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TECHNICAL REPORT

Initial Evaluation of the Cities Readiness Initiative

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SUMMARY

In 2004, the U.S. Department of Health and Human Services (HHS) created the Cities Readiness Initiative (CRI) as part of the Cooperative Agreement on Public Health Emergency Preparedness (PHEP) to help the nation's largest metropolitan regions develop the ability to provide life-saving medications in the event of a large-scale bioterrorist attack or naturally occurring disease outbreak. Administered by the Centers for Disease Control and Prevention's (CDC's) Division of Strategic National Stockpile (DSNS), CRI seeks to help awardees respond to a large-scale anthrax attack or other large-scale public health emergency by providing antibiotics and other life-saving medical supplies to 100 percent of a planning jurisdiction's population within a 48-hour time frame. The program currently includes 72 metropolitan regions and covers an estimated 57 percent of the U.S. population.

In the spring of 2007, CDC asked the RAND Corporation to provide an initial external, independent evaluation of CRI to determine whether the program has led to discernible improvements in awardees' readiness to conduct mass medical countermeasure dispensing¹ above and beyond what would have occurred in the absence of the program. The evaluation is considered *initial* because not enough time has passed to expect the impacts of CRI to be fully observable in all sites and because the data sets required to support evaluation activities are still being developed. To conduct the evaluation, we drew upon available empirical evidence, including Technical Assistance Review (TAR) data, a CDC-administered assessment that focuses on jurisdictions' capabilities in 12 core functional areas associated with countermeasure distribution and dispensing. We also collected primary data through discussions with personnel involved with countermeasure dispensing in nine metropolitan areas.

CRI HAS IMPROVED READINESS FOR MASS COUNTERMEASURE DISPENSING

Based on this initial examination, CRI appears to have improved regions' readiness to rapidly dispense lifesaving medications and other medical supplies on a large scale. Specifically, CRI has enabled awardees to

- increase the number of staff working on countermeasure dispensing, either by hiring new staff or by freeing up existing staff

¹ CDC refers to the process of providing medical countermeasures to individuals as *dispensing*. Alternatively, Homeland Security Presidential Directive 21 (2007) refers to this process as *distribution*.

- strengthen key partnerships with other responders with key roles in countermeasure dispensing, including law enforcement, fire, and emergency management
- develop more detailed countermeasure dispensing plans, especially with regard to the critical last step of dispensing life-saving medications and other materials to patients
- adopt more streamlined dispensing models that rely less on medically trained staff (likely to be in short supply) and that take advantage of nontraditional venues and partners
- purchase needed equipment and supplies (e.g., mobile dispensing units, communication equipment)
- engage in key planning activities (e.g., security assessments), training, and exercises.

CRI's Funding, Clear Focus, and Accountability Requirements Are Important Drivers

The CRI program's clear focus on a single scenario, along with the specific targets set out in the TAR, are among the most important mechanisms by which CRI has produced improvements in countermeasure dispensing readiness in the cases we examined. For instance, the scenario has helped awardees prioritize resource allocation and reach out to key partners.

The program's effectiveness appears to depend on a number of factors. CRI sites that have less developed plans and planning processes appear to respond more favorably to the program's scenario focus and goals. It also appears that CRI sites located in decentralized public health systems face additional challenges in developing relationships with other local first responders, often simply because these systems tend to have larger numbers of jurisdictions. In addition, CRI's efforts to improve relationships among response partners within regions seem to have been more successful than efforts to improve state-local relationships, which, in some cases, were subject to preexisting and long-standing tensions and conflicts. In nearly every region studied, the efforts, skills, and working styles of individuals affected how well CRI goals were met.

CRI Impacts on Other Programs and on Operational Capabilities Could Not Be Assessed

CRI may also have affected other aspects of PHEP that could not be evaluated systematically in this study. First, there might be spillover CRI impacts on other areas of PHEP, nonemergency areas of public health, and public health systems not participating in CRI. However, limitations in the sample of health departments made this difficult to assess. Second, while CRI is designed to improve awardees' ability to *implement* their mass dispensing plans in emergency conditions, there is little available evidence on which to base an assessment. While operational exercises provide a

potential source of data, the lack of standardized performance metrics and standards limits our ability to use exercises to evaluate operational capabilities.

THERE IS MERIT IN CONTINUING THE CRI PROGRAM

Given the improvements that CRI appears to have brought about in staffing, equipment, planning, partnerships, and dispensing strategies, there is merit in continuing the program. However, a decision to continue the program needs to be accompanied by steps to build on the program's existing strengths and to ensure the use of measurement and evaluation tools that allow effective program monitoring going forward.

Reassess the impact and renewal of the program after two to three years.

After another two to three years of continued investment, future evaluation efforts should confirm whether CRI awardees have continued to build the relevant capacities and capabilities and should consider whether the program's goals should be revised (e.g., to focus on a different planning function, emphasize sustaining rather than creating readiness, or include other metropolitan regions in the program).

Continue development of systems for measurement and evaluation. Although the measurement tools already developed by the Division of Strategic National Stockpile (SNS) and CRI programs provide a solid foundation, better tools for evaluation and measurement are required to support a robust reevaluation of the program and continuous program improvement. In particular, promising opportunities include the following:

- *Developing finer-grained budget data:* Doing so would allow evaluators to assess the impact of CRI and other programs on key spending priorities and should consider collecting data on actual expenditures. This would include continuing efforts to improve archiving of data from the plan-based assessment already in place (the TAR).
- *Continuing to roll out standard, drill-based metrics:* These tools provide a means of assessing key operational capabilities. In addition, opportunities exist to further explore the use of alternative means of measuring operational capabilities, including computer-based simulation models.
- *Comparing the costs and benefits of the CRI program:* In addition to evaluating impact, it is prudent to consider whether the achievements of the CRI program justify the investments made to produce them. Future evaluations could be extended to include assessments of public health risks, risk reduction, and the cost-effectiveness of public health programs.

Continue improvements in technical assistance and assessment. Awardee satisfaction with CRI's technical assistance varies considerably. At several sites, we heard concerns about the impacts of frequent changes in consultants. CDC officials point to efforts currently under way to continuously improve training for these consultants, and these efforts seem worth continuing.

In addition, attention should be paid to ensuring the ability of the relevant state health department to provide assistance to local health departments in meeting CRI goals. Agreements between CDC, state, and local participants might be needed on such issues as the division of CRI-related tasks, priorities in furtherance of CRI planning, norms of communication between federal, state, and local officials, and so on.

Finally, a certain degree of flexibility in TAR scoring seems warranted, given the wide variation in state and local public health systems, relationships with other first responders, and threat profiles. Flexibility might also allow jurisdictions to address the challenges of declining funding levels for PHEP and might be especially warranted for awardees that have demonstrated strong performance in past assessments.