

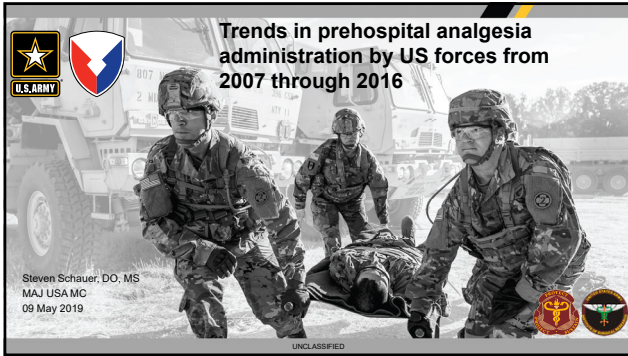
 **Trends in prehospital analgesia administration by US forces from 2007 through 2016**

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  **Conflicts of Interest**

None.

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I do not accept any commercial funding.

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  **Disclaimer**

Opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the Department of the Air Force, the Department of the Army, or the Department of Defense.

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 **Background**

Multiple previously published reports showing low adherence to TCCC guidelines

- » Consistent across all our analyses → analgesia, wound prophylaxis
- » Unclear effects of TCCC on actual prehospital practices

Analgesia guideline changes occurred during the recent conflicts

- » Ketamine added to the TCCC guidelines in 2012
- » OTFC authorized for theater ordering in 2011 (recommended back in 2006)
- » IM morphine has been out of guidelines since before Iraq and Afghanistan conflicts...yet still persists in the supply chain



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 **Methods**


Ethics

- » Submitted protocol → USAISR regulatory office determined it to be exempt
- » Sub-analysis of previously published data

Casualty data

- » Searched the DoD Trauma Registry using a series of ED procedure codes to isolate casualties that required at least one ED intervention upon arrival
- » Requested all prehospital and relevant hospital-based data for the overall dataset

Goal → Analyze effects of guideline changes on prehospital practices



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**Methods**

Periods of Analyses

- » Pre-ketamine era (2007-2012), post-ketamine era (2013-2016)
- » Pre-OTFC era (2007-2011), post-OTFC era (2012-2016)
- » Post-IM morphine era (2007-2016)

Goal → Analyze effects of TCCC and theater guideline changes on prehospital practices

U.S. Army, U.S. Air Force, U.S. Navy, U.S. Marine Corps, U.S. Coast Guard

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**Results**

- » Pre-defined search codes captured 28222 casualties from January 2007 to August 2016
- » 8979 casualties had documentation of IM morphine (2.1%), IV morphine (2.1%), OTFC, IV/IM fentanyl (8.9%), and/or ketamine (all routes, 5.4%)

U.S. Army, U.S. Air Force, U.S. Navy, U.S. Marine Corps, U.S. Coast Guard

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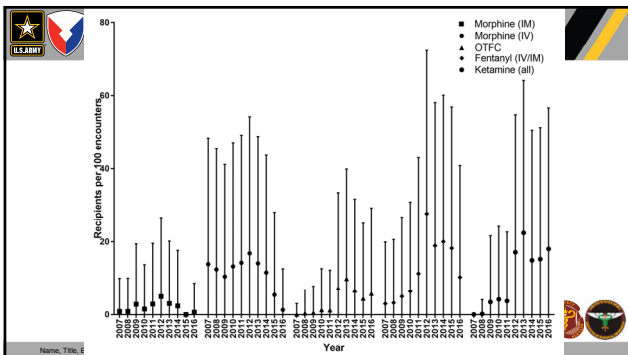
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**Results**

- » Ketamine use
  - » Pre-era 3.9% (995 out of 25618 encounters)
  - » Post-era 19.8% (515 out of 2604, p<0.001)
- » OTFC use
  - » Pre-era 0.7% (163 out of 22815)
  - » Post-era 7.9% (427 out of 5407, p<0.001)

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**Conclusions**

- » Ketamine use rose significantly before and after
- » OTFC use rose significantly before and after
- » IM morphine use appears to be relatively stable
- » TCCC and theater-level guidance changes appear to have a notable impact on use overall

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"Trends in prehospital analgesia administration by US forces from 2007 through 2016"

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**The End**

Questions?  
Comments?  
Feedback?



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