Traumatic and Acquired Brain Injury

Course # 4066

Texas Commission on Law Enforcement

September 2023

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ABSTRACT

This guide is designed to assist the instructor in developing an appropriate lesson plan or plans to teach the course learning objectives. The learning objectives are the minimum required content of the Traumatic and Acquired Brain Injury course.

Note to Trainers: it is the responsibility of the coordinator to ensure this curriculum and its materials are kept up to date. Refer to curriculum and legal resources for changes in subject matter or laws relating to this topic as well as the Texas Commission on Law Enforcement website at www.tcole.texas.gov for edits due to course review.

Target Population: Peace Officers, Jailers, Telecommunicators, and Law Enforcement Personnel

Student Pre-Requisites: None

Instructor Pre-Requisites: TCOLE Certified Instructor and/or Subject Matter Expert

Length of Course: 2 hours

Training Options: This course may be delivered in a face-to-face or via approved distance education program.

Methods of Instruction:

- Lecture
- Group Discussion
- Scenarios

Assessment: Assessment is required for completion of this course to ensure the student has a thorough comprehension of all learning objectives. Training

providers are responsible for assessing and documenting student mastery of all objectives in this course.

In addition, the Commission highly recommends a variety of testing/assessment opportunities throughout the course which could include: oral or written testing, interaction with instructor and students, case study and scenario, and other means of testing students' application of the skills, as the instructor or department deems appropriate.

Reference Materials:

- House Bill 1338
- Occupations Code §1701.261 and .262

Instructor Guide

Course Goals and Objectives

Course Title: Traumatic and Acquired Brain Injury

Instructor Note: Introduce this course with the following video or one concerning a similar topic: https://www.youtube.com/watch?v=TRY-Zok7mKs&index=1&list=PLJE6pz0haTBoeTKJrGP4MklpQhtwzwboX

1.0 Unit Goal: What is brain injury?

Instructor Note: Introduce this course with the following video or one concerning a similar topic: https://www.youtube.com/watch?v=TRY-Zok7mKs&index=1&list=PLJE6pz0haTBoeTKJrGP4MklpQhtwzwboX

1.1 Students will discuss the definition of brain injury

There are many types of brain injuries, and we use many different terms to talk about them:

- Traumatic Brain Injury/TBI
- Knocked Out
- Neurological Damage
- Abusive Head Trauma
- Stroke
- Brain Damage
- Shaken Baby Syndrome
- Head Injury
- Concussion

These brain injuries can fit under the broad term of Acquired Brain Injury

1.2 Students will describe an Acquired Brain Injury (ABI).

An acquired brain injury is an injury to the brain which:

- Occurs after birth
- Is not related to a congenital or a degenerative disease
- Can cause temporary or permanent impairments that result in physical, emotional, and intellectual difficulties.

1.3 Students will describe a Traumatic Brain Injury (TBI)

A TBI is a type of acquired brain injury that disrupts the normal function of the brain and is caused by:

- A blow to the head
- A penetrating head injury

The injury may be a closed- or an open-head injury. A closed-head injury is when the skull stays intact, while an open-head injury is when an object penetrates the skull and enters the brain.

1.4 Students will describe a Non-Traumatic Brain Injury

A non-traumatic brain injury is a type of acquired brain injury that disrupts the normal function of the brain and is caused by an internal event, rather than an external force. Non-traumatic brain injuries are just as serious and life altering as TBIs.

1.5 Students will compare traumatic and non-traumatic brain injuries

All traumatic brain injuries and non-traumatic brain injuries are types of acquired brain injuries.

Non-Traumatic brain Injury: Stroke, drug induced, anoxic brain injury, exposure to toxins, meningitis, and encephalitis, brain tumors, near drowning, infection, and aneurism.

Traumatic Brain Injuries: Concussion, violence, blast injury, struck by or against something, falls, motor vehicle crash, abusive head trauma, shaken baby syndrome, sports injuries.

Lecture Scenario: Review these two types of brain injuries and have students give examples of each.

2.0 How common is a brain injury

2.1 Student will appraise the prevalence of brain injuries

Traumatic brain injury is the leading cause of death and disability in children and adults. Over 2.2 million people sustain a traumatic brain injury in the United States each year. Over 144,000 of those injuries are in Texas.

The number of people who are diagnosed with a brain injury each year is more than the number of people diagnosed with Alzheimer's, breast cancer, HIV/AIDS, prostate cancer, lung cancer, and ALS combined. That doesn't include the number of individuals who experience other types of brain injuries, such as stroke (800,000 each year in U.S.), anoxic brain injury, hypoxic brain injury, encephalitis, drug induced brain injury, etc. The number of people who go undiagnosed, misdiagnosed, and untreated is incalculable.

Lecture Scenario: Lead a discussion with the class on the following questions:

- Where do these statistics come from?
- What doesn't get counted?

