



EMS Stress and Safety Study

Summary Report

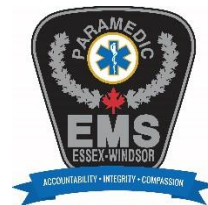


University
of Windsor



Paramedic Chiefs
of Canada

Chefs Paramédics
du Canada



London Health Sciences Centre

Southwest Ontario Regional Base Hospital Program



County of
Essex

This report was generated by Elizabeth Donnelly, PhD, MPH, NREMT
Please direct questions to donnelly@uwindsor.ca or 519-253-3000 x 4906.

This study, conducted with the support of the Paramedic Chiefs of Canada and Essex-Windsor EMS, examined several types of workplace stress, posttraumatic stress, fatigue, and safety outcomes (paramedic injury, adverse events, and safety compromising behaviors).

It is our hope that these data will provide a resource to begin or continue a conversation within EMS services about workplace health and safety.

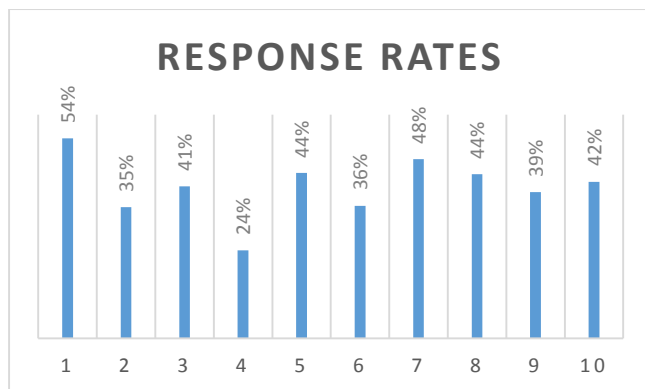
Please note these results are only descriptive. Analyses are ongoing and more results will be forthcoming.

If you have any questions, would like to discuss this information in this report or possible strategies for managing workplace stress, please do not hesitate to contact me at donnely@uwindsor.ca

Thank you so much for your interest in this study!

Response rate – Not everyone responded to or completed the survey. Here is the proportion of paramedics that responded to the study and completed the survey as well as the average across all participating services.

Please note, because not everyone responded to the survey, the results do not capture the whole picture of workforce stress and safety.



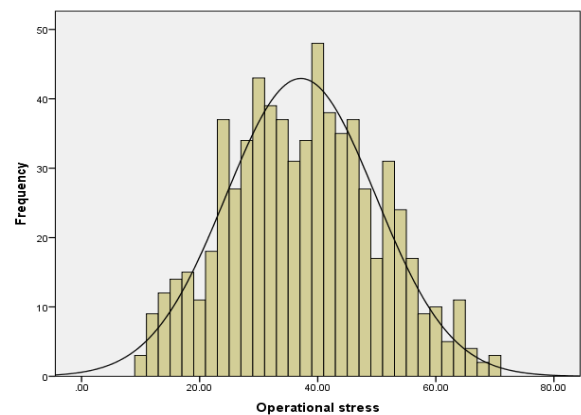
Response rate for all services: 717/1767 (40.5%)

Chronic operational stress – This is the stress associated with the provision of ambulance services (e.g., shift work, not being able to eat healthy, being away from friends and family).

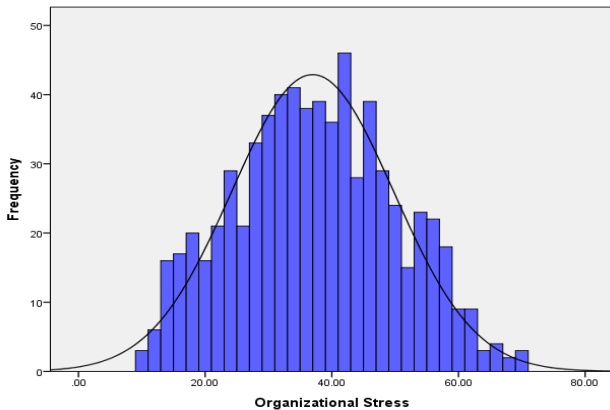
Average across all services was: **37.1** (range 10-70, SD 12.7)

The top three operational stressors were:

1. Fatigue
2. Shift work
3. Eating healthy at work



Chronic organizational stress – This is the stress associated with the culture of the organization (e.g., staff shortages, favoritism, and changes in policy).



