

**The State of Pandemic Influenza Planning in Ontario Acute Care Hospitals**  
**Dr. Dick Zoutman, Queen's University**  
**Sponsored by Virox Technologies Inc. ([www.virox.com](http://www.virox.com))**

**THE STATE OF PANDEMIC  
INFLUENZA PLANNING IN  
ONTARIO ACUTE CARE  
HOSPITALS: THE NEED FOR A  
PANDEMIC PREPAREDNESS  
LEARNING PORTAL**

**DE ZOUTMAN MD, FRCPC  
QUEEN'S UNIVERSITY**

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**ARE WE READY YET?**

- In the post SARS era, the United States General Accounting Office (GAO) conducted a survey of hospital preparedness for emerging infectious disease threats in the United States.
- 556 hospitals in 47 states completed a survey on their preparedness. It was found that many hospitals had SARS plans, but very few had coordinated them with other facilities or jurisdictions, an initiative which is required for effective implementation.
- Infection Control and certain specialty services were limited, particularly in small and rural hospitals.

**DOCTOR KNOWS BEST?**

- A recent poll released December 9, 2005, conducted by Environics Communications on behalf of the College of Family Physicians of Canada demonstrated that a majority of Canadians felt that when faced with a pandemic of influenza or other disaster, it was very important to be able to turn to their primary care family physician

**OR DO THEY?**

- However, in a separate survey conducted concurrently, only 20% of family doctors felt that they had the supports in place to handle such an emergency.

**ASSOCIATION OF STATE  
HEALTH OFFICIALS**

- The association of state and territorial health officials in the United States in November 2005 undertook a survey of states
- Of the 49 states, territories or districts surveyed, only a minority had plans in place for antiviral stockpiling, and over one third of states did not have a prioritization scheme for distributing antivirals

**WHO'S IN CHARGE?**

- 29% of responding states had not named a pandemic influenza coordinator.
- Most states had not attempted to quantify the personal or fiscal resources necessary for an effective state-wide response to an outbreak or pandemic of influenza.

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**P5: PURPOSE**

- Pandemic Preparedness Planning Portal Project

 **P5**

- The purpose of this project is to develop a training and preparation framework for managing severe respiratory illness such as pandemic influenza for hospitals in Ontario.

**P5: OBJECTIVES**

- to develop a comprehensive learning portal complete with educational material templates and assistive materials to permit hospitals to plan effectively for a pandemic of severe respiratory illness

**AUDIENCE**

- The proposed audience for the severe respiratory illness pandemic learning portal includes both frontline healthcare workers who will be providing services during a pandemic
- the managers and clinical leaders who are charged with preparing for an unknown pandemic
- In particular we will be sure to pay close attention to the needs of smaller and rural hospitals that have unique challenges in planning for a pandemic.

**DELIVERY METHOD**

- The educational delivery will be visual as well as interactive and will also include audio and full motion video.
- This mixture and blending of multi-medial methodologies will allow for a rich multimedia experience that will facilitate understanding retention in application of the information provided.

**COMPUTER BASED EDUCATION**

- Curran and Fleet evaluated the peer reviewed literature of evaluative outcomes of web based continuing professional development.
- They examined 31 studies, including 25 which evaluated the satisfaction of the learners, 16 which examined learning outcomes and two that assessed changes in clinicians' practices.

**COMPUTER & WEB BASED EDUCATION**

- users found web based education enjoyable and highly satisfactory, that there were proven improvements in knowledge attitudes and skills domains, and that practice changes were associated with web based learning

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## CRITERIA FOR QUALITY

- Over-all there are seven criteria that can be used to assist the quality of web based training programs:
  - objectives that are reported to the trainees;
  - meaningful content to those undertaking the training;
  - provision of learning aids;
  - opportunity to practice what is being learned;
  - adequate feedback;
  - the capacity to interact with other trainees;
  - and efficient coordination and arrangements.
- Noe and Colquitt, 2005

## P5 NEEDS ASSESSMENT

- We conducted a needs assessment of Ontario hospitals to assess their state of preparedness for a severe respiratory illness pandemic:
  - Surveillance capacity, facility, local and regional
  - Infection Control and personal protective equipment procedures
  - Communications, pathways and protocols, both internal and external
  - Education, training and practice exercises for a pandemic
  - Patient triage and controlling facility access
  - Occupational Health and vaccination protocols
  - Accessibility, distribution and availability of supplies (eg antivirals or other antimicrobial agents, protective equipment etc)

