To reduce the risk and spread of healthcare-acquired infections.

Fundamental to quality and safety in health care.

Does the context matter?

Hospital-based traditions...

Healthcare-associated infection...

Hospital vs. Community-acquired...

The challenges of where...

What's different about emergency care?

What do this mean for infection prevention and control, managing infection, and communicable diseases?

Time

Numbers of patients

Acuity of patients

Poor predictability

“Rubber walls”

Uncertainty

Limited previous assessment/treatment/diagnosis

Always coming in and never going out

Ambulance Ramping, Access Block, Overcrowding

Communication challenges and difficulties

Expectations

Disasters

Events within the hospital

Variable settings and resources

Open all hours

And so on...

1890   H2N?

1900   H3N8

1918   H1N1 (Spanish Flu)

1957   H2N2 (Asian Flu)

1968   H3N2 (Hong Kong Flu)

1977   H3N2 H1N1 (Russian Flu)

1997   H5N1 (Avian Flu)

2009   H1N1 (Swine Flu)

What was different about H1N1 2009?

Emergency Departments had a primary public health response...
9 May 2009
Australia’s first Pandemic (H1N1) 2009 Influenza case (Qld)

21 May 2009
• more cases emerged in Victoria and NSW

22 May 2009
• first confirmed case in SA
• pandemic alert level escalated to CONTAIN

25 May 2009
• first confirmed case in WA

31 May 2009
• first confirmed case in NT
• all Australian states and territories had confirmed cases

Background... Australia

• 9 May 2009
  • Australia’s first Pandemic (H1N1) 2009 Influenza case (Qld)
• 21 May 2009
  • more cases emerged in Victoria and NSW
• 22 May 2009
  • first confirmed case in SA
  • pandemic alert level escalated to CONTAIN
• 25 May 2009
  • first confirmed case in WA
• 31 May 2009
  • first confirmed case in NT
  • all Australian states and territories had confirmed cases

Background

• EDs are at the forefront of Australia’s health disaster response
  • immediate patient care
  • system-wide patient facilitation
• Pandemic (H1N1) 2009 Influenza presented Australian EDs with
  • challenges relating to diversity of roles in disease containment & management
  • opportunity to describe the extended clinical impact of pandemic disease
• Major impact of ED function...

Aims

• to describe the impact and clinical profile (including severity) of patients presenting to Australian EDs with influenza-like-illness (ILI) during the 2009 (H1N1) Influenza Pandemic
To describe:
- number & clinical profile of patients that presented to Australian EDs with ILI over the period April-August 2009 including their outcome
- management of patients presenting with ILI in Australian EDs
- the impact of the outbreak on EDs
  - special precautions required
  - changes to operational practices
  - staff support & protection
  - impact of staff absenteeism

Method...
Part A:
- National survey of Directors of Emergency Medicine of teaching hospitals across Australia
  - Poor response rate = insufficient data
Part B:
- national survey of Australian emergency nurses and physicians via the membership
  - College of Emergency Nursing Australasia
  - Australian College for Emergency Medicine
  - Australian College of Emergency Nursing
  - Response rate = 18.4% [Fellows: 19.3%, Trainees: 17.6% & Nurses: 18.7%]

Participant characteristics
- age = 38 (Mdn)
- yrs of experience = 12 (Mdn)
- yrs ED experience = 8 yrs (Mdn)
- hrs of work per week = 37 hrs (Mdn)
- 66% medical staff (M:F = 64%: 36%)
- 33% nursing staff (M:F = 17%: 83%)
- all states and territories represented
- employment
  - 78% - hospitals in capital cities
  - 18% - major regional hospitals
  - 93% - public hospitals

Participant characteristics - Nurses
1. Designation
   - 22% RNs
   - 42% senior clinical nurse
     - CNS, clinical facilitator, CNE
   - 20% nursing management
     - NUM, CNC, clinical nurse manager
   - 7% nurse researchers
   - 7% nurse practitioners
2. Qualifications
   - 54% Graduate Certificate / Graduate Diploma
   - 26% Master’s degree
   - 1% Doctoral degree

ED preparedness         ED demand            Impact on other ED pts
Worried well             Moderately unwell        Critically ill

Results – Perceptions illness severity
- Worried well
- Moderately unwell
- Critically ill

