TRAUMATIC EVENT/EXPOSURE
STRESS CONTROL (TESC) INFORMATION

AND ADDITION OF STRESS INOCULATION:
CONCEPTS AND OVERVIEW
TRAUMATIC EVENT/EXPOSURE STRESS CONTROL (TESC)
EVENT/EXPOSURE/OPERATIONAL STRESS (EEOS)

The sum of the physical and emotional stressors experienced due to high impact event and/or extended operations.

EVENT/OPERATIONAL STRESS REACTION (EOSR)

- A description, not a diagnosis
- Broad group of reactions
- “Circuit breaker” rather than “Breaking point”
- Can occur in situations other than active events
EVENT AND OPERATIONAL STRESS REACTIONS

Normalize, Validate; Normalize, Validate; Normalize, Validate!

All professionals involved with operations will have some form of Operational Stress Response, this is expected “And Normal”

Operational Stress REACTIONS (impact a few)
Short in duration, normal response to events
Implementation of de-activation techniques

Operational Stress casualty-”out of service” (impacts very few)
Need time away, recovery strategies and reconnection. Potential supports and engagement in supportive counseling

Very few: PTSD
Maximize Prevention
Preventive interventions to reduce stress reactions
Tailored interventions to the needs of the unit/individual

Communication
Use all means to coordinate with the unit, support agencies and leadership

BICEPS
Brevity – Interventions are brief
Immediacy – Interventions are enacted as soon as possible
Contact – Involve supported units in COSC support
Expectancy – Promote positive and realistic expectations
Proximity – Keep individuals as close to unit as possible
Simplicity – Straightforward interventions (6 R’s)
TESC PRINCIPLES: 6 R’S

REASSURE
REST
REPLENISH
RESTORE
RETURN
REMIND
TESC TRIAGE

Based on
- Individual needs
- Treatment capabilities

Key Components
- Assessment
- Disposition

Rule out Medical issues
TESC TRIAGE

Triage Categories
- Help in place
- Rest
- Hold
- Refer

Triage EE/OSR not MH disorders
Responses to all hazards events can and will vary between people depending on many factors.

Most symptoms are short in duration.

Key Concepts to Remember:

- The typical reactions people have are normal to the abnormal event/situation they have endured.
- Effective coping and surviving a traumatic event enhances our personal belief in inner strength and confidence.
EXERCISE
TYPICAL AND NORMAL STRESS EXPERIENCES...CROSSWALK RESPONSES

- Feeling keyed up or on edge.......................... You are activated, by role. When are you able to de-activate?
- Restless.................................................. Naturally (importance of rest/recovery as obligation to perform)
- Hyper-vigilant.............................................. “Really good noticing!”
- Exaggerated startle response....................... Disarm the response...predict the response and validate
- Irritability or anger outbursts........................... _________?
- Preoccupation with the event........................... _________?
- Sleep disturbance ....................................... _________?
- Sadness and crying...................................... _________?
- Fatigue ................................................... _________?
- Difficulty concentrating .............................. _________?
- Muscle tension ......................................... _________?
- Appetite disturbance .................................... _________?
EFFECTIVE COPING AND WHEN TO REFER

- Allow individuals to talk about what happened

- Attend to their basic needs: food, sleep, activity, friends, spiritual needs, as much as you can support this

- Engage with those that are supportive of others in need

- Seek assistance for any suicidal/homicidal ideation, intent or plan, severe depression; alcohol or drug use

- Seek assistance when symptoms last for over a month or impact work or social functioning

- Friends may notice changes in you before you do, listen when they bring things to your attention
<table>
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<tr>
<th><strong>FIRST RESPONDER/FRONTLINER HEALTHCARE SPECIFIC COSR EXPOSURE</strong></th>
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Intense emotional demands (e.g., rescue personnel and caregivers searching for possibly dying survivors or interacting with bereaved family members)

Extreme fatigue, weather exposure, hunger, sleep deprivation

Extended exposure to danger, loss, emotional/physical strain

Exposure to environmental hazards, such as toxic contamination (e.g., gas or fumes, chemicals, radioactivity)

