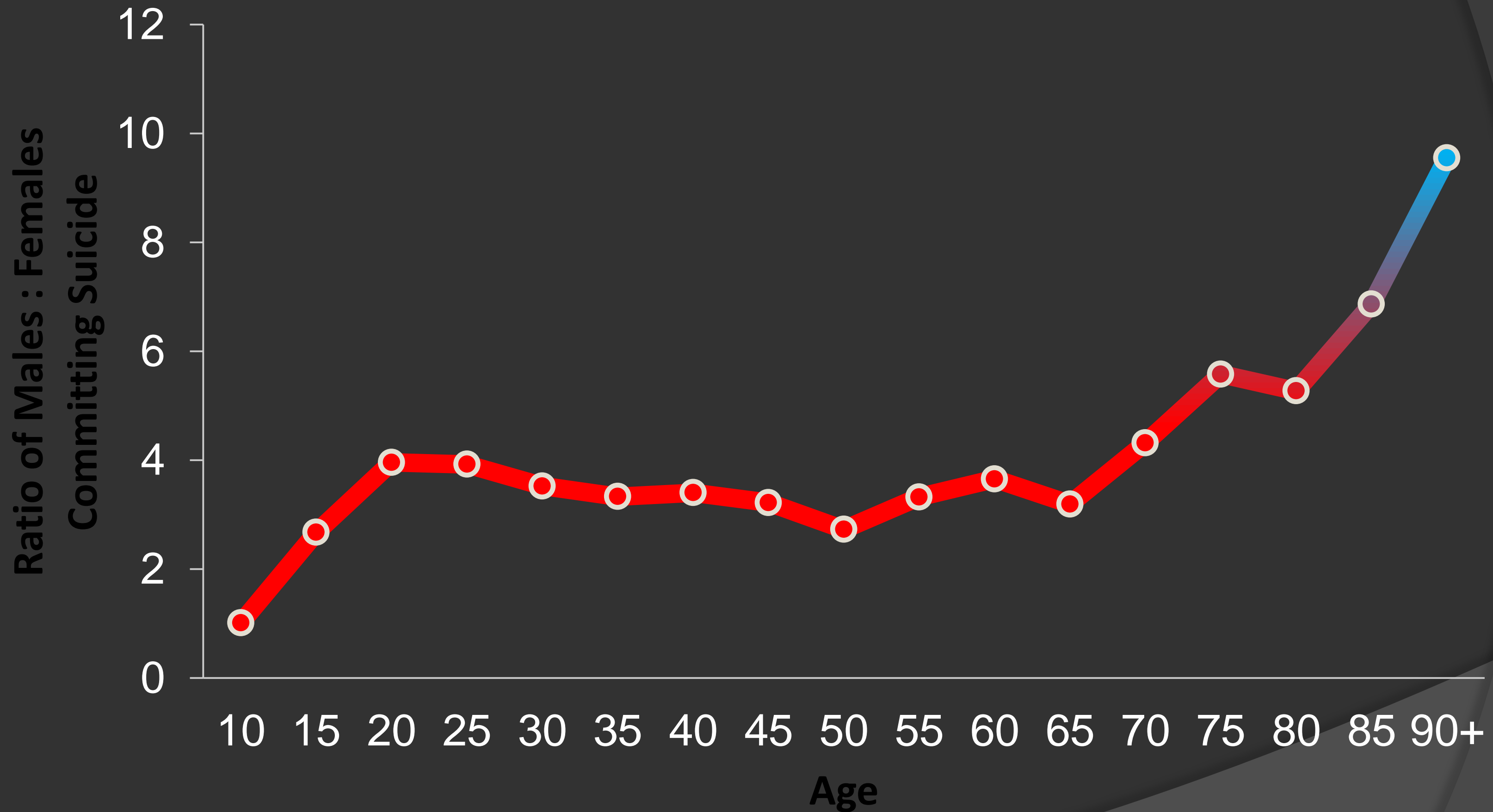
Myth: Suicides are more common in immigrant and visible minority populations.

