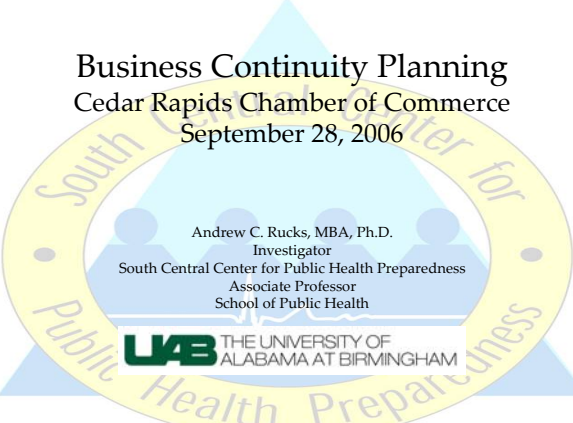


## Business Continuity Planning

Cedar Rapids Chamber of Commerce  
September 28, 2006



Andrew C. Rucks, MBA, Ph.D.  
Investigator  
South Central Center for Public Health Preparedness  
Associate Professor  
School of Public Health

**UAB** THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

---

---

---

---

---


---

---

---

## Setting the Stage

*The drug problem.  
The 16-game schedule.  
But the biggest problem is management.*  
**Coach Hayden Fry**



2

---

---

---

---

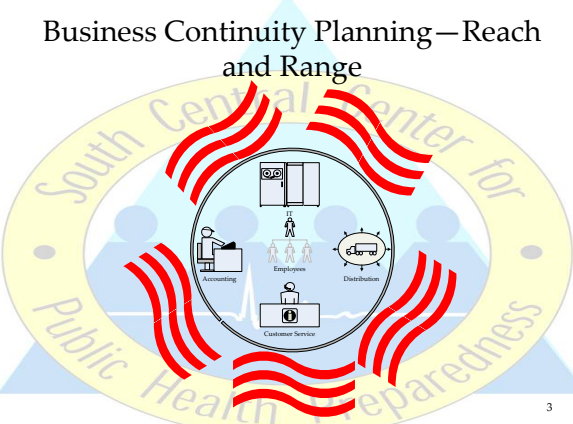
---

---

---

---

## Business Continuity Planning – Reach and Range



3

---

---

---

---

---

---

---

---

### Business Continuity Planning – Reach and Range

4

---



---



---



---



---



---



---

### BCP – Scope

- Objective – minimizing loss after a disaster
- Essential ingredients to achieving the objective:
  - executive leadership to acknowledge need for and commitment to continuity planning and continuity itself
  - management and systems available to facilitate the recovery of core business operations
  - staff capable of operating systems under adverse conditions; capability determined by sufficiency of wellbeing, knowledge, and skills

5

---



---



---



---



---



---



---

### BCP – Background

- Originally developed and applied to continuity of information systems operations
- Policies focused on records retention, mirror sites, backups, and redundancy
- Expectations of short-duration downtime, minimal disruptions limited to IT intensive areas

6

---



---



---



---



---



---



---

## BCP – Pandemic Influenza

- Applies to the complete enterprise including all inputs, processes, and outputs
- Policies must focus on minimizing adverse consequences for the enterprise
- Expectations of multiple waves of several weeks duration affecting significant portions of the workforce and their families
- Extends beyond the boundaries of the enterprise

7

---

---

---

---

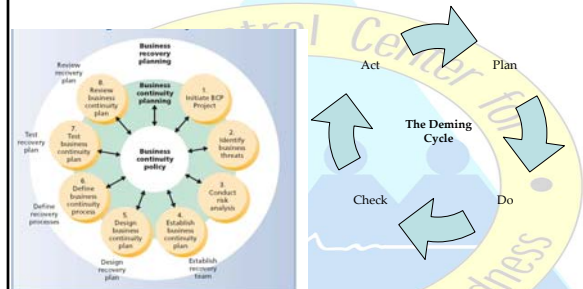
---

---

---

---

## The BCP Process



Source: Lam, W., "Ensuring business continuity," *IT Professional*, vol.4, no.3pp.19-25, May/June 2002

© 2002 IEEE

8

---

---

---

---

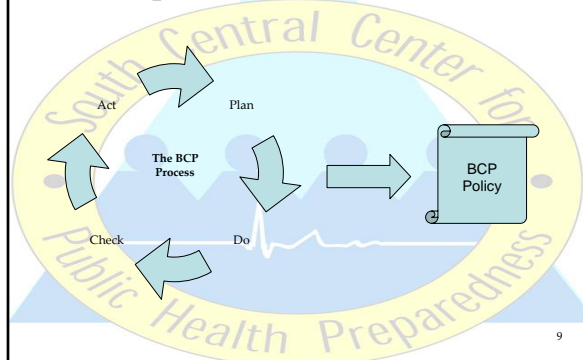
---

---

---

---

## Output of the BCP Process



9

---

---

---

---

---

---

---

---

## Elements of a BCP Policy

1. Contacts—who and how during work hours, non-work hours, and emergencies
2. Assignments—an organizational “depth charts”
3. Risk Assessment—identify and categorize threats and consequences
4. Continuity Benchmarks—define temporal expectations for: resumption following a failure and full recovery to normal activity

