

**Suicide**  
Reviewed by World Health Organization

**"SELF MURDER"**  
**SUICIDE: A REVIEW OF FACTS, RISK FACTORS,  
 AND ASSESSMENTS  
 (OH AND HOMICIDE TOO)**


Canadian Collaborative Mental Health Pre-Conference & Cannabis Symposium  
 June 18, 2015  
 Dr David Tano, MD, FRCPC  
 Forensic Psychiatrist  
 Consulting Psychiatrist for PACT and CET  
 Section Chief for Outpatient Mental Health Calgary Zone

**DISCLOSURE:**

- Member of advisory board for Lundbeck – Otsuka : Abilify Maintena, astrazeneca
- Speaker for Janssen – speaking on motivational interviewing on Long Acting Injectables
  - - advisory board for Janssen regarding Long Acting Injectables
- Clinical trial for Eli-lilly – Olanzapine injectable
- Clinical trial for Astra-Zeneca – Seroquel trial

**SELF MURDER = SUICIDE**


- OBJECTIVES:
  - Review basic facts regarding suicide
  - Briefly Review differences between "suicidality" and "parasuicidality"
  - Review of Risk Factors for suicide
  - Review what to do when faced with
    - Homicidal ideations
  - "What to do?"
  - Scenarios



**Key Messages about suicide and homicide**

- You are not expected to predict the future (i.e. suicide or homicide).
- You are expected to identify imminent risks for suicide and harm to others
- You are expected to manage imminent risk factors for suicide and harm to others.
- You are expected to document the risk factors that you identify and manage
- You are expected to have a Duty to Protect
- You will be judged against the actions that your colleagues would have taken with a similar patient under similar circumstances.

**SUICIDE: BASIC FACTS**



- Has occurred since beginning of Recorded history with varying views from condemnation to tolerance to "honorable" (Japanese)
- Today in Western society: neither random nor pointless but rather a way out of a problem, crisis – at times more situational, at other times directly resulting from a mental illness
- Range: from SI to SI with plans to acting on plans. Some have SI for years and never act, some plan for days, weeks, years before acting, some are more impulsive...some are not suicide attempts at all but rather parasuicidal "cries for help"

**SELF MURDER: BASIC FACTS**

- No diagnostic tests to predict Suicide
- Rates have increased about 60% over the past 45 years with yearly estimates of 1M/yr worldwide
- US - >32000 suicides annually
  - 2<sup>nd</sup> leading cause of death b/w 25-34 yo
  - 3<sup>rd</sup> leading cause of death b/w 15-24 yo
  - 8<sup>th</sup> overall cause of death in the us after heart disease, cancer, CV disease, COPD, accidents, pneumonia and influenza and DM
- Leading cause of death in young adults in China, Sweden, Australia, New Zealand

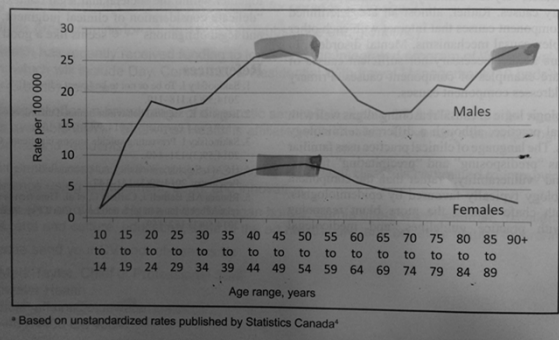
### SELF MURDER: BASIC FACTS

- Recent article/study JAMA Jan 2013 Nock et al.
  - Surveyed 6483 13-18yo and parents
    - 12.1% had SI
    - 4.0% had Suicide Plan
    - 4.1% had previous attempts
  - 1/8 US teens have considered Suicide
  - 1/25 have attempted
  - 1/3 who considered suicide had a plan
  - 2/3 who had a plan, attempted
  - Most attempts were within the 1<sup>st</sup> year of considering

