Training for Failure:
Why some first responder training must change

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Where brain science meets public safety
#1 Contributing Factor to casualty events:
#2
Contributing Factor to casualty events:
#3 Contributing Factor to casualty events:
Root Cause Analysis
First responders... doing dumb things
Dumb:
Lacking intelligence;
Lacking the ability to reason through a situation;
Marked by acting or thinking irrational.
Momma always said: “Stupid is ______.”

Do first responders do dumb things at emergency scenes?
Are responders doing dumb things on purpose?

Can a responder be accidentally dumb?
Unconscious Incompetence

The condition of being unaware of your own shortcomings.
(Not knowing any better)
Situational Awareness

What are we learning?
Situational Awareness — Awareness of immediate surroundings.
Fig. 35-9. Water rescue responders must maintain situational awareness to prevent being caught by debris or obstacles.
Situational Awareness

“Pay attention”
“Don’t get tunnel vision!”
Testing your situational awareness
Stress changes everything!

- Your brain goes on drugs
- Hereditary instincts kick in.
- Rational judgement becomes impaired
- Intuitive judgment dominates
- Attention narrows
- Hyper vigilant
- Struggle to understand and process complex information
- Revert to behaviors that reflect routines and habits
Your brain should come with an owner’s manual

16 things we know about how the brain works & how it can impact first responder learning and performance under stress.
Your brain acts different under stress.

Stressed brains don’t function like non-stressed brains.
Your brain evolved and is adapted for survival.

Under stress your brain is wired to find simple solutions to simple problems... with a focus on survival.
Your training develops two types of memory.

Cognitive (information)

Kinesthetic (muscle movement)
You cannot consciously multitask.

This includes paying attention in a dynamically changing environment.
Your subconscious brain can multitask... and it’s REALLY good at it.
You are a...

Stress induces automatic habitual performance.
Under stress, behavior may not appear rational.

That’s because it’s not!
Your stressed brain is NOT very good at figuring out solutions to complex problems.

It uses shortcuts, rules of thumb & estimates.
Your working memory has a very limited capacity.

We’re not good at remembering a lot of detailed information.
Your brain prioritizes incoming information.

And for the most part, you cannot control what it keeps and what it dumps.
You can fool your brain into learning.

Your brain can have a very difficult time distinguishing cognitive FACTS from vividly imagined FICTION.
Your brain... is a stubborn brain.

Once you lock on to doing something (like an action plan), it can very difficult to change your mind or see an alternate solution.
When you’re judging, you cannot learn.

And we are sometimes quick to judge the performance of others.
Emotions drive decisions.

And the two biggie emotions are...
Muscles learn from muscle movement.

Muscles don’t learn from verbal instructions.
Hose line selection for structural fires.
The aggressive interior fire attack drill
Every building on fire is in the process of falling down.
Is this building?
The Interior Fire Attack Drill
The Patient Care Drill
The Nance Drill
The LP Gas Christmas Tree
Safety dance

We need to learn a new way to dance.
Helping you see the bad things coming... in time to change the outcome.

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