



V-VICTA®

VirTra - Virtual Interactive Coursework Training Academy®

***MENTAL ILLNESS: A PRACTICAL APPROACH -
TRAUMATIC BRAIN INJURY***

Training Manual

VirTra

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TRAINING COURSE CERTIFICATION

This "Mental Illness: A Practical Approach" training course has been certified by the IADLEST™ National Certification Program on 9/23/22.

Certification number: 22505-2209



MENTAL ILLNESS: A PRACTICAL APPROACH - TRAUMATIC BRAIN INJURY

TOPIC

Mental Illness: A Practical Approach - Traumatic Brain Injury

ESTIMATED TIME

1 hour

PERFORMANCE OBJECTIVE

(Slide 3) At the end of 1 hour of instruction in a video simulation, the student will successfully be able to:

- A. Understand the role of contact professionals
- B. Recognize signs, symptoms, and behaviors associated with TBI
- C. Demonstrate skills for dealing with individuals who have a TBI

CLASS SIZE

Designed for pairs of officers with maximum class size of 8 (4 pairs). If class size is smaller than 8 (4 pairs) scenarios can be cycled through.

The following training plan and lesson plan is designed to be used with the VirTra simulator. Where as many of the techniques have been used over many years in LE, this training plan maximizes training time and leverages the strengths of the VirTra Training System.

The instructor shall first ensure that students are familiar with the presented material. The outline is provided to supplement and provide context to the use of the simulation scenarios.

The simulation scenarios are used as a tool to facilitate the understanding of the concepts. The first scenarios will be provided in a slower tempo with the use of the PLAY/PAUSE feature to elaborate on the training points. Once the first simulation is provided in this format the remaining scenarios will be provided to each pair of officers. The Socratic methodology should be used for event debriefing.

“What did you know?”

“What did you see or hear?”

“What did you do and the reason behind it?”

“What would you do differently in the future?”

All officers will be allowed to watch the other pairs participate in the exercise. This is done to maximize the benefit of modeling for adult learners. Students shall be given the opportunity to ask questions at the end of each section.

SAMPLE STUDENT GROUP SET UP

Non-test scenarios should be used with the concept of social learning theory and observation. The non-participating students should be watching their peers and be ready to answer what other options may have been available after the initial Socratic debrief.

- A. Officer Yackley and Officer Emerson
- B. Officer Danninger and Officer Ashley
- C. Officer Bacon and Officer Adams
- D. Officer Stephens and Officer Marks

First Scenario - Executed in “PLAY/PAUSE” methodology for all students - key concepts are applied and discussed

Second Scenario - Group A participates while Groups B, C, and D watch

Third Scenario - Group B participates while Groups A, C, and D watch

Fourth Scenario - Group C participates while Groups A, B, and D watch

Fifth Scenario - Group D participates while Groups A, B, and C watch

Sixth Scenario - (Practical skills test) Class is sequestered with students brought one at a time (not pairs) to evaluate performance.

SCENARIO BANK TO BE USED

- A. On the Case
- B. Misery Mountain
- C. Government Spy Games

I. INSTRUCTOR INTRODUCTION

II. INTRODUCTION TO MENTAL ILLNESS FOR CONTACT PROFESSIONALS

III. TRAUMATIC BRAIN INJURY (TBI)

A. DEFINITION

B. SEVERITY

C. RISK FACTORS

D. SEQUELAE

IV. CAUSES

V. COMBAT RELATED TBI

A. PRIMARY INJURY

B. SECONDARY INJURY

C. TERTIARY INJURY



D. QUATERNARY INJURY

VI. SIGNS, SYMPTOMS, BEHAVIOR

A. PHYSICAL

B. COGNITIVE

C. EMOTIONAL

VII. TIPS FOR DEALING WITH TBI

VIII. VERBAL DE-ESCALATION LOOP INTERVENTIONS

IX. CONCLUSION

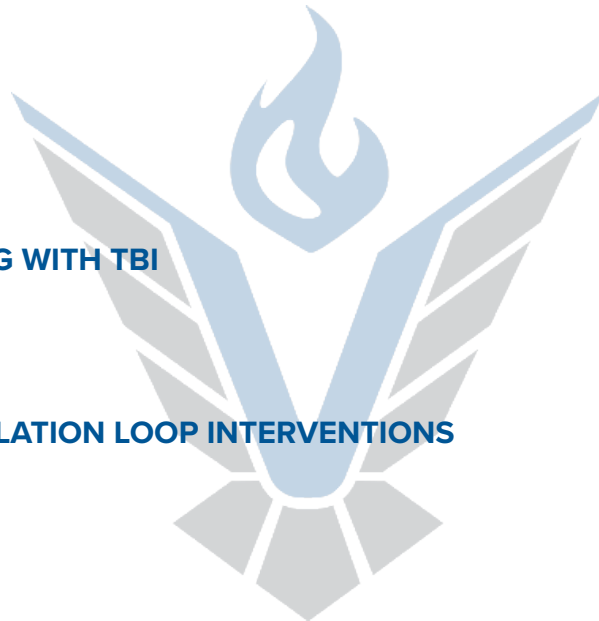


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I. INSTRUCTOR INTRODUCTION

Instructor will introduce themselves to the class. This introduction should be no more than 2-3 minutes long and establish why they are qualified to teach the course and how long they have been with the organization. This not a moment to brag but to build confidence and trust from the attending students.