Average across all services was: **37.0** (range 10-70, SD 12.8)

The top three organizational stressors were:

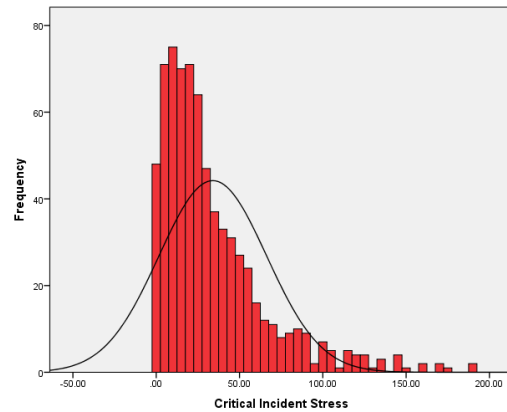
1. Bureaucratic red tape
2. Constant changes in policy/legislation
3. Leaders over-emphasize the negative (e.g., supervisor evaluations or public complaints).

Critical incident stress – This is the stress associated with patient care.

Average across all services was: **33.9** (range 0-188, SD 32.4)

The top three stressors related to patient care were:

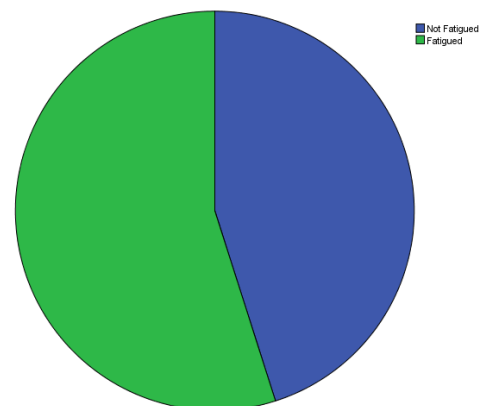
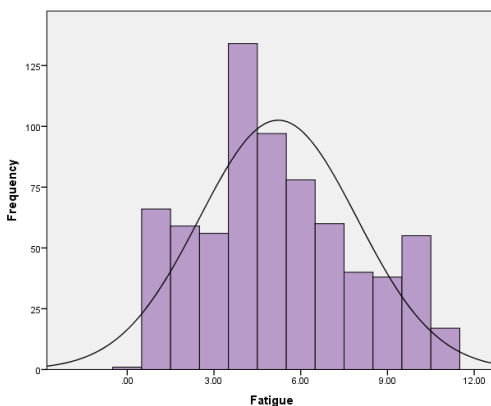
1. Saw someone dying
2. Made a death notification
3. Encountered the body of someone recently dead



Fatigue – We asked about being sleepy at work. Below is a report of both mean scores (average scores) and the proportion who met the recommended cut off for “fatigued.”

Average across all services was: **5.2** (range 0-11, SD 2.7)

Percentage at all services that reported being fatigued at work: **54.9%**

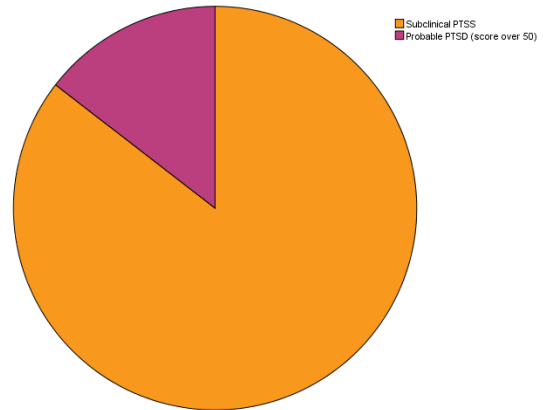
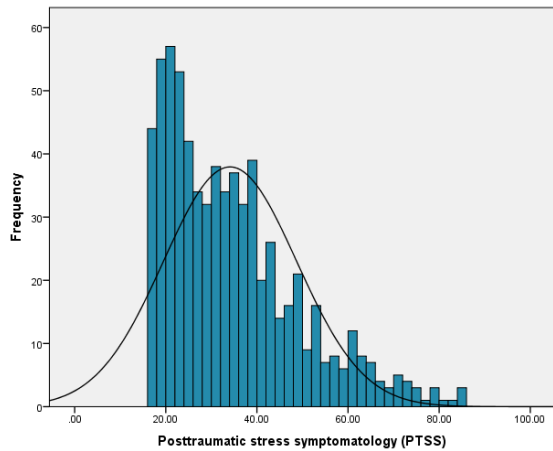