## P5 NEEDS ASSESSMENT

- Human Resources and plans for surge capacity
- The control of hospital operations for elective and urgent care
- Planning for alternate care sites and mortuary facilities
- Emergency Services
- Critical Care Services
- Plans to provide services and assistance to facility staff
- Unique requirements and challenges of smaller and rural hospitals

## PROVINCIAL NEEDS ASSESSMENT PURPOSE

- The purpose of this study was to determine the state of pandemic influenza planning in acute care hospitals in Ontario.
- The findings will aid in designing a web portal to help hospitals plan effectively for future pandemics of severe respiratory infections such as influenza.

## METHODS

- A comprehensive survey was sent in early 2007 to all acute care hospitals in Ontario.
- Respondents had the option of completing the survey on-line
- The survey was completed by the person most responsible for the hospital's pandemic influenza plan.

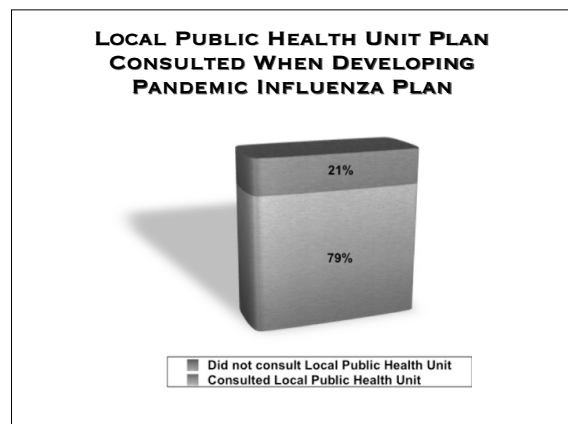
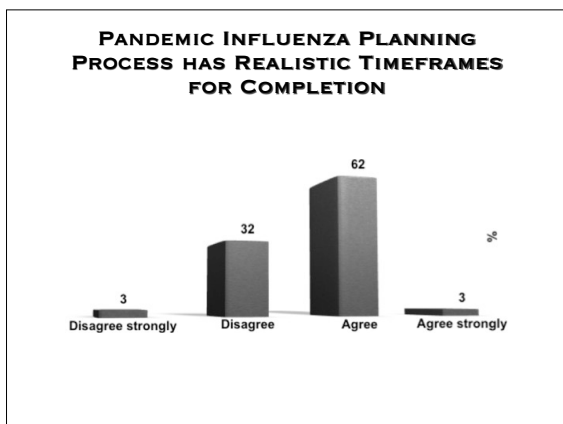
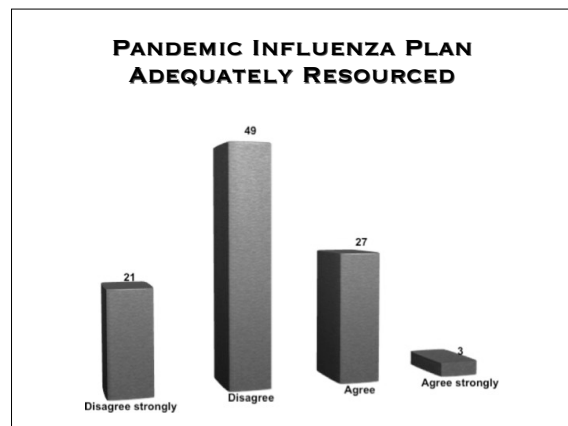
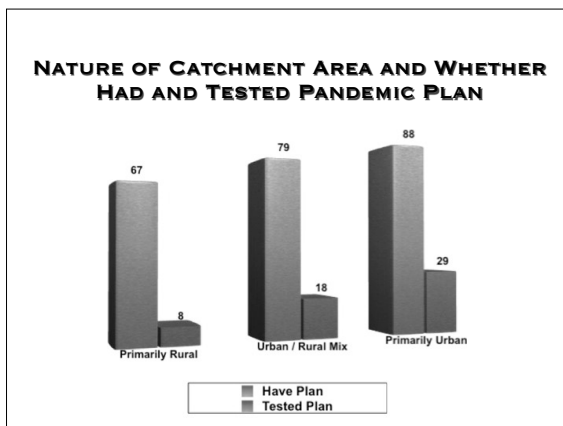
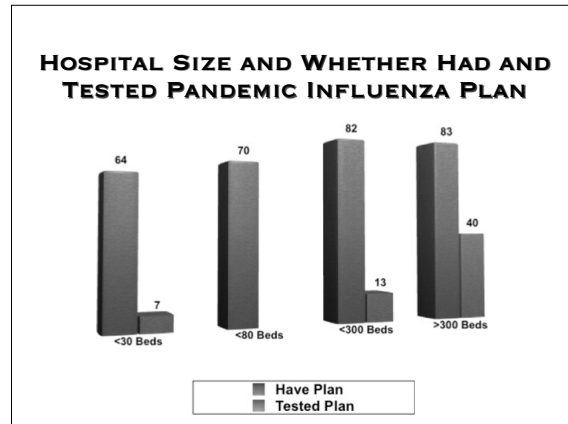
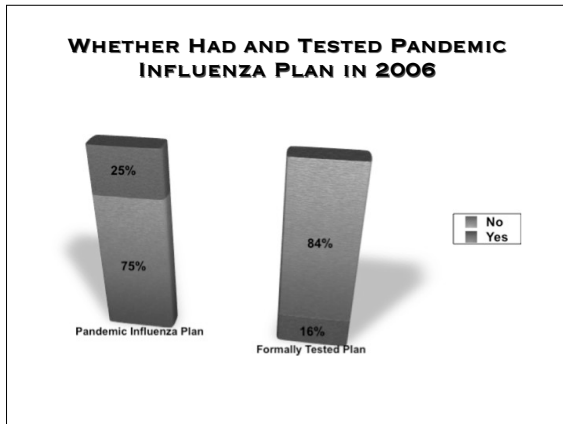
## RESPONSE RATE

