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Medical Resources Implications of a Megacity CBRNE Event

Shane Connolly, Tyler McLees, James McNulty, Leah Wasserman, and Dr. Kenneth McDonald

United States Military Academy
West Point, New York

Corresponding author's Email: Shane.Connolly@usma.edu, Tyler.McLees@usma.edu, James.McNulty@usma.edu,
Leah.Wasserman@usma.edu, Kenneth.McDonald@usma.edu

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Abstract: The collaborative effectiveness of the public health system (PHS) and the Army Medical Department (AMEDD) is limited in the case of a 10-kiloton (kt) nuclear event on a megacity due to an overall lack of knowledge and understanding among agencies. This report details an exhaustive analysis of the current medical response system, using New York City as a case study. Through the problem definition phase of the Systems Decision Process (SDP), this report identifies operational gaps existing at different levels within the system. Identified operational gaps existed at the local, state, and federal levels in the areas of resources, communication, and planning within the following agencies: Sloan Kettering Memorial Hospital, the Office of Emergency Management (OEM), the Federal Emergency Management Agency (FEMA), Health and Human Services (HHS), and the United States Department of Veteran Affairs (VA). Evaluation of the operational gaps illustrated the areas which were most vulnerable. The current analysis suggests that the system in place requires adjustments of the identified gaps so that maximum efficiency can be achieved.

Keywords: Megacity, (Chemical, Biological, Radiological, Nuclear and Explosive), Army Medical Department, Emergency Operations Center, Public Health System, Gap Analysis, Systems Dynamics Modeling, Value Modeling