



## Preventing influenza outbreaks in long-term care facilities

This is the first in a 3-part series. Recognition and control of respiratory infection outbreaks will be discussed in part 2, and the use of amantadine in part 3.

Residents of long-term care facilities are exposed, through staff, visitors and outside visits, to respiratory infections circulating in the community. Once introduced, respiratory viruses spread easily in the institutional setting.

One of the best means of protecting this highly vulnerable population is yearly influenza vaccination for residents and staff. In frail elderly people, influenza vaccination reduces rates of pneumonia, hospital admission and death, although it does not prevent all illness.<sup>1</sup> Nursing homes with vaccination rates above 80% are less likely to have outbreaks than those with lower coverage,<sup>2</sup> and outbreaks that do occur in well-vaccinated populations are usually mild. Unfortunately, the average coverage in Canadian facilities is below 80%.<sup>3,4</sup>

### The physician's role

All patients and staff of long-term care facilities should be vaccinated against influenza every year. The physician advisor can play a pivotal role by providing direction and monitoring results. Keys to success include ensuring that the program is well timed, simplifying procedures and overcoming barriers to vaccination. The annual vaccination campaign should take place in mid to late fall. If the vaccine is given too early, immunity will wane by late winter, leaving residents unprotected if influenza arrives late. If the vaccine is given too late, it will not protect residents against an early influenza season. The facility should continue to vaccinate all newly admitted residents until the end of the influenza season.

Procedures for obtaining consent and administering the vaccine should be as simple as possible. Barriers such as requiring written (rather than oral) consent and requiring that a physician give the injections or be on site should be eliminated whenever possible. Competent residents can be informed through talks, posters and simple written material. For incompetent residents, a relative's consent is usually needed. Consent for routine vaccinations can be obtained on admission or when the resident first becomes incompetent. Similarly, a medical directive or standing order could be considered as an alternative to individual physician orders.

## The health care worker challenge

A recent study conducted in geriatric medical hospitals showed a significant reduction in total patient mortality and in influenza-like illness when health care workers received influenza vaccine.<sup>5</sup> Employee vaccination has also been found to reduce absenteeism and save money.<sup>6</sup> Employee vaccination levels are pitifully low at most facilities.

In-service education can help to overcome employees' concerns about whether vaccination is needed and about side effects. Physicians can point out that in healthy adults systemic side effects are similar to those associated with placebo.<sup>7</sup> Taking acetaminophen at vaccination and at 4, 8 and 12 hours has been shown to reduce side effects in health care workers.<sup>8</sup>

Health departments can provide new resources and ideas for interactive displays, contests and other strategies to increase vaccination rates. Incentives such as free refreshments or prizes often work well. It helps to make it easy for staff to be vaccinated by offering the vaccine free of charge, on site and during all shifts. Part-time staff and volunteers should be included, as they can introduce influenza into the facility as well.

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