- 77%, 97 of the 126 acute care hospitals in Ontario completed the survey
- 87%, 84 of 97 respondents chose to complete the survey online

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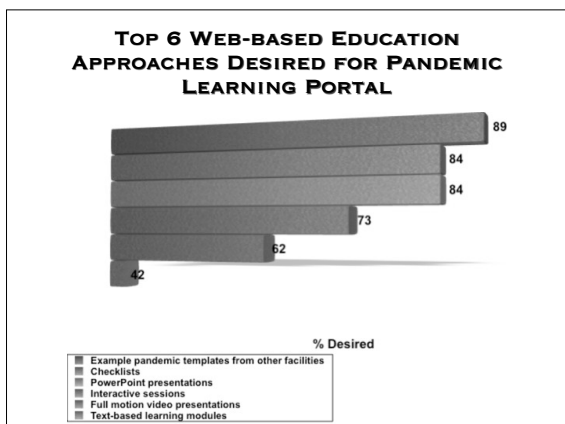
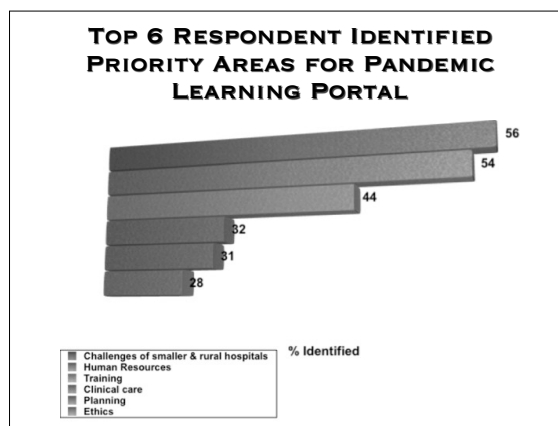
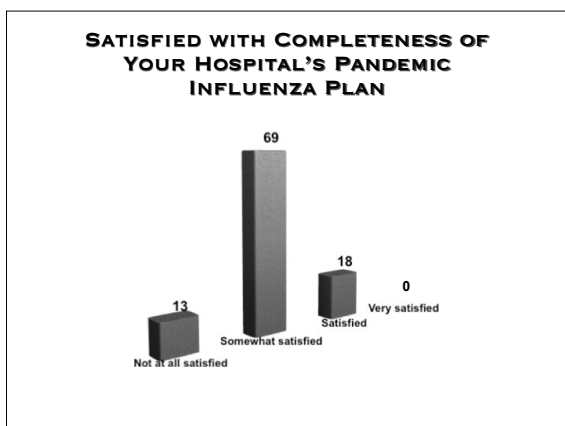
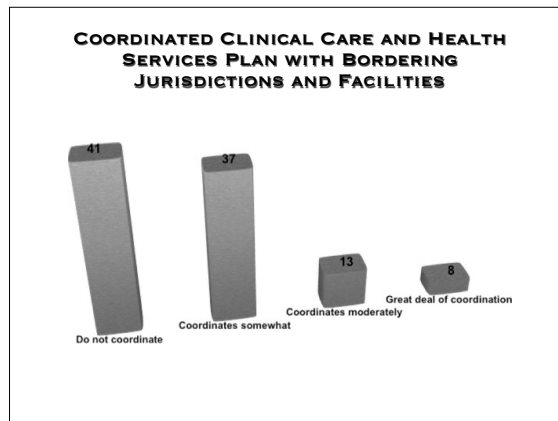
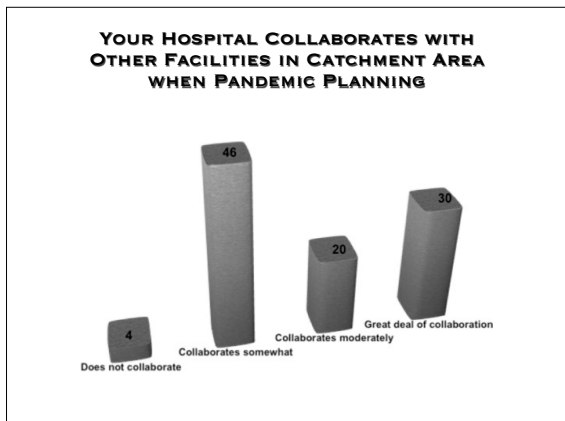
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### CONCLUSIONS: PANDEMIC PLANS