### SUICIDE CANADIAN STATS

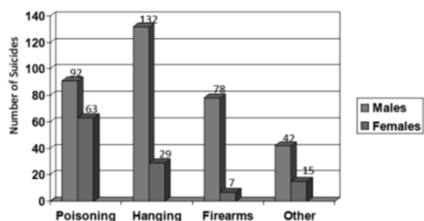
- Canada:
  - 2000-2004
    - 18326 deaths
  - 2005-2009
    - 18461 suicides
  - le about 4000 deaths / year
    - Statistics Canada suicides and suicide rate, by sex and by age group 2013
- Calgary stats:
  - 2010 – 10.1 deaths /100 000
  - Considered within the top 7 causes of death in Calgary Zone
- 2011 Alberta about 500 suicides

Figure 1 Canada: mean suicide rates 2005–2009\*



- Despite above, rates increase with age
  - Men – suicide peak after age 45
  - Women – suicide peak after 55
  - Older persons attempt suicide less often than younger but are more successful
  - Rate for >75 yo is 3x the rate among young people
  - Traditionally we talk of 2 spikes 15-24yo, >55

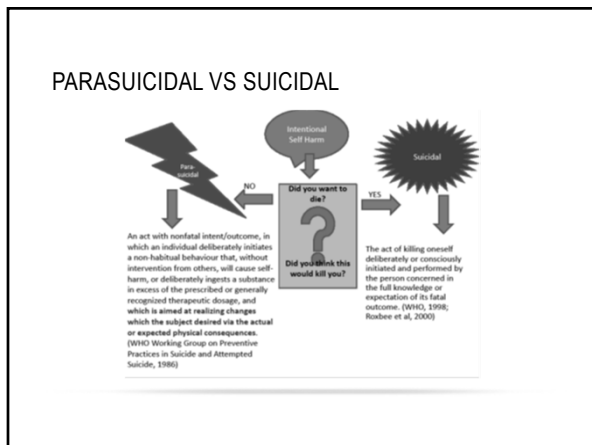
### Methods of Suicide by Gender Alberta, 2003



### SUICIDE BASIC FACTS

- Attempted:completed = 20:1
- M:F = 3-4:1 completed, 1:4 attempted
- “Right to Die Society”
- “the sealed car with tubs in the Back seat”





- ### SUICIDE RISK FACTORS
- **SAD PERSONS**
  - Sex – male>female
  - Age – 15-24, >55
  - Depression with comorbidity – Subst., personality, physical
  - **Previous attempts**
  - Etoh abuse
  - Rational thinking loss
    - (delusions, hallucinations, hopelessness)
  - Suicide in Family
  - Organized Plan
  - No spouse/supports system
  - Serious/chronic illness
  - Those in red are considered to be most robust RF

- ### SUICIDE RISK FACTORS
- Others
    - Marital status: divorced/widowed
    - Stressful life events – esp those that result in humiliation, loss etc
    - access to firearms
    - Change in treatment (recent discharge from hospital, provider, treatment change)
    - Psychiatric disorders:
      - Psychiatric patients risk for suicide 3-12x higher
      - Almost 95% of all persons who commit or attempt suicide have a diagnosed mental disorder (raises questions of Right to Die society philosophy)
      - mood (1/2 to 2/3 of completed suicides suffered from mood disorders; but suicide risk of person with depression – 4%, and 7-8% for BP. – makes hard to predict)
      - Schizophrenia – 10%
      - Persons with delusional depression are highest risk
      - ETOH: up to 15% of all alcohol-dependent persons commit suicide
    - Presenting Sx of anhedonia, impulsivity, hopelessness, command hallucinations

- ### SUICIDE RISK FACTORS
- Physical health risks:
    - Post mortem studies show that physical illness is present in 25-75% of all suicides
    - 50% of men with cancer who commit suicide do so w/i 1 year of dx
    - Cancer of breast or genitals found in 70% of all women w/ cancer who commit suicide
    - CNS diseases with incr risk:
      - Epilepsy, MS, HI, CV disease (post cardiomy?), Huntington's, dementia, AIDS – nb all associated with mood disorders
    - Endocrine diseases:
      - Cushing's, Klinefelter's, porphyria
    - GI:
      - Peptic ulcer, Cirrhosis
    - Urogenital
      - Prostatic hypertrophy treated with prostatectomy and renal disease treated with hemodialysis – both also related to mood d/c

