

## Injury Risk and Location Comparison of Full-Time SWAT Operators and Part-Time SWAT operators.

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### ABSTRACT

Special Weapons and Tactics (SWAT) teams deal with high-risk situations with unpredictable movement patterns that put them at a risk for injuries. SWAT teams fall into two distinct categories full-time (FT) and part-time (PT). FT SWAT teams are in big cities, and they are SWAT operators their whole shift. While PT teams are in smaller cities or more rural counties, and they spend half their time as SWAT operators and the other as patrol officers. **PURPOSE:** The purpose of this study was to examine differences in pain and injury locations and average length of injury time between PT and FT SWAT team operators. **METHODS:** Data was collected from 72 SWAT operators (PT n = 48, FT n = 24) from Texas and Oklahoma that participated in a course in strength, conditioning, and marksmanship. At this training, participants completed an online survey regarding self-report of injuries. Questions centered on ranking the top three areas of the body where they have received the most injuries while in their career, longest injury recovery they have sustained while in their career, how often they seek medical assistance with injuries, and if these injuries were sustained while in live operations. All data were analyzed for group differences using a Mann-Whitney U test. **RESULTS:** There were no differences between groups for mass (FT:  $87.9 \pm 21.9$  kg, PT:  $91.6 \pm 13.1$  kg,  $p = 0.492$ ) or height (FT:  $171 \pm 37$  cm, PT:  $179 \pm 9$  cm,  $p = 0.298$ ). There was a difference in median responses between groups for percentage of injuries in which the operator sought medical assistance (FT: 25-50%, PT: 1-24%,  $p = 0.009$ ) and number of injuries sustained while on a live operation (FT: 1-24%, PT: none,  $p = 0.008$ ). There were no differences between groups for number of injuries sustained during law enforcement career (FT:  $3.1 \pm 2.5$  injuries, PT:  $2.4 \pm 2.2$  injuries,  $p = 0.238$ ), number of body areas with extended pain (FT:  $2.6 \pm 2.3$  areas, PT:  $1.9 \pm 1.8$  areas,  $p = 0.120$ ), or time period of sustained injury (median responses for both groups: 1-6 months,  $p = 0.187$ ). Approximately 47% of the injuries reported were to the lower back and the second highest reported area was the neck at 14%. **CONCLUSION:** These data indicate that FT operators sustain more serious injuries than PT operators and that FT operators also experience more injuries while on duty. Law enforcement agencies and clinical practitioners should consider partnering to provide FT operators with the appropriate care for their injuries. Appropriate care may effectively reduce recovery time for injuries and reduce number of missed workdays for the operator.