MY ONE GOAL:

SURVIVE

THRIVE

GUIDE
TODAY’S AGENDA:

1. Share my story – How it happened to me
2. How trauma injures the first responder
3. How we help those who are injured
4. Encourage you to to survive, thrive and guide
THE DAY I DREAMED OF:

February 25th, 2006
WHEN DREAMS TURN TO DREAD:

July 2\textsuperscript{nd}, 2006
WHEN DREAMS TURN TO DREAD:

August 27th, 2006
LAST DITCH EFFORT:

August 6th, 2018
PERHAPS YOU HAVE ASKED?

• What’s wrong?
• What the hell happened?
• Why am I so angry, so easily frustrated?
• Why does small stuff freaking infuriate me?
• Why happiness alludes you?
• Why depression, anxiety and worry control you?
• Why the inside of you never matches the outside you see in others?
• What the heck is wrong with me?
HOW BIG IS THE PROBLEM?

1.75 million first responders in U.S.A

30% will struggle with some form of mental health this year

You do the math . . .
525,000

THIS YEAR ALONE
BRAIN FACTS:

• The brain is the most complex organ in the universe.
• It weighs about 3 lbs.
• It has 100 BILLION neurons (nerve or brain cells).
• TRILLIONS of connections to other cells.
• The human brain can process information as fast as 268 mph.
• There are 100,000 miles of blood vessels in the brain.
• Each person has about 70,000 thoughts a day, 50% in words and 50% in images.
• It’s a myth that we only use 10% of the brain. A loss of 90% of its function would likely result in being a vegetable or being dead.
THE TRUTH OF THE MATTER:

The human brain is awesome
It functions 24 hours a day
From the day we are born
And only stops when we are
TAKING AN EXAM
or
WHEN WE FALL IN LOVE
LET’S TALK BRAIN ANATOMY:

Frontal (PFC): Forethought/focus Executive center (CEO/COP), short term memory

Parietal: Temperature, taste, touch, seeing motion, grabbing objects

Temporal: Mood stability, recognition, interpreting social cues, hearing/listening

Occipital: Vision, color & depth perception

Cerebellum: (Little Brain): Posture, balance, fine motor skills, speech, thought organization & formation. Higher level thinking.
INNER BRAIN: LIMBIC SYSTEM

**Thalamus:** Detects & relays info to rest of brain. Center for emotions

**Cingulate Gyrus:** Thought gear shifter

**Hypothalamus:** Regulates temp, thirst, hunger, pain, sex satisfaction, anger & rage

**Pituitary:**
Release hormones into blood stream "master gland"

**Amygdala (2):** Emotional response part of brain, 911 system

**Hippocampus (2):** Regulates the emotions of thought and converts short term memory into long term memory
THE TWO SYSTEMS OF THE BRAIN

Sympathetic Nervous System

&

Parasympathetic Nervous System
How the brain is supposed to work
SYMPATHETIC NERVOUS SYSTEM:

• Thalamus – detects danger  
  (Center between hemispheres that relays information)

• Amygdala  
  (Emotional part of brain picks up the message and says “OH SHIT!”)

• Hypothalamus & Pituitary Gland  
  (Adrenocorticotropic Hormone dump – ACTH”)

• Adrenal Glands  
  (sit on top of kidneys dump Epinephrine, Norepinephrine and Cortisol)
HOW TRAUMA CHANGES EVERYTHING

In the presence of trauma, the brain is injured.

- Amygdala – Becomes hyperactive, over stimulated
- Prefrontal Cortex – Shuts down, decreased blood flow
- Hippocampus – Has a hard time providing context
- Anterior Cingulate – (gear shifter of thoughts) gets stuck

Trauma, which can result in PTSD
CAUSES A PERSON TO GET STUCK IN DANGER MODE
HOW TRAUMA CHANGES EVERYTHING:

Cortisol within normal limits helps:

• Helps control blood sugar levels
• Regulates metabolism
• Decreases inflammation
• Assists with memory function
• Controls salt / H2O balance
• Helps control blood pressure
HOW TRAUMA CHANGES EVERYTHING:

Too much Cortisol is bad:

