BACKGROUND

On November 15, the Communicable Disease Control & Prevention (CDCP) Section of the San Francisco Department of Public Health conducted the Infectious Disease Emergencies Response (IDER) Exercise to test how well we were able to operationalize the new Infectious Disease Emergencies Response Plan, the “core” portion of which was completed by CDCP in the Fall of 2006. A scenario involving multiple gastrointestinal outbreaks in clinics and the general community following an earthquake was used to test our plan.

Exercise planning began approximately 2 months before the exercise date and was done by 4 CDCP staff. All CDCP staff (approximately 50) were mobilized as exercise participants, in addition to a few individuals from other SFDPH sections serving as interviewers, runners, deputies and administrative staff. IDER activation and notification of all CDCP staff took place on the afternoon of November 14 in preparation for a full-day exercise on November 15. The cost of staff time used for the exercise totaled approximately $19,000 and used 408 person-hours of staff time.

The purpose of this report is to analyze exercise results, identify strengths to be maintained and built upon, identify potential areas for improvement, and support development of corrective actions.

MAJOR STRENGTHS

- **Notification and activation** of key IDER and CDCP staff were timely and successful; all CDCP staff were notified via the CDCP phone tree within 2 hours. Existing protocols need to be better integrated into one. The Incident Briefing Form (ICS 201) was completed by the Incident Commander and ready for distribution in 1.5 hours.

- CDCP staff received more **training and orientation** to prepare for this exercise than in previous exercises. IDER planners held two 2-hour trainings in the 2 weeks prior to the exercise, as well as a half-hour orientation at the start of the exercise. Staff appreciated the varied methods that were used in orienting them to the general IDER plan, roles of each module, and how to use ICS forms; this was done via lecture, games and small group activity formats. Binders provided to each module containing module-specific information also helped to orient staff to their roles.

- CDCP staff felt that the **IDER plan** is well-organized and easy to read. Upon reading sections relevant to their modules during the exercise, most felt that it was easy to understand their modules’ roles and responsibilities.

- The Incident Commander and General Staff noted that staff appropriately followed the **chain-of-command** for updates and resource requests during the exercise.

- Updates collected and displayed by the Plans Section staff on the **Situation Update board** was useful. Plans Section staff were successful in proactively soliciting updates and staff were cooperative in providing them. As a follow-up, planners will devise a way to share them more broadly with IDER staff in a more timely manner.

- Most staff were pleased with the capabilities of the **Resource Tracking System**, a MS Access database developed to track personnel and supplies requests. There is a need to further refine the database and better integrate it into IDER request protocols.

- This is CDCP’s first experience using a **simulation cell** for a full-scale exercise.

**FOCUS AREAS FOR IDER EXERCISE**

- Testing the **Activation** and **Notification** protocol
- Evaluating the effectiveness of the **IDER Incident Command Structure** (ICS) in facilitating a response to an infectious disease emergency, especially the division of responsibilities between Operations and Plans Sections
- Evaluating the use of **ICS forms** and other orientation / reference tools for IDER responders
- **Movement of outbreak-related information** among branches within the Operations Section, especially with the newly-created Data Branch
- Ability of the **revised resource tracking protocols and database** to facilitate resource requests, deployment and tracking during a response
AREAS FOR IMPROVEMENT

- Identify critical functions that need to be sustained by the Continuity of Operations during an infectious disease emergency and clearly define who has decision-making authority during an event.
  - Clarify the scope of responsibilities of the health officers, CDCP on-call physician and the IDER commander during an infectious disease emergency. SFDPH is legally required to respond to reports of notifiable diseases; however, during an infectious disease emergency, it is unclear who has the authority to prioritize the investigation of one disease over another. The legal implications of that decision are also unclear.
  - More staff need to be assigned to work in Continuity of Operations during an event to maintain critical functions. On a pre-event basis, preparations in the form of guidance documents and procedures for transferring responsibilities in the event of an IDER activation need to be made; currently few protocols exist for this purpose.

- More guidance needs to be created for just-in-time training of response staff. Given the hierarchical nature of ICS, training guidance are especially needed for those serving as supervisors, who are responsible for training their staff on not only their module’s role but how to function within an ICS (such as using forms, how to request resources, etc.).
  - Create more checklists to guide trainings. Also consider streamlining the orientation of staff at the Staging Area by holding a series of small group, function-oriented trainings rather than one large general orientation.

- Further work is needed to set protocols and tools for resource request, approval and tracking. Also, the responsibilities and interaction among the Logistics Section, Staging Area and Resource Status Unit in the Plans Section need to be more explicitly defined.
  - Staff requested clarification on the request approval pathway for different types of resources. Explicitly define the level of approval needed for personnel, small and large-scale supplies request and services and incorporate into training materials.
  - Once these protocols have been defined, expand and refine the functionalities of the Resource Tracking System Database to accommodate these protocols.

- Create “Paper Management Go-kits” that allow for quick deployment of IDER response protocols and paperwork into any room containing IDER responders. These kits would contain common materials such as additional office supplies, the IDER plan, organizational charts, common job tasks, poster-sized flow diagrams detailing routes of information flow and approval pathways, maps, and ICS forms. Better display of reference materials would help to orient staff quicker to the resources available to them during a response.
  - Exercise staff overwhelmingly preferred to see key instructions and protocols in a more visual manner, as posters and flow charts posted on walls for common reference. This way, the module binders and Job Action Sheets they receive would only contain a short checklist of tasks specific to their positions; they would be easier to reference in a rush. These visual cues should be use liberally in rooms housing responders and during orientation.

- Identify the most useful ICS forms and revise them by placing usage instructions clearly up front, keep only the most important fields.

- CDCP staff need to be periodically and regularly trained in changes in the IDER plan between activations.

Overall, the IDER exercise was successful in testing the readability and usability of the IDER Plan by potential responders to an infectious disease emergency. It also showed that the current IDER ICS and associated tools such as the IDER ICS forms and resource tracking database are, for the most part, adequate to facilitate a response. In the future, we would like to conduct smaller functional exercises to specifically test the ability of the Data Branch to facilitate the flow and analysis of outbreak-related information among other Branches in the Operations Section. We will also apply lessons learned from our planning experience to inform future exercise planning.