Traumatic Brain Injury and Suicide:

Suicide Assessment

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Objectives:

• Suicide and TBI prevalence in Alaska
• Shared risk factors
• Suicide Risk Assessment
• Treatment considerations
• TBI and Suicide Prevention
Alaska Suicide Attempts and Deaths by Region per 100,000 Population from 2001 to 2010

**Attempts** – suicide attempts not resulting in death; source: Alaska Trauma Registry. The Alaska Trauma Registry is an information system of the most seriously injured patients in Alaska from 24 of Alaska's acute care hospitals.


**Alaska Statewide Rates**

<table>
<thead>
<tr>
<th>Attempts</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>PER 100,000 AK POPULATION (CRUDE RATE)</td>
<td></td>
</tr>
<tr>
<td>96.0</td>
<td>20.7</td>
</tr>
<tr>
<td>ATTEMPTS (6,431)</td>
<td>DEATHS (1,389)</td>
</tr>
<tr>
<td>Total Attempts</td>
<td>Total Deaths</td>
</tr>
</tbody>
</table>
Suicide Prevalence Rates in Alaska - 2014

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>United States</th>
<th>Alaska</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>10th</td>
<td>6th</td>
</tr>
<tr>
<td>Ages 15-24</td>
<td>2nd</td>
<td>1st</td>
</tr>
<tr>
<td>Rate per 100,000</td>
<td>13.4</td>
<td>22.7 / 2\textsuperscript{nd} - Nation</td>
</tr>
<tr>
<td>All Ages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ages 15-24</td>
<td>11.6</td>
<td>34.9</td>
</tr>
</tbody>
</table>

Alaska/Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>35.6*</td>
</tr>
<tr>
<td>Female</td>
<td>8.3*</td>
</tr>
</tbody>
</table>

Data sources Alaska Bureau of Vital Statistics & National Data Sources from CDC’s WISQARS last updated 10/16/2014

*Only 2011 crude rate available last updated 9/16/2013
Rate of TBI in Alaska

There are an estimated 10,000 Alaskans living with disability due to brain injury.³

Each year, 800 Alaskans are hospitalized and 150 Alaskans die.⁴

An estimated 38% of hospitalizations result in permanent disability.⁵

An estimated 247 Alaskans become permanently disabled due to traumatic brain injury.⁶

³ University of Alaska Anchorage, TBI Study, Jennifer Carter, 2003
⁴ Alaska Trauma Registry (2006)
⁵ CDC data (2006) shows there were 235,000 hospitalizations and an estimated 80,000-90,000 resulted in permanent disability (38%)
⁶ In Alaska there are 800 hospitalizations (150 die) (38% of 650).
The Gender Gap
Non-fatal TBI Hospitalizations in Alaska 2004-2008

*US data for 2002-2006, per CDC
Region of Patient Residence
Non-fatal TBI Hospitalizations in Alaska 2007-2011

Regional Differences in Rates
TBI Hospitalizations in Alaska, All Races
2007-2011

All U.S. Rate*: 93
All Alaska Rate**: 96
Alaska Native Rate**: 176

* Rate for 2002-2006, per 100,000 (CDC)
** Crude rates, per 100,000
Number of Service Members Diagnosed with Traumatic Brain Injury
2000-2015
Total Number of Service Members Diagnosed Total 344,030

DoD TBI Worldwide Numbers since 2000
DoD Numbers of TBI

DoD Numbers for Traumatic Brain Injury Worldwide
Number of Service Members Diagnosed

No. of cases
35,000
30,000
25,000
20,000
15,000
10,000
5,000

Calendar year
'00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15

Source: Defense Medical Surveillance System (DMSS), Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Branch (AFHSB).
Prepared by the Defense and Veterans Brain Injury Center (DVBIC) 2000-2015
Suicide Risk Factors

- Previous suicide attempt
- Current ideation, intent, plan, access to means
- Family history of suicide
- Alcohol/substance abuse
- Recent discharge from an inpatient unit
- Current or previous history of psychiatric diagnosis
- Veterans are twice as likely to die by suicide
- Among Veterans, younger and older Veterans are more prone to die by suicide than middle-aged Veterans
- Hopelessness
- Recent loss
- Impulsivity and poor self-control
- Age, gender, race
TBI Risk Factors

• Alcohol and substance use
• Familial discord
• Low socio-economic status
• Unemployment
• Male
• Antisocial behavior
• Sports participation
• Combat experience
• History of previous brain injury
• Age, gender, race
Traumatic brain injury