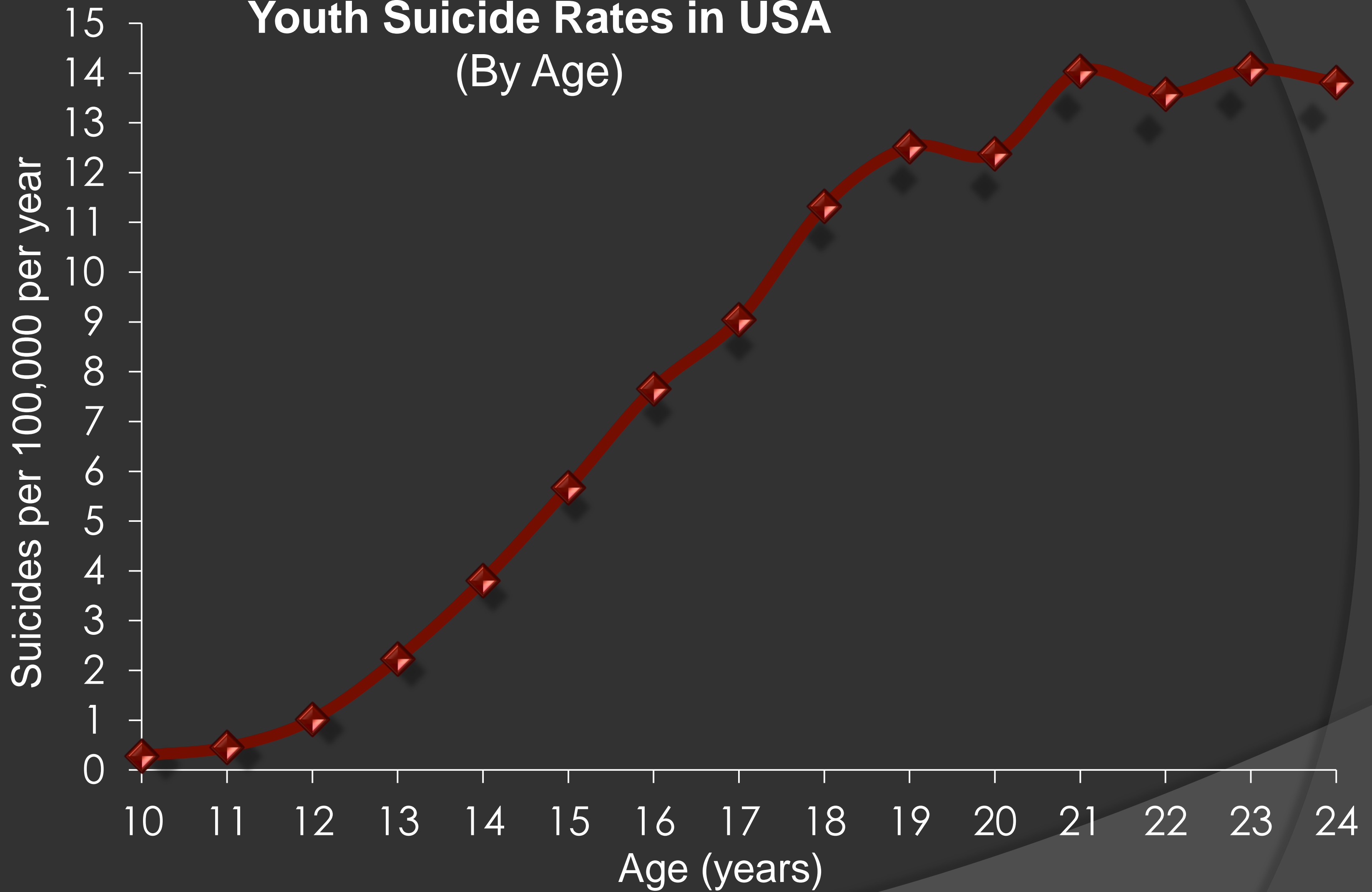
The Evidence: While suicide is prevalent in all races, a native-born, Caucasian Canadian is in the highest risk group for lifetime suicide rates.