While a EEOSR can result from a specific traumatic event, it generally emerges from cumulative exposure to multiple stressors.
TYPICAL (PREDICTIVE) STRESS REACTION TIMELINE
RESOLUTION OR STICK POINTS/SX CONTINUATION

Traumatic Event

2 Days
- OSR
- ASR

1 Month
- ASD
- Acute PTSD

3 Months
- Chronic PTSD
PSYCHOLOGICAL FIRST AID (PFA) CORE ACTIONS

PFA should be envisioned as the mental health correlate of physical first aid, removing the individual from the trauma and supporting their needs of reassurance and safety

- Contact and Engagement
- Safety and Comfort
- Stabilization
- Information Gathering: Current Needs and Concerns
- Practical Assistance
- Connection with Peer and Social Supports
- Information on Coping
- Linkage with Collaborative Services
GROUP SETTINGS

- When working with a group after an incident remember to put effort and thought into their specific situation gathering as much information as possible prior to meeting with them
  - Tailor discussions
  - Understand there are variations of perceptions of event
  - Teach self care/buddy care
  - Make available resources known to the group
- Groups may be effective vehicles for providing trauma-related education, training in coping skills, and increasing social support, especially in the context of multiple group sessions
- Group participation should be voluntary
PEP STEP ONE:
PREPARE FOR STRESS

What are common stressors to be faced by your audience? It is important to gather as much information as possible prior to completing a PEP briefing.

If there are 'seasoned' folks in the crowd ask for their feedback on past incidents and what they noticed in the past.

Learn anything unique about the incident others should know about.

Acknowledge stressors currently in your life.

Recognize how you normally deal with stress physically and emotionally and when you are noticing changes in yourself.

Talk to someone when feeling overwhelmed with the circumstances.
**PEP STEP TWO: POSITIVE COPING SKILLS**

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<th>Be</th>
<th>Practice</th>
<th>Stay</th>
<th>Make</th>
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<tbody>
<tr>
<td>Have confidence in yourself, your skills, equipment and leadership</td>
<td>Stay focused on the purpose – be a team player “we instead of me”</td>
<td>Have a bubbly, stay connected with them</td>
<td>Be realistic with the situation, what you can control and your attitude</td>
<td>Practice what grounds you, faith, spirituality, meditation etc..</td>
<td>Stay active</td>
<td>Make sure to HALT stress by supporting your lack of:</td>
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PEP STEP THREE: AVOID INEFFECTIVE COPING

- Insufficient sleep
- Insufficient nourishment
- Insufficient fluid intake, avoid alcohol and other drug abuse
- Breakdown of respect for those in the chain of command
- Breakdown of respect for lawful orders and directives
- Breakdown of communication within the chain of command
STRESS INOCULATION TRAINING

- Stress tolerance is enhanced via changing individual’s beliefs about their performance in stressful situations and ability to deal with distress

- Promotes hope, self confidence, self-control, & personal responsibility!
HOW DOES IT WORK?

- SIT teaches a broad range of coping skills
- These coping skills can be applied in any stressful situation
- SIT comprises 3 overlapping phases

Direction:
1. Place kit on FIRM surface.
2. Follow directions in circle of kit.
3. Repeat step 2 as necessary, or until unconscious.
4. If unconscious, cease stress reduction activity.
WHAT IS IT? (SIT)

- The process of showing people what can happen to you under stress
- Developing and building tools to cope with the physiological response to stress
- “Inoculating” by exposing yourself to the stressors that you’re likely to experience in your field
GOALS OF SIT

1) To gain knowledge and familiarity with a stressful environment

2) To develop and practice task-specific skills, including psychological skills as well as decision making faculties, to be performed under stress

3) To build confidence in an individuals capabilities
CONSTRUCTIVE NARRATIVE PERSPECTIVE

- We construct stories about ourselves.
- These stories affect persons ability to cope with stress.
- Being a “Victim” vs being and “Overcomer”
- SIT uses this perspective to help people construct life narratives to help them cope with stress.
STRESS INOCULATION TRAINING