- Three-quarters of hospitals have plans
- All Teaching hospitals have plans, but only 63% of Small hospitals have plans
- Over 90% of hospitals in GTA and East OHA Regions and ~ 70% of hospitals in the North, South West, and Central West regions have plans
- Only 2/3's of Rural hospitals have plans

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## CONCLUSIONS: TESTING PLANS

- Only 16% of hospitals with pandemic plans have tested them
- 40% of Teaching hospitals have tested their plans while only 5% of Small hospitals have
- Only ~10% of North and South West region hospitals have tested their plans
- While 29% of Urban hospitals have tested their plans, only 8% of Rural have

## CONCLUSIONS: COOPERATION WITH OTHER ORGANIZATIONS

- 80% of hospitals consulted local public health units when developing pandemic plans
- Only half have collaborated moderately or a great deal with other facilities in their catchment area when planning
- Only 21% have coordinated clinical care and health services with bordering jurisdictions and facilities

## CONCLUSIONS: RESOURCES AND SATISFACTION

- The majority of hospitals thought the pandemic planning process was underfunded
- 65% agreed that timeframes for completion of their plans were realistic
- Only 18% of respondents were satisfied with their hospital's plan and none were "very satisfied"

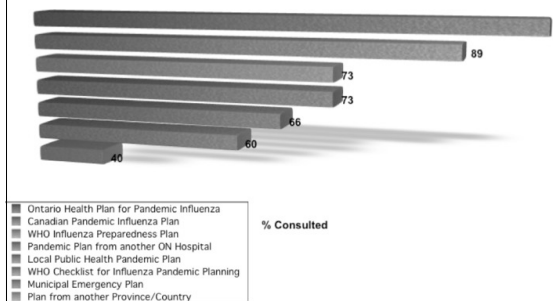
## CONCLUSIONS: GENERAL

- The survey results support the need for a comprehensive program to help hospitals, especially small and rural hospitals, develop and test pandemic influenza plans

## THE CONTENT OF PANDEMIC INFLUENZA PLANS IN ONTARIO ACUTE CARE HOSPITALS: IMPLICATIONS FOR A PANDEMIC INFLUENZA PLANNING PORTAL