Source: Statistics Canada, 2002-2006 Data, Compiled by Presenter

Epidemiology - ♂ to ♀ Ratios





1991-1998 Data, Web-based Injury Statistics Query and Reporting System compiled by presenter (2010)

Prevalence of Despair in Youth

"so much stress [they] could not function"

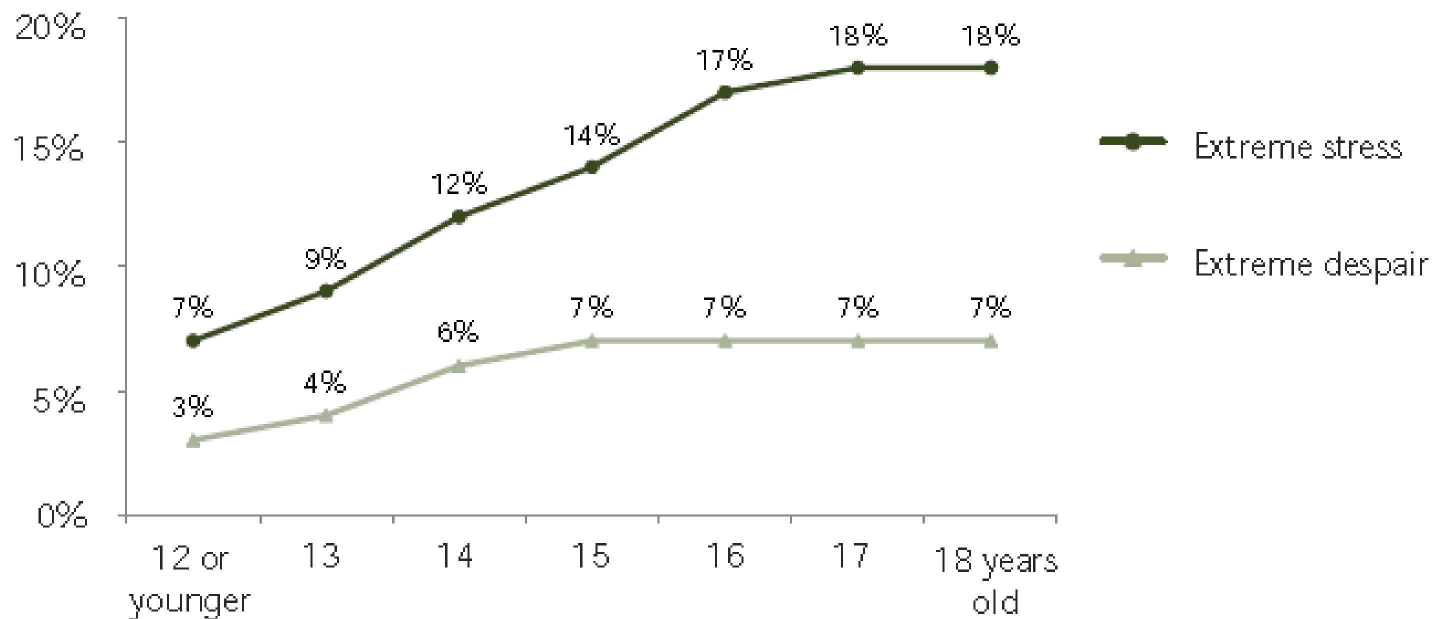
14% (1 in 7 adolescents)

"despair such that [they] wondered if anything was worthwhile"

6% (1 in 17 adolescents)

Females 2x as likely to report the above

Prevalence



Age-appropriate considerations

- Risk of completed suicide <10y is **very** low
- Risk of completed suicide increases to 24y

  Therefore, asking about suicidal thinking should likely start after age 10

- Rate of **significant stress** <10y is ~3-5%
- Rate of **despair** <10y is 2-4%

  Therefore, it makes sense to consider asking about stress and feeling hopeless at any age!