- Blast is the most common wounding etiology of our returning war fighters
- 50-60% of those exposed to blasts sustain a brain injury (Walter Reed Army Medical Center)
- Depression, PTSD and alcohol use common
- Simpson & Tate post-injury TBI community sample study (2002):
  - 23% had significant suicidal ideation
  - 18% made a suicide attempt
- Life time risk of suicide 3-4 times higher
Alaska TBI and Suicide

Shared Risk Factors For TBI and Suicide

✓ Age
✓ Male
✓ Combat Experience
✓ Geographic Location
✓ Substance Use
✓ Psychiatric Disorders
✓ Impulsivity
✓ Aggressive Behavior
Sustaining a TBI can be stressful
- Loss of support system
- Loss of job/income
- Increased psychological stress
- Change of roles within the family
- Decreased ability to function as a parent
- Decreased ability to function as a spouse

TBIs can contribute to limited problem-solving strategies
- Cognitive deficits
- Poor judgement
- Impulsivity
- Poor decision-making ability
- Organically-based mood lability
Suicide Assessment
“People are not driven to suicide by a caring person who inquires as to whether or not they are suicidal. People may, however, be driven to suicide by an avoidance of the topic on the part of the listener, from whom they need a concerned response” (Fujimura, Weis, and Cochran, 1985) P. 613
Suicide Assessment

Asking the S Question: Samples

“You know, when people are as upset as you seem to be, they sometimes wish they were dead. I’m wondering if you’re feeling that way, too?”

“You seem very unhappy. Have you had any thoughts of death or suicide?”

“Suicidal thoughts are a common symptom of depression; have you had been depressed lately?”

“Have you been suicidal or have you been thinking about suicide?”
Suicide Assessment

WHAT’S WRONG?

What You Should Learn:

- Explanation of the reasons for suicide
- Problem(s) that suicide would solve, such as being a burden on others
- How this person solves problems
Suicide Assessment

- Why Now? (Suicidal desire)
- With What? (Suicidal Intent)
- Where and When? (Suicidal Intent)
- Where and When in the Past? (Suicidal Capability)
- Who is Involved? (Buffers/connectedness/conflict/isolation? Who can help right now?)
- Why Not Now? (Reasons for living)
KEY POINTS in Safety Agreements

- Set specific times and expectations for crisis management action steps (work through safety plan checklist)

- Recommitment to life; not a “no-suicide contract”

- Clarity of language in a person’s recommitment to life and safety plan helps confirm risk is now lower

- Hard copy directions, phone numbers, and how-to steps are helpful and key to avoiding claims of negligence
Safety Planning and Risk Reduction

Personal Reduction Risk Plan

Safety Planning

- Recognizing warning signs
- Internal coping strategies
- Social supports
- Family supports
- Professional contacts
- Reduction in access to means
Support Options That Have Helped

- Psychotherapy
- Medication
- Support groups
- Having accessible providers
- Having a belief system—spirituality
- Distractions such as having something to do first, TV, computers, hobbies, etc
- Having a responsibility such as a pet or a job
- Family/Friends that care
- Volunteer work, or helping others
Treatment Considerations and Follow Up

• Screening for post-TBI related psychiatric sequelae is indicated

• Survivors and family members need to be educated about risk of suicide and encouraged to discuss and identify person specific warning signs
  
  • Advocate for means reduction

• Close monitoring for at least one year for signs of suicidality

• Be aware of what can precipitate suicidal thoughts (loneliness, disconnected, anniversaries, anxiety, unemployment, stressful events, lack of resources and support)
Service Members & Veterans
Intensive dual-track treatment program for military services members and veterans who have experienced trauma and are in needed of detoxification and/or substance abuse rehabilitation.

No Cost Assessment
Call 24/7
1-800-478-7575 or 907-258-7575
Visit Our Website: chriskylepatriotshospital.com

Masters Level Clinician will assist with the following:
Clinical Assessment
Overview of Services
Coordinate Travel
Connect to Community Resources
Alaska Careline 877-266-HELP (4357)
24-HOURS A DAY, 7 DAYS A WEEK

Text '4help' to 839863

Text line available Tues-Sat, from 3PM -11PM

www.carelinealaska.com

Calls are caring & confidential.
Resources:

- Washington Post, 2016, February, Donald Redelmeier
- QPR Institute, 2015, Dr Paul Quinnett
- Lisa Brenner, PhD, Traumatic Brain Injury and Suicide
- Dr Thomas Joiner, Why People Die by Suicide, 2005