

## Stress, Burnout, and Psychosocial Support for Staff of the Emergency Medical Services

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**Introduction:** The objectives of study on stress of EMS professionals were to analyze the average and individual rates of burnout syndrome symptoms, sources of stress associated with the profession, and the degree of exposition to critical incidents. Two years later, burnout and experience with any psychological intervention technique were analyzed again. Meanwhile, Critical Incident Stress Management (CISM) techniques after critical incidents, according to Mitchell's model, were performed in some organizations' lectures on prevention, communication trainings, consultations concerning professional stress, supervision meetings and debriefings also are offered to professionals within crisis preparedness.

**Methods:** The questionnaire study used a screening test of symptoms of burnout syndrome. Burnout scores of groups from the year 2003 (286 respondents) and from 2005 (597) were compared. Analysis of variance (ANOVA) was used for basic comparison. The General Linear Model (GLM) was used for testing individual factors' influence on burnout symptoms and for comparison for each of four professional groups: physicians, medical nurses, paramedics, and dispatchers. Exposition to critical incidents, and stressful and positive factors associated with profession were analyzed using descriptive statistics.

**Results:** A highly significant difference in burnout score was found between the group of dispatchers when compared to any other professional group. The other factor significantly influencing symptoms of burnout was the length of practice in EMS. No other factor (sex, matrimonial status, any professional position other than dispatcher, age) has had influence on the degree of burnout. Surprisingly, high (85.5%) experience with assault and/or an ambulance vehicle accident during duty was found. Experience with any psychological intervention technique was also analyzed. No statistically significant difference ( $p = 0.771$ ) was found between the two groups: A (372; any type of intervention) and B (225; no intervention). Satisfaction with the named techniques ranged from 79–92%. Another pilot study with psychological peer support took place in Prague in 2008. This pilot testing identified the most stressful events and the need of support (15 contacts/month, on average). Effectiveness of both models—CISM and peer—currently is being evaluated

**Conclusions:** A large-scale study on stress of EMS professionals had proved the need for psychological support. Analysis of stress helped to implement supporting psychological techniques adapted to specific needs of rescuers. Based on the results and on experience from pilot programs the Ministry of Health has constituted a working group to develop national guidelines for psychological crisis intervention for rescuers. The Ministry's draft of the Law about Emergency Medical Services also declared the obligation

to provide psychological support both for rescuers and victims of disasters. The aim of psychological interventions and targeted education is to increase well-being of the professionals, their effectiveness, and, as a result, to improve the patient care.

**Keywords:** burnout; critical incidents; emergency medical services (EMS); stress; psychological support  
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## Psychological Support for EMS Professionals in the Czech Republic

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**Introduction:** A study on stress of emergency medical services (EMS) professionals proved the need for psychological support. Based on results of the study and on experience from pilot programs, the Ministry constituted a working group to prepare national guidelines. The Ministry's draft of the Law about EMS also declared the obligation to provide psychological support both for rescuers and victims.

**Methods:** Prevention, education, supervision meetings and debriefings after critical incidents according to Mitchell's model have been performed in Central Bohemia and Northern Moravia since 2004. A pilot study with crisis intervention by peers occurred in Prague in 2008. Effectiveness of both models currently are evaluated

**Results:** This study on stress analyzed experiences with any psychological intervention technique. No statistically significant difference ( $p = 0.771$ ) was found between the two groups: A (372; with any intervention) and B (225; with no intervention). Satisfaction with different techniques ranged from 79–92%. Pilot testing of psychological peer support in the Prague's EMS identified the most stressful events and also the need of support. Based on these preliminary results, the working group of the Ministry started to develop national guidelines for psychological crisis intervention for rescuers.

**Conclusions:** The aim of psychological interventions and targeted education is to increase well-being of the professionals, their effectiveness and, as a result, improvements in the patient care.

**Keywords:** critical incidents; emergency medical services (EMS); psychological support  
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## Human Factors and Medicine Panel Activities in Psychological Health and Mild TBI/Concussion

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**Introduction:** As in previous eras, military members and civilians involved in current operations are reporting increased incidence of psychological and mental health problems during and after exposure to the physical and mental stresses that are part of armed conflict. The blast effects of Improvised Explosive Devices (IEDs) also have been associated with an increased incidence of mild traumatic brain injury (mTBI), or post-concussive disorder. The causal factors, incidence rates, and options