Myth – Age and Suicide

Myths: Increasing age is correlated with increased suicide risk, and adolescents are at higher risk than adults.

The Evidence:

- Starts at age 10
- Increases until age 24
- Remains high until age 60
- Increases (male) or decreases (female) after age 60

Epidemiology – Depression and Suicide

Lifetime Prevalence of Suicide in Mood Disorders:

- Hospitalized for mood disorder + suicidal – 8.6%
- Hospitalized for mood disorder – 4.0%
- *Treated for depression as outpatient – 1.8%*
- Non-mood disorder – 0.3-0.5%

Am J Psychiatry 157:1925-1932, December 2000

Epidemiology – Schizophrenia and Suicide

Lifetime Prevalence of Suicide in Schizophrenia:

- Cited by over 270 journals and all major textbooks as 10%
  - 1977 Review of 34 articles

    Miles CP. Conditions predisposing to suicide: a review. *J Nerv Ment Dis.* 1977;164:231-246
  - 1990 Follow-up longitudinal studies

    Tsuang MT. Suicide in schizophrenics, manics, depressives, and surgical controls: a comparison with general population suicide mortality. *Arch Gen Psychiatry.* 1978;35:153-155.
- Flawed statistics (assumes rate during study is constant)
- Reanalysis:
  - At time of first diagnosis
  - Lifetime risk = 4.9% (4.3%-5.6%)

Arch Gen Psychiatry. 2005 Mar;62(3):247-53.

Myth – Mental Illness & Suicide

Myth:

Lifetime risk of suicide in **depression** = 5-10%
Lifetime risk of suicide in **schizophrenia** = 10%

The Evidence:

Lifetime risk in all mood disorders	= 2.2%
Lifetime risk in **schizophrenia**	= 4.9%
Lifetime risk in bipolar disorder	= 6%
Lifetime risk in addictions	= 6%

Are those who commit suicide mentally ill?

- It is natural to assume most who commit suicide are *suffering* at least acutely
- Does all such suffering equate to mental illness?

Opportunities for Intervention

- 1 month prior to suicide:
  - 40% contacted *any professional*
  - 20-25% contacted a *mental health professional*