3.0 How does Brain Injury happen?

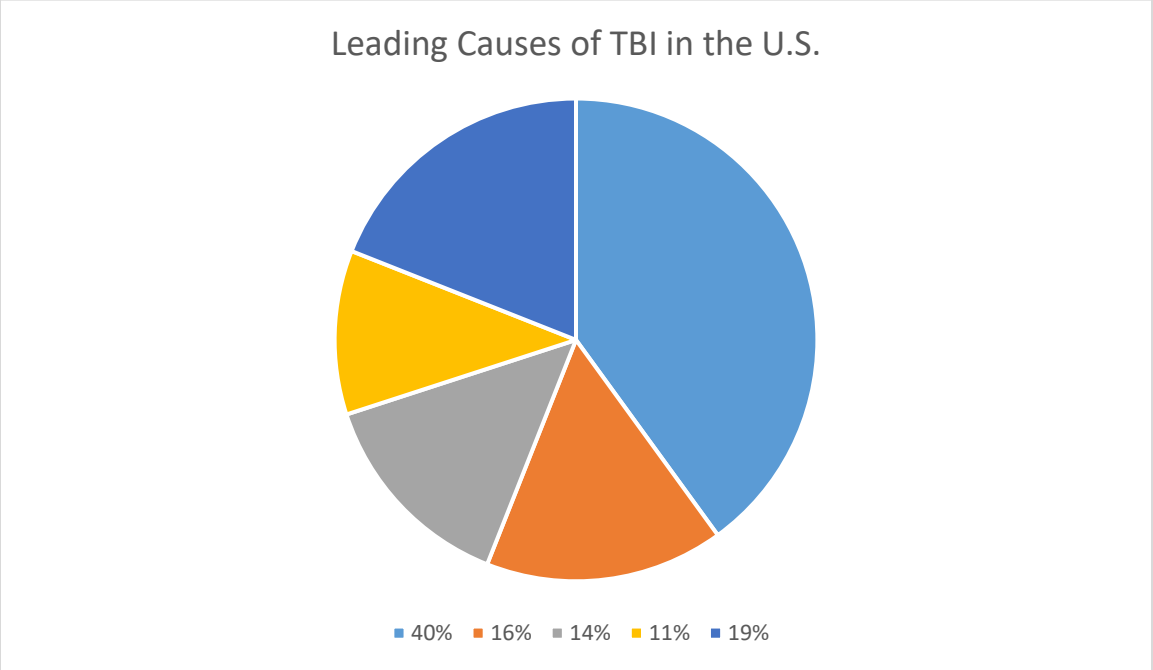
3.1 Examine the assorted causes of Traumatic Brain Injury (TBI)

- Falls: Falls from heights like buildings, trees, ladders, bicycles, etc., as well as small falls like slips, tumbles down steps, and loss of balance.
- Struck by/against something: falling debris, motor vehicles, violence, etc.
- Motor vehicle crash: Cars, motorcycles, ATVs, etc.
- Violence: Domestic violence, gang violence, assault, shaken baby syndrome, etc.

- Explosion/Blast Injury: Military service members (combat and non-combat positions), civilians, journalists, etc.
- Concussion: Sports-related injuries, motor vehicle crashes etc.

3.2 Students will apply the leading causes of traumatic brain injury in the U.S. to a pie chart of percentages of causes

Lecture Scenario: Distribute a pie chart diagram to each student with percentages identified. Have students assign through course information what TBI types (falls (40%), Struck by/against something (16%), Motor vehicle crashes (14%), Assaults (11%), Other-Unknown 19%) match the appropriate percentage on the pie chart.



3.3 Examine the assorted causes of Non-traumatic Brain Injury

- Stroke
- Infection: Meningitis, Encephalitis, etc.
- Anoxia/Hypoxia:
    - No oxygen or too little oxygen is making it to the brain

    - Near drowning, asphyxiation, strangulation, aspiration, etc.
- Brain Tumors
- Aneurysm
- Exposure to Toxins
    - Cleaning products, pesticides (DDT/DDE, Chlorpyrifos), PCB's, arsenic, ethanol, toluene, etc.
- Drug Induced
    - Cocaine, Methamphetamines, Inhalants, MDMA, etc.

4.0 Who is at risk?

4.1 Students will differentiate populations with brain injury risk

Some of the populations you may interact with are more likely to have a brain injury or be at risk of sustaining one.

- Children ages 0-4 and Adolescents ages 16-19: most likely to have TBI-related ED visit or hospitalization
- Older adults age 75+: have highest rates of TBI-related hospitalizations and deaths among all age groups.
- Domestic Violence Survivors: Studies estimate the prevalence of TBI in domestic violence survivors is over 35%.
- Athletes: Over 1.6 million sports and recreation-related concussions occur in the U.S. each year.
- Adult and Juvenile offenders: The estimated prevalence of TBI in imprisoned populations is 60.3%.
- Homeless: In a comparison of multiple studies, the prevalence of TBI in homeless populations is between 30% and 40%.
- Veterans: Veteran's advocates estimate that 10 to 20% of Iraq veterans and service members have some level of brain injury.

5.0 The reality of Brain Injury

No one plans to have a brain injury. Brain injuries often come as complete shocks to individuals and their families.

People sustain brain injuries while riding in a car, sitting at a desk, playing their favorite sport, etc.

And, while some populations have a higher risk of sustaining a brain injury, the reality is brain injuries can happen to anyone, anywhere, and at any time.

To grasp the magnitude of this public health problem, it might help to think about people we know of who sustained brain injuries.

5.1 Students will discuss examples of historical persons who suffered with brain injury

The effects of brain injuries were recorded by early writers and doctors such as Hippocrates, Homer, and Aristophanes.

Examples of such cases include:

- Harriet Tubman, abolitionist and humanitarian: sustained a TBI when she was hit by a heavy metal weight. Suffered from epilepsy, headaches, and sleeping spells as a result.
- Phineas Gage, railroad worker, first recorded neurological patient: sustained a TBI when an iron rod penetrated his skull.
- Abraham Lincoln, 16th U.S. President: Sustained a TBI when a mule kicked him in the back of the head. He then went on to suffer from depression throughout his life.
- Charles Dickens, Novelist: Died from a stroke at age 58.

