

# Cover up: The lack of evidence for vaccinate or mask policies

Vaccinate or mask is an incoherent policy. Given its inconsistent enforcement and lack of universal application of basic infection control principles, the policy cannot be shown to confer any benefit to patients, and should be discontinued.

Will Offley, RN

**W**hen a public health policy is put into effect to reduce a risk to patients, best practice calls for evidence that the risk actually exists, consistent application of the policy, and an assessment of whether the policy achieves its stated goals. Failure to meet these criteria indicates the need to reconsider the policy.

In 2012 British Columbia instituted a mandatory vaccinate or mask policy for all health care staff who receive an influenza vaccination. The policy's stated purpose was "to prevent transmission [of influenza] from them to their patients."<sup>1</sup>

This vaccinate or mask policy is not based on evidence, but on an assumption that hospital-acquired influenza is a significant threat to patients. It is predicated on the 24-hour period in which a person can be infected with the influenza virus but remain asymptomatic. However, recent studies have challenged this

concern, determining that there is little if any evidence that infected individuals shed significant amounts of influenza virus in the 24-hour asymptomatic period following infection.<sup>2</sup>

## A policy without evidence

The reality is that no provincial statistics are kept on nosocomial influenza infections. The BC Centre for Disease Control has acknowledged that it does not maintain records on the incidence of hospital-acquired influenza, stating that "we are unable to differentiate between nosocomial and community-acquired cases (a positive lab report was sufficient for provincial reporting)" (electronic communication from Lisa Kwindt, BC Centre for Disease Control, 11 January 2016). Nor does the Vancouver Coastal Health Authority,<sup>3</sup> Providence Health Care,<sup>4</sup> the Interior Health Authority,<sup>5</sup> the Northern Health Authority,<sup>6</sup> the Provincial Health Services Authority,<sup>7</sup> or the Fraser Health Authority<sup>8</sup> keep such records. Without these data, the vaccinate or mask policy is, in effect, based on assumptions and guesswork, not evidence. There is no proof of a threat to patient safety; nor is there a means to establish a baseline. In short, there is no way of measuring the effectiveness of the policy.

## Inconsistent application

In 2015 James Hayes addressed these issues in an arbitration between the Ontario Nurses' Association and the Ontario Hospital Association concerning that province's vaccinate or mask policy. In striking down the policy, Hayes posed the question, "If hospital authorities were convinced about the utility of masks for the purpose alleged, why not mask everyone?"<sup>9</sup> He dismissed the arguments of the expert witnesses who provided testimony defending the compulsory policy, stating that they did not explain "to my satisfaction, or to my understanding, why masking should not be required generally if the risk of [health care worker] transmission is as serious as they maintain and if masks actually serve as an effective intervention."<sup>9</sup>

Vaccination and immunity are not the same thing. There are many ways an individual may be infected with influenza despite having had the annual vaccination. As an example, many infections occurred in the 2014–15 flu season when there was a mismatch between the vaccine and the circulating H3N2 virus, which resulted in a vaccine efficiency in Canada of ~8%.<sup>10</sup> Considering that the 2014–15 vaccine offered virtually

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no protection to the influenza strain circulating in Canada, it would be reasonable to expect that a policy consistent with the stated goals would have immediately been enforced—one that required all health care workers to don masks regardless of their vaccination status. No such action was taken.

The current policy is also inconsistent in its scope. The rationale for compulsory masking of nonvaccinated health care workers makes no sense whatsoever from the standpoint of infection control unless all other nonvaccinated individuals are obliged to don masks as well. Visitors and family members are at the bedside of patients for far longer periods of time than health care workers. They engage in more intimate contact (e.g., kissing, holding hands). They are also, as a rule, far less likely to engage in proper handwashing and cough etiquette than are health care workers. Yet Vancouver Coastal Health Authority made it clear early on that the vaccinate or mask policy would not be enforced with visitors, but would be on the honor system instead.<sup>11</sup>

As well, physicians, residents, and medical students are often seen without masks in flu season. As it is extremely unlikely that there this group would have a 99%+ vaccination rate, it appears incontestable that the policy is not being enforced equally for this category among health care workers.

Infection control measures are meaningless if they are not consistent, and the vaccinate or mask policy is utterly inconsistent. And if the masking policy has been implemented in such a partial, patchwork, and inconsistent way, the question arises—what is its actual purpose?

### **Patients vs health care workers**

Another key concern with the current policy is the imbalance between the rights of patients to safe care and

the rights of health care workers to informed consent and medical confidentiality. The policy simply obliterates the rights of health care workers without discussion and without even acknowledging it is doing so. And with what justification? Where is the threat to our patients?