10

---

---

---

---

---

---

---

---

## Elements of a BCP Policy

5. BC Reviews—formal process and calendar for reviewing business continuity plans
6. BC Processes and Procedures—formal prescriptions for response actions to particular incidents and failure scenarios
7. Incident Documentation—formal methods for recording incident and response scenarios
8. Testing—formal plan for and test-acceptance criteria for the BCP
9. Training—formal training requirements for employees in the BCP and BC Processes and Procedures

11

---

---

---

---

---

---

---

---

BCP Planning Process and Participation

	Phase I	Phase II	Phase III	Phase IV	Phase V	Phase VI
Executive Management	Initiate and formally charter project	Conduct and document threat, exposure and leads risk analysis team	Organize and lead BC team, establish roles of succession for team leader	Manage development and approve plan	Conduct exercises & evaluations, Participate in exercises and critiques	Establish and lead formal review process
Middle Management		Member risk analysis team, lead sub-assessment teams as needed	Member BC team and functional area teams, establish roles of succession	Manages functional area plan development, collates plans	Participate in exercises and critiques	Member BC Plan review team, lead functional area reviews
Front-Line Management		Member risk analysis sub-teams	Member functional area teams, liaise with team leader	Contribute to functional area plan development	Participate in exercises and critiques	Contribute to functional area review
Associates			Member functional area teams	Contribute to functional area plan development	Participate in exercises and critiques	Contribute functional area teams

Phase I—Initiate Business Continuity Planning Process  
 Phase II—Threat Identification and Risk Assessment  
 Phase III—Organize Business Continuity Teams  
 Phase IV—Develop the Formal Business Continuity Plan (Including Processes and Procedures)  
 Phase V—Test Business Continuity Plan  
 Phase VI—Improve Business Continuity Plan

12

---

---

---

---

---

---

---

---

## Initiating BC Planning

- Requires executive leadership
- Needs effective management to be successful
- Should be recognized as the enormous undertaking that it is
- Once initiated will continuously evolve, but must not be permitted to languish
- An incremental process
- Designing, executing, and evaluating tests of the BC Plan may require outside expertise

13

---

---

---

---

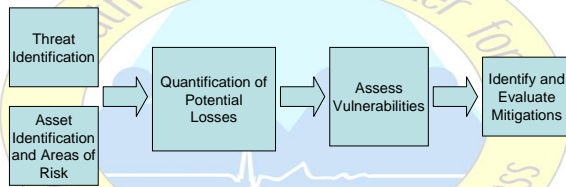
---

---

---

---

## Threat Identification and Risk Assessment



14

---

---

---

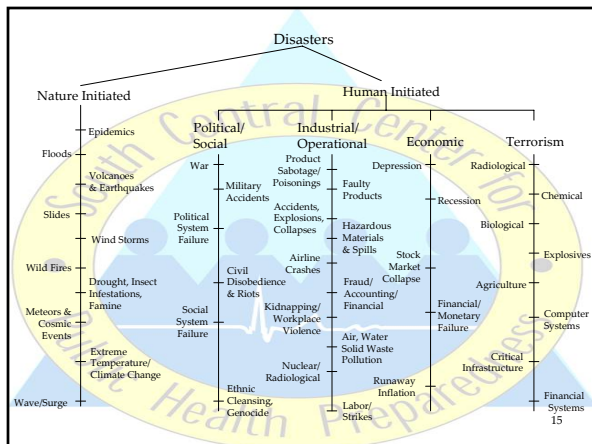
---

---

---

---

---



15

---

---

---

---

---

---

---

---

## Asset Identification and Areas of Risk

- Assets
  - List and categorize assets
  - Consider tangible and intangible assets (e.g., competitive advantages, reputation, good will)
  - Audit to assure complete identification
- Areas of risk
  - Policies and procedures
  - Business processes
  - Supply chain
  - Distribution channels
  - Physical access and security
  - Personnel
  - Information and telecommunications technologies
  - Marketing
  - Customer interface

16

---

---

---

---

---

---

---

---

## Quantify Potential Losses

- Value fixed assets and inventories at replacement values rather than book value
- Include the cost of finding new customers
- Estimate cost of restoring a damaged reputation
- Examine effects on the value of equity (clearly easier for publicly traded companies)
- Validate valuations with case studies, insurers, bankers, and industry experts

