Ebola Readiness Assessment (ERA) Update
Ebola Supplement Activity A3

Ryan Fagan, MD, MPH & TM
Healthcare-associated Infections (HAI) and Ebola Supplement Grantees’ Meeting
November 17 - 19, 2015

Nothing to Disclose
ELC Supplement ICAR Activity A.3:
Assess Readiness of Ebola-designated Facilities

- Conduct on-site assessments of all designated Ebola assessment hospitals (or treatment centers, if any)
- Determine gaps in readiness
- Address gaps through consultation/training using CDC-based resources; develop and implement mitigation plan with hospital
- Follow up to confirm mitigation of gaps
Frontline Healthcare Facility
- Quickly identifies and isolates patients with possible Ebola
- Notifies facility infection control and state and local public health officials
- Has enough Ebola personal protective equipment (PPE) for at least 12–24 hours of care
- Prepares for patient transfer, if needed

Ebola Assessment Hospital
- Safely receives and isolates a patient with possible Ebola
- Provides immediate laboratory evaluation and coordinates Ebola testing
- Cares for a patient for up to 5 days (including evaluation and management of alternative diagnoses) until Ebola diagnosis is confirmed or ruled out
- Has enough Ebola PPE for up to 5 days of care
- Transfers a patient with confirmed Ebola to an Ebola treatment center in consultation with public health officials

Ebola Treatment Center
- Safely receives and isolates a patient with confirmed Ebola
- Cares for patients with Ebola for duration of illness
- Has enough Ebola PPE for at least 7 days of care (will restock as needed)
- Has sustainable staffing plan to manage several weeks of care
- CDC Ebola Response Teams (CERTs) are ready to deploy to provide assistance as needed
Summary of CDC-led Technical Assistance for ETCs and Assessment Hospitals

- **2 Phases**
  - ETC focus (REP), Oct 2014 – Jan 2015
  - Assessment hospital focus (ERA), Feb – Dec, 2015

- **Projected summary of CDC-led hospital visits through Dec 15, 2015**
  - Multi-disciplinary teams of CDC and HHS/ASPR staff
  - About 145 hospitals in 47 states + D.C.

- **CDC-led ERA mechanism to lead on-site assessment hospital visits is standing down after remaining scheduled visits**
  - Future announcements about training opportunities and on-site assistance pending
  - NETEC (National Ebola Treatment and Education Center)
  - Additional collaborative work between CDC and partners is ongoing to identify additional training opportunities and support
## Activity A3 Reporting by Grantees

- Monthly beginning May – November, 2015, then quarterly
- Status on each capability from the 11 Ebola Assessment Hospital domains*

<table>
<thead>
<tr>
<th>Facility Infrastructure</th>
<th>Waste Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Transportation</td>
<td>Worker Safety</td>
</tr>
<tr>
<td>Laboratory Safety and Testing</td>
<td>Environmental Services</td>
</tr>
<tr>
<td>Staffing</td>
<td>Clinical Management</td>
</tr>
<tr>
<td>Training</td>
<td>Operations Coordination</td>
</tr>
<tr>
<td>PPE</td>
<td></td>
</tr>
</tbody>
</table>

## Activity A3 Reporting Summary, Sep 2015

<table>
<thead>
<tr>
<th>Domain (facilities reported on)</th>
<th>% of facilities with reported gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure (n=187)</td>
<td>19</td>
</tr>
<tr>
<td>Patient transportation (n=186)</td>
<td>15</td>
</tr>
<tr>
<td>Laboratory (n=187)</td>
<td>35</td>
</tr>
<tr>
<td>Staffing (n=188)</td>
<td>19</td>
</tr>
<tr>
<td>Training (n=187)</td>
<td>25</td>
</tr>
<tr>
<td>PPE (n=187)</td>
<td>13</td>
</tr>
<tr>
<td>Waste management (n=188)</td>
<td>15</td>
</tr>
<tr>
<td>Worker safety (n=187)</td>
<td>13</td>
</tr>
<tr>
<td>Environmental services (n=184)</td>
<td>16</td>
</tr>
<tr>
<td>Clinical management (n=180)</td>
<td>16</td>
</tr>
<tr>
<td>Operations coordination (n=164)</td>
<td>7</td>
</tr>
</tbody>
</table>
Preparedness Domains: Specific Observations

- **Infrastructure**
  - Problematic layout of patient care space
  - Inadequate PPE doffing or waste storage space

- **Staffing**
  - Inadequate # of trained staff to provide care for up to 96 hours
  - Planned shift durations not practiced

- **PPE**
  - Inter-facility variability in protocols due to supply chains, personal preference, experience
  - Limitations of locally available expert trainers
  - Adoption of HAZMAT principles and training can be problematic
Preparedness Domains: Specific Observations, Cont’d

- **Training**
  - Competency in defined roles is labor intensive to establish and maintain
  - Ideal frequency of retraining not defined

- **Waste management**
  - Local regulations concerning solid waste and sewage
  - Workable solutions usually exist but can be very expensive and/or cumbersome
Other Specific Concerns Observed during ERA Visits

- **Worker safety**
  - Protocols to monitor HCWs
  - Coordination of monitoring with health departments

- **Environmental cleaning and disinfection**
  - Potential overuse or misuse of bleach products (e.g., spraying HCWs in PPE)
  - Need for terminal cleaning protocols

- **Clinical management**
  - Protocols for special populations (e.g., children)
  - Appropriate interventions such as invasive procedures for critically ill patients
Next Steps

- Conduct onsite assessments of all designated Ebola assessment hospitals (or treatment centers, if any)
- Determine gaps in readiness
- Address gaps through consultation/training using CDC-based resources; develop and implement mitigation plan with hospital
- Follow up to confirm mitigation of gaps
  - May require follow-up onsite assessment
Addressing Gaps and Confirming Mitigation: Example Approaches from Recently Visited Jurisdictions

- **Written report from health department to hospital**
  - Consider providing specific, bulleted feedback after initial visit
  - Organized by domain
  - Highlight what went right as well as what should be improved

- **Develop a timeline for follow-up assessment by health department team**
  - Timeline varies, weeks - months
  - Scope should be guided by observed gaps on initial assessment

- **It is ultimately up to the health jurisdiction to determine hospital role in ‘tiered approach’**
How Ebola Preparedness and Response Activities Can Improve Healthcare Safety

- Improving the visibility of infection prevention and control and laboratory biosafety programs
- Linking healthcare worker and patient safety
- Standard taking of patient travel histories
- Safer PPE use, e.g. doffing of gloves for routine patient care situations
How Ebola Preparedness and Response Activities Can Improve Longer Term Public Health Activities

- Improved coordination between HAI prevention and hospital preparedness groups (federal and local)
- Improved coordination between public health jurisdictions and major hospitals regarding emerging infectious threats
- Experience with Ebola assessments may assist efforts to launch general infection control assessments (Activity B)
Thank you!

For more information, please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov    Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.