BMJ, 1999;318:1235=1239 AJP, 2002;159:909-916

Opportunities for Intervention

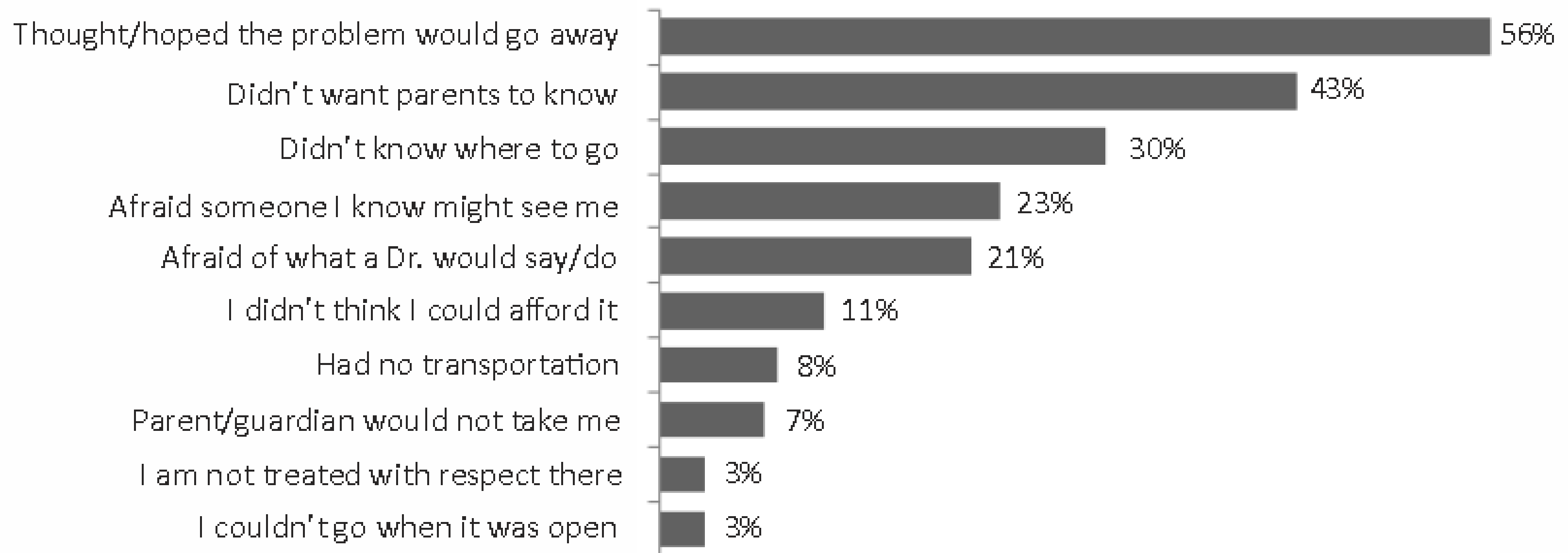
If every mental health treatment team

magically protected every person they saw for 1 month,

***about 70% of suicides would still occur*.**

BMJ, 1999;318:1235=1239 AJP, 2002;159:909-916

Why don’t we have access to children in Mental Health?



Child and Adolescent Suicide

- Suicide is the 2nd leading cause of death in people aged 10-24 years

In Canada, between 2000-2007:

- Suicide: 4,210 deaths (avg = 526 / year)
- Cancer: 1,759 deaths (avg = 219 / year)
- ALL OTHER DISEASES: (avg = 550 / year)

