

INFLUENZA IMMUNIZATION OF REGISTERED NURSES

CNA POSITION

CNA recognizes that influenza is a serious illness that affects certain populations disproportionately. Vulnerable groups, such as infants, seniors, pregnant women and those with chronic illnesses, are at higher risk of experiencing complications from influenza.

CNA supports annual influenza immunization as the most effective method of preventing influenza and its complications. CNA also supports removing barriers that would make influenza immunization universally accessible.

It is CNA's position that all registered nurses (RNs) should receive the influenza vaccine annually to protect themselves, their families and those in their care, with the exception of RNs for whom influenza immunization is contraindicated.

CNA recommends that annual influenza immunization of RNs be part of a comprehensive workplace and patient-safety strategy. Front-line RNs must be included in the planning, implementation and evaluation of such programs.

CNA believes that policies that place immunization as a condition of service should be introduced if health-care worker influenza immunization coverage levels are not protective of patients, and reasonable efforts have been undertaken with education and enhancing accessibility to immunization. CNA considers mandatory immunization policies by employers to be congruent with the *Code of Ethics for Registered Nurses* in Canada and the obligation to act in the public interest, as noted in CNA's Objects.

CNA believes that RNs must be well-informed of the risks of the disease to themselves, their families and those they care for, as well as of the benefits and risks of immunization. Employers are expected to provide RNs with information that is thorough, current and accessible.

CNA urges nursing education programs to discuss the science of vaccines, including safety and efficacy, as well as ethical issues surrounding the immunization of RNs and nursing students.

BACKGROUND

Influenza is a highly contagious disease that affects between 10 and 20 per cent of the world's population each year.¹ Rates of influenza infection are highest in children (20-30 per cent), but rates of serious illness and death are generally highest in people 65 years and older and in people with underlying medical conditions.² Most patients are not tested routinely for influenza, making it difficult to assess the true burden of influenza in terms of incidence, deaths and hospitalizations. The Public Health Agency of Canada estimates that, in a given year, between 2,000 and

¹ (World Health Organization, 2008)

² (National Advisory Committee on Immunization [NACI], 2012)

8,000 Canadians die of influenza and its complications, depending on the severity of the influenza season.³ Yearly, there may be up to 20,000 hospitalizations related to influenza.⁴

Annual immunization is the most effective method of preventing influenza and its complications.⁵ Influenza immunization programs focus on three groups: those at high risk of influenza-related complications, those capable of spreading influenza to individuals who are at high risk of complications and those who provide essential community services.⁶

Due to the nature of their jobs, both in acute care and in the community, RNs are in contact with people who are at high risk of complications — children, seniors, pregnant women and people with low immunity or with chronic health conditions. Many nurses also provide essential services, and their absences due to illness compromise a facility's ability to provide care. Influenza immunization of health-care workers (HCW) has been shown to decrease infection rates,⁷ and a growing body of evidence demonstrates that HCW immunization can improve patient outcomes in health-care settings.⁸ No randomized controlled trial data exist for acute care; however, observational studies have found lower immunization rates of HCWs to be associated with higher rates of laboratory-confirmed hospital-acquired influenza among patients.⁹

Recommendations for the immunization of HCWs against influenza have been made for over 20 years; however, rates of immunization against seasonal influenza are as low as two per cent, with an average between 40-60 per cent.¹⁰

The rationale for immunizing HCWs is that:

- HCWs with influenza can be infectious at least one day before their initial signs and symptoms,¹¹ and most HCWs will continue to work even when ill with influenza, particularly if the illness is mild. Approximately 20 per cent of ill HCWs remain subclinical yet are still infectious.
- Some groups that are at high risk of influenza complications cannot receive the vaccine, such as babies less than six months of age. Persons who have had an anaphylactic reaction to a previous dose of influenza vaccine or are allergic to a vaccine component should not receive influenza vaccine. Some groups, such as immunocompromised patients, can generally receive inactivated influenza vaccine but may not develop protective immunity. Others, such as the elderly, should be immunized but do not develop good levels of immunity from the vaccine. These vulnerable groups are best protected when their family and the community around them, including RNs, are immunized.
- Occupational exposure of HCWs to influenza is a concern, given the high concentration of seriously ill people

³ (Public Health Agency of Canada, 2012).

