Modest Goal of Continuity Planning

We want to be able to do tomorrow what we were doing yesterday – no matter what happens today.
This is **NOT** the time to ask... “What do we do now?”

2008 – $15 million in damages to College of Pharmacy
   – Molecular Biology and Research Building Heating system breakdown
2009 – Steam Plant Lost Power – UIC and Rush Medical Center Power Outage
2011 – Chicago Blizzard – More than 300 health care workers volunteered to remain at the hospital during the blizzard
Gap is Widening

Current approach to academic continuity risk management

- Technology-based (Network outage)
- Terrorism
- Geopolitical
- Weather
- Health pandemics

Increasing Continuity Gap

Threats

Vulnerabilities
Key Terms in Preparedness Planning

Disaster Recovery
Technology Driven Response (Voice & Data Impact)
- Network Failure
- Physical Loss of Systems
- Sabotage
- Virus
- Data Confidentiality Compromised
- Etc.

Emergency Response
Event Driven Response (Site Impact)
- Contamination
- Bomb-threat
- Fire
- Earthquake
- Wind
- Etc.

Continuity Planning
Time Driven Response (Business, Image, $$ Impact)
- Infrastructure Disruptions
- Business Unit Disruptions
- Administrative Unit Disruptions
- Academic Unit Disruptions
- Hospital & Clinical Unit Disruptions
- Supply Chain Disruptions
- Etc.

Depending on event, you can have integration of all plans

Integration

Integration

Integration

Academic /Business Continuity

Emergency Response
How do all these different elements work together?

- **Normal Operations**
- **Incident Occurs**
  - **Recovery Time Objective**
  - **Return to Normal Operations**

**Capability**
- **Risk Acceptance**
- **Recovery** (Plan activation, strategy)
- **Prevention** (EOP, CMP, DRP, COOP, BCP)

**Proactive Risk Activities**
- Prevention and Preparedness

**Reactive Risk Activities**
- Response, Recovery & Restoration

**Crisis Management**
- Emergency Response
- Restoration Activities
- Transfer & Finance (Insurance)

**Return to Normal Operations**

**Minimum Acceptable Level of Capability**
A New Proactive View

- The old paradigm was Experience and React
  - Things happen, We react
  - The units and/or the campus is affected

- The new way of thinking must be to Anticipate and Adjust
  - Things still happen, but their effect is neutralized
  - The unit or campus see or feel no effect
Continuity Planning
Objective

- **Program Objective**
  - Improve the ability to maintain critical academic, business, public health, and medical care functions and resources during and after an emergency or major adverse event
    - Provide procedures and strategic capabilities to:
      - Ensure survivability of critical functions, processes, information, equipment, records, and other healthcare facility assets;
      - Specification of leadership succession;
      - Identification of emergency delegation of authority;
      - Identification of alternative modes of communications; staffing allocations; alternative recovery sites; and
      - Validation of the capabilities through regular testing, training and exercises.
Put in place **NOW** the things that will enable us to

- continue serving our constituents
- continue performing fundamental mission
- preserve our reputation/image
- maintain accreditation
- reduce our operation risk
- and minimize the duration of a serious disruption following a catastrophic event (*all-hazards approach*).
Continuity Planning

Why, What, Who, and How?

- **Best Practice Guidelines and Mandates**
  - Campus Security Enhancement Acts
  - Illinois Compiled Statutes – Campus Security Enhancement Act
  - U.S. Department of Education Sector Specific Plan
  - Disaster Mitigation Act & Stafford Act
  - Federal Continuity Directive 1 & 2
  - FEMA Continuity Guidance Circular on Continuity Guidance for Non-Federal Entities
  - Homeland Security Presidential Directives
  - National Incident Management System
  - National Fire Protection Association 1600
  - International Organization for Standardization (22301, 27001/2)
  - National Institute of Standards and Technology (800-34)
  - Joint Commission Environment of Care – Emergency Management Standards
  - Healthcare Facilities Accreditation Program
Continuity Planning
Why, What, Who, and How?

- **Continuity Plans**
  1. Identify and protect critical function
     - Ensure “Plan B” (sometimes Plan C, Plan D) for critical functions
  2. Preserve **Acceptable Level of Operations** in the event of any interruption
  3. Categorize **Action Items** to increase UIH and OCC resiliency and readiness

- **Scope**
  - Design plans addressing **Resumption, Recovery, and Restoration** for all campus units.

- **Applicability**
  - The plan should be applicable in the event that operations cannot be performed due to a disruptive event
Continuity Planning: Why, What, Who, and How?

**STRATEGIC PLANNING SCENARIOS**

- **President / Vice Presidents**
- **Chancellor**
- **Provost**
- **Vice Chancellors**
- **Deans**

**Top Down Approach**

**Understand Campus-Level Risk / Impact Priorities**

- **Analyze Action Items (countermeasures)**
- **Implement Mitigation Programs**

**Bottom Up Approach**

**Assess Risk / Impact at Functional-Level on Campus**

- **High Priority CRITICALITY SCREENING**
- **Department/Unit Level Self Assessments**

**Ongoing effort to:**
- Learn
- Evaluate
- Refine
- Evolve

**Managed by:**
- **Continuity Advisory Group**
- **IT-Disaster Recovery Advisory Group**
- **Crisis Management Advisory Group**
- **UIH & OCC Emergency Response Group**
Continuity Planning
Why, What, Who, and How?

Maintain results through auditing, exercising, maintenance and training. Support continuous improvement through constructive feedback.

Identify overall strategic objectives, values and activities; identify stakeholders, Campus and UIH/OCC processes, procedures, and services

Implement continuity plans in line with agreed strategies; embed framework within culture of UIC.

Analyze financial and non-financial impacts resulting from disruption of campus, hospital and OCC processes; identify critical processes; identify gaps in recovery capability; develop prioritized recovery timeline.

Develop appropriate levels of recovery strategies that provide practical, cost-effective solutions to close the gaps; develop organizational structure to implement the formulated strategic objectives and operating model to respond to major incidents.
Continuity Planning Impact Tolerance

- What are your primary concerns regarding the recovery capabilities ("96 hour rule") within your area following a significant adverse event on your unit?
  - Concerns where the campus or hospital may have significant exposure relative to such areas as:
    - Resource requirements (e.g. Facilities, Personnel, Equipment, IT, etc.)
    - Revenue streams
    - Critical processes (e.g. Teaching, Research, Public Service, Patient Care, etc.)
    - Third parties (e.g. Service providers to provide administrative and other support services)
    - From a human capital perspective
Criticality is a function of tolerance for downtime and data loss at time of disaster.

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**Function**
Determined by Senior Management

**Procedures**
Determined by Senior Management

**Resources**
- People
- Work area
- Computing
- Applications
- Data
- Vital records
- Vendors

**Dependencies**
Internal and External

**Tolerance for Downtime**
Recovery Time Objective

Tolerance for Data Loss
Recovery Point Objective

- 96hrs
- 72hrs
- 48hrs
- 24hrs
- 8hrs
UNIVERSITY OF ILLINOIS AT CHICAGO
University of Illinois Ready
Continuity Planning Tool
University of Illinois Ready

- Web-Based System ("Turbo-Tax" for continuity planning)
  - Adopted by all three campuses of the University of Illinois

- Step by step guide to create a Continuity Plans that identifies:
  - Critical Functions
  - Information and Strategies
  - Action Items

- Open Source Enterprise Software
  - Functional Buttons
  - Pull-Down Menus
  - Free-Form Entry Options
  - Hosted Application

- Offered by Kuali Foundation
  - Not-For-Profit University Consortium

- University of Illinois is a founding partner
  - Seat/Vote on Project Board
UI Ready Planning & Analysis

- Standardized methodology enabling data consistency

- 200+ expertly designed questions built into 7 interfaces

- Intelligent branching logic allows users to answer only the questions that are relevant to their operations

- Reporting flexibility provides standard and customized reports
Continuity Planning Tool
Service Delivery Locations

- High Availability & Scalability Architecture:

- **United States Site**
  - 2 dedicated VM servers with failover & load balancing
  - 2 database servers with failover
  - Active Site Failover

- **Canadian Site**
  - 1 VM Web Application Server
  - 1 Database Server
  - Active Site Failover
91 Subscribing Institutions
84 US, 5 Canada, 2 Australia
Readiness is an Ongoing Process

1. **Start Here**
   - University of Illinois Ready
   - A continuity planning tool for the University of Illinois to sustain our teaching, research, public service, and patient care.

2. **Create Plan**
   - Department of Biology
     - Continuity Plan
   - Continuity Plan Example:
     - What is a continuity plan?
     - Continuity Plan - An emergency plan to ensure the safety and well-being of the university community in the event of a disaster or emergency.

3. **Do Action Items**
   - Review Action Items
   - Annual Review / Exercise Session (Review Action Items)

4. **Revise Action Items**

5. **Constant State of Readiness**
Let's get started...  

Go to: **us.ready.kuali.org/uic**
Thank You!

“If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle”

- Sun Tzu