The stated policy is intended to promote patient safety. But many of its proponents do not appear to believe that compulsory masking is an effective method of preventing influenza transmission. For example, in the Ontario arbitration, Dr Bonnie Henry, BC's deputy provincial health officer, while defending mandatory masking policies, admitted that “there's not a lot of evidence to support mask use.”<sup>9</sup> Dr Allison McGeer, epidemiologist and flu vaccine researcher, also testified in support of mandatory masking policies, but stated “there's quite a limited literature concerning the effectiveness of masks in prevention transmission.”<sup>9</sup> Even the BC Ministry of Health's own policy documents concede that masks don't work, remarkably stating that “the [vaccinate or mask] policy will not be amended to require vaccinated staff to wear masks because there is no strong evidence to support universal masking as a preventative measure in the presence of pronounced vaccine mismatch and in the absence of an outbreak.”<sup>12</sup>

Also at issue is the practical matter of wearing masks. It appears that coercion is at the heart of the vaccinate or mask policy. Masks are extremely uncomfortable to wear for 12 hours a day continuously over a 4-month period. In addition, the requirement to mask serves to put psychological pressure on staff to comply and get a flu shot through the very real peer pressure and disapproval many experience from some of their co-workers.

### **Summary**

Judged by its professed goals, vaccinate or mask is an utterly incoher-

ent policy. Given its inconsistent and selective enforcement and its lack of universal application of basic infection control principles, it is clear that the policy cannot be shown to confer any benefit to patients. It should be discontinued.

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# Immunize or mask: A choice to protect patients in BC

The policy is an evidence-supported, systematically implemented, and ethically defensible program that has improved influenza vaccine coverage among health care workers and improved protection for our vulnerable patients.

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**T**he BC health care worker influenza protection policy is an evidence-supported, systematically implemented, and ethically defensible program that has successfully improved influenza vaccine coverage among health care workers in the province and, as a result, improved protection for our vulnerable patients. In response to Mr Offley's critique of the policy, we present the following evidence.

First, the policy is supported by the majority of health care workers in BC, according to a recent survey, and has been upheld as reasonable at arbitration in BC.<sup>1</sup> The policy is, in fact, predicated on several factors:

- The universal recommendation that health care workers receive annual vaccination against influenza.<sup>2,3</sup>
- The failure in Canada of voluntary programs to achieve anything close to high coverage levels.<sup>4</sup>
- The evidence that high vaccine coverage provides patient/resident protection.<sup>5-9</sup>
- The fact that health care workers can and do transmit influenza to

those they care for, and they do work while sick and may transmit influenza while asymptotically shedding virus.<sup>10</sup>

The BC policy recognizes that health care workers have the right to refuse vaccination and provides them the option to wear surgical masks in patient care areas during influenza season when influenza is circulating in our communities. There is evidence that masking will reduce influenza virus transmission,<sup>11-22</sup> and while the body of evidence is not as robust as that supporting influenza immunization, it is at least as strong as that supporting hand washing in the prevention of nosocomial transmission. Where evidence is lacking (as described in testimony to the arbitrator in Ontario that Mr Offley quotes) is on the issue of whether there is any *additional* benefit to an individual wearing a mask over and above immunization.

It is recognized that the current technology for making influenza vaccines produces less than optimal effective antigens. The continuing annual drift in viral antigens is challenging and does result in varying degrees of protection from year to year (from the low of 13% in 2014–15 to over 80% in 2010–11 in Canada with an accepted average of 60% protection over

many seasons).<sup>23,24</sup> Nonetheless the great majority of infectious disease specialists and influenza experts continue to recommend that people get vaccinated against influenza if they are at higher risk of severe influenza or complications from influenza or if they are in contact with higher-risk individuals.

While a universal vaccination *and* mask policy might be the logical approach in the face of vaccine and circulating virus uncertainty, the BC policy seeks a balance of protection of the health care worker and the patient without posing undue hardship on health care workers. As Mr Offley observes, “masks are extremely uncomfortable to wear for 12 hours a day continuously over a 4-month period.”

Consistent application of the policy in BC has been recognized since its inception as a very important feature and considerable resources are spent on this. That some unvaccinated health care workers may seek to subvert the program by inferentially claiming vaccination status by not wearing a mask is regrettable, but fortunately it is not a characteristic of the overwhelming majority of our professionals.

Vaccinate or mask is a coherent

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policy based on the time-proven ethical principle *primum non nocere* (first, do no harm).

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**There is evidence that masking will reduce influenza virus transmission, and while the body of evidence is not as robust as that supporting influenza immunization, it is at least as strong as that supporting hand washing in the prevention of nosocomial transmission.**