

# Development of a Mass Gathering and Event Medicine Tabletop Game

## A Systems Approach to Major Planned Event Health Services Planning

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### Objective:

Create an interactive learning activity to apply event health and emergency medical services planning principles.

### Background:

We created a series of interactive board game based tabletop exercises to enhance systems learning for major planned events (MPE).

### Methods:

1. Review of mass gathering and education literature on the effects of game theory on adult learning.
2. Conceptualization of planning and operational chronology including pre, during, and post-event phases.
3. 'Rules of engagement' were created (e.g., cooperative versus competitive play, optimum size of each tabletop team 6-8 players, duration of play 90-120 minutes).
4. Illustration of 'field of play' (map) through creation of individual game boards (e.g., obstacle adventure course, endurance running event, multi-day music festival, triathlon, etc).
5. 'Character' cards were implemented to represent the diverse stakeholders involved in MPE health services planning.
6. Generation of event-specific card decks, each representing 'Bonus,' 'Challenge' and 'Patient' scenarios to be addressed through collaborative 'free-play.'
7. A survey was created to compare knowledge and comfort levels in seven domains before and after game participation.



### Results:

Core knowledge domains for event medical services planning were themed as:

- Event, Risk & Resource Assessment
- Personnel & Staffing
- Equipment & Supplies
- Infrastructure & Logistics
- Transportation (to, on & from event)
- Communication & Stakeholder Engagement
- Administration & Medical Direction

Qualitative and quantitative feedback collected from three workshops (convenience samples of 28 event race directors, 44 medical students, and 12 emergency medicine residents) was positive.

### Conclusions:

The use of a facilitated mass gathering and event medicine tabletop exercise is an effective and engaging delivery modality for the transmission and integration of knowledge related to the planning and delivery of health services for MPEs.