Business Continuity and Pandemic Response Planning on One Page!

Mary D. Lasky
Johns Hopkins University
Applied Physics Laboratory

Agenda
• The Applied Physics Laboratory (APL)
• APL’s Business Continuity Model
• One page model
• Pandemic Response Planning
• One page pandemic plan

Divisions of The Johns Hopkins University

School of Arts & Science
Writing School of Engineering
School of Professional Studies
School of Business & Education
School of Hygiene & Public Health
School of Medicine
School of Nursing
Nina School of Advanced International Studies
Peabody Institute
Profile of the Applied Physics Laboratory

- Not-for-profit university research & development laboratory
- Founded in 1942 as a division of the Johns Hopkins University
- On-site graduate engineering program in eight degree fields
- Staffing: 4,000 employees (69% scientists & engineers)
- Annual revenue ~ $700M

APL Staff Demographics

<table>
<thead>
<tr>
<th>Degree Level</th>
<th>Degree Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>19%</td>
<td>Doctorate</td>
</tr>
<tr>
<td>54%</td>
<td>Masters</td>
</tr>
<tr>
<td>21%</td>
<td>Bachelors</td>
</tr>
<tr>
<td>6%</td>
<td>None</td>
</tr>
</tbody>
</table>

Total Staff - 4,000
JHU/APL Organization

History of Continuity Planning at APL

• The purpose of Business Continuity Planning is to ensure that the Laboratory has effective plans in place to enable it to resume business operations quickly in the event of a business interruption that lasts longer than 48 hours.

• After September 2001, a team was formed to explore business continuity
• Consultants were hired to introduce continuity planning, and they helped catapult us into our planning
• Business Impact Analysis was performed to help uncover vulnerabilities
• Business Continuity Plans were built first for a couple of business areas and then for all departments, because departments own the resources
• An Incident Management Team was formed
APL Business Continuity Planning Overview

Incident Management Team

- Led by the Assistant Director, Operations
- Serves as the Command Center to help manage a business interruption
- Goal is to coordinate restoring the business to normal operations
- Manages the recovery process by coordinating with the Department Liaisons who in turn work with their department’s management teams

Incident Management Team Members

Assistant Director, Operations – Leader
Assistant Director, Programs – Alternate Leader

Representatives from:
- Security
- Human Relations
- Information Technology
- Facilities
- Business
- Space Management
- Legal
- External Communications

Support from:
- BCP Program Manager and team
- BCP Advisors
APL Departmental Continuity Plans encompass:

- Call Trees
- Action plans for each of the following teams:
  - Department Liaisons
  - Key management team (varies by department as to who is on that team)
  - Group supervisors & program managers
  - IT (in some departments)
- Vendors
- Software
- Customers
- Essential Facilities (mainly for Pandemic Flu)
- Locations – key rooms and facilities
- Listing of Staff -- by group and by building
- Listing of Property

Business Continuity Plans are:

- Comprehensive
- Kept updated with new HR and customer data biweekly
- Complete list of all vendor data is kept on the BCP web site and updated daily
- Flash drives containing all plans and data are provided biweekly to:
  - Assistant Directors
  - Human Relations Department Incident Management Team Representative
  - BCP Program Manager

APL Business Continuity Plans are:

- Large with a great deal of data
- Not easy to get the big picture from the complete document
- Not something that everyone wanted to keep at work and at home

CONSEQUENTLY –

Developed a one-page diagram
History of the One Page Model

- Table Top for the Operations Council

- From that meeting, one of the departmental representatives became interested but the entire process was too complicated
  - Wanted material to be understandable at a glance
  - Wanted material to provide the big picture

- Working with that representative led to the “One Page Model”
Benefits of the One Page Model

- Can see steps at a glance and is easily understood
- Can understand where emergency starts and stops and the Incident Management Team and departments take over
- Color coded for quick reference and helps you get started and then use the big plan for the details
- Enables you to concentrate on first things first and not worry about things that can be dealt with later
- Can be laminated and kept at work, at home and in your car

The high-level view of the Plan can be on One Page.