17

---

---

---

---

---

---

---

---

## Assess Vulnerability

- For each threat determine its likelihood (probability of occurrence) and impact on the company
- Simple measures are adequate
  - Likelihood—high or low
  - Impact—high or low

Threat	Likelihood (high or low)	Impact (high or low)

18

---

---

---

---

---

---

---

---

## Identify and Evaluate Mitigations

	Impact	High	Low
Likelihood	High	Reduce	Manage
	Low	BC Plan	Accept

19

---

---

---

---

---

---

---

---

## Managing and Reducing Risk

- Manage Risk—(low impact, high likelihood threats) actions to monitor and reduce the probability of occurrence, e.g., procedures reducing operator error
- Reduce Risk—(high impact, high likelihood threats) actions to lower impact and decrease probability of occurrence, e.g., re-engineer process, outsource risk (includes insurance)

20

---

---

---

---

---

---

---

---

## Some Policy Considerations

- Distribution of workforce
  - Redundancy of operations in geographically dispersed areas
  - Facilitate “telework”
    - Infrastructure on server and client sides
    - Data security policies, procedures, and practices
- Document all jobs, responsibilities, and procedures

21

---

---

---

---

---

---

---

---



### 3M Facility/Country Pandemic Threat Level Matrix

Level 0 Awareness	Level 1 Cautionary	Level 2 Serious	Level 3 Severe	Level 4 Critical
- No documented cases of person-to-person transmission in-country	- Documented person to person transmission is rare in-country	- Limited documented person-to-person transmission (Small Cluster) in-country	- Evidence of widespread person-to-person spread in-country (Larger or multiple clusters identified in-country) AND - Limited person-to-person spread within city	- Increasing and sustained person-to-person transmission in-country AND - Multiple clusters of cases identified in 2 or more countries or regions

25

---

---

---

---

---

---

---

---

### My Pandemic Threat Level Matrix

Situation Analysis	Level 0 Awareness	Level 1 Cautionary	Level 2 Serious	Level 3 Severe	Level 4 Critical
Threshold definition	- No documented cases of person-to-person transmission in the USA	- Documented person to person transmission is rare in USA	- Limited documented person-to-person transmission in USA	- Evidence of widespread person-to-person spread in USA AND - Limited person-to-person spread within the Upper Midwest	- Increasing and sustained person-to-person transmission in USA AND - Multiple clusters of cases identified in the Upper Midwest
Policies to be implemented					

26

---

---

---

---

---

---

---

---

### Pandemic Influenza BCP – External Issues

- Actions of State Health Officials
- Actions of the Governor
- Actions of Local School Administrations

27

---

---

---

---

---

---

---

---

## Some Policy Considerations Concerning Pandemic Influenza

- Develop and communicate actions associated with each stage of pandemic threat
- Preventive efforts
  - Encourage annual flu shots for all employees, mandate for those who travel (consider subsidizing this action)
  - Establish rigorous handwashing procedure, promote with posters, fliers, and visual clues
  - Provide hand wipes in lobbies and meeting rooms
  - Encourage greetings without handshakes

28

---

---

---

---

---

---

---

---

## A Note About Testing Your Plan

- Train, train, train
- At-the-desk and board room exercises (known as tabletop exercises in preparedness jargon) are essential, but inadequate to fully test a BCP
- Full-scale exercises including loss of personnel and telework scenario components should be part of the test plan
- Use both scheduled and surprise test events

29

---

---

---

---

---

---

---

---

*Management means, in the last analysis, the substitution of thought for brawn and muscle, of knowledge for folkways and superstition, and of cooperation for force. It means the substitution of responsibility for obedience to rank, and of authority of performance for the authority of rank.*

Peter F. Drucker

30

---

---

---

---

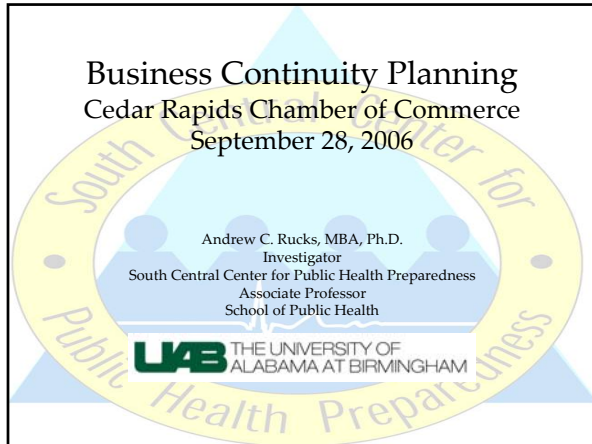
---

---

---

---

**Business Continuity Planning**  
Cedar Rapids Chamber of Commerce  
September 28, 2006



---

---

---

---

---

---

---

---