DE ZOUTMAN, BD FORD,  
M MELINYSHYN, B SCHWARTZ,  
& C GUNN  
QUEEN'S UNIVERSITY

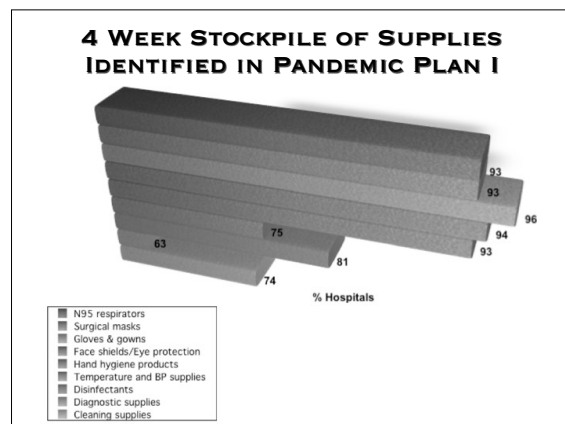
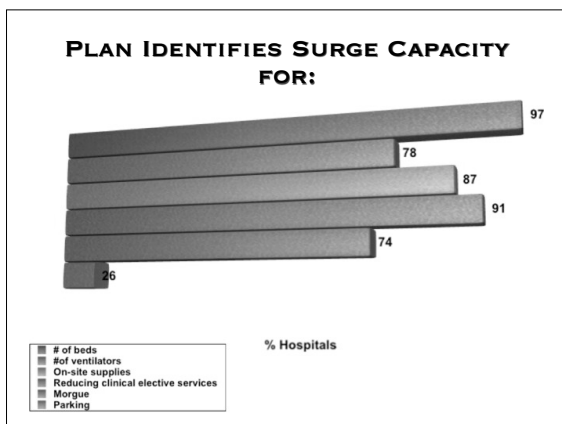
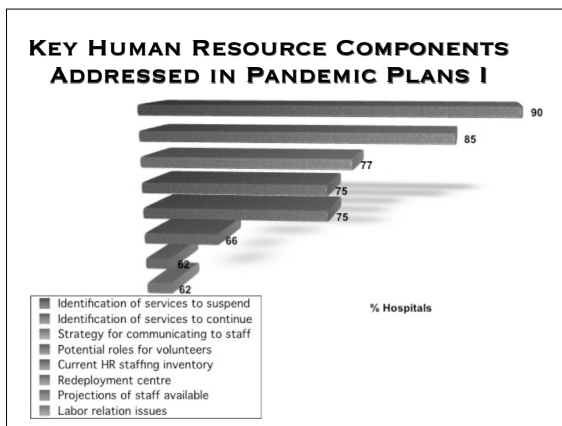
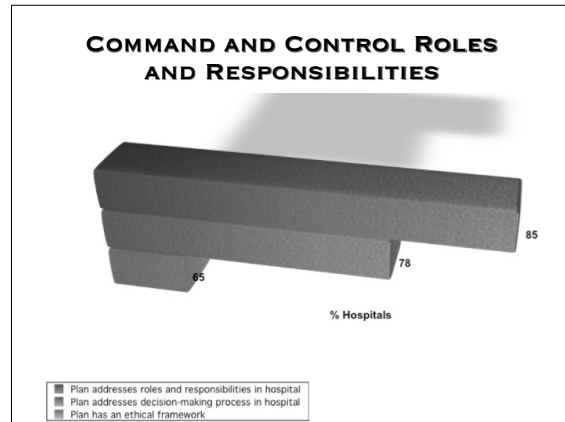
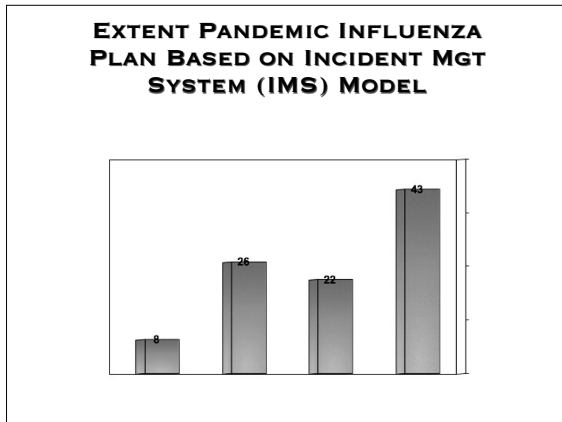
## DOCUMENTS CONSULTED IN DEVELOPING PANDEMIC INFLUENZA PLAN



