

Comparison of Infectious Disease Outbreak Preparedness at Two Hospitals: Split, Croatia and Milwaukee, WI, USA

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Introduction

- Threats to public health are faced by countries worldwide in broad and diverse ways
- All countries are strongly encouraged to strengthen their capabilities for general emergency risk management by incorporating measures for prevention, mitigation, preparedness, response, and recovery¹
- Recent pandemics like the resurgence of Ebola, H7N9 Influenza, and Zika virus are reminders that infectious diseases bring dangers that are immediate and many healthcare systems are underprepared^{2,3}
- It is essential that individual hospitals are prepared for infectious disease outbreaks
- The World Health Organization (WHO) and the U.S. Centers for Disease Control and Prevention (CDC) provide key stakeholders tools to improve health outcomes for people at risk of emergencies and disasters^{1,4}

Study Aims

- Complete public health surveys on infectious disease outbreak preparedness at a hospital in Split, Croatia, and a hospital in Milwaukee, WI, USA
- Compare the hospitals' infectious disease outbreak preparedness

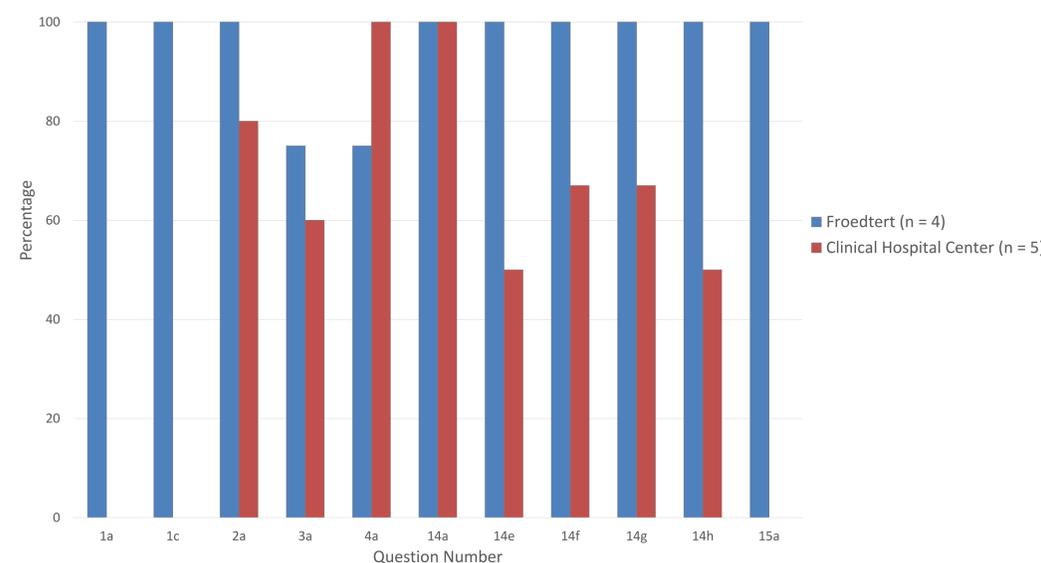
Methods

- Institutional Review Board approval was obtained by the Medical College of Wisconsin and ethics approval from Split University Hospital
- The U.S. Centers for Disease Control and Prevention's "Public Health Survey: Infectious Disease Outbreak Preparedness" evidence-based tool was utilized, and was adapted for use in Croatia⁴
- From June to July 2017, key personnel at Clinical Hospital Center (Split) were identified, surveys were distributed, and responses were collected through in-person interviews
- From August to September 2017, key personnel at Froedtert Hospital (Milwaukee) were identified, surveys were distributed, and responses were collected through in-person interviews

Results

Key Selected Survey Questions Used in Comparison	
1a	Has your facility conducted a hazard vulnerability analysis to identify potential emergencies and the resulting effects on your ability to provide services?
1c	Does your facility have a written, all-hazards disaster or emergency operations plan? (item "critical" to all-hazards planning)
2a	Have you identified a location for your facility's disaster control command center? Ideally, this area is away from the emergency department (ED)
3a	Does the plan specify who are to assume key roles and when they are to do so, if the appointed individuals are not able to perform their responsibilities?
4a	Can the plan be fully activated in one to two hours, both during and outside normal business hours?
14a	Does the plan require healthcare personnel to use, at a minimum, standard precautions and droplet precautions with patients symptomatic with a communicable disease?
14e	Does the plan include regularly monitoring accepted websites for updates/revisions to infection control recommendations and implementation of these recommendations?
14f	Does the plan address cohorting patients with known or suspected communicable diseases?
14g	Does the the plan include strategies for identifying and tracking contacts of people infected with communicable diseases?
14h	Are infectious disease notification procedures in place 24 hours a day and 7 days a week?
15a	Does your facility have ongoing disaster training and education programs?

Percentage of "Yes" Responses to Survey Questions



Conclusion

- Threats posed by a large-scale infectious disease outbreak are vast, high-impact, and require system-wide prepared, practiced responses
- This study suggests that ensuring adequate infectious disease outbreak readiness across all staff and departments is a common challenge for two hospitals in different countries
- Although respondents at the Split, Croatia hospital report the hospital is well prepared to respond to an infectious disease emergency, several indicated that an absence of a fully developed, written protocol results in gaps in staff knowledge and suboptimal plan execution
- The Milwaukee hospital has a formal written policy and established protocols, and is generally well prepared to respond to an infectious disease outbreak., though survey responses indicate that there may be variability of how well the plans are understood across levels and departments
- Per WHO, CDC recommendations, all hospitals should have a written protocol for infectious disease outbreaks and other disasters, followed by a training program to ensure appropriate knowledge and skills are disseminated throughout the organization

Next Steps

- Continue interviewing key leaders in Milwaukee and Croatia to better assess the depth of awareness regarding disaster preparedness among different levels of hospital staff and departments
- Evaluate differences between Croatian and U.S. cultures and whether any such differences dictate the ways in which each hospital prepare for disasters
- Disseminate study results participating hospitals/survey respondents

Acknowledgments

Dr. Elaine Kohler Summer Academy of Global Health Research and the Medical College of Wisconsin Office of Global Health, University of Split School of Medicine

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