Can Instructions for Plans be on One Page?

Work for Howard County Maryland

- Community Emergency Response Network (CERN)
- Requested to bring Continuity Planning to all businesses
  - April 2007
  - Piloted in January 2008
  - Announced in March 2008
- One Page planning document with example on opposite side
**Incident Planning Example: A Fire at a Pharmacy**

On a Sunday evening in late January at 7 pm, the Howard County 911 center receives a call that heavy smoke is coming from a pharmacy located in a strip shopping center. The temperature is approximately 25 degrees and a strong wind is aggravating the fire. As fire companies respond to the scene, they are faced with a major challenge due to the cold temperatures and wind. The pharmacy business operates from 9 am to 9 pm, and the fire starts during one of the busiest times. The fire escalates and the store is destroyed. The fire chief explains that it is too dangerous to re-enter the building. However, due to the quick response of the fire company and the 3,000 gallons of water per minute they poured on the fire, the fire is contained to this store, saving the remaining stores in the shopping center.

The owner arrives about an hour after the fire started and discovers his family business in ruins. He declares there are many important activities, functions or facilities that your business depends upon. For example, computer data, pharmacies with back-up capabilities, and even the fire company personnel to get the job done. The owner now has to begin dealing with the results of this disaster, which could have been mitigated by proper planning.

**Planning for an Incident which Interrupts Your Business**

<table>
<thead>
<tr>
<th>Planning Step</th>
<th>Planning Task</th>
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<tbody>
<tr>
<td>Planning Step 1</td>
<td>Identify Risks</td>
<td>Assess Risks</td>
<td>Identify Critical Business Functions</td>
<td>Assess Critical Business Functions</td>
<td>Develop Business Continuity Plan</td>
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<td>Identify Risks</td>
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<tr>
<td>Planning Task 6</td>
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**Example of “Planning for an Incident” – Unfilled items show planning responses**

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**Pandemic Response Planning**

|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
Social Distancing

- Center for Disease Control and Prevention (CDC), February 2007: Interim Pre-Pandemic Planning Guidance for Communities and Others
  - CDC has based its social distancing guidance on modeling conducted by the Institute of Medicine
  - If moderate, CDC suggests that an organization should consider social distancing
  - If severe, CDC says that the organization must enact social distancing
    - Since we will not know the severity at the beginning, CDC states social distancing would need to be implemented early
    - CDC also recommends planning for a severe pandemic

Modeling Shows Benefit of Social Distancing

Goals of Community Mitigation
1. Delay outbreak peak
2. Decompress peak burden on hospitals/infrastructure
3. Diminish overall cases and health impacts

CDC Interim Pre-pandemic Planning Guidance, February 2007
Johns Hopkins University  
Applied Physics Laboratory’s  
Pandemic Influenza  
Response Planning

Hopkins Critical Event Preparedness and Response  
(CEPAR) Activities  
• Pandemic Plan – uses three phases  
  • Routine -- Business as usual  
  • Transition -- Pandemic in US  
  • Critical -- Pandemic in local area

Governance for the Pandemic
APL’s Executive Council Sets High-Level Criteria to Guide Planning

- In 2006, the APL Executive Council created:
  - The criteria to be used for planning, communications and decisions if there is a pandemic or similar incident
  - Provide for the health and welfare of APL staff and their families
  - Meet immediate Government needs of critical national or regional importance
  - Assure the continued existence and viability of APL

### One Page

**APL Pandemic Trigger Actions**

<table>
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<tr>
<th>Responsibility</th>
<th>Department</th>
<th>Decision Matrix – approve during planning</th>
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<tr>
<td>APL Executive Council</td>
<td>🔷clasr</td>
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<tr>
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<tr>
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### Decision Matrix – approve during planning

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"What If" Scenarios

Scenario 1:
The World Health Organization (WHO) has raised the Pandemic level to Phase 5 because there are clusters of human-to-human transmission in Asia.

What actions does your organization take when WHO states the world is in Phase 6 – a pandemic?