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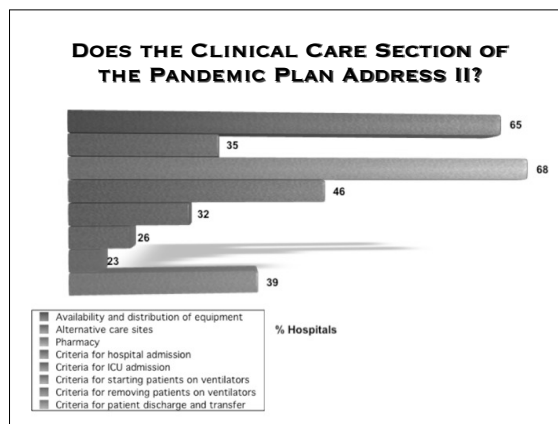
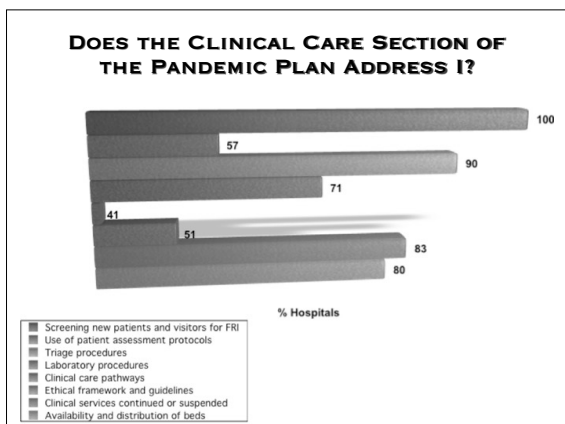
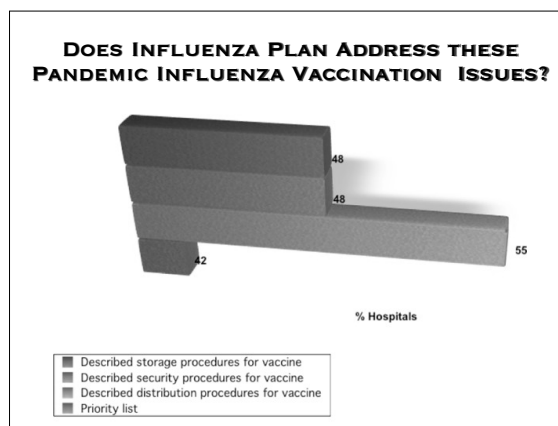
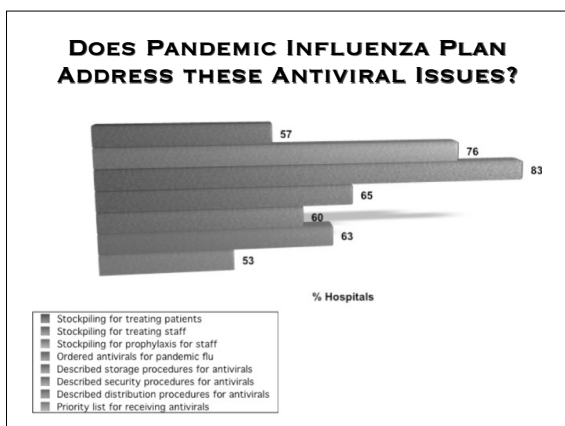
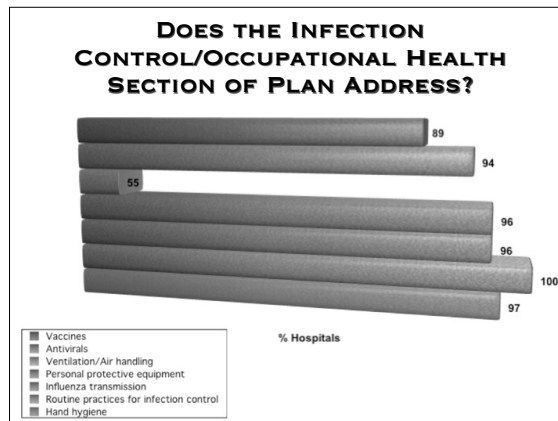
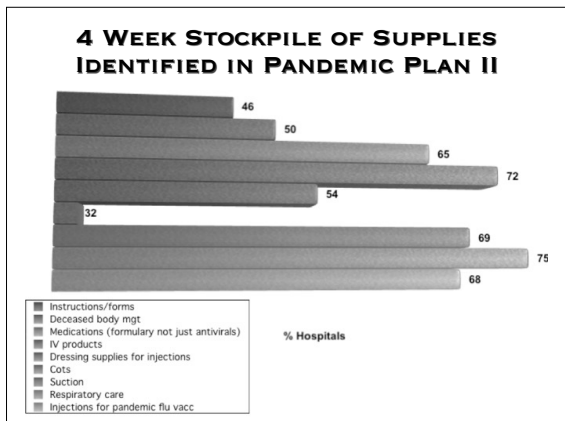
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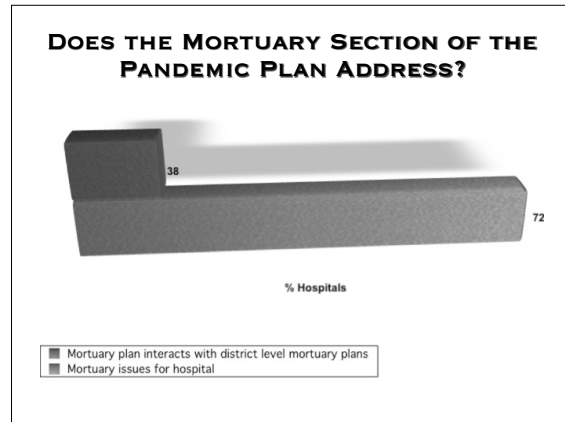
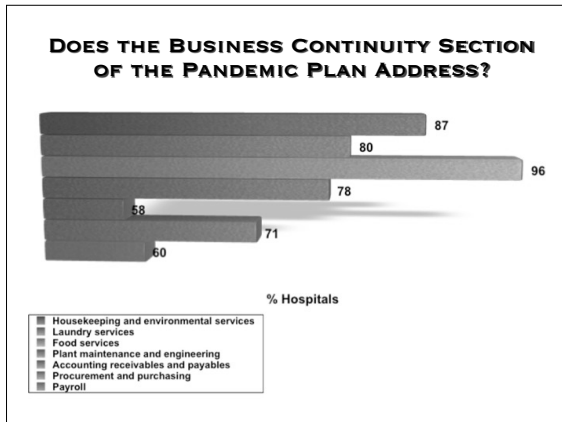


