

Special Events: Understanding the distance between celebration and catastrophe

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INTRODUCTION

Both literature and expert consensus point to the necessity of emergency management operating as a core component of special events (Thierbach 2003, Peleg 2010, Jongejan 2011, Hardcastle 2012, Shen 2015, Ranse 2017, Tajima 2020, Spaepen 2021). History aligns with this perspective, as recent experiences such as the 2017 Fyre Festival and 2022 Soul Halloween crowd surge event show just how thin the line between celebration and catastrophe can be. Thus, it is essential that emergency management thoroughly understands the risks associated with events and appropriately balances engagement activities against them. Healthcare emergency management has a particularly interesting role in special events, as many impacts stemming from these events would also directly impact the healthcare system. However, little data exists to identify where preparedness and effectiveness intersect in relation to emergency management and special events (Peleg 2010, Jongejan 2011, Ranse 2017).

While this lack of data is true regardless of location, in New York City this balance must also consider a heightened baseline risk that is inherent to densely populated urban cities. Being home to some of the largest and most famous events in the world, from the TCS NYC Marathon to the United Nations General Assembly, also makes it a complex threat landscape. As such, it is an ideal space to investigate the line between celebration and catastrophe. This poster highlights how one healthcare enterprise, NYU Langone Health, is approaching this intersection.



METHODS

Over the course of one calendar year, data was collected weekly to define special events around New York City. The festivals, parades, and events throughout the city that resulted in officially sanctioned weekend road closures were gathered into a dataset containing over three hundred events. Examples of the data collected are:

- Event size, including both spectators and participants
- Event location(s)
- Distance from key NYU Langone Health sites
- Event incident history
- Event type
- Previous emergency management engagement
- Level of event visibility and social factors

METHODS

Expert opinion, literature, and event histories were used to identify the key variables necessary to understand event risk to the healthcare enterprise. The key variables were then merged within the NYU Langone Five-Step Incident Management Framework, creating Enterprise Incident Thresholds which delineate special events into categories, segmenting suggested engagement into increasing levels of departmental and resource involvement. As an event moves up in categorization, the engagement activities include and build on those of less intensive categories.

FIGURE 1. Enterprise Incident Thresholds

Special Event Category	Examples	Variables		
		Proximity to NYULH Facilities / Operations	Event Size	Event Visibility
Watch & Size-up	Street fairs and events that cause traffic disruptions	New York City and Long Island	Any size	Low
Notify	Labor Day Parade, 9/11*, Indigenous Peoples Day, NY Caribbean Carnival Week	Beyond 0.5 miles	>50,000	High or Medium
Activate	Times Square New Year's Eve, Macy's Parade, TCS NYC Marathon, Pride*	Within 0.5 miles	>2,000,000	High
Operate	Fourth of July, UNGA*	Within 0.5 mile	>3,000,000	High

* Denotes events that were up classified based on recommendation by subject matter expert.

FIGURE 2. Engagement Activities by Category



RESULTS

The review of data revealed that three factors - event size, proximity to enterprise locations, and the social visibility of the event - were primary drivers of the event interacting with the healthcare enterprise. The size of an event and its proximity present a twofold risk of mass gathering-related and transportation-related contingencies. Further, events with high social visibility represent a potential target to malicious threats such as terrorism. Further, impacts were able to be sorted into two categories: primary impacts, which occur due to the nature of the special event itself and cannot be avoided, and secondary impacts, which arise due to event contingencies. Primary impacts were largely defined by transportation-related impacts, but also included anticipated elemental impacts such as weather. Proper event planning was essential to mitigate primary impacts and prevent them from progressing into secondary impacts such as human injury and death, physical property damage, as well as infrastructure and critical service disruption.

Most notably, any event that gathered more than 50,000 people was determined to require providing advanced notice to key stakeholders, including internal mass casualty and trauma teams. For those events within half a mile of the major enterprise locations, congregating more than two million people (approximately 25% of the New York City population), and with high event visibility, suggested engagement increased to include activation of the enterprise emergency operations center and development an event-specific contingency plan. Once the number of expected attendees reached three million people (approximately 37.5% of the New York City population), engagement was again increased to include standby for decontamination and medical purposes. Following these thresholds resulted in 51 weekend traffic advisories, 23 special events notices, and 6 event-specific contingency plans, more than tripling the number of events that underwent enhanced monitoring.

CONCLUSIONS

At NYU Langone Health, the development of these Enterprise Incident Thresholds has resulted in the proper classification of special events allowing for effective allocation of resources, gap identification, and intra-departmental collaboration, while simultaneously increasing preparedness rigor and protecting against audience messaging fatigue. The thresholds are designed to fortify against special events-related contingencies within the context of an urban environment saturated with events – they are not intended to be used as justification for overlooking additional subject expertise (Buehler 2017, Keefe 2018), but to help inform decision making with additional event-related context. Adaptation of these thresholds outside of this healthcare enterprise should be careful to appropriately contextualize the key variables for the environment. Additionally, each emergency management department must understand its unique situation regarding staff, work capacity, budget, and stakeholder buy-in. Leveraging open-source data, artificial intelligence, and intra-professional collegiality are all useful methods for this contextualization.

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