

To the Editor:

Could you give us some clear-cut guidelines concerning upper respiratory infections being transmitted from employees to patients? Our employees are not working while febrile from colds and flu but do work after the febrile period and during this time they have have coughing, sneezing, rhinitis, etc.

Question: Are masks effective in the prevention of the spread of such infections to other patients and employees?

We appreciate your help and thank you in advance for your assistance.

The new periodical **INFECTION CONTROL** is all we hoped for and more! We look forward to the next issues as they are published.

Sincerely,

*Alyce Maupin, R.N.  
Infection Control Specialist  
West Nebraska General Hospital  
Scottsbluff, Nebraska*

*This letter was referred to a member of our Editorial Board, who wrote the following reply:*

This question regarding general guidelines for preventing transmission of upper respiratory infections from hospital employees to patients (and specifically the role masks play in preventing such infections) is particularly important, considering the recent interest in nosocomial viral infections.

Among adults, most upper respiratory infections, particularly during winter, are due to viruses (parainfluenza, respiratory syncytial virus, rhinovirus, adenovirus, and influenza). Several studies have suggested

that medical personnel and visitors may be epidemiologically important in nosocomial transmission of several of these viruses. The relative importance of masks, gowns, gloves, and separate isolation rooms in preventing transmission has not been determined, but several studies have suggested that such measures