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**CONCLUSIONS: CONTENT OF PLANS**

- The Ontario Health Plan for Pandemic Influenza was used by almost all hospitals in developing their plan
- The Canadian Pandemic Influenza Plan was used by 89% of hospitals as a resource
- 2/3's of pandemic plans were moderately or extensively based on the Incident Mgt System (IMS) Model

**CONCLUSIONS: KEY SHORTFALLS**

- The vast majority of the pandemic influenza plans of acute care hospitals in Ontario had shortfalls in many key areas
- Only 65% of plans had an ethical framework
- Only 58% of hospitals used their web site to communicate their plan to staff
- Only 36% of plans addressed the staffing of alternative care sites

**CONCLUSIONS: KEY SHORTFALLS II**

- Only a quarter of hospitals identified surge capacity for parking
- Only a third of plans deal with the stockpiling of cots
- Only 55% address ventilation / air handling in the Infection Control/Occupational Health section of their pandemic plan
- Only 53% of plans have a priority list for receiving antivirals and only 40% address priority issues for pandemic influenza vaccines

**CONCLUSIONS: KEY SHORTFALLS III**

- The use of patient assessment protocols is only in 57% of the Clinical Care section of plans
- Only a quarter of plans address the starting and removing of patients on ventilators
- Only half of plans deal with patient transportation within the hospital

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## GENERAL CONCLUSION

- The vast majority of the pandemic influenza plans of acute care hospitals in Ontario had shortfalls in key areas.

## PANDEMICPORTAL.CA

- A web-based educational initiative, the "Being Prepared is Being Protected Pandemic Learning Portal Project", is currently being developed by the authors to address these shortfalls and will assist hospitals to plan effectively for future pandemics.