⁴ (Schanzer, Langley & Tam, 2006; Schanzer, Langley & Tam, 2008)

⁵ (Wilde et al., 1999)

⁶ (NACI, 2012)

⁷ (Wilde et al., 1999)

⁸ (Potter et al., 1997; Carman et al., 2000; Hayward et al., 2006; Lemaitre, 2009)

⁹ (Bénet et al., 2012; Salgado, Farr, Hall & Hayden, 2002)

¹⁰ (Canadian Healthcare Influenza Immunization Network, 2012)

¹¹ (Elder et al., 1996)



in health-care settings. Immunization of workers protects them, their families and those they care for. Measures such as hand hygiene and barrier precautions such as masks constitute important additional protective steps, but they do not offer the same level of protection that immunization does.

In its 2012-13 statement on influenza,¹² Canada's National Advisory Committee on Immunization states:

HCWs who have direct patient contact should consider it their responsibility to provide the highest standard of care, which includes annual influenza vaccination. In the absence of contraindications, refusal of HCWs who have direct patient contact to be immunized against influenza implies failure in their duty of care to patients.

In order to protect vulnerable patients during influenza outbreaks, HCWs with confirmed or presumed influenza and unvaccinated HCWs who are not receiving antiviral prophylaxis should be excluded from direct patient contact. Health care organizations should have policies in place to deal with this issue.

Studies have shown that there are different reasons why HCWs are not immunized, which relate to the vaccine, the disease and barriers to immunization. There can be a perception of vaccine inefficacy, fear of side-effects, overestimation of the risks of the vaccine or a belief that the vaccine should be used for people at higher risk. There can also be a misperception of the risk of contracting influenza, lack of knowledge about the possible severity of the disease or even misperceptions about the transmission of influenza to patients. There are also barriers to immunization, including lack of time or lack of convenience of accessibility.

Active multi-faceted staff-influenza programs have achieved, at best, immunization rates of 55 to 70 per cent.¹³ An increasing number of health-care organizations and professional associations have been supporting the institutional requirement of immunization as a condition of service. Such programs allow exceptions due to medical, religious and/or philosophical reasons and have been effective in increasing HCW-immunization coverage to over 90 per cent. However, mandatory immunization of HCWs remains controversial.¹⁴ Mandatory policies have been challenged in court based on principles of privacy and choice. There is tension between individual rights and moral justifications in the interest of social justice for vulnerable populations. A number of publications discuss the ethical issues surrounding mandatory immunization, with most reviews in favour of it.¹⁵

*Approved by the CNA Board of Directors
November 2012*

¹² (NACI, 2012, p. 36)

¹³ (Provincial Infectious Diseases Advisory Committee [PIDAC], 2012)

¹⁴ (Yassi, Lockhart, Buxton & McDonald, 2010; Sullivan, 2010)

¹⁵ (Caplan, 2011; Steckel, 2007; van Delden et al., 2008)



References:

- Bénet, T., Régis, C., Voirin, N., Robert, O., Lina, B., Cronenberger, S., . . . Vanhems, P. (2012). Influenza vaccination of healthcare workers in acute-care hospitals: A case-control study of its effect on hospital-acquired influenza among patients. *BMC Infectious Diseases*, 12:30.
- Canadian Healthcare Influenza Immunization Network. (2012). *Successful healthcare personnel influenza immunization programs: A guide for program planners* (Edition 3). Retrieved from http://www.immunize.cpha.ca/uploads/flu2012/chiin_2012guide_e.pdf
- Caplan, A. (2011). Time to mandate influenza vaccination in health-care workers. *The Lancet*, 378(9788), 310-311.
- Carman, W. F., Elder, A. G., Wallace, L. A., McAulay, K., Walker, A., Murray, G. D., & Stott, D. J. (2000). Effects of influenza vaccination of health-care workers on mortality of elderly people in long-term care: A randomised controlled trial. *The Lancet* 355(9198), 93-97.
- Elder, A. G., O'Donnell, B., McCruden, E. A., Symington, I. S., & Carman, W. F. (1996). Incidence and recall of influenza in a cohort of Glasgow healthcare workers during the 1993-4 epidemic: Results of serum testing and questionnaire. *British Medical Journal*, 313(7067), 1241-1242.
- Hayward, A. C., Harling, R., Wetten, S., Johnson, A. M., Munro, S., Smedley, J., . . . Watson, J. M. (2006). Effectiveness of an influenza vaccine programme for care home staff to prevent death, morbidity, and health service use among residents: Cluster randomised controlled trial. *British Medical Journal*, 333(7581), 1241.
- Lemaitre, M., Meret, T., Rothan-Tondeur, M., Belmin, J., Lejonc, J. L., Luquel, L., . . . Carrat, F. (2009). Effect of influenza vaccination of nursing home staff on mortality of residents: A cluster-randomized trial. *Journal of the American Geriatric Society*, 57(9), 1580-1586.
- National Advisory Committee on Immunization. (2012). *Statement on seasonal influenza vaccine for 2012-2013* (Advisory Committee Statement). Retrieved from <http://resources.cpha.ca/immunize.ca/data/1814e.pdf>
- Potter, J., Stott, D. J., Roberts, M. A., Elder, A. G., O'Donnell, B., Knight, P. V., Carman, W. F. (1997). Influenza vaccination of health care workers in long-term-care hospitals reduces the mortality of elderly patients. *Journal of Infectious Diseases*, 175(1), 1-6.
- Provincial Infectious Diseases Advisory Committee (2012). *Best practices for infection prevention and control programs in Ontario: In all health care settings* (3rd ed). Retrieved from http://www.oahpp.ca/resources/documents/pidac/PIDAC-IPC_BP%20Infection%20Prevention%20Control_English_Final_2012-10-03.pdf
- Public Health Agency of Canada. (2012). *Influenza*. Retrieved from <http://www.phac-aspc.gc.ca/influenza/index-eng.php>
- Salgado, C. D., Farr, B. M., Hall, K. K., & Hayden, F. G. (2002). Influenza in the acute hospital setting. *The Lancet Infectious Diseases*, 2(3), 145-155.
- Schanzer, D. L., Langley, J. M., & Tam, T. W. (2006). Hospitalization attributable to influenza and other viral respiratory illnesses in Canadian children. *Pediatric Infectious Disease Journal*, 25(9), 795-800.
- Schanzer, D. L., Langley, J. M., & Tam, T. W. (2008). Role of influenza and other respiratory viruses in admissions of adults to Canadian hospitals. *Influenza and Other Respiratory Viruses*, 2(1), 1-8.



-
- Steckel, C. M. (2007). Mandatory influenza immunization for health care workers — An ethical discussion. *American Association of Occupational Health Nurses Journal*, 55(1), 34-39.
- Sullivan, P. (2010). Influenza vaccination in healthcare workers: Should it be mandatory? *The Online Journal of Issues in Nursing*, 15, 1. doi: 10.3912/OJIN.Vol15No01PPT03
- van Delden, J. J., Ashcroft, R., Dawson, A., Marckmann, G., Upshur, R., & Verweij, M. F. (2008). The ethics of mandatory vaccination against influenza for health care workers. *Vaccine*, 26(44), 5562-5566.
- Wilde, J. A., McMillan, J. A., Serwint, J., Butta, J., O'Riordan, M. A., & Steinhoff, M. C. (1999). Effectiveness of influenza vaccine in health care professionals: A randomized trial. *Journal of the American Medical Association*, 281(10), 908-913.
- World Health Organization. (2008). *Immunization, vaccines and biologicals: Influenza*. Retrieved from <http://www.who.int/immunization/topics/influenza/en/>
- World Health Organization. (2012). *Background paper on influenza vaccines and immunization* (SAGE Working Group). Retrieved from http://www.who.int/immunization/sage/meetings/2012/april/1_Background_Paper_Mar26_v13_cleaned.pdf
- 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), S41-45.

PS-121