## PRIMARY CARE SETTINGS

- Detection and management of depression in primary health care is one of central tenets to suicide prevention strategies
- Overall, suicide mortality among depressed patients = lower in primary care than in psych settings
- Intent to kill self is rarely communicated
- A 5 year follow up cohort study found suicide attempts to occur almost exclusively during MDE but hardly ever known by the primary care physician
  - Riihimaki K. et al. Incidence and predictors of suicidal attempts among primary-care patients with depressive disorders: a 5 year prospective study. *Psychol med.* 2013;1-12

## SAFE-T

- SAFE-T
  - Suicide Assessment Five-step Evaluation and Triage
  - 1. Identify Risk Factors
    - Note those that can be modified to reduce risk
  - 2. Identify Protective Factors
    - Note those that can be enhanced
  - 3. Conduct Suicide Inquiry
    - Suicidal thoughts, plans, behavior, and intent
  - 4. Determine risk level/intervention
    - Determine risk. Choose appropriate intervention to address and reduce risk
  - 5. Document
    - Assessment of risk, rationale, intervention, and follow-up
- U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Substance Abuse and Mental Health Services Administration www.samhsa.gov  
 NATIONAL CENTER FOR SUICIDE PREVENTION AND CRISIS INTERVENTION Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviors  
 Suicide Prevention for Health Care Providers  
 Suicide Prevention for Health Care Providers: Children and Adolescents with Suicidal Behavior. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2002;41(10):1255-1265  
 Acknowledgments  
 Originally conceived by Douglas Jacobs, MD, and developed as a collaboration between Screening for Mental Health, Inc. and the Suicide Prevention Resource Center.  
 HHS Publication No. (SMA) 09-4432 • CMHS NSIP-0193 Printed 2009. e.s.r.n.n. Originally conceived by Douglas Jacobs, MD, and developed as a collaboration between Screening for Mental Health, Inc. and the Suicide Prevention Resource Center. © Douglas Jacobs, MD, and developed as a collaboration between Screening for Mental Health, Inc. and the Suicide Prevention Resource Center.

## 1. RISK FACTORS

- suicidal behavior:
  - history of prior suicide attempts, aborted suicide attempts, or self-injurious behavior
- current/past psychiatric disorders:
  - especially mood disorders, psychotic disorders, alcohol/substance abuse, ADHD, TBI, PTSD, Cluster B personality disorders, conduct disorders (antisocial behavior, aggression, impulsivity)
  - Co-morbidity and recent onset of illness increase risk
- Key symptoms:
  - anhedonia, impulsivity, hopelessness, anxiety/panic, global insomnia, command hallucinations
- Precipitants/stressors/Interpersonal:
  - triggering events leading to humiliation, shame, or despair (e.g., loss of relationship, financial or health status—real or anticipated), Ongoing medical illness (esp. CNS disorders, pain), Intoxication, Family turmoil/chaos, History of physical or sexual abuse, Social isolation
- change in treatment:
  - discharge from psychiatric hospital, provider or treatment change
- Access to firearms
- Family history:
  - of suicide, attempts, or Axis 1 psychiatric disorders requiring hospitalization

## WARNING SIGNS : IS PATH WARM?

- I – suicidal ideations
- S – substance use
- P – purposelessness
- A – anxiety
- T – feeling trapped
- H – hopelessness / helplessness
- W – withdrawal
- A – anger/agitation
- R – recklessness / risk taking behaviour
- M – dramatic changes in mood

- From Canadian association of suicide prevention
- www.Suicideprevention.ca

## 2. PROTECTIVE FACTORS

- Protective factors, even if present, may not counteract significant acute risk
- Internal:
  - ability to cope with stress, religious beliefs/affiliations, frustration tolerance, reasons for living
- external:
  - responsibility to children or beloved pets, positive therapeutic relationships, social supports, medications, marriage (unless high conflict or violent)
- Most robust protective factors appear to be moral objections (belief suicide is morally incompatible with belief) and strength of religious convictions