II. INTRODUCTION TO MENTAL ILLNESS FOR CONTACT PROFESSIONALS

A. WHAT IS MENTAL HEALTH?

(Slide 6) Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

B. MENTAL ILLNESS

(Slide 7) Mental illnesses are health conditions involving changes in emotion, thinking or behavior (or a combination of these). Mental illnesses are associated with distress and/or problems functioning in social, work or family activities. Many factors contribute to mental illness: biological factors, stress and trauma, life experiences, and long-lasting health conditions. Mental illness becomes problematic when daily activities, relationships, and work is affected. Mental illness can be very impactful in a person's life.

C. WHO CAN DIAGNOSE?

(Slide 8, 9) Psychiatrists, psychologists, counselors, clinicians, therapists, clinical social workers, psychiatric nurse practitioners, physicians, and nurse practitioners. This can vary by state, licensing requirements, and master's level program requirements. Only psychiatrists, physicians, physician's assistants, psychiatric nurse practitioners, and nurse practitioners (state dependent) can prescribe medication.

A mental health professional will conduct a full mental health assessment before diagnosing a person with a mental illness. The assessment may consist of:

1. Physical Exam
2. Lab Tests
3. Mental Health History
4. Personal History
5. Mental Evaluation
6. Cognitive Evaluation

D. THE ROLE OF CONTACT PROFESSIONALS

1. Contact professionals are not trained to diagnose nor should they. Familiarization and recognition of behaviors are critical in deciding an intervention response. The intervention response should be as safe and effective as possible for all parties involved.
2. Behavioral health response and/or crisis intervention should be a coordinated effort that is as safe and effective as possible for everyone involved.
3. The focus should fall in recognizing indicators and signs associated with behaviors.
4. Safety is paramount and should not be compromised situationally for a behavioral health response or crisis intervention. Crisis intervention, behavioral health intervention, and de-escalation tactics are integrated responses based on the totality of circumstances.
5. Refer to department policies and legal department mandates for behavioral health or crisis response.

III. TRAUMATIC BRAIN INJURY (TBI)

A. DEFINITION

(Slide 11) A TBI is caused by a bump, blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. Not all blows or jolts to the head result in a TBI. The severity of a TBI may range from “mild,” i.e., a brief change in mental status or consciousness to “severe,” i.e., an extended period of unconsciousness or amnesia after the injury. ¹

B. SEVERITY

(Slide 12)

1. TBI severity is classified as mild, moderate or severe based on confusion, disorientation and the extent of damage to the brain. ² The severity of the injury does not equate to potential for Neurocognitive Disorder (NCD) or recovery.
 - i. Neurocognitive disorders are acquired and cause decline and deficit in previously attained levels of cognitive function. They are not developmental and are the result of an underlying brain pathology. NCD includes delirium, mild NCD and major NCD.³
 - ii. Neurocognition relates to or involves cognitive functioning and associated structures and processes of the central nervous system.⁴
2. In 2014, about 2.87 million TBI-related emergency department (ED) visits, hospitalizations and deaths occurred in the United States, including over 837,000 of these health events among children.¹
 - i. About 21% of all sports related injuries are from TBIs, and although rare, TBI is the leading cause of death in sports related injury.⁵
 - ii. The highest number of head injuries in sports across all ages occurs in the following categories: cycling, football, baseball and softball.⁵
3. TBI contributed to the deaths of 56,800 people, including 2,529 deaths among children.¹

C. RISK FACTORS

TBI can be a risk factor for NCD, substance abuse and other psychiatric disorders.