Hosted by Jane Barnett  jane@webbertraining.com
www.webbertraining.com
Pandemics, Public Health & Emergency Care: Contemporary Trends and New Challenges in Infection Control and Infectious Diseases
Prof. Ramon Shaban, Griffith University, Australia
A Webber Training Teleclass

Hosted by Jane Barnett  jane@webbertraining.com
www.webbertraining.com
Personal illness with H1N1 influenza
Exposing family to H1N1 influenza

Personal Influenza-like illness
Underwent testing

Days off for personal illness
Days off to care for others

H1N1 influenza is a ‘health emergency’
Should EDs take responsibility for managing H1N1

Lessons and Recommendations
1. There is a need for a single authoritative source of information that is well regarded. Consistent, timely, accurate messaging required to avoid confusion, which is more likely to cause injury to patients and adversely impact ED staff.

2. Information should be provided in an organised and consistent format, regardless of the means of distribution. Multiple means are necessary, but a consistent message is vital. A simplified ‘state-of-the-art’ summary re-issued regularly, and published in juxtaposition with only the more recent updates will promote communication for during pandemics.

3. There is a need for active engagement and collaboration with the media and for clinicians to aid this process by disciplined approaches. Appropriate communication strategies are needed that reflect local engagement. However, this process must also take cognisance of the need for consistent information.
Lessons and Recommendations

4. Standardised clinical approaches are critical. Guidelines need to be issued, and in the case of Pandemic (H1N1) 2009 Influenza were found to be very useful. Standardised approaches to triage are necessary to ensure consistency in assessment. EDs need to review their management of infectious patients. Guidelines for managing infectious patients in EDs should be reviewed and include managing infectious patients in a pandemic.

5. Policies regarding the establishment of flu clinics should be in place and strategies determined for rapid implementation when an outbreak occurs. All services, including pre-hospital services, should be engaged in the development and approval of these policies and strategies.

6. ED design reviewed to determine how to better accommodate infectious patients during a pandemic and on an every-day basis.

7. ED infection control procedures and the related behaviours of ED staff in both normal and emergency situations must be reviewed.

8. There is a need to address a range of occupational health and safety issues including leave, immunisation, infection control, and entitlements to compensation.

9. Clinical supplies required during a pandemic must be identified, and strategies designed to ensure access and availability. These include embedded stockpiles and dedicated stockpiles.

10. Standard policies for PPE and antiviral agents must be developed consistently applied.

11. Strategies to create surge capacity within EDs for staff, equipment, physical space and stores need to be identified.

12. Peer and local support strategies should be developed to ensure staff feel their needs are provided for, thereby creating resilience, dependency, and stability in the ED workforce. These strategies also need to identify mechanisms for peer support and need to address staff resilience and psychological first aid.

13. Planning frameworks should be reviewed to clarify the relationship between pandemic plans and disaster plans.

14. There is a need to recognise that EDs have limited capacity as indicated by Ambulance Ramping and Access Block. Tailoring of their role during pandemics for the reality of service delivery must occur.
### COMING SOON

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Speaker/Location</th>
<th>Sponsor/Website</th>
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<tbody>
<tr>
<td>21 June</td>
<td>Establishing an Infection Control Program for Acute Respiratory Infections and Ensuring Pandemic Preparation</td>
<td>Prof. Wing Hong Seto, Queen Mary Hospital, Hong Kong</td>
<td>World Health Organization First Global Patient Safety Challenge: Clean Care is Safer Care (<a href="http://www.who.int/gpsc/en">www.who.int/gpsc/en</a>)</td>
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<tr>
<td>23 June</td>
<td>Ventilator-Associated Pneumonia: Epidemiology, Diagnosis, and Prevention</td>
<td>Dr. Lennox Archibald, University of Florida</td>
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<td>29 June</td>
<td>Opening Ceremonies &amp; Keynote Lectures</td>
<td>Prof. Didier Pittet, Sir Liam Donaldson, World Health Organization</td>
<td>Virox Technologies Inc (<a href="http://www.virox.com">www.virox.com</a>)</td>
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<tr>
<td>14 July</td>
<td>Climate Change and Infectious Diseases</td>
<td>Prof. Andrew Nichols, University of Plymouth, UK</td>
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