Statistics Canada, 2007 data, compiled via CANSIM by presenter

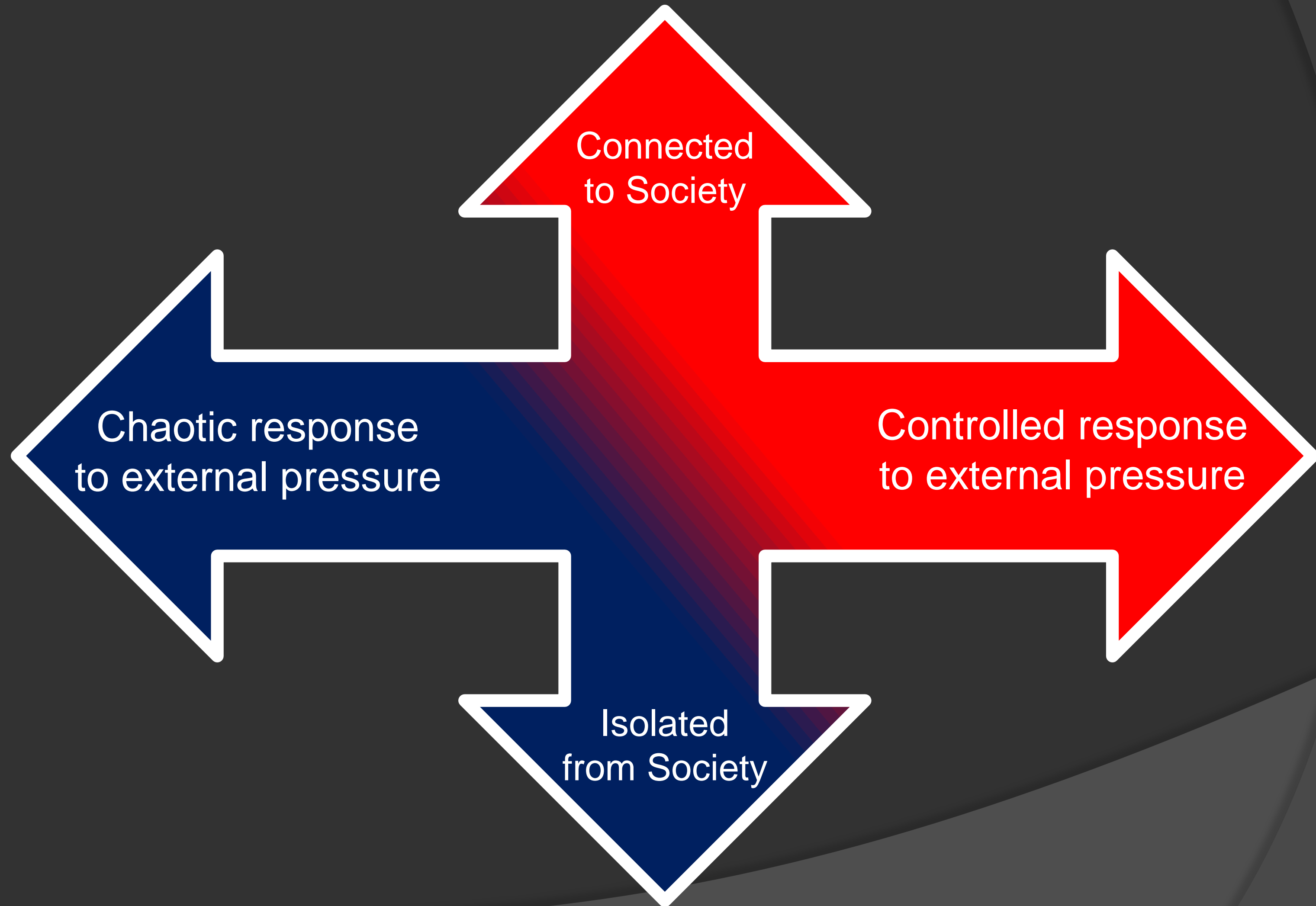
Epidemiology – C&A

Substantially Increased Risk:

- Aboriginal youth (reserve/isolated)
  - 5-6 times Non-Aboriginal Youth (GoC
  - Metro-based Aboriginal Youth = Non-Aboriginal 1995)
- Street Youth
  - 10-15 times more likely than other youths

(Stephen Hwang, 1999/2001)

Motivations for Suicide



Motivations – Pressure

(Anomic)

"Sometimes I feel as if I should have a punch-in time clock before I walk out on stage"

"I can't stand the thought of Frances becoming the miserable, self-destructive, death rocker that I've become."

Motivations – Escape (Fatalistic)

April 22, 1945 – Russia in Berlin, "Germany is Lost"

April 28, 1945 – Mussolini executed, "I will not have that happen to me"

April 30, 1945 – Suicide by cyanide ingestion and gunshot to head

Motivations - Isolation

- (Egoistic suicide) – not connected to others or community

Motivations - Socioistic

- The opposite of Egoistic suicide, the individual is entirely focused on the betterment of their community.

Hachiro Hosokawa - a member of Thunder Gods Kamikaze squadron.

In Children & Adolescents

- Anomic – school pressure, shifting social pressures, family losses/changes
- Fatalistic – Hopelessness about the future, repeated disappointments
- Isolation – isolated communities, gay/bixsexual youth, victims of trauma
- Altruism – protecting parents or friends, remorse over perceived infraction

Importance of Motivation

- Most suicide interventions done by therapists address *anomic* suicidal ideation
  - “Safety planning”; distraction, call someone…
- If you understand the motivation, you can target your intervention, or recognize when simple “safety planning” will not reduce risk

One other motivation...

- ... No motivation.

Motivations for Suicide

Parasuicide – Behaviors or Attitudes that *appear* suicidal to an observer but are driven by another motive. Please from now on, call this “non-suicidal self-injury” or “non-suicidal coping strategies”.

Eg: therapeutic cutting, trying to get attention, proving a point, wanting to sleep, treating a mental illness

Non-lethal self-inflicted behaviour

- Estimated that for every suicide, there are 25 “attempts”
- In youth, this may be even more (50-100)
- In young females, this is estimated to be upward of 200 “attempts” per completed suicide

Should we ask kids about suicide?