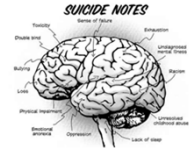
## 3. SUICIDE INQUIRY

- Specific questioning about thoughts, plans, behaviors, intent
- Ideation:
  - frequency, intensity, duration—in last 48 hours, past month, and worst ever
- Plan:
  - timing, location, lethality, availability, preparatory acts
- Behaviors:
  - past attempts, aborted attempts, rehearsals (tying noose, loading gun) vs. non-suicidal self injurious actions
- Intent:
  - extent to which the patient (1) expects to carry out the plan and (2) believes the plan/act to be lethal vs. self-injurious.
  - Explore ambivalence: reasons to die vs. reasons to live
- \* For Youths: ask parent/guardian about evidence of suicidal thoughts, plans, or behaviors, and changes in mood, behaviors, or disposition
- \* Homicide Inquiry: when indicated, esp. in character disordered or paranoid males dealing with loss or humiliation, or depressed mother. Inquire in four areas listed above

4 RISK LEVEL INTERVENTION  
ASSESSMENT OF RISK LEVEL IS BASED ON CLINICAL JUDGMENT, AFTER COMPLETING STEPS 1-3  
REASSESS AS PATIENT OR ENVIRONMENTAL CIRCUMSTANCES CHANGE

| RISK LEVEL      | RISK/PROTECTIVE FACTOR   | SUICIDALITY   | POSSIBLE INTERVENTIONS   |
|-----------------|--|---|--|
| <b>High</b>     | Psychiatric diagnoses with severe symptoms or acute precipitating event; protective factors not relevant | Potentially lethal suicide attempt or persistent ideation with strong intent or suicide rehearsal | Admission generally indicated unless a significant change reduces risk. Suicide precautions              |
| <b>Moderate</b> | Multiple risk factors, few protective factors  | Suicidal ideation with plan, but no intent or behavior  | Admission may be necessary depending on risk factors. Develop crisis plan. Give emergency/crisis numbers |
| <b>Low</b>      | Modifiable risk factors, strong protective factors   | Thoughts of death, no plan, intent, or behavior   | Outpatient referral, symptom reduction. Give emergency/crisis numbers                                    |

- 5. DOCUMENT
  - Risk level and rationale; treatment plan to address/reduce current risk (e.g., medication, setting, psychotherapy, E.C.T., contact with significant others, consultation); firearms instructions, if relevant; follow-up plan. For youths, treatment plan should include roles for parent/guardian.



### SUICIDE INTERVENTIONS

- Evidence exists for:
  - Li prophylaxis in mood d/o
  - Clozapine for psychotic d/o
  - Psychosocial Tx (eg DBT) for BPD
  - Outreach via communicating caring and concern
- Collaboration, therapeutic alliance, enhancing social contacts decrease rates of suicidality therefore, enhance therapeutic alliance

### HOMICIDE ASSESSMENTS

- Fortunately they are extremely rare but because rare, difficult to predict
- Risk assessment will take a full conference
- Some things to think about:
  - Past history of violence
  - Personality disorder: antisocial, narcissistic (eg ego injury with spouse leaving), borderline, paranoid
  - Psychosis: specifically delusions with organized plans
  - Access to weapons
  - Plan
  - Specific target
- Summary: if worried about homicide or harm to others: either form 1 certificate or call police or both

### DUTY TO WARN/PROTECT

- Tarasoff I and II – American legislation
- Smith v Jones – Canada
- CMA – stance = essentially equivalent to Duty Protect from Tarasoff II
  - <http://publications.cpa-apc.org/media.php?mid=154>
  - A duty to protect (warn, or inform) exists
    - in the event that risk to a clearly identifiable person or group of persons is determined
    - when the risk of harm includes severe bodily injury, death, or serious psychological harm
    - when there is an element of imminence, creating a sense of urgency