APL Pandemic Trigger Actions

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Phase 1: Pandemic Flu in the world not in USA</th>
<th>Phase 2: Pandemic Flu in USA</th>
<th>Phase 3: Pandemic Flu in local area</th>
<th>Phase 4: Pandemic Flu in local area</th>
<th>Phase 5: Hospitals are overwhelmed and critical care facilities overloaded</th>
<th>Phase 6: World is in Phase 6 – a pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td>APL Executive Management Team</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Implement “maximum work at home”</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Enact social distancing, examine limitations on meetings, staggered work hours, cafeterias, etc.</td>
<td></td>
</tr>
<tr>
<td>APL Incident Management Team (IMT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Communicate with staff, families, and emergency responders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Ratify travel ban &amp; quarantine decisions</td>
<td></td>
</tr>
</tbody>
</table>

Scenario 2:
The World Health Organization (WHO) has raised the Pandemic level to Phase 4 because there are clusters of human-to-human transmission in Egypt.

What happens if one of your employees is in Egypt and contracts the disease bringing it back to your organization?
One Page
APL Pandemic Trigger Actions

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>APL, Federal Govt.</td>
<td>WHO Phase 6, Federal Govt.</td>
<td>APA + CEPAR – routine</td>
<td>WHO Phase 6, Federal Govt.</td>
<td>WHO Phase 6, Federal Govt.</td>
<td>WHO Phase 6, Federal Govt.</td>
</tr>
<tr>
<td>APL Incident Management Team (IMT)</td>
<td>- Communicate with staff and families - Implement travel ban for non-essential travel - Enact social distancing - Ratify mask decision - Ratify travel ban &amp; quarantine decisions</td>
<td>- Enact social distancing - Communicate with staff - Ratify contingency policies &amp; social distancing</td>
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</tr>
<tr>
<td>APL Executive Management</td>
<td>- Reverse social distancing policies - Stand down the IMT - Facilities are open for routine operations</td>
<td>- Recommend “critical work” at facility - Communicate often with staff - Enact social distancing, examine limitations on meetings, staggered work hours, cafeterias, etc. - Communicate often with staff</td>
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Benefits of the One Page Pandemic Triggers

- People focus quickly on the big picture

- The APL director understood it immediately and started wanting to add “what ifs”

- Table Top Exercises (Scenario 2 shown here) validated that plan could be flexible

Pandemic Planning for Howard County Maryland

- The Community Emergency Response Network (CERN) has done some initial work on a one-page document to help all businesses be prepared for a Pandemic

- The most complicated part of pandemic planning is the HR side of things.

- It is very important, if staff members are going to work from their homes
Preparing for a Pandemic Influenza

A Pandemic is an outbreak of a disease that covers a wide geographic area and affects large numbers of people.

Develop Communication Plan
- What to say to staff now to be sure they are prepared before a pandemic and at each stage during a pandemic
- Ask suppliers about their plan and determine alternative resources

Develop Contingency Policies
- Do you need a policy to request staff to stay at home if ill?
- Do you need rules about working at home and what you will and will not support?
- Will you pay your staff during the pandemic if they are not working?
- Will staff benefits continue?
- Ensure direct deposit for all staff members

Determine Critical Work
- Work that must be done at the facility and cannot be done from home
- Risk to the business if not supported

Obtain Supplies to have during the pandemic
- Masks, hand sanitizer, gloves, special hospital grade cleaners?

Determine Computing Requirements
- Working at home (check with legal and Human Resources about insurance issues)
  - Can staff work from home? Be sure to practice.
  - Consider laptops for key staff
  - Can payroll be run from home? - If not, how will you pay your staff?
- Transferring phones to staff member’s homes

Acknowledgements & Thanks

- APL Incident Management Team and the Assistant Director, Operations, Ruth Nimmo
- Howard County Community Emergency Response Network (CERN) and its chairman, Richard M. Krieg
- Lynn Coleman, Vice President, Howard Community College
- First Responders - Howard County, Maryland
- Jim Wyant, Operations Executive, Air and Missile Defense Department, APL

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