



Joseph A. Barbera, MD, Associate Professor of Engineering Management (Crisis & Emergency Management), Clinical Associate Professor of Emergency Medicine, Co-Director, Institute for Crisis, Disaster, and Risk Management, The George Washington University

Joseph A. Barbera, M.D. is an Associate Professor of Engineering Management and Clinical Associate Professor of Emergency Medicine at The George Washington University. He is a founding Co-Director of the George Washington University Institute for Crisis, Disaster, and Risk Management (ICDRM), which was established in 1994 as a multi-disciplinary research institute (www.gwu.edu/~icdr). ICDRM is currently based in the Department of Engineering Management and Systems Engineering, but continues to promote and support multidisciplinary research. ICDRM initiated its academic program in 1998, with a Crisis, Emergency and Risk Management (CERM) focus area layered on an Engineering Management foundation. The program now includes Master's and PhD degrees and two graduate certificates: 1) Emergency Management and Public Health and 2) Homeland Security Emergency Preparedness and Response. Dr. Barbera created courses and taught within the concentration since its inception, and also teaches a doctoral level course Research Methods for Engineering Managers. He has supervised doctoral research across a wide range of emergency management subject areas, and has completed multiple applied research projects focusing on emergency response as well as more general emergency management topics. Graduates of the CERM academic programs have enjoyed exceptional success in finding employment and advancing their professional careers.

Dr. Barbera has a long principal investigator history of applied research success, including a US Department of Health and Human Services (DHHA) sponsored strategy guide on managing medical surge: Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources during Large-Scale Emergencies. A companion handbook focusing specifically on healthcare coalitions during response was developed later, and these books now provide central guidance in the national DHHS Hospital Preparedness Program.¹ He has completed multiple research projects focused on managing spontaneous volunteers, the most challenging area of volunteer management, and produced guidance used in a range locations across the US. Other research has focused on defining and developing competencies for healthcare emergency managers, including the critical management competencies that are often cited as leadership. This competency framework and related competencies are in use by the US Department of Veteran Affairs.

Dr. Barbera has also enjoyed a two-decade career as an emergency responder and consultant on emergency management. He was the lead medical subject matter expert for the Federal Emergency Management Agency (FEMA) in the development of the National Urban Search & Rescue (US&R) Response System, and performed the same role for the Office of U.S. Foreign Disaster Assistance (OFDA) in developing the International Search & Rescue program. His response experience includes scene-response to hurricanes (2005 Hurricanes Katrina and Wilma and others), mine disasters, earthquakes (Baguio City Philippines 1990, Northridge California 1994, Tou-Liu Taiwan 1999, and Haiti 2010), mass terrorism (the Oklahoma City Bombing and the 9-11 Pentagon and World Trade Center attacks), biological terrorism (Anthrax 2001), tsunami (Banda Aceh, Indonesia), and school collapse (Haiti 2008). He has helped plan and execute medical contingency capabilities for high security events (presidential inaugurations, State of the Union Addresses, the NATO 50th Anniversary Summit). He has participated in numerous mass casualty exercises, including the development and execution of the original TOPOFF Bioterrorism exercise in Denver, Colorado (May 2000).

Dr. Barbera has authored numerous scientific and technical papers related to medical, public health and general emergency management, and maintains an active academic and consulting career.

¹ <http://www.phe.gov/preparedness/planning/mscc/pages/default.aspx>