Examples of brain injuries in movies and plays:

- 50 First Dates
- The Vow
- Light in the Piazza
- The Bourne Identity
- Mulholland Dr.
- Memento
- While You Were Sleeping

- This is Where I Leave You
- Anastasia
- Amour
- The Diving Bell and the Butterfly
- Concussion

Examples of public figures who sustained brain injuries:

- Tracy Morgan: TBI from car crash
- Gabby Giffords: TBI from gunshot wound
- Lamar Odom: Drug-induced strokes
- Natasha Richardson: TBI from ski accident
- George Clooney: TBI from accident while filming
- Bob Woodruff: TBI from blast injury
- Ronald Dahl: TBI from plane crash
- Bret Michaels: Stroke
- Stevie Wonder: TBI from car crash
- Dwight D. Eisenhower: Stroke
- Kurt Vonnegut: TBI from fall

Lecture Scenario: Ask students to discuss:

• Favorite athletes who have sustained brain injuries.

• Types of sports most prevalent in obtaining a brain injury

• Brian Injury in the news:

Instructor Note: Have students Google a period of time or a day and seeing how many articles appear for that timespan. Ask if they know anyone who has sustained a brain injury.

6.0 Severity of Brain Injury

6.1 Students will classify Brain Injury types with the accompanied severity factor

The severity of a brain injury can range from mild, to moderate, to severe.

Determining the severity of a brain injury usually depends on four factors:

- Confusion/Disorientation
- Loss of Consciousness
- Memory Loss
- MRI/CT/Imaging

	MILD	MODERATE	SEVERE
Confusion/Disorientation	Less than 24 hours	More than 30 minutes but less than 24 hours	More than 24 hours
Loss of Consciousness	0-30 minutes *A loss of consciousness does not always occur	More than 30 minutes but less than 24 hours	More than 24 hours
Memory Loss	Less than 24 hours	More than 24 hours but less than 7 days	More than 7 days
MRI/CT/Imaging	For all levels of severity, imaging results may come back normal or abnormal. Certain chemical and physical reactions are not picked up by these tests, so this should not be the only determining factor when diagnosing a brain injury.		

6.2 Students will recognize the significance of a "mild" brain injury

Lecture Scenario: Ask students -- "Which is worse: mild, moderate, or severe?"

Though the labels seem to imply that one brain injury is worse than another-that is not always the case. Discuss this reasoning.

75% of traumatic brain injuries seen are mild TBIs. Many individuals who sustain these injuries will recover and may not suffer many long term changes. However, it should be noted that mild injuries are a major public health concern.

Mild brain injuries are deceptive:

- A person may look “normal” and feel “fine”
- Mild brain injuries are often unrecognized and undiagnosed
- A “mild” brain injury can have just as severe consequences as a “severe” brain injury
- Multiple “mild” brain injuries can exponentially increase the consequences and even lead to death

Don’t let your eyes deceive you. Even if a person looks “normal” or feels “fine,” there may be changes you can’t see.

All brain injuries need to be taken seriously.

Instructor Note: Show following video or one concerning similar topic material:

https://www.youtube.com/watch?v=QXJwkT6abqc&index=2&list=PLJE6pz0haTBoeTKJrGP4MklpQhtwzwboX

7.0 The effects of brain injury/the functions of the brain

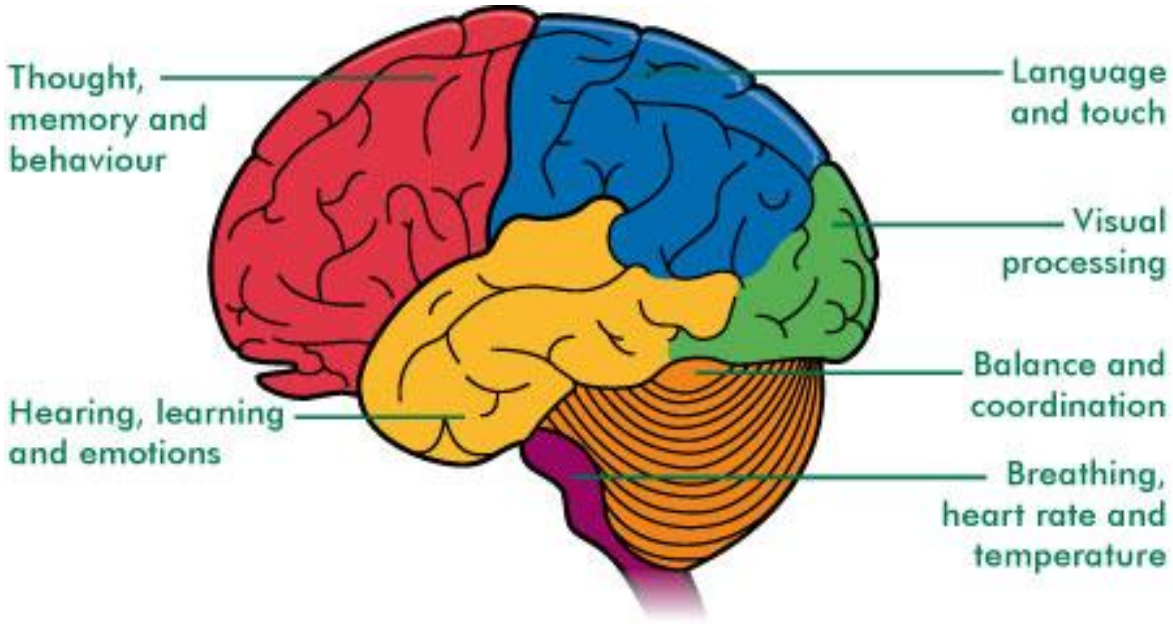
7.1 Students will categorize the functions of the brain

Memorizing the various parts of the brain and their functions is not required for this training; however, it helps to take a look at everything the brain does to understand what can go wrong after a brain injury.