D. SEQUELAE

(Slide 14) While acute TBI can be life threatening, TBI also can have long-term sequelae (after-effects of a disease) including post-concussion syndrome (PCS) and may contribute to the development of chronic traumatic encephalopathy (CTE). PCS results when various symptoms of concussion last weeks, months or more than a year following concussion. CTE is a delayed neurodegenerative disorder that results from repetitive mild injury to the brain and can only be diagnosed postmortem.²

IV. CAUSES

(Slide 15)

- A. Head being struck by an object
- B. Head striking an object
In 2014, falls were the leading cause of TBI.¹ Falls accounted for almost half (48%) of all TBI-related emergency department visits. Falls disproportionately affect children and older adults.
 - 1. Almost half (49%) of TBI-related ED visits among children 0 to 17 years were caused by falls.
 - 2. Four in five (81%) of TBI-related ED visits in older adults aged 65 or older were caused by falls.
- C. The brain undergoing acceleration/deceleration movement without direct trauma to the head
- D. A foreign object penetrating the brain.
- E. Forces from explosions or blasts.
- F. TBI can result in either closed head or penetrating head injury.²
 - 1. Swelling and pressure are problematic for closed injuries.
 - 2. Tissue damage, bruising, axonal shearing (damage to axons) from open injuries.

V. COMBAT RELATED TBI

(Slide 16) From 2000-2016, Over 360,000 service members sustained TBI's during active duty. The majority were mild (82.4%) and only 1% were severe. 17,000 service members sustained a TBI in 2016 alone.⁵

Blast injuries are the primary cause of TBI while deployed. Blast injuries are complex and have four levels of injury:

A. PRIMARY

Atmospheric over-pressure followed by under-pressure or vacuum.

B. SECONDARY

Objects placed in motion (shrapnel) by the blast hitting the person.

C. TERTIARY

A person being thrown by the blast and hitting their head against the ground, a wall or other solid surface.

D. QUATERNARY

Other injuries from the blast such as burns and crush injuries.

Blast TBIs are also a traumatic event barring the actual injury. This can lead to depression, anxiety, PTSD or substance abuse.

VI. SIGNS, SYMPTOMS, BEHAVIOR⁶

(Slides 18-20) TBI diagnosis is dependent on a thorough clinical exam as well as a thorough physical exam. A combination of factors is reviewed such as a person's consciousness level throughout the TBI event; level of cognitive ability prior to the event; number of previous head injuries; an evaluation and description of the person's personality before and after the event; and other medical history, mental health conditions, and medication regimens.

A. PHYSICAL

1. Headaches
2. Sleep disturbance
3. Dizziness
4. Balance problems
5. Nausea/vomiting
6. Fatigue
7. Visual disturbances
8. Sensitivity to light
9. Ringing in the ears

B. COGNITIVE

1. Concentration problems
2. Temporary gaps in memory
3. Attention problems
4. Slowed thinking
5. Difficulty finding words
6. Frontal lobe injuries
 - i. Aggression
Although aggressive behavior is common after a TBI, there is not a specific definition for the aggression. Impulsive aggression may stem from the inability to regulate negative emotions. Aggression can manifest verbally or physically.^{7 8}
 - ii. Impulse control
Impulsivity is also common after TBI. There is also a component of a lack of inhibitory control and ability to self-regulate emotional response.⁸
 - iii. Criminal behavior⁹
There is an apparent causal link of TBI and criminal behavior. A meta-analysis of 20 different studies showed that 60.3% of adult offenders screened positive for a lifetime history of TBI.

C. EMOTIONAL

1. Irritability
2. Anxiety
3. Depression
4. Mood swings
5. Aggression
6. Personality changes

VII. TIPS FOR DEALING WITH TBI

(Slides 22, 23) Remember that an individual with TBI will have varying behaviors. Law enforcement and contact professionals are more likely to deal with behaviors associated with aggression and impulse control. However, the cognitive symptoms related to TBI can also inadvertently inhibit healthy communication if they are not recognized during interaction.

- A. Speak calmly in a non-threatening manner
- B. Repeat yourself if necessary
- C. Be non-judgmental and empathetic
- D. Move to a quiet place if possible and safe to limit distractions
- E. Be patient
- F. Avoid interrupting the person
- G. Redirection of negative behaviors and thoughts
- H. Allow expression of emotion if safe to do so

VIII. VERBAL DE-ESCALATION LOOP INTERVENTIONS^{12, 13}

(Slide 24)

- A. Speak in a low, calm voice
- B. Listen with empathy
- C. Respond to some aspects of communication with understanding
- D. Be clear but non-confrontational
- E. Use active listening skills

IX. CONCLUSION

As it is of utmost importance, below is a reiteration of the role of the contact professional.

- A. Contact professionals are not trained to diagnose nor should they. Familiarization and recognition of behaviors are critical in deciding an intervention response. The intervention response should be as safe and effective as possible for all parties involved.
- B. Behavioral health response and/or crisis intervention should be a coordinated effort that is as safe and effective as possible for everyone involved.
- C. The focus should fall in recognizing indicators and signs associated with behaviors.
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- E. Refer to department policies and legal department mandates for behavioral health or crisis response.

X. QUESTIONS?

XI. REFERENCES

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XII. CONTACT VIRTRA

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