• Interferes with learning & memory
• Decreases immune function
• Decreases bone density
• Increased weight gain
• Increased blood pressure
• Increased cholesterol
• Increased risk for heart disease
HOW TRAUMA CHANGES EVERYTHING:

Adrenal Gland Burn Out:

• Signs & Symptoms:
  • Fatigue – Constantly tired
  • Illness (flu, bronchitis, pneumonia)
  • Crave salty snacks
  • Sleep does not resolve you feeling ”UGH!”
  • Your body isn’t getting enough of what it needs bc your glands are over worked

• YOU WILL EVENTUALLY SHUT DOWN!
SYMPATHETIC NERVOUS SYSTEM: S/S

- Heart Rate increases = YOU CAN’T RELAX
- Emotions are inhibited = RELATIONSHIP PROBLEMS
- Bladder relaxes
- Pupils dilate = DON’T SEE THINGS YOU NORMALLY WOULD
- Blood pressure increase
- Air passages enlarge
- Tears and saliva decrease = YOU BECOME EMOTIONALLY NUMB
- Digestion slows
- Hearing diminishes = YOU MISS IMPORTANT MESSAGES
- Muscles become tense
- Blood shunts to core
- Immune system shuts down = YOU FEEL LIKE SHIT
- Brain has hard time focusing (brain shrinks)
SYMPATHETIC SYSTEM:

Flight or fight system designed to keep your ass ALIVE
THE BALANCE WE NEED:
HOW DO WE HELP THE INJURED?
IH2 FOUNDATION STEPS OF HEALING:

Step 1: Brain Scans

• You can’t fix what you don’t know is broken
• No amount of counseling fixes a tumor
• You have an injury

We no longer have to guess at what’s wrong
SPECT BRAIN SCAN IMAGES:

SPECT: Single Photon Emission Computer Technology

Shows how the brain is working
  • Healthy
  • Overactive
  • Underactive
SPECT BRAIN SCAN IMAGES:

Healthy vs Classic PTSD vs TBI vs Both

Healthy
Classic PTSD
Classic TBI
TBI & PTSD
MY SCAN: FUNCTIONAL BRAIN - COMPARISON

2007

2019
MY SCAN: EMOTIONAL BRAIN - COMPARISON

2007

2019
YOU CAN HEAL OR YOU GET WORSE:

WORK TO HEAL

DO NOTHING

- OR -
IH2 FOUNDATION STEPS OF HEALING:

Step 2: Unload the Trauma

IF WE DON’T

- Anger dominates
- Depression deepens
- Sleep problems (lack of good sleep, nightmares)
- Unwanted flash backs / visions
- Heart palpitations
- Panic attacks – excessive worry
- Unexplained mood swings
- You just feel like “SHIT!” – and you don’t know why or what to do.

WE SUFFER NEEDLESSLY
IH2 FOUNDATION STEPS OF HEALING:

Step 3: Heal Holistically

• Biological
  Genetics, overall health, diet, exercise
  Hormone levels

• Social
  Have great relationships
  Do fun stuff
  Don’t isolate yourself
  Share your struggles w/ safe people (Peer Support)
Step 3: Heal holistically

• **Psychological**
  Work on your thinking patterns
  Heal other past hurts
  Fix undealt with issues
  See a counselor weekly

• **Spiritual**
  What’s important to you?
  Understand your purpose
  What’s the meaning of life?

Don’t forget about God!
HERE’S THE INVITATION:

4 I sought the LORD, and he answered me and delivered me from all my fears.

5 Those who look to him are radiant, and their faces shall never be ashamed.

Psalm 34:4-5

“Not who I thought you were!”
WHO CAN YOU BECOME?
THAT'S GREAT BUT . . .

YOU DON'T KNOW MY STORY!
WHOSE DEPENDING ON YOU?
WHOSE DEPENDING ON YOU?
WHOSE DEPENDING ON YOU?
WHATEVER YOU DO:

DON’T GIVE UP ON LIFE
FOR EVERY ONE OF THESE MOMENTS:
THERE’S DAYS LIKE THIS . . .
WITH TIMES LIKE THESE...
AN INSTANCE LIKE THIS. . .
BECAUSE WE NEVER WANT THIS AGAIN!