The brain is the control center for our physical, emotional, and cognitive activities. When someone is living with a brain injury, some of those activities are altered. Even a basic overview of the functions of the brain reveals the importance of one of our most valuable organs.

So when someone sustains a brain injury in their frontal lobe, the functions of the frontal lobe are affected. (Attention, decision making, social behavior, concentration, personality, memory, awareness of abilities and limitations, emotions, planning, problem solving, impulse control.)

The same goes for any other lobe.



The lobes and functions of the brain

PARTS OF THE BRAIN

- Frontal lobe
- Parietal lobe
- Temporal lobe
- Occipital lobe
- Cerebellum
- Brain stem

Often a brain injury affects multiple parts of the brain. Diffuse axonal injuries can damage cells throughout the brain.

7.2 Students will inventory the three categories of change that develop as a result to a brain injury

The easiest way to think about how a brain injury can affect a person is to split up the effects into three categories.

- Cognitive Changes
- Emotional/Behavioral Changes
- Physical Changes

Cognitive Changes:

The most common cognitive changes that individuals living with a brain injury experience include:

- Difficulty with memory
- Personality change
- Lack of concentration
- Delayed thinking/processing
- Reckless decision-making
- Difficulty communicating and understanding

What will this change look like?

- Struggles following conversations
- Difficulty finding a word to say
- Needs things repeated several times
- Is unable to recognize words they once knew
- Difficulty following instructions
- Is easily distracted
- Has trouble following directions
- Doesn't pay attention to conversation
- Can't remember answers to simple questions
- Makes reckless decisions

Emotional/Behavioral Changes

The most common behavioral changes that individuals living with brain injury experience include:

- Irritability
- Aggression
- Anxiety/Depression
- Mood swings
- Inappropriate social behavior
- Impulsivity

What might this change look like?

- Physical and verbal outbursts
- Depression/anxiety
- Inappropriate sexual behavior
- Makes impulsive decisions
- Difficulty reasoning and concentrating
- Inappropriate laughing or crying
- Inappropriate social behavior

Physical Changes

The most common physical changes that individuals living with brain injury experience include:

- Poor balance
- Impaired fine motor skills
- Impaired hearing
    - Hearing loss
    - Difficulty differentiating sets of sounds from background noise
    - Auditory agnosia-not recognizing the meaning of sounds
- Vision issues
    - Double vision
    - Nystagmus
    - Reduced visual acuity or visual field
    - Trouble with depth perception
- Persistent talking
- The inability to speak
- Slurred speech
- Muscle tremors

- Chronic headaches
- Incontinence
- Seizures

What might this look like?

The cognitive, emotional/behavioral, and physical changes caused by a brain injury, individually or combined, can make individuals seem:

- Uncooperative
- Disrespectful
- Indifferent
- Defiant
- Rude
- Vulgar
- Reckless
- Detached
- Irrational
- Dismissive
- Evasive
- Unapproachable
- Unresponsive
- Dazed
- In shock
- “Airheaded”
- “Out of it”
- Aloof
- Senile
- “Socially awkward”
- As if they are under the influence of alcohol and/or drugs

Each person will experience these changes differently.

- Not every person will experience changes
- A person may experience a few changes or many
- Changes can be mild or severe

- Many individuals don't know they have sustained a brain injury, and don't realize these changes have a cause
- Overstimulation, being upset or irritated, and/or anxiety can increase the level at which these changes are displayed.

Comorbidities

The effects a brain injury can have on a person often leads to the development of comorbidities.

Two or more simultaneously present chronic diseases or conditions are known as comorbidities. (Brain Injury + a chronic disease or condition)

Common Comorbidities include:

- Substance use/abuse
- Sleep problems
- Depression and suicidality
- Epilepsy
- Neurodegenerative diseases (EX. ALS, Alzheimer's, dementia, etc.)
- Fatigue

8.0 Recovering from a Brain Injury

8.1 Students will discuss the differences in the brain injury recovery process

Recovery is different for everyone

- Advancements in medicine, therapy, and research have made it possible for a person to make a great recovery, but each individual is different.
    - Some individuals may feel that they have returned to "normal"
    - Others may have to learn what their "new normal" is (ex. limitations, adaptations, etc.)
- While we call them "injuries" it is more accurate to think of a brain injury as a chronic condition.
    - Survivors often go on to live the rest of their lives coping with the effects of their injuries

- Recovery is an ongoing process throughout life

Unlike the healing of a broken bone, a relatively quick process that will end and allow individuals to return to the life they knew before…the recovery process for brain injuries is ongoing and changing.

