

Creating the “Culture” For Behavioral Health in the First Response Professions

By:

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The following information is copy written by either TWDietz, or the First Responders Support Network

- Creating the “Culture”
- The Need...
 - Over 50% of Responders reported experiencing the following:
 - Depression
 - Anxiety
 - Relationship Problems
 - Fatigue
 - Loss of Enthusiasm
 - Avoidance of Feelings
 - Mood Swings
 - Sleep Disturbances
 - Sadness
 - Anger
 - Irritability
 - Frustration
 - Prevalence of PTSD in Firefighters can be as high as 20%
- Factors that Influence the Stress Response
 - Genetic Influences
 - Family history of psychological conditions
 - Temperament
 - Past Experiences
 - Learned coping patterns
 - Previous exposure to stress
 - Existing Conditions
 - Closeness of the situation to your own life
 - The event
 - Health status
 - Resources and support systems
 - Individual appraisal of event and resources
- Stress Sources
 - Environmental
 - Politics
 - Over activity/Under activity
 - Poor relationships with co-workers/supervisors

- Frequent changes in shift
- Response
 - Line of duty death
 - Traumatic injury
 - Injury/death to children
 - Emotionally upsetting scenes
 - Threat of personal injury/death
- Responder Culture...What they believe about yourselves and why.
 - Action Oriented in the service of responding to emergencies
 - Problem Solvers
 - Are able to control your environment and yourselves
 - People are better off because you are there
 - "Command Presence"
 - Able to maintain clarity and effectiveness under stress
 - Effectively control people in crisis
 - Expectation of an ability to effect positive outcomes regardless of the circumstances
 - Unaffected by gruesome events
- Why do they Believe These Things?

Because without these beliefs they could not do your jobs!
- The Human Response to Critical Incidents
 - Some Basics
 - We are born with billions of neurons – as we experience life, our neurons connect to each other and create pathways

Our fear reaction is a biological adaption that evolved to help us survive

- One Way of Understanding the Brain
 - Reptilian Brain - Physical Response
 - Controls the body's most basic functions such as heartbeat and breathing
 - Limbic System - External World/Internal Response
 - Controls Emotions
 - Emotional Responses
 - Hormonal Secretions
 - Mood
 - Motivation
 - Pain/Pleasure Sensations
 - No language involved-necessary in Limbic system response

- Cortical Brain - Conscious Thought/Action/Planning
 - Planning, Organizing, Problem Solving, Selective Attention, Personality Behavior
 - Spoken and/or written language
- How it Works
- Thalamus – is a routing station for all incoming sensory impulses except smell
 - Routes info from eyes and ears to the brain
- Amygdala
 - Small almond shaped structure near the middle of the brain
 - Attaches meaning to memory
 - Places the experience into the context of an emotion
 - The Amygdala is the command center of the brain's fear system
 - The Amygdala receives info and starts a reaction before you can even create a conscious thought about the event
 - It takes 50 milliseconds (A millisecond is one thousandth of a second) for the Amygdala to sense a threat
 - It takes another ½ second)or 500 milliseconds) for the brain to attach language to the threat
- When the Amygdala goes on, the Pre-Frontal Cortex “goes off”
 - Prefrontal Cortex – Reins in the Amygdala if the threat is deemed to be insignificant
 - Amygdala – If threat is sufficient the body shuts down non-emergency services i.e. digestion and immunity
 - Triggers body wide emergency response within seconds
 - Heart and lungs receive a glucose dump
 - Heart's Response
 - Heart rate and blood pressure increase instantaneously
 - Blood flow may actually increase 300%-400% to get the glucose where it is needed
 - Circulatory Response
 - Spleen increases red blood cells into bloodstream to promote oxygen supply
 - As blood moves into muscles, blood vessels tighten causing vasoconstriction
 - If you are always stressed, the blood vessels need to strengthen to handle the chronic increase in BP (thickening walls), which in turn increases the force of the blood, which in turn...HYPERTENSION!!!
 - Skin's Response
 - Diverts blood flow away from the skin to support the heart and muscle tissues
 - This causes cool, clammy, sweaty skin

- Immune System's Response
 - infection fighting systems (white blood cells, etc) are redistributed
 - Immunity boosting agents are sent to the skin, bone marrow and lymph nodes
- In response to stress, the body releases chemicals
 - Catecholamines
 - Suppress activity in areas at the front of the brain concerned with short-term memory, concentration, inhibition, and rational thought
 - This allows a quick reaction to the threat
 - Epinephrine
 - Epinephrine acts within seconds
 - Breaks down fats to use as energy
 - Increases heart size
 - Increases the size of arteries in heart and lungs
 - Muscles are primed for action
 - Glucocorticoid
 - Glucocorticoids are also released. While epinephrine acts instantly, glucocorticoids assist the stress response for minutes or hours
 - Small problem...Glucocorticoids other job is to suppress illness and disease
 - If you are constantly using Glucocorticoids, you never store it...
 - Are more prone to disease
 - You tire more rapidly
 - Mouth and Throat Response
 - Fluids are diverted from nonessential locations
 - Can make it difficult to talk
- Cognitive functions are controlled by higher brain functions...But stress reactions inhibit higher brain functions
 - Your ability to process information decreases by 400%
- Hippocampus Response
 - Evaluates threats by placing them in the context of a previous experience
 - The Hippocampus is like the keyboard of a computer – info goes through it and is then stored on the hard drive (cortex)
 - Hippocampus is often smaller in people with PTSD
 - Serotonin increasing medications increase hippocampus size!
 - And, if the Hippocampus is smaller, the brain releases more Cortisol
 - *Which keeps the stress reaction system fully engaged*
 - Impaired Information Processing

