Electronic Mass Casualty Assessment and Planning Scenarios


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Few tools exist that are sufficiently robust to allow manipulation of key input variables to produce casualty estimates resulting from high-consequence events reflecting local or specific regions of concern. A computerized modeling simulation tool, Electronic Mass Casualty Assessment and Planning Scenarios (EMCAPS), has been developed to have broad application across emergency management and public health fields as part of a catastrophic events preparedness planning process (Fig. 1). Our approach was as follows:

- Develop a tool that works for users with a wide range of training and education and that works reliably on a variety of PCs.
- Provide user-scalable scenarios to realistically represent local risks and threats.
- Ensure that the project is consistent with state and national guidelines and requirements:
  - Department of Homeland Security capability-based planning methodology
  - National Planning Scenarios
- Set up an expert panel to advise the EMCAPS team.
- Freely offer the EMCAPS tool to others.

![EMCAPS Diagram](image)

Figure 1. Scenarios available in EMCAPS.
We have delivered a PC-based tool and a technical report. EMCAPS shareware now is available through the Johns Hopkins Office of Critical Event Preparedness and Response (CEPAR) and the National Center for the Study of Preparedness and Catastrophic Event Response (PACER).

EMCAPS has been used in preparedness planning by the following groups:

- Johns Hopkins Medical Institutions
- Other Maryland state and local health care organizations
- Emergency planners in other states
- EMCAPS has supported curricula, books, and research worldwide.

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For further information on the work reported here, see the reference below or contact chris.latimer@jhuapl.edu.