Instructor Note: View video

Show students the below video or one concerning a similar subject matter https://www.youtube.com/watch?v=q9TXuLEZKgA&list=PLJE6pz0haTBoeTKJrGP4MklpQhtwzwboX&index=4

9.0 From knowledge to action

Brain injury affects every aspect of health. According to the World Health Organization, "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

9.1 List the various health issues associated with a brain injury that a first responder will come in contact

As a first responder, you have an impact on these very aspects of health when you respond to:

- Domestic Violence
- Elderly falls
- Public Intoxication
- Strokes
- Heart Attacks
- Juvenile Misconduct
- Drug activity
- Assault
- Suspicious person/activity
- Child abuse and negligence
- Trauma
- DWIs

- Motor vehicle accidents
- Mental health concerns
- Welfare concerns
- Suicide attempts/completions

Lecture Scenario: Discuss with students

The officer has a profound impact on the physical health, mental health, and social wellbeing of the people you interact with each day. So how can you ensure that you have a profoundly positive impact regarding brain injury?

10.0 Preventing Brain Injuries

10.1 Students will inventory brain injury prevention strategies in children

Prevention is the best medicine. Although there is not a magic pill that can cure a brain injury in a matter of minutes, most brain injuries are preventable. Educating and raising awareness will reduce the impact brain injuries have on society. The following prevention tips have been included to equip the officer with the knowledge needed to prevent brain injuries in your community.

Preventing brain injury in children—the following tips can help children avoid brain injuries:

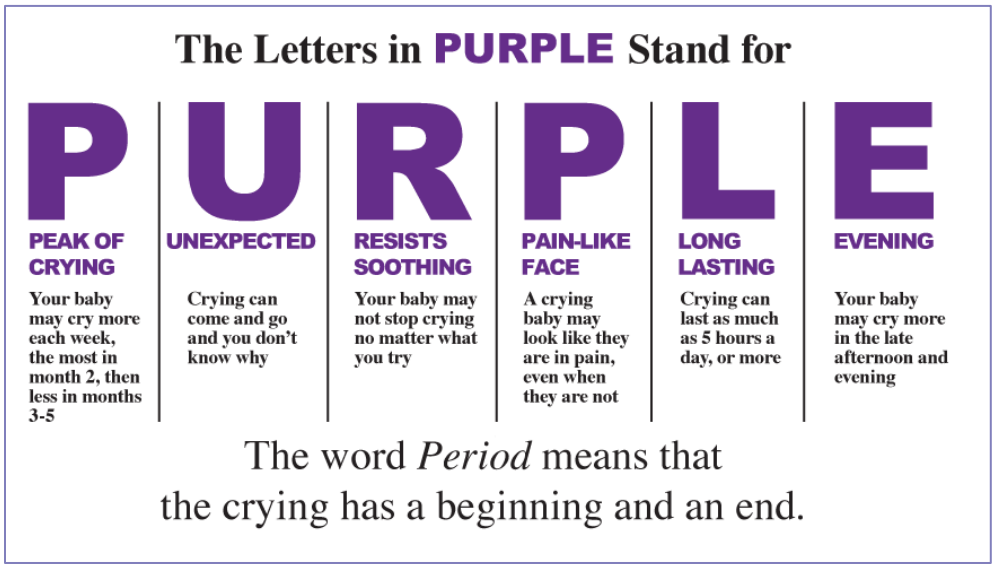
- Keep stairs and floors clear of clutter
- Make sure area rugs are secure
- Install window guards to prevent falls
- Put a nonslip mat in the bathtub or shower
- Use safety gates at the top and bottom of stairs when young children are around
- Never leave children unattended in the bathtub or when near water
- Teach children to swim and put gates around pools/water. Children can safely take swimming lessons as early as age 1.
- Don’t let children play on ledges, fire escapes, or balconies

- Make sure the surface on your child's playground is made of shock-absorbing materials, such as mulch, sand, or recycled tires

Preventing Abusive Head Trauma (Shaken Baby Syndrome)

The Period of PURPLE Crying is an evidence based approach to preventing abusive head trauma through parent and caregiver education.

Lecture Scenario: Discuss the following chart with students.



The CDC's Heads Up program has great resources for coaches, parents, teachers, and athletes.

Instructor Note: To learn more on this topic refer to: www.cdc.gov/headsup/youthsports

In Texas, Natasha's Law, under Texas Education Code Chapter 38, mandates that the coaches and trainers for any school district, public school, or UIL interscholastic athletic activities be trained on how to best manage a concussion. This includes removal from play and adherence to the return to play protocol.

Instructor Note: To learn more on this topic refer to http://headsafetytexas.org

10.2 Students will inventory brain injury prevention strategies in older adults

Preventing brain injury in older adults

The following tips can help older adults avoid falls around the house:

- Remove tripping hazards such as throw rugs and clutter
- Use nonslip mats in the bathtub/shower
- Install grab bars next to the toilet and in the tub or shower
- Install handrails on both sides of stairways
- Improve lighting throughout the home
- Maintain a regular physical activity program

Instructor Note: "A Matter of Balance" is an evidence-based program aimed at preventing older adult falls. To learn more visit: https://www.ncoa.org/healthy-aging/falls-prevention/falls-prevention-programs-for-older-adults

Preventing Stroke

The risk of sustaining a stroke can be reduced by implementing some healthy habits:

- Eating a healthy diet
- Maintaining a healthy weight
- Getting enough exercise
- Not smoking
- Limiting alcohol use

10.3 Students will inventory brain injuries during a motor vehicle accident

You can reduce the risk of brain injury in a motor vehicle crash by:

- Always wearing seat belts when you are driving or riding in a vehicle
- Never driving while intoxicated or riding with someone who is driving while intoxicated
- Never driving while distracted (talking/texting on a cellphone, eating, applying makeup, etc.)

- Ensuring that children who are riding in the car are sitting in age, weight, and height appropriate child safety seats

Lecture Scenario: Discuss the following chart.

