Stress Injury Risk for Patrollers

Helping to keep people safe in the outdoors is what we do.
Helping to keep ourselves safe - physically, mentally and emotionally - is what we must do.

The Risk for Stress Injury:
Patrollers, as First Responders, have by nature of their profession, occupational hazards. In addition to musculoskeletal injuries and the risk for cold exposure, stress injuries - our reaction to taking care of injured people - can affect our physical, mental and emotional well being. We have all heard the term Post Traumatic Stress Disorder (PTSD). PTSD is not really a disorder. It is a natural reaction to traumatic stress. Stress injury could evolve into a PTSD condition. Examples of situations that could cause stress injury include: the traumatic death of adult or child; traumatic injury of a fellow patroller, or a difficult incident where the outcome was poor. These types of traumatic events can cause real physical, mental and emotional stress. Exposure from our job is an important piece; but its not the whole story. Most of us are volunteer patrollers. Many of us have other jobs that have their own occupational risk for stress injury, such as law enforcement, firefighters, EMS or medicine. Stress injuries from all aspects of our lives can stack or pile up until we find ourselves physically and emotionally drained.

The Physical Changes from Stress:
Stress can lead to physical changes in our body. Stress causes an increase in cortisol secretion. Chronically elevated cortisol can lead to increased inflammation, sleep disruption, weight gain, pathological fractures, hypertension, hyperlipidemia, cardiac injuries, diabetes and chronic pain.
Stress injury exposure affects our body, our brain function, our hormonal balance and our organs. Chronic stress tricks us into thinking that we are constantly under attack; that we need to be on guard for danger; that we are in survival mode everyday, 24/7. These changes are called stress injury because acute traumatic incidents and incidents that build up over time affect us physically, mentally and emotionally.

Early and Late Changes from Stress:
Prolonged stress can lead to: sleep disturbances, irritable behavior, angry outbursts, difficulty concentrating, reckless self destructive behavior and depression. No place is a safe place. Negative thoughts can make a person isolate themselves from others. It is common for them to avoid memories, thoughts or feelings of the original experience and to avoid external reminders of the event. This is when patrollers stop taking care of children, stop running the scene, or just quit. Physical changes result in increased heart rate and increased blood pressure. We may overeat and quit exercising. This sets us up for cardiovascular disease and obesity.

Stress Injury May Lead to: loss of vitality, dreading work, criticism, avoidance, lack of motivation, sleep disturbance, substance use, anxiety, irritability, isolation, hopelessness, depression, thoughts of suicide.

Cumulative stress puts us on a continuum from well being to major depression. This continuum was originally developed by the Military (Combat and Operational Stress First Aid - COSFA) and ranges from the color Green to Red. Green (Emotionally healthy = good to go), Yellow (Reacting = early changes), Orange (Injured = start of late changes including fatigue & burnout), Red (Ill = late changes including thoughts of suicide). This continuum, developed by the Military, has been adapted for Ski Patrol by the Eldora CO Ski Patrol.
**Stress Injury Continuum Model - Reacting to Stressor** (traumatic incident or situation)

<table>
<thead>
<tr>
<th>READY</th>
<th>REACTING</th>
<th>INJURED</th>
<th>ILL</th>
</tr>
</thead>
</table>
| • Effective communication  
  • Socially active  
  • Healthy sleep  
  • Joy & vitality  
  • Emotionally & physically healthy | • Cynicism, loss of interest & motivation  
  • Distance from others  
  • Sleep disturbance  
  • Work avoidance  
  • Short fuse; irritable  
  • Fatigue, weariness | • Numbing & avoiding  
  • Burnout; trapped  
  • Social isolation  
  • Sleeplessness; nightmares  
  • Self medicating  
  • Physical symptoms | • Depression, anxiety, hopelessness, panic  
  • Intrusive thoughts; self blame; insomnia  
  • Suicide thoughts  
  • Hiding; broken relationships  
  • More physical symptoms |

**TO STAY READY** | **TO RECOVER & BUILD RESILIENCE** | **TO BEGIN HEALING** | **TO GET HELP** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep fit, eat right, learn to let go</td>
<td>Get adequate sleep, talk to someone you trust</td>
<td>Talk to a counselor, medical provider, CISM</td>
<td>Seek medical treatment</td>
</tr>
</tbody>
</table>

**Immediate Steps to Heal and Go Green:**
These are the first steps to mitigate the stress injury cascade; to reduce the initial distress; to foster adaptive functioning and coping.
• Create a sense of safety  
• Create calm  
• Create self & collective efficacy  
• Create connection  
• Create hope

The goal is to move toward the **Green** section of the Stress Injury Continuum.

**Goals for Staying **GREEN** and Getting to **GREEN:**
• I’m sleeping 8 hours per day without nightmares  
• I’m not dreading going to work or patrol shift  
• I’m not using alcohol or drugs to numb out what hurts  
• I’m laughing with my children, partner, spouse  
• I can take pleasure in the small things  
• My body feels strong; it doesn’t hurt  
• I can listen to my body’s cues  
• I wake up looking forward to the day  
• I am meditating or praying  
• I have time and desire to help others  
• I like myself  
• I have enough left over to care for my family  
• My friend’s tell me “I’m back”  
• I head to the mountains regularly
Case Study:
Camelback Ski Resort in Eastern PA has developed a peer support service (Disruptive Event Response Team or DERT) that has two functions.

- **Education**: Stress injury signs and symptoms are taught to all ski patrol candidates and refreshed with all patrollers at yearly On Hill Refreshers. This education creates awareness of stress injury, prepares their patrollers for possible disruptive and traumatic events, reviews expected symptoms and instructs them on first steps they can take and treatment.

- **The DERT team personally intervenes when there is an incident.** They had a fatality of a 40 year old season pass holder. That same day, the DERT met with all involved in the accident and reviewed possible symptoms they might expect. They reassured all involved that their reactions were normal and expected. Follow up occurred 3 days and 30 days afterwards to mitigate against symptoms becoming chronic and becoming PTSD. They strive to remove all stigma and reinforce that what they are feeling is normal and to be expected.

**Education and Preparedness for Patrol Stress Injury:**

- Post article information on the Eastern Division (ED) website: www.nspeast.org
- Share with all the ED regions
- Suggest that each region post contact information for their state’s Critical Incident Stress Management (CISM) help teams, as well as the suicide prevention hotline
- All of our Eastern Divisions safety reps are working to identify CISM resources currently available to patrollers within their state or region. We hope to be able to educate regional officers and patrol directors on how to access this critical capability before next year’s refreshers.
- Refresher training to understand more about stress injury
- Patrollers calculate their own stress continuum to proactively develop personal green choices
- Create a “Culture of Safety” with emphasis on connection, time off for rest, exercise and mindfulness
- Re-think the Critical Incident Stress Debriefing (CISD) tool: Consider a patrol-directed approach to change it from delayed reaction (after the fact) to early action (proactive preparedness) in order to better shield ourselves from stress injury formation.

Melinda Mingus, MD - Eastern Division Safety Advisor
Eastern Division Safety Team: Sadie Prescott (Western NY), Dave Sacchitella (Western MA), Bryant Hall, NRP (WAPP), Wendy Aarnio (Southern VT), Jesse Remmey (Northern VT), Bob Wright (NH), Timothy Bruce (Maine), Dallas Coffman (EMARI), James Policelli (Eastern PA) Ollie Neith (PA)
Laura McGladrey, RN,FNP, PMHNP, FAWM