

HEALTH CARE WORKERS AND SWINE FLU

To the Editor:

In a recent article in the journal, Santos et al concluded that “physicians and medical personnel had a higher [swine flu] infection rate than other employee positions, whereas ED personnel had the highest infection rate.”¹ This finding is interesting. There is no doubt that physicians and medical personnel can have higher influenza infection rates than other staff members. However, it is still questionable whether this high rate actually means that they are more likely to become infected. Respiratory pathogens can spread anywhere in a hospital, and everyone in it has a high probability of contact with them. An important concern is infectious control practice. If physicians and medical personnel, who must touch patients, do not practice good infectious controls (eg, regular hand washing), then infection can occur easily. In exigent locations such as emergency departments (ED), staff may be less compliant with infectious control practice than staff in other departments and infection rates there may be higher. Meengs et al proposed that “poor compliance in the ED may be due to the large number of patient contacts, simultaneous management of multiple patients, high illness acuity, and severe time constraints.”² It must be noted, however, that this report examined only a small sample in a single institution, with limited variables studied. Some recent data revealed that hand hygiene compliance in the ED can be as high as 90%, but that factors such as patients overflowing into hallways because of high volume, glove use, and other environmental factors may lower ED hand hygiene compliance.^{3,4} Thus, it is not certain that infection control practices may vary between health care worker types.

Viroj Wiwanitkit, MD
Wiwanitkit House
Bangkok, Thailand

REFERENCES

1. Santos CD, Bristow RB, Vorenkamp JV. Which health care workers were most affected during the spring 2009 H1N1 pandemic? *Disaster Med Public Health Prep.* 2010;4(1):47-54.
2. Meengs MR, Giles BK, Chisholm CD, Cordell WH, Nelson DR. Hand washing frequency in an emergency department. *Ann Emerg Med.* 1994;23(6):1307-1312.
3. Venkatesh A, Pallin D, Crim H, et al. Environmental predictors of hand hygiene compliance in the emergency department. *Ann Emerg Med.* 2009;54(3)(Suppl 1):S76-S77.
4. Schuur J, Crim H, Pandya D, et al. A multifaceted quality improvement program improves hand hygiene compliance in the emergency department. *Ann Emerg Med.* 2009;54(3)(Suppl 1):S75-S76.

Santos replies:

The factors that contributed to the increased rate of H1N1 transmission in the emergency department (ED) setting are multifaceted. Infection control practices likely played a large role in the spread of H1N1 in EDs. Universal precautions may be difficult to always comply with because of the severe time restraints, the large degree of patient contact, and the simultaneous management of multiple patients with which ED personnel are challenged. In addition, because transmission of H1N1 occurs through both respiratory and aerosol transmission, EDs are at a higher risk due to the many aerosol-producing procedures that are performed there. For example, EDs commonly perform diagnostic sputum collection, airway suctioning, and endotracheal intubation, and administer nebulized medications, bronchoscopy, and ventilation procedures. These factors, compounded with ED overcrowding likely contributed to the high rate of H1N1 infection in the ED setting.

Cynthia Santos, BA
New York-Presbyterian Hospital