

# **Selecting the number and location of emergency clinics to provide mass prophylaxis in response to a major public health emergency or bio-terrorism event**

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## Abstract:

Through the Cities Readiness Initiative (CRI) program, the U.S. Department of Health and Human Services (HHS) channels funding to assist public health departments in the development of plans to provide emergency oral prophylaxis for all workers and residents within a region in the event of a major pandemic or bio-terrorist attack. These plans typically rely on a set of emergency medical clinics - often referred to as "points of dispensing", or PODs - distributed throughout the jurisdiction. To ensure the effectiveness and feasibility of city plans, HHS recently contracted with the RAND Corporation to help develop a set of "minimum standards" on issues such as the number and location of PODs, intra-POD operations, POD staffing levels, and POD security arrangements. This presentation focuses on the analysis related to the number and location of PODs. Using data from three different test cities, we first employ several location optimization model formulations to examine the relationships and tradeoffs between factors such as the size of the city, the size of the population, the number of PODs, the location of PODs, travel distances to the nearest POD, and POD capacity requirements. Leveraging these findings, we next consider the types of standards related to the number and location of PODs that would be both useful and reasonable to apply across all major U.S. cities, regardless of their respective size and geographical variations.