10.4 Students will discuss the importance of wearing a helmet during sports activities

Don't forget a helmet.

A properly fitted helmet should be worn during all of the following activities and more:

- Skiing and snowboarding
- Skateboarding

- Playing
    - Baseball
    - Contact Sports (football, hockey etc.)
- Riding a:
    - Motorcycle
    - Bike
    - ATV
    - Horse
    - Scooter

11.0 Brain Injury Intervention

11.1 Students will identify the signs and symptoms of a brain injury

Knowing the signs and symptoms of a brain injury will help an officer best assist individuals who may have sustained a brain injury.

Situations when you should pay attention for signs and symptoms include:

- Motor vehicle crashes
- Falls, slips, and trips
- Falls from heights
- Domestic violence, child abuse and neglect, etc.
- Assaults
- And any other situation where someone's body or head has been hit or jolted

Signs and symptoms of a brain injury: if someone is experiencing any of the following symptoms after their body or head has been hit or jolted, encourage them to go to the emergency room immediately:

- Confusion or disorientation
- Loss of consciousness
- Severe headache
- Nausea or vomiting

- Dizziness
- Blood or clear fluid draining from nose or ears
- Weakness, numbness, or tingling in limbs
- Trouble walking
- Slurred speech or vision
- Seizures

Symptoms may show immediately or they may not show up for days, weeks, or even months. Encourage individuals to watch for symptoms that may not appear immediately. They should see their doctor if they notice any of the following changes after their injury

Physical	**Cognitive**	**Behavioral**
Poor balance and coordination	Concentration and memory problems	Changes in personality and behavior
Sleep disturbances or fatigue	Changes in work/school performance	Irritability/Aggression
Ongoing headaches or neck pain	Delayed thinking and understanding	Depression/Anxiety
Sensitivity to light and noise		

Signs and symptoms of a stroke

- Sudden numbness, tingling, weakness, or loss of movement in your face, arm, or leg, especially on only one side of your body
- A sudden, severe headache that is different from past headaches
- Sudden confusion or trouble understanding simple statements
- Sudden problems with walking or balance
- Sudden vision changes
- Sudden trouble speaking

An easy way to remember these signs and symptoms is to use the acronym FAST:

F-Face drooping-Does one side of the face droop or is it numb? Ask the person to smile. Is the person's smile uneven?

A-Arm Weakness- Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward?

S-Speech Difficulty-Is speech slurred? Is the person unable to speak or hard to understand? Ask the person to repeat simple sentences. Is the sentence repeated correctly?

T-Time to call 9-1-1-if someone shows any of these symptoms. Even if the symptoms go away, get the person to a hospital immediately. Check the time so you'll know when the first symptoms appeared.

Memorizing all the signs and symptoms of a brain injury is a lot. Please refer to handouts for quick access.

Practical Scenario: Have students role-play the situation of coming in contact with a person suffering from a stroke and the utilization of the F-A-S-T technique. Have class participate in the evaluation of each scenario.

Instructor Note: Preprinted materials can be ordered from the Office of Acquired Brain Injury or the American Stroke Association.

11.2 Students will apply course knowledge to case study scenario

Lecture/Practical Scenario: Lead the class in case study and/or scenario roleplay and discussion.

Case Study #1: Running errands (This case study is based on actual events. Names and locations have been changed.)

Marni was driving to the store on the same highway they always took and knew their way well. On this particular day, they were driving behind a large semi-truck when the driver slammed on the breaks to avoid hitting another car.

Marni's car was lodged under the back of the truck. Their windshield was shattered, and the airbags had been deployed.

The driver of the truck and several other drivers ran to assist Marni out of their car. As they talked to them and helped them brush the broken glass off, they suspected they hit their head in the crash.

Marni couldn't remember what happened during the crash. They seemed confused and shaky. When EMS arrived, they encouraged them to go to the hospital.

Marni was starting to feel better and still had errands to run so they didn't feel like going to the hospital. Marni politely declined going with EMS to the hospital, and had their spouse pick them up.

Marni returned home and went on with their day.

Ask students: What did the EMS personnel do well? How could they improve?

The Outcome:

Marni returned to work the next day and couldn't seem to concentrate. They figured they had a concussion and just needed rest.

Several months later, Marni was still struggling at work. They were having trouble remembering things, it took them lots of time and effort to complete simple tasks, and they were struggling to communicate with their co-workers.

Six months after the crash, Marni finally saw a doctor and was told they sustained a brain injury. They began therapy immediately.

Marni has now been unemployed for two years. They still struggle with some cognitive functions despite having made huge improvements. Every day, Marni wonders what might be different if they had gone to the hospital right after the crash.

Case Study #2: Officer Ortega was working a big event at the convention center. As they were walking through the hall they saw an older adult slip on the slick concrete and land with a thud. Officer Ortega helped them stand up and stayed to check if they were showing any signs or symptoms of a brain injury.

They didn't show any signs or symptoms. Before leaving, Officer Ortega encouraged them to monitor for symptoms, gave them a summary of what they should know, and left them with a handout to refer to later.

Ask students: What did Officer Ortega do well? And how could they improve?

12.0 Successful Communication

12.1 Students will review effective communication techniques

Ways to communicate successfully

If there is any suspicion that an individual may be a brain injury survivor, use the following communication tips and techniques to help communicate successfully. Even if an officer is unsure whether or not an individual has a brain injury, these communication tips and techniques can help during interactions with any individual encountered.