Posttraumatic stress – Paramedics reported on posttraumatic stress symptoms. Below is a report of both mean scores (average scores) and the proportion who met the recommended cut off for probable posttraumatic stress disorder.

It is important to note that even sub-clinical posttraumatic stress can cause distress and impairment.

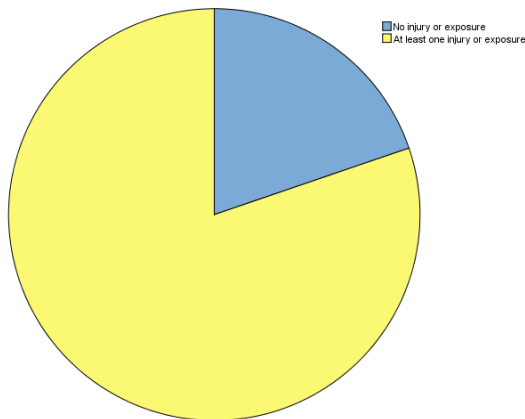
Average across all services was: **34.1** (range 17-85, SD 14.61)

Percentage at all services who met the clinical cut off for probable PTSD: **14.5%**



Safety Outcomes

Paramedic injury – We asked participants to report if they had been injured in the past three months. This includes physical injury, needle sticks, and exposed to pathogens.



Across all services, **80.2%** of medics reported some sort of injury or exposure.

The most common injuries or exposures were:

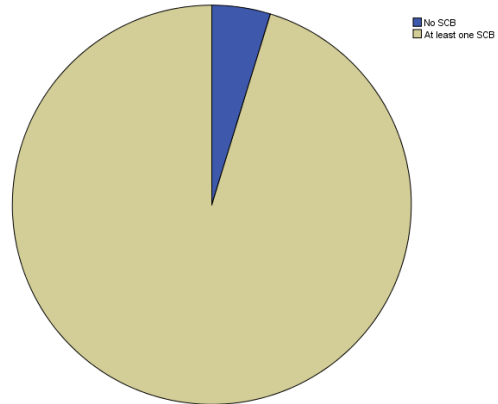
1. Exposure to MRSA/VRE
2. Exposure to measles, chickenpox, or the flu
3. Exposure to bedbugs, fleas, or other insects

Safety compromising behaviors - We asked about safety compromising behaviors (e.g. speeding, working while tired, or “fudging” patient care reports).

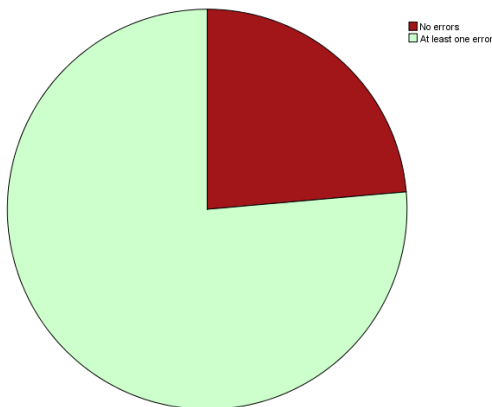
Across all services, **95.3%** of medics reported safety compromising behaviors.

The most common safety compromising behaviors reported were:

1. Reported for a shift without getting adequate rest beforehand
2. Exceeded the speed limit while driving in non-emergency mode
3. Greatly exceeded the speed limit while responding lights and sirens



Adverse events/medication errors – We asked participants to report if they’d had deviations from protocol.



Across all services, **76.4%** of medics reported deviations.

The most common deviations were:

1. Did not place the patient on a monitor
2. Did not deliver high flow oxygen to a patient with chest pain
3. Did not check a glucose level on a patient with altered mental status.

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