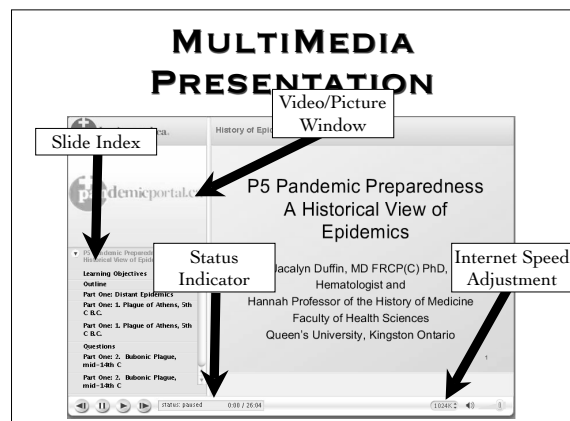
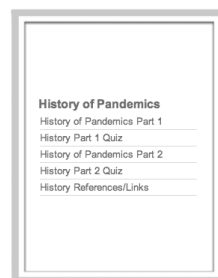
## 15 CHAPTERS IN P5

- Introduction
- Preparedness Assessment of Ontario Hospitals
- History of Pandemics
- Ethics
- Overview of Planning Principles
- Assessment Centres
- Ontario Emergency Management Unit
- OHA Small, Rural & Northern Hospital Toolkit
- Pandemic Exercise
- Equipment and Supplies
- Clinical Care
- Incident Management System
- Public Health
- Public Health Agency of Canada
- World Health Organization
- Occupational Health and Infection Control Links
- Evaluation

Introduction  
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OHA Small, Rural & Northern Hospital Toolkit  
Pandemic Exercise  
Equipment and Supplies

## CHAPTER MENUS

- Each chapter has three parts:
  - Presentation
  - Quiz
  - References & links
- Some have 2 of each



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**REFERENCES & LINKS**

- General History Bibliography
- Arrizabalaga, Jon, John Henderson, and Roger French. *The great pox : the French disease in Renaissance Europe*. New Haven : Yale University Press, c1997.
- Boccaccio, Giovanni. *The Decameron*, trans. G.H. McWilliam., 2nd ed. London; New York: Penguin Books, 1995. (Introduction on plague)
- Brudney K, Dobkin J. Resurgent tuberculosis in New York City: human immunodeficiency virus, homelessness, and the decline of tuberculosis control programs. *Am Rev Respir Dis* 1991;144:745-9.

**USEFUL LINKS**

- Ethics Chapter References: (Dr. Upshur and others)
- Joint Centre for Bioethics Report titled "Stand on Guard for Thee" at: [www.utoronto.ca/jcb/home/news\\_pandemic.htm](http://www.utoronto.ca/jcb/home/news_pandemic.htm)
- Ontario Pandemic Plan at: [www.health.gov.on.ca/english/providers/program/emu/pan\\_flu\\_plan.html](http://www.health.gov.on.ca/english/providers/program/emu/pan_flu_plan.html)

**USER SURVEY**

0% completed

Instructions: Click on the "Continue" button to go to the next question.

1. How many of the chapters in the PandemicPortal.ca did you complete?

None  
 Less than half  
 Half  
 More than half  
 All

**P5 TEAM**

- Matt Melinyshyn, Project Manager
- Brian Schwartz, Co-Investigator
- Doug Ford, Project Consultant
- Callie Gunn, Media Technician
- Dave Lawrence, OSM Networks
- Dick Zoutman, Principle Investigator

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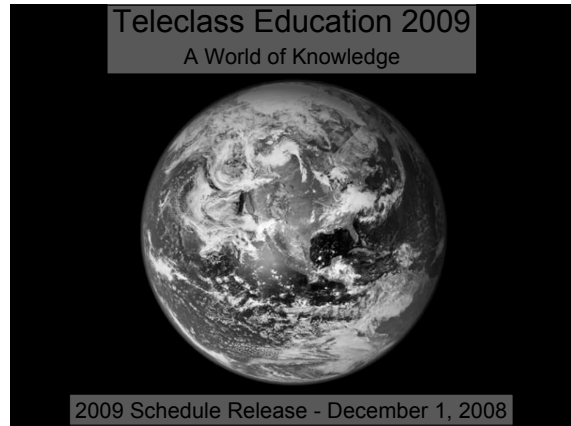
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- Pat Piaskowski
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