### RESOURCES:

- ACCESS MENTAL HEALTH: 1-403-943-1500
- If you are part of a pcn: shared care and BHC
- We are currently in the process of providing another resource for each PCN hopefully providing another source of consultation ie extended team concept
- ER
- Form 1's
- Form 8 judges Warrant – family can apply to judge to have patient brought into ER for assessment
- If it is a mental health concern and a potential violence risk where you need a team to assess: PACT – Police and Crisis Team – 1-403-955-6380
- If require a mobile assessment and violence is not a concern:
  - Mobile Response Team: 403-266-4357 (HELP), or
  - 403-944-9783 Professional Referral Line

### SCENARIOS

- 14 yo – OD on 14 tabs of Tylenol
- 36 yo female with long history of repeated suicide attempts found hanging but was expecting boyfriend to come in a few minutes
- Elderly female found unconscious by landlord – right to die literature
- 45 yo male presenting trying to shoot self in the face with a shotgun but too delirious to do so – mild hyponatremia during 3 previous admissions – autoimmune rxn to K+ channels -delirium
- Borderline PD threatening suicide
- MDE in hospital for suicidality x 7 days, suddenly improved and wishes to go home

A 20-year old woman presents to the family physician's office for a routine physical examination. The physician takes note of multiple, healed scars on the woman's forearms. The patient says that she cuts herself in times of stress because this makes her feel better and more in control of her circumstances. The cuts were inflicted during her recent final exams at university. She learned to do this after talking with a friend, who also deliberately cuts herself. **The most appropriate label for this clinical presentation would be:**

- A. Behavioural emergency**
- B. Parasuicidal gesture**
- C. Suicidal gesture**
- D. Malingering**

A 36-year old man presents to a walk-in clinic with the request to "just talk with someone". The man reveals that his wife recently informed him of her intent to pursue a divorce and take their children with her when she leaves. The man says that, if he loses his children, he might as well kill himself. Since he is presently unemployed, he cannot afford to pay child support, but thinks that his children would receive his life insurance if he dies. He recently obtained a prescription for a sleeping medication, and as he falls to sleep at night, he has started to wonder what it would be like to be dead.

**The most appropriate label for his presentation would be:**

- A. Malingering for the purpose of obtaining sedative medication**
- B. Passive parasuicidal ideation to express his desire for further counselling**
- C. Active parasuicidal ideation that requires urgent medical clearance**
- D. Passive suicidal ideation due to multiple psychosocial stressors**

A 41-year old man presents himself to the emergency department, telling the triage nurse that he has been having urges to kill people at random. On further questioning, he explains that he would kill anyone who gets in his way. He has no particular person in mind that he might harm. He advises the emergency department physician that "it would be safer for everyone if you admit me to the hospital for a few days". The patient concludes the conversation by saying, "You wouldn't want to be the doc who lets a mass-murderer onto the streets". A review of the patient's recent history reveals that he was released from the penitentiary a few days earlier after completing a three-year sentence for armed robbery, and is not believed to have a fixed address.

**The most appropriate working diagnosis in this case would be:**

- A. Adjustment disorder**
- B. Malingering**
- C. Antisocial personality disorder**
- D. Psychosis NOS**

### resources

- Thanks to Dr McIlwrick for contributions to slides and material.
- Dr David Tano
  - [David.tano@albertahealthservices.ca](mailto:David.tano@albertahealthservices.ca)
- U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Substance Abuse and Mental Health Services Administration [www.samhsa.gov](http://www.samhsa.gov)
- sAFE-T drew upon the American Psychiatric Association Practice Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviors [http://www.psychiatryonline.com/pracGuide/pracGuideTopic\\_14.aspx](http://www.psychiatryonline.com/pracGuide/pracGuideTopic_14.aspx)
- Practice Parameter for the Assessment and Treatment of Children and Adolescents with Suicidal Behavior. Journal of the American Academy of Child and Adolescent Psychiatry, 2001, 40 (7 Supplement): 24s-51s
- Canadian Association of Suicide Prevention
  - [www.suicideprevention.ca](http://www.suicideprevention.ca)
- Here in Calgary
  - Centre for Suicide Prevention
    - [www.Suicideinfo.ca](http://www.Suicideinfo.ca)