- Most studies tell us “yes”
- Screening vs. spontaneous report
  7x more likely to discover suicidal thinking
- Only **25% of completed suicides** occur in people who have recently accessed mental health services

We are missing the majority of truly at-risk kids!

AACAP. (2001). American Academy of Child and Adolescent Psychiatry Practice parameter for the assessment and treatment of children and adolescents with suicidal behavior. *J Am Acad Child Adolesc Psychiat*, 40:24S–51S.

How easy is it?

- It's normal to feel uncomfortable asking about mental health issues, **especially suicide**.
- In reality, anybody can do it.
- Many successful crisis programs use *youth volunteers* who are as young as 13!

Don't be intimidated, you can do it!

Can I harm youth by asking about suicide?

- Studies tell us “no”
- The best study (n=2500) in 2005 showed:
  - No distress at the time of asking
  - No distress 3 days or 3 weeks after asking
  - **Children who were depressed or suicidal felt better after being asked this question even in a survey**.

Gould MS, M. F. (2005). Evaluating iatrogenic risk of youth suicide screening programs: a randomized controlled trial. *Journal of the American Medical Association*, 293:1635-1643.

The Script for Asking

"I'm going to ask you a few quick questions about how you are doing with respect to your mental health."

- "Do you think that you have been under a lot of stress lately?"
- "Have you ever felt like life is not worth living?"
- "In the past month, have you felt so bad that you have considered harming or killing yourself?"

The 4 C's of Suicide Assessment

- Collateral
- Confidence
- Common Sense
- Changeability

Collateral History

- Collateral history essential to emergency suicide risk assessment
- “The more the merrier”
- In children, especially important
  - Child’s perception of reality
  - Child’s distortion of time
  - Child’s reactionary nature

Confidence

- Patient well-known to you or new?
  - This works both ways!
- Does the patient feel confident in themselves? (NOT a *"safety contract"*)
- Do you have collateral information?
- Poor Engagement / Rapport

Common Sense

Nothing astonishes people so much as common sense and plain dealing.

Ralph Waldo Emerson (1803-1882) U.S. poet, essayist and lecturer.

- Suicide is unpredictable
- Careful history taking
  - Consistency, plausibility
  - Chronological history of suicide attempt
  - **Active Ideation vs. Passive Ideation**
  - Assess affect before/during/after suicide attempt
  - Assess current view of suicide attempt

Changeability

Not Changeable	Changeable
Age	Access to Lethality
Sex	Untreated Mental Health Disorder
Family History of Suicides	Worsening Mental Health Disorder
Family History of Mental Disorder	Dealing with Recent Loss/Life Crisis
Prior Attempts of Suicide	Lack of Social or Formal Support
Cultural Beliefs	No Access to Health Care
Historical Diagnosis of Psychiatric DO	Non-response to Medication
Historical use of Psychotropic Meds	Caregiver/Family Unavailable to care
Remote Loss	Addictions

Changeability

- Changeability greatly influences the success of hospitalization
  - Can remove lethal methods
  - Can address untreated disorder
  - Can work with family
  - Can organize outpatient services
  - Can address coping strategies
- Without changeability, hospitalization has no goal, except to "protect."

What risk factors do hospitalizations add to?

- **Fear response (anxiety and stress)**
  - Procedures and tests, meeting new people, family separation, worry about health
- **Feelings of isolation**
  - Not seeing friends, hard to see family
- **Decreased pro-social activity**
  - Playing sports, engaging with friends
- **Major life changes**
- **Parental upset / stress**

Suicide in Hospital

- Review of 76 inpatient suicides:
  - 78% denied suicidal ideation
  - 51% on q15 minute checks or 1:1 observation
  - 21% had no-suicide contract

Journal of Clinical Psychiatry, 2003:64(1)

Myth

- Hospitalization of suicidal patients protects them. (*hospitalization treats suicidality)*

- The Evidence:
  - Inpatient, close-observation suicides account for ~800 deaths in North America per year.