Create a safe environment that promotes positive communication:

- Explain the limits and rules
- Be encouraging, respectful, and patient
- Use a positive or neutral tone
- Be accommodating
- Stay calm if their behavior is inappropriate (ex. Inappropriate language) Focus on the person's message, not how it was delivered
- Show empathy: empathize with the feelings but not the behavior
- Do not:
    - Threaten
    - Interrupt
    - Argue
    - Challenge
    - Shame
    - Use a condescending tone
    - Attempt to finish their sentences for them
    - Speak harshly or too loudly

    - View the situation as a competition where one person has to win

These actions can come across as aggression which can cause anxiety and stress. The more stress and anxiety, the worse their symptoms can become.

Accommodating and Collaborating

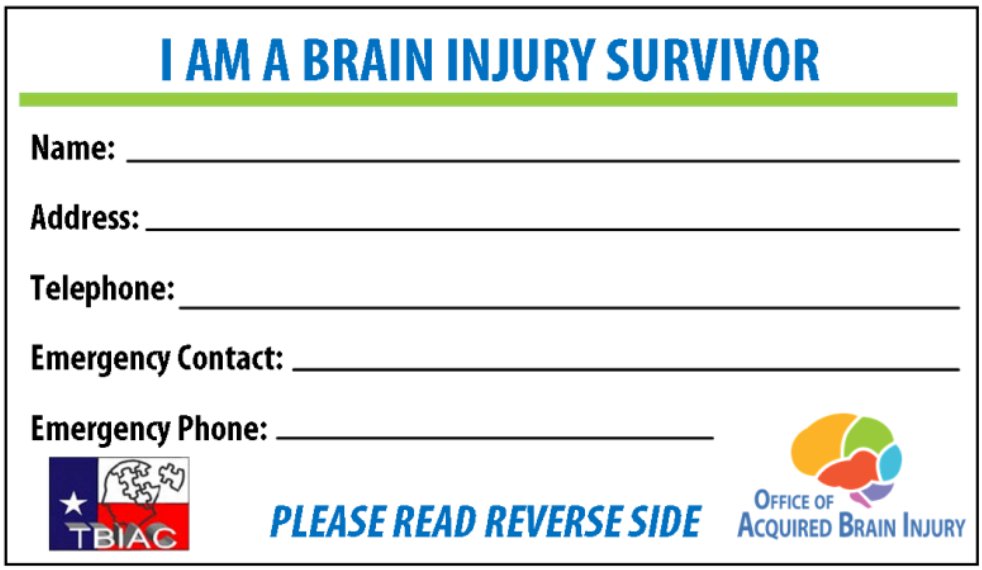
- Reduce distractions (other conversations, TVs, music, lights, traffic, etc.)
    - You may want to move to a new location, offer the individual a chair, or reduce the number of first responders on scene
- Make sure you have their attention before talking
- Speak slowly, simply, and clearly
- Focus on one subject at a time
- Let them know if you have not understood or if you need them to repeat what they have said
- Check to see if they have understood
- Use active listening skills
    - Pay attention
    - Show you are listening
        - Body language: open and inviting posture
        - Encourage them to continue with small verbal or physical cues
            - Nods, smiles, affirming gestures
    - Provide feedback
        - Paraphrase your understanding
        - Get clarification
    - Defer judgement
    - Respond appropriately

Finding help

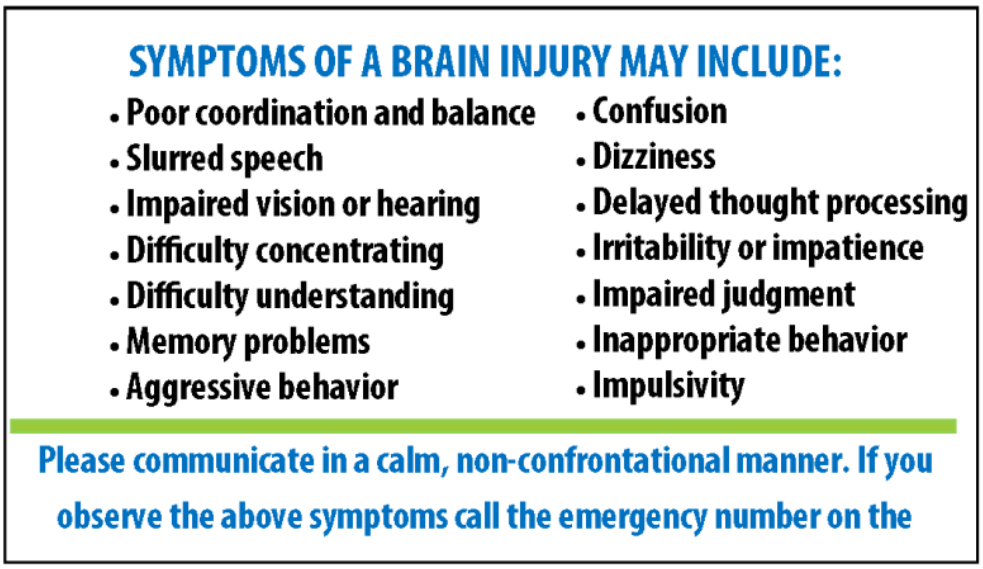
If an officer is unable to communicate successfully or has concerns, the individual can contact a friend or a family member.

Some brain injury survivors carry wallet size emergency contact cards which will help you find someone who can help you manage the situation.

FRONT



BACK



12.2 Students will express reasons why appropriate communication is necessary when interacting with a person with a brain injury.

Communication is key.

After sustaining a brain injury, a person may experience life-long changes that affect their ability to communicate.