- Images and information are fragmented
 - Responses can be immediate or delayed
 - Your memory is impaired because...
 - That is a side effect of memory under stress
- Stress can interfere with the ability to recognize and discriminate between relevant and irrelevant stimuli.
- So...Your brain is on alert much too often because it has trouble discriminating between a threat and non-threat
- All of this occurs in a couple of seconds or less
- Typical Events That May Cause Stress Reaction
 - Serious Line of Duty Injury
 - Line of Duty Death
 - Suicide – Work - Family
 - Injury or death to a child
 - Unable to state the victim is at fault
 - Irrational self-expectation to rescue
 - Prolonged exposure to a victim resulting in death
 - Multiple injury / fatality accident
 - Victim is known to the first responder(s)
 - Any incident where one's personal safety is in peril
 - Skewed Media attention
 - Other Events...
 - Large Media Attention
 - Organizational/personal betrayal
- Chronic Stress Damages the:
 - Immune System
 - Cardio-Respiratory System
 - Neurological System
 - Re-deposits fat at the waist
 - Accelerates aging
- **Critical Incident Stress**
The "Basics"
- Critical Incident:
 - Is far beyond normal human daily experiences
 - Happens suddenly without warning
- Exposed Responders
 - 74% recover w/o assistance

- 22% show illness symptoms w/in 6-12 months
 - 4% develop PTSD
- Acute Stress Responses-Occur Immediately
 - Physical Symptoms
 - Nausea, diarrhea
 - Profuse sweating and tremors
 - Increase in heart rate
 - Hyperventilation
 - Headache
 - Chest pain
 - Difficulty sleeping
 - Cold hands and feet
 - Cognitive Symptoms
 - Impaired thinking
 - Difficulty concentrating
 - Confusion/disorientation
 - Forgetting to remember things
 - Flashbacks and vivid recall
 - Short and variable attention span
 - Emotional Symptoms
 - Anxiety
 - Fear
 - Guilt
 - Depression
 - Anger
 - Resentment
 - Feeling alone, abandoned
 - Overwhelmed
- Delayed Stress Responses - occur hours, days, weeks, months, or years
 - Most Likely:
 - Fatigue
 - Depression
 - Irritability
 - Sleep disturbances
 - Non-specific anxiety
 - Change in eating habits
 - Loss of emotional control
 - (crying, rage)
 - Loss of sex drive
 - Increased arguments with mate, family, co-workers
 - Behaving "out of character"
 - Change in menstrual cycle
 - Drop in work performance
 - Also May Occur:
 - Vivid recall of the event
 - Fear the incident will occur again
 - Physical or emotional symptoms listed in acute responses

People experiencing delayed stress responses should seek professional assistance

- *Just because an incident is not bothering one person, doesn't mean someone else on the crew is not impacted!*
- There is an Increased Risk for PTSD if...
 - They didn't see it coming
 - At the time of the event they experienced very high levels of terror
 - It feels personal...People vs. Natural
 - The severity/intensity of event was high
 - They experienced a feeling of HELPLESSNESS
- And...
 - The event was associated with high blood pressure, increased hormone releases, etc...
 - Combined with Difficulty in the hours and days after the event calming down
- Numerous studies have shown that there is an increased risk for cardiovascular disease if a job is HIGH in Demand and LOW in Control...
- It isn't actual control that makes the difference, it is the belief that they have control...
- Commonly Used Maladaptive Coping Techniques
 - Working harder, faster, better
 - Hyperactivity
 - Counter Phobic Behavior - Impulsive and reckless Behavior w/o thought
 - Multiple romantic relationships
 - To obtain positive mirroring
 - "I can't be bad, look how much she loves me"
 - Overcompensation...
 - Token attempts seeking professional help...
 - Alcohol / Substance Use
- These maladaptive strategies are an attempt to recapture the ability for denial...

What happens when expectations/hopes do not meet reality?

- Our Strengths can be our greatest weaknesses...
- For First Responders...
 - A lot of how they react is beyond their control but does not mean they are weak or worthless
 - When they know what causes the symptoms, they can do something about it

- The “Culture” would...
 - Teach employees how to take care of themselves...AND each other!
 - Before the Incident (Preventative Steps)
 - Education and Training
 - Both stress management and job related
 - Exercise
 - Eat a Proper Diet
 - Get Good Sleep
 - Make Time For Yourself and Those You Love
 - Laugh, Have Fun
 - After the Incident
 - Talk
 - Exercise
 - Eat a Proper Diet
 - Avoid the use of Alcohol/Drugs as way to cope
 - Stress Management Resources?
 - Seek Professional Mental Health Intervention if needed

(5 Assignment Model)

- Talk
- Eat
- Exercise
- Schedule something to do when you get home (that you enjoy and can look forward to!)
- Laugh

The best medicine is prevention. By creating a culture that embraces and normalizes the challenges of the job, and puts in place resources to help struggling employees get back to a healthy career, may be the answer to preventing, or at least slowing the suicide problem. A successful culture acknowledges that:

- We work in a high stress occupation.
- We hire human beings.
- Sometimes human beings get overwhelmed.
- It’s okay to say “that one got to me.” (It’s NOT a sign of weakness or that we chose the wrong career.)