Journal of Clinical Psychiatry, 2003:64(1)

So what do we do?

- Chronic suicide risk
  - No changeable factors
  - Chronic pattern of suicide attempts as a coping mechanism
    - *Makes a strong case for encouraging coping, strength, improving contacts with emergency services.*
    - *Makes a weak case for hospitalization, as discharge criteria would be undefined.*

So what do we do?

- Acute Suicide Risk
  - Changeable risk factors
  - Mechanisms of coping are inadequate to handle stressors
    - *Makes a strong case for hospitalization, to address and change the changeable risk factors, to discharge to a stronger community position.*
    - *Makes a weak case for d/c to community, as imminent risk factors threaten safety.*

So what do we do?

- Acute on Chronic Suicide Risk
  - Acute change in situation increases the emergency of an already-established suicidal risk
    - *Makes a case for hospitalization to address the acute risk factors and changes, but discharge would occur after this was dealt with to encourage coping and strength for chronic risk factors*.

Conclusion

- Evidence to support management of suicide risk has not been robust
- Many previously held beliefs and practices have little evidence to support them
- Suicide is a multifactorial problem with a multifactorial solution

- Thank you!
- Any questions?

Case 1 - Julie

- Julie is a 14-year-old girl from Nanaimo
- Admitted for suspected bowel obstruction
- Has been a patient now for 3 days
- Mother constantly at bedside
- You have never seen father
  (still on papers at the same phone number!)
- She clearly loves “the Beebs”
  (Justin Bieber posters everywhere!)

Case 1 - Julie

- You notice:
  - Mother is very anxious and annoys Julie with her maternal protectionism
  - Julie ALWAYS has some form of homework while “resting” in bed
  - Julie doesn’t smile a lot
  - Julie has a hard time making eye contact

Break-out Groups

Group 1 – How would you approach **MOTHER** to find out more information?
How could you approach **JULIE** to find out more information?

Group 2 – Discuss what **worrisome** possibilities exist to explain what you know.

Group 3 – Discuss what **positive/appropriate** possibilities exist to explain what you know.

Group 4 – In your current working environment, discuss what pathways you are aware of, or who you could talk to, about your concerns. What responsibilities do **you** bear?

Group 5 – Ideally, how could a nursing unit set up a system to make sure Julie is OK, or will be OK?

Case 2 - Ali

- Ali is a 12-year-old boy from Vancouver
- Lives with mother and father, both present
- Has a history of leukemia 8 years ago, stayed in BCCH x 3 months. Full remission.
- Admitted for diabetic ketoacidosis (4th admission in 1 year), secondary to Type I Diabetes
- Has had many ER visits for “stomach pain”

Case 2 - Ali

- Ali appears happy, plays on the unit.
- Mother and father bicker constantly, Ali simply ignores it.
- Both parents support Ali lovingly.
- Ali has an extended family in Canada and Iraq (who visit), and his room is always full of visitors and gifts.

Case 2 -Ali

- While Ali is sleeping, mother approaches you, and mentions in passing.
  - He has such a strange sense of humour. He just said that he **intentionally** stops taking insulin to get sick!"
  - Come to think of it… he always has excellent glucose control in hospital…

Break-out Groups

Group 1 – How might Ali's Iraqi-Canadian background influence his mental health presentation?

Group 2 – How might Ali's previous hospital experiences be affecting his risk for distress, mental health issues, or even suicide? How could the unit help this?

Group 3 – How might his **home** and **extended** family play a role in his health? How could the unit help this?

Group 4 – What are ways you could talk to Ali about his "joke?"

Group 5 – Which resources at home, in hospital and in the community might you employ in helping Ali?

Conclusion / Open Discussion

- Hopefully, your mind is thinking about mental health issues.

How can: … you personally

… your hospital unit …

… your work flow …

… Improve your ability to detect or help children under stress or feeling despair?