Utilizing appropriate communication techniques when you are interacting with someone living with a brain injury will help you to:

- Keep the officer and the individual safe
- Prevent and/or resolve conflict
- Provide high-quality assistance, medical care, etc.

How does a brain injury affect communication?

A person who is living with a brain injury may experience difficulty:

- Understanding if someone speaks too fast or gives too much information at once
- Finding a word they are looking for or using the wrong word
- Recognizing words they used to know
- Speaking clearly (ex. slurred speech)
- Following instructions

They may also:

- Use inappropriate language or talk about inappropriate things
- Need things to be repeated several times
- Not pay attention during conversations
- Repeat the same thing over and over
- Misunderstand jokes or sarcasm

Knowing what to do:

If an officer starts noticing any of these communication difficulties during an interaction, look for other symptoms that might help determine if an individual has a brain injury:

- Physical changes
- Emotional changes
- Cognitive changes

This can be difficult:

- The individual may not know they had sustained one or multiple brain injuries

- Signs and symptoms may be subtle
- Many changes are intangible
- Physical changes may have healed

Or it may be simple:

- The individual might tell you
- There may be physical evidence

Brain injury is often called the invisible epidemic.

Why not just ask if they have ever sustained a brain injury? Asking if an individual sustained a brain injury is tricky:

- Some individuals find it invasive or offensive
- Some individuals are glad to be asked
- Some individuals may not know they have sustained a brain injury

It is up to you to assess the situation and decide if asking is appropriate.

Figuring out if someone has ever sustained a brain injury is not always easy, but don't worry, it is not your job to diagnose what is causing any communications difficulties. An officer needs to stop and consider the possibility.

Lecture Scenario: Share the below case study and discuss with students. This case is based on actual events. Names and locations have been changed.

Case Study: DWI

Jordan, a brain injury survivor, was driving home after visiting friends when they saw flashing lights behind them.

• They pulled over to the side of the road, turned off their car and waited for the officer to walk over. The officer had pulled them over because they were driving over the speed limit.

• As the police officer asked Jordan a few questions, Jordan began to get anxious. They tried to calmly respond, but as their anxiety increased, they could feel a wave of symptoms building up.

• The sounds of the other cars zooming by kept startling Jordan and distracting them from listening to the police officer. As Jordan spoke, their speech slurred,

and they stumbled over their words. They were trying hard to be compliant, but their brain injury was getting the best of them.

• Jordan stumbled when they were asked to get out of the car. Their brain injury made it difficult to move their left leg, but on a regular day they got by just fine. The officer began giving Jordan instructions but as they comprehended the first task, they had already missed the second and the third. Jordan had acquired nystagmus as a result of their brain injury. So as the officer tested Jordan's horizontal gaze, their pupil's oscillated back and forth.

• Before things got worse, Jordan pulled out their emergency contact card with their spouse's contact information and explained to the officer that they are a brain injury survivor.

• The police officer had never been informed about the effects a brain injury can have and assumed Jordan was making excuses in an attempt to hide that they were driving while intoxicated.

• This interaction did not end positively for Jordan or the police officer. As the officer placed them under arrest, they panicked. Overwhelmed with fear, they began to struggle to get away. As they resisted, the officer resorted to using physical force to get them to cooperate. Feeling further threatened, they began expressing their fear in less than appropriate language. By the time the officer was able to get them into their vehicle, they had suffered a second brain injury and multiple physical injuries.

• As of now, Jordan and the police officer have spent lots of time and money on an emotionally draining trial that seems to drag on and on.

Ask the class:

• What communication techniques could have been used to improve the outcome of this interaction?

• Discuss this topic with the class.

13.0 Resource Facilitation

13.1 Distinguish "unmet needs" of a person living with a Brain Injury

An officer will likely encounter individuals living with brain injury who have one or more unmet needs.

Commonly unmet needs that you may encounter include:

- Physiological needs
    - Water, food, air, clothing, shelter, health care, etc.
- Safety needs
    - Personal, physical, financial, career, etc.
- Belongingness and love needs
    - Friendship, intimacy, family, etc.
- Esteem needs
    - Self-esteem, self-respect, confidence, independence, etc.
- Self-actualization
    - Realizing one's potential
- Self-transcendence needs
    - Life is meaningful, giving one's self to a higher goal (altruism, spirituality, etc.)

13.2 Arrange a listing of resources to utilize when working with individuals with brain injury

Referring individuals to an organization that can connect them with the resources they need can have a hugely positive effect on a person's life.

For brain injury resources, have them contact:

The Office of Acquired Brain Injury

- OABI@hhsc.state.tx.us
- https://www.hhs.texas.gov/services/disability/office-acquired-brain-injury

For non-brain injury related resources, have them contact:

- 2-1-1 Texas
    - Dial 2-1-1
    - http://www.211texas.org/

14.0 Time to Act

14.1 Examine the impact a law enforcement officer has when interacting with the public

An officer can have a profound impact on the physical health, mental health, and social well-being of the people they interact with each day. In regards to brain injury, an officer can have a profoundly positive impact through:

- Prevention
- Intervention
- Communication
- Resource facilitation

For additional information on starting a program (ex: prevention programs, additional training etc.), have questions, or would like to request resources, contact the Office of Acquired Brain Injury. The Office of Acquired Brain Injury (OABI) is Texas' premier resource for providing education, awareness, prevention, and service referral and coordination in regard to brain injury. They serve brain injury survivors, military service members and veterans, and other state, federal, local, and private agencies.

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