

Effective influenza prevention and control strategies: Time to get serious about a culture of safety in health care

Health services that are grounded in a culture of safety are proven to result in better patient care and outcomes. Together, it is the role of governments, employers, employees, and all organizations representing providers to work to achieve healthy and safe health care environments. A culture of safety must be an enduring focus and cannot simply arise in times of crisis. It must be nurtured in such a way that it guides everyday operations through sufficient funding, delivery and management of health care services.

Effective infection control strategies are essential to achieving an overall culture of safety that must govern health services in Canada. In light of efforts to prevent and control the spread of global infectious diseases such as influenza, it is critical that we do everything we can to ensure that the care we provide is embedded in principles of Occupational Health and Safety and anchored in three key elements:

- The Precautionary Principle
- o Internal Responsibility Systems
- Hierarchy of controls

These principles are explained in more detail below as they are applied to influenza prevention and control strategies:

1) The **Precautionary Principle** has been enshrined in various acts, labour codes, and laws in Canada and abroad.

Applying a precautionary approach means:

 Safety comes first: reasonable efforts to reduce risk should not await full scientific certainty.¹

2) Successful Internal Responsibility Systems require:

- A top-down, demonstrated commitment to occupational health and safety law and principles (establishing, maintaining, collaborating and complying)
- Widespread training in occupational health and safety law and principles, hazards and protections
- Consultation and involvement of consensus-based Joint Health and Safety Committees

http://www.ontla.on.ca/library/repository/mon/16000/268478.pdf

¹ As defined in the SARS Commission (Executive Summary) by the Honourable Mr. Justice Archie Campbell. (2006). Accessible at:

- Effective two-way communication enhanced by tracking and reporting mechanisms (e.g., hazard reporting forms, professional responsibility forms)
- 3) A hierarchy of controls must be established and well understood. It is applied to hazard elimination at multiple levels.

At the source:

 Engineering controls (e.g., negative pressure rooms, spatial distancing of waiting room chairs at two or more meters apart, physical barriers, local ventilation)

Along the path:

- Administrative controls such as:
 - Controlling patient flow
 - Safe staffing policies
 - Increased access to education and training for staff
 - Surge capacity protocols
 - Policies for not working when ill
 - Housekeeping practices such as effective environmental cleaning

At the worker:

- Personal protective equipment
- Hand hygiene
- Immunization

Further, it is crucial that the application of the hierarchy in infection control and health and safety strategies are developed, implemented and evaluated with input from Joint Health and Safety Committees that include direct care providers (including nurses) and their unions.

Influenza infection prevention and control strategy

As flu season approaches, and throughout the year, in keeping with occupational health and safety law and principles, a joint commitment by health care employers, unions and employees is needed to increase education and awareness of prevention and control strategies that will reduce transmission and lower infection rates of influenza and influenza-like illnesses (ILI). In doing so, it is important to consider that many elements must be present for effective and comprehensive influenza prevention and control strategies. These include but are not limited to:

Effective isolation policies

- Remove or limit the hazard by restricting and screening visitors at facility entry and point of care, and ensuring use of protective equipment by visitors at point of care
- Early detection through identification and isolation of all patients with ILI symptoms, which requires staff education of ILI symptoms

Adequate staffing

 Collaboration between all stakeholders to formulate surge capacity protocols that can be carried out to ensure a safe supply of nurses

Overcapacity protocols

Elimination of overcrowding through adherence to strict overcapacity protocols

Personal protective equipment

- Provision of all appropriate PPE to workers²
- Provision of education and training for all health care workers

Hand hygiene

- Education strategies & organizational policies
- Inclusion of electronic hand hygiene systems

Immunization

- Immunization is a single component of a constellation of strategies, based on the hierarchy of controls, to control the hazard of influenza.
- Increasing voluntary immunization rates in health care workers and among the general public should be achieved by increasing awareness, education and access to immunization.
- The role of health care employers and health care unions to support public education on and access to immunization is critical.

In addition to the controls listed above, a separate outbreak protocol is required. Implementation of such protocols requires that unique directives and guidelines may supersede routine procedures. In the event of an influenza outbreak declared by the Medical Officer of Health, employers, together with consensus-based Joint Health and Safety Committees, must plan additional precautions specific to outbreak situations, including policies for use of personal protective equipment, isolation policies and restricted visiting protocols.

² Annual fit testing and education on use of PPE (e.g., NIOSH-approved N95 respirators) should be in place so that health care providers are equipped to care for patients presenting with an ILI that may have aerosolized transmission. Testing, education, and use of PPE must be done regularly to ensure accordance with provincial WSH standards.

Summary

An integrated system of planning and control is needed to support the health and safety of workers and the communities of patients who rely on their care.

Annual influenza immunization of health care workers may be one part of a comprehensive workplace- and patient-safety infection control strategy, but it is important to recognize that there are many other elements that must be present first. Further, front-line nurses must be included in the planning, implementation and evaluation of any such strategy.

Supporting research:

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http://www.nursesunions.ca/sites/default/files/cfnu_workload_paper_pdf.pdf

Canadian Federation of Nurses Unions. (2012). CFNU Position Statement on Mandatory Influenza Immunization. Mandatory Influenza Immunization of Nurses: Unethical and Unnecessary. Available at:

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http://www.ona.org/documents/File/positionstatements/ONAPositionStatement_HallwayNursing_200712.pdf

Osterholm, M.T., Kelley, N.S., Manske, J.M., et al. (2012). *The Compelling Need for Game-Changing*

Influenza Vaccines: An Analysis of the Influenza Vaccine Enterprise and Recommendations for the Future. CIDRAP. Available at: http://www.cidrap.umn.edu/cidrap/files/80/ccivi%20report.pdf

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Yassi, A., Lockhart, K., Buxton, J.A., & McDonald, I. (2010). Vaccination of Health Care Workers for Influenza: Promote Safety Culture, Not Coercion. *Canadian Journal of Public Health*, 101(Suppl.1), S41-S45.