Phase 1
- Information Provision
  - Learns about the nature and impact of the human stress response
  - Made aware of their ability to solve problems
  - Encouraged to think adaptively

Phase 2
- Skills acquisition
  - Develops and refines behavioural, technical & cognitive skills

Phase 3
- Application and practice
  - Practice skills learnt
  - Graded exposure to increasingly stressful situations
**Fight or Flight Response**

- **Saliva flow decreases**
- **Eyes pupils dilate**
- **Blood vessels constrict; chills & sweating**
- **Lungs quick, deep breathing occurs**
- **Heart beats faster & harder**
- **Bowel food movement slows down**
- **Stomach output of digestive enzymes decreases**
- **Muscles become more tense; trembling can occur**
- **Blood vessels blood pressure increases as major vessels dilate**
YERKES DODSON LAW

Optimal arousal
Optimal performance

Impaired performance because of strong anxiety

Increasing attention and interest

Performance

Strong

Weak

Low

High

Arousal

HTTPS://WWW.ADELAIDE.EDU.AU/UNI-THRIVE/REVIVE/STRESS/
STAGE 2; SKILLS ACQUISITION AND CONSOLIDATION

Building skills and muscle memory to perform skills when it really counts

Develop technical & non technical skills needed to perform in the resus environment without the addition of stressful stimuli

Goals:
- Learn & develop constructive coping mechanisms
- Develop effective performance habits
BLUEPRINT PLAN

1. Learn relaxation skills
2. Identify specific stressors
3. Develop plan to respond differently
4. Write up Plan & Practice
5. Coach self through the situation
6. Positively assess own performance
7. Plan & execute improvements
COGNITIVE CONTROL TECHNIQUES

- Provide control over distracting or stress inducing thoughts
- Individual is taught to recognize distracting thought processes and stop them
COGNITIVE CONTROL TECHNIQUES

NEGATIVE THOUGHT

STOP

REPLACE WITH POSITIVE, TASK-FOCUSED THOUGHTS
Physiological Control Techniques

- Controlling specific physiological parameters

- Progressive relaxation
  - Not always feasible when faced with deteriorating patient

- Controlled breathing
  - Respiration is the only autonomic function that can be controlled and modified consciously
  - Can be used to control emotional response
  - Slow breathing $\rightarrow$ Reduced heart rate $\rightarrow$ Reduced stress

- Seppala et al 2014 RCT
  - Breathing techniques decrease stress response, anxiety and hyper arousal in combat veterans with PTSD

- Tactical breathing – 4 second method
TACTICAL/4 SQUARE
MENTAL PRACTICE AND REHEARSAL

“The same neural pathways are recruited and the same neurochemicals are secreted when we visualize doing something as when we engage in the actual activity” ¹

Lorello 2015 – Mental practice is effective at preparing teams for trauma resuscitation

20 mins mental practice vs 20 mins ATLS Sim

Mental practice group increased scores for teamworking behaviours

¹ WEISINGER H, PAWLIW-FRY JP. PERFORMANCE UNDER PRESSURE. NEW YORK, NY: CROWN BUSINESS; 2015
VISUALIZATION

- Something challenging
- Go through the steps
- Lead yourself to success
OTHER TECHNIQUES

Training decision making skills
Eg algorithms and checklists

Overleaning technical skills

Teaching on communication

Team training / simulations
PHASE 3; APPLICATION AND PRACTICE

- Take skills from Phase 2 and rehearse them in increasingly graduated stressful conditions
- Allows trainees to experience in real time the performance challenges they will face in a specific setting
- Reduces uncertainty and anxiety
- Increases confidence when individuals realise they can overcome stressors
SUMMARY

1) Performance diminishes under stress

2) Technical skill & knowledge necessary but not enough to perform effectively in stressful situations

3) Focus on developing the skills to perform under stress

4) No RCTs yet exploring SIT in resuscitation – some currently under way but needs further investigation
REFERENCES

- *Cognitive Behavior Modification: An Integration*. Donald Michenbaum
MORE INFORMATION

- Managing Stress & Relaxation Skills
  www.nehc.med.navy.mil/hp/stress

- Resiliency
THANK YOU