Mental Management of Emergencies

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Public Safety Laboratory
Where brain science meets public safety.
No emergency responder ever goes to a call thinking to him or herself…

I’m going to lose my situational awareness on this call… make some bad decisions… and jeopardize my safety or the safety of my crew. But it happens, a lot!
The goal of this program to help you understand the how and the why of decision making.

Deep Knowledge

The quality of your decision making depends on your ability to understand how you make decisions under stress.
Under stress…

- Your brain is on drugs.
- Hereditary instincts kick in.
- Rational judgment impaired.
- Intuitive judgment dominates (primal).
- Attention narrows.
- Hyper vigilant.
- Struggle to understand and process complex information and details.
- You will revert back to behaviors that are comfortable, routine, or reflect your habits.
Realistic and repetitive training builds muscle memory that can save your life.
Realistic and repetitive training…
My story from 1979.
Decision Making Process

1. Define the problem
2. Identify decision criteria
3. Allocate weights to the criteria
4. Develop the alternatives
5. Evaluate the alternatives
6. Select the best alternative (the decision)
7. Evaluate effectiveness of the decision
How did you use this process at the fire scene?

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Recognition-Primed Decision Making Process

1. Size-up situation quickly
2. Focus on most relevant information
3. Recognize “typical” ways of reacting
4. Run mental models of options
5. Forming expectations of outcomes
6. Detect unusual things and problems and seek explanations
7. Make a decision and a plan of action
Recognition-primed decision making under stress requires:

1. Situational Awareness
   “Pay attention”
   “Don’t get tunnel vision.”
Recognition-primed decision making under stress requires:

1. Situational Awareness (Paying attention)
2. Tacit Knowledge (Unconscious knowledge)
Stored images…

Pattern matching…

Information chunking…
Recognition-primed decision making under stress requires:

1. Situational Awareness
   (Paying attention)
2. Tacit Knowledge
   (Unconscious knowledge)
3. Ability to conduct mental simulations
   (Predicting future events through modeling)
4. Self-Confidence
   (Be able to trust your gut… your intuition)
3 Levels of Situational Awareness (SA)

Level 1:
Capturing the cues and clues in the current situation
• Paying Attention
• “Perception”
  ➢ “What's happening right now?”

Level 2:
Comprehending the current situation
• Making sense of it
• “Comprehension”
  ➢ “What does this mean?”
Facts are the clues and cues that prime your recognition.

Without facts (points of reference) your brain struggles to form a pattern match.
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**Level 3:**
Predicting the future situation
- Mental models of future events
- “Projection”
  - “Where is this going?”