# Grand Rounds Series

## Pandemic Planning for Academic Institutions

<table>
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<th>Speaker</th>
<th>Sponsored by</th>
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In collaboration with the  
Association of Schools of Public Health (ASPH)  
All Centers accessible at  
www.asph.org/cphp |

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<tr>
<th>Call-In</th>
<th>Evaluation</th>
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| Phone: 800-452-0662  
Fax: 518-426-0696 | www.UAlbanyCPHP.org/evals  
Nursing Contact Hours,  
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## Learning Objectives

1. Identify a process and organizational structure for pandemic planning in academic institutions.
2. Examine strategies to develop an effective evaluation and review plan.
3. Explore new collaborations to strengthen on and off-campus relationships.

## Overview

| I. Definitions and Background |
| II. Academic Institutions as Communities |
| III. Planning Assumptions |
| IV. The Pandemic Planning Process |
| V. Evaluation and Next Steps |
| VI. ASPH/CDC Collaborative Group |
| VII. References and Resources |

## Definitions

**Pandemic Influenza** ("pan flu")
- A global outbreak of a novel influenza strain that spreads rapidly.

**Avian Influenza** ("bird flu")
- A respiratory illness caused by a virus, usually found only in birds.

**Seasonal Influenza** ("seasonal flu")
- A human respiratory illness caused by a virus, most common during winter months.

## Why plan?

Historically, three pandemics occur each century:
- 1918
- 1957
- 1968

We are overdue for a severe pandemic.

### Influenza Pandemics 20th Century

<table>
<thead>
<tr>
<th>Year</th>
<th>Strain</th>
<th>Deaths</th>
<th>US Deaths</th>
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<tbody>
<tr>
<td>1918</td>
<td>&quot;Spanish Flu&quot; A(H1N1)</td>
<td>20-40 m</td>
<td>675,000</td>
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<tr>
<td>1957</td>
<td>&quot;Asian Flu&quot; A(H2N2)</td>
<td>1-4 m</td>
<td>70,000</td>
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<tr>
<td>1968</td>
<td>&quot;Hong Kong Flu&quot; A(H3N2)</td>
<td>1-4 m</td>
<td>34,000</td>
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Credit: US National Museum of Health and Medicine

### Why plan?

H5N1 is a strain of *bird flu* being closely monitored:
- 2/29/08: WHO reported 368 cases, 234 deaths (63.5%)

The next pandemic may be caused by a completely different strain. Opinions vary widely.
Basic Student Needs During a Public Health Emergency

- Housing
- Food
- Safety
- Health care

Academic Institutions as Communities

The University of Iowa:
- “Urban” campus, rural state
- Nearly 30,000 students, 11,000 staff, 1,700 faculty
- Education, hospital, sports, cultural, research, public safety, commerce

Planning Assumptions For Moderate to Severe Pandemic:

- 35% ill, 15% require treatment, 2% mortality
- Well-matched vaccine may not be available for six months from outbreak
- Antivirals may be limited or ineffective
- Social distancing may limit transmission
- Significant social and economic disruptions
- Education and communications are critical
- In worst-case scenario, the University of Iowa community could expect 14,700 illnesses, 6,300 individuals requiring treatment and 840 may die.

University of Iowa Pandemic Influenza Planning

- Taskforce organized in January 2006 as an initiative of the Office of the Provost
- Draft plan submitted in June 2006
- Recharged by Office of the President
- Currently in third year of planning
- [https://www.uiowa.edu/~crisis/pandemic/index.html](https://www.uiowa.edu/~crisis/pandemic/index.html)
- [http://www.provost.uiowa.edu/work/pandemic.htm](http://www.provost.uiowa.edu/work/pandemic.htm)

UI FY 2007 Pandemic Influenza Task Force Organizational Chart
UI FY 2008 Pandemic Influenza Task Force Organizational Chart

Planning 2007 Tabletop Exercise

Facilitator: Dr. Paul Biddinger, Harvard SPH Center for Public Health Preparedness

• Simulation of a public health emergency on campus, testing Pandemic Plan
• 65 participants role-played through a fictional scenario

2007 Tabletop Exercise

• Prompted rapid decision-making
• National Incident Management System (NIMS) / Incident Command System (ICS), communications
• Coordination w/external organizations
• Ability to care for faculty, staff and students

2007 Tabletop Agenda

• Introduction, Objectives, Ground Rules (1+ hour)
• Exercise Play (1+ hour)
• Break and Lunch (1/2 hour)
• Hot Wash (1 hour)

First Lesson Learned

• Objectives not clear enough
• We under-allocated time
• Roles must be identified and understood

The Scenario

Day 1: Return from overseas spring break
  Student #1: classes, bar crawl, hospital
Day 2: Student #2 seeks medical attention
Day 5: Student #1 dies, influx of parents
Day 11: Hospitals full, 30% of students on campus
Evaluation
Preparedness Cycle: Planning, Training, Exercise, and Evaluation
Composing After-Action Report (AAR) and Improvement Plan (Next Steps)
  • Hot wash (immediately after exercise)
  • Evaluation forms (less than 50%)
  • Timeline for completion of goals

After-Action Report
What went well:
  • Care for students
  • Health care services

Areas for improvement:
  • Job Action Sheets (JAS) for NIMS/ICS
  • Communications (redundancies)

Improvement Plan
Progress Reports & Next Steps in University Pandemic Planning (June 2007)
  • Formalize NIMS/ICS
  • Increase internal & external coordination with partners
  • Begin recovery plans

Community & State-wide Partners
  • American Red Cross
  • Iowa City Government and Business leaders
  • Iowa Department of Public Health (IDPH)
  • Iowa Regents schools:
    • Iowa Braille and Sight Saving School
    • Iowa School for the Deaf
    • Iowa State University
    • University of Northern Iowa
  • Johnson County Public Health (JCPH)
  • Mercy Hospital, Iowa City
  • Veterans Affairs Medical Center (VAMC)
Planning for the 2008 Tabletop Homeland Security Exercise & Evaluation Program (HSEEP)

- National Exercise Program, 2-day training
- Focus on evaluation and scale
- Building block approach
- Identify recommendations, corrective actions, timeline for completion, next exercise to test for improvements
  - https://hseep.dhs.gov

Building Block Approach Training & Exercise Activities

Multi-year plan in which training and exercise activities focus on specific capabilities in a cycle of escalating complexity.

Discussion-based activities:
- Seminars
- Workshops
- Tabletops
- Games

Operations-based activities:
- Drills
- Functional Exercises
- Full-Scale Exercises

Choosing Objectives SMART Objectives

It is extremely difficult to write good objectives
- Cornerstone of design & development
- Provide a basis of measurement
- Five objectives recommended
- Avoid arbitrarily choosing weaknesses

Create SMART exercise objectives:
- Specific
- Measurable
- Achievable
- Realistic
- Time
The Good
Draft objective for 2008 exercise:
• Participants will activate and utilize an incident command structure within 24 hours of a declared emergency on the University of Iowa campus.

The Bad
Draft objective for 2008 exercise:
• The exercise will maintain a challenging pace for both advanced and beginner participants.
Better:
• Participants will identify their roles and responsibilities as outlined in the Pandemic Plan.

The Ugly
Objective from 2007 tabletop exercise:
• Meet basic needs (including but not limited to safety, healthcare, psychosocial, housing, and nutrition) of University of Iowa students who remain on campus during a pandemic.

Lessons Learned
1) Continuity of Operations
2) Alternate Care Facilities
3) Screening and Triage

Continuity of Operations
Define “essential” / “core” functions.
• Necessary to protect health and safety of community members and avoid irreparable damage to property.

Core Functions Specific to Higher Academic Institutions
• Human Resources
• Communications
• Information Technologies
• Facilities Management (heating/cooling)
• Public safety
• Health care Services
• Housing
Alternate Care Facilities

Facilities for students who require quarantine or isolation
- Not ill enough for hospital
- Mayflower Dormitory

Logistics issues:
- Staffing
- Food
- Communications

Screening and Triage

- Triage facilities will also serve as Points of Dispensing (PODs)
- Open to all county residents
- Working on protocol for hotline
- Logistics issues:
  - Staffing
  - Supplies

Tri-Hospital Collaborative Group

- University of Iowa Hospitals and Clinics (UIHC)
- Mercy Hospital, Iowa City
- Veterans Affairs Medical Center (VAMC)
- Local county health department
- State health department

Next Steps

1. Complete FY 2008 goals (charge)
2. Expand student involvement in pandemic planning
   - Public Health Emergency Student Volunteer Advance Registration System (UI-PHESVAR): secure, confidential database of potential student volunteers
### Next Steps

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<td>3.</td>
<td>Applicability to wide array of hazards</td>
</tr>
<tr>
<td>4.</td>
<td>Identify areas for continuing and ongoing refinement of plan</td>
</tr>
<tr>
<td>5.</td>
<td>Identify individuals for training</td>
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### Key Points

**Support from central administration is crucial**
- Embrace diversity
- Stay situationally aware
- Objectives drive the exercise

### Additional Resources

- **CDC Social Distancing Guidance:** [www.pandemicflu.gov/plan/community/community-mitigation.pdf](http://www.pandemicflu.gov/plan/community/community-mitigation.pdf)
- **Cough Etiquette Training Video:** [http://video.google.com/videoplay?docid=-8574515984907771637](http://video.google.com/videoplay?docid=-8574515984907771637)
- **NIH Pandemic Plan for Research Animals**
  - [oacu.od.nih.gov/disaster/PandemicReadiness.doc](http://oacu.od.nih.gov/disaster/PandemicReadiness.doc)
- **Public Health Incident Command System:** [http://www.uabanytmphp.org/pinata/phics/default.cfm](http://www.uabanytmphp.org/pinata/phics/default.cfm)
UAlbany CPHP Online Course:

Preparedness & Community Response to Pandemics

References

CDC, Pandemic Influenza Website: www.pandemicflu.gov
DHHS, Pandemic Plan: www.hhs.gov/pandemicflu/plan
Hospital Incident Command System: http://www.emsa.ca.gov/hics/hics.asp

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Evaluation

UAlbanyCPHP.org/evals

Nursing Contact Hours, CME & CHES Credits Available
UI FY 2008 Pandemic Influenza Task Force Organizational Chart

**Public Health Subcommittee**
- Disease Control
- Epidemiology
- Psychosocial
- Public Health Lab
- Surveillance
- Johnson County Public Health
- Iowa Department of Public Health

**Health Care Services Subcommittee**
- HHC Leaders
- Student Health
- Employee Health
- Screening, Influenza & Vaccination Sites

**Continuity of Operations Subcommittee (COOPS)**
- Collegiate Advisory Workgroup (CAW)
- Human Resources
- Information Technologies
- Facilities Management
- Finance & Contracts
- Office of Provost
- Public Safety

**Communications Subcommittee**
- University Relations
- Health Aed Networks
- UHCP Communications
- University Hygienic Lab
- External
Planning for the 2008 Tabletop

***DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT***
University of Iowa Pandemic Influenza Planning Task Force
NIMS/ICS Organizational Chart: Public Health Emergency

This model is a modification of several found within http://www.albanyiphp.org/pmartaphc/masters/PHIC3_vol1_2006_Oct_27.pdf applying guidance from ICS-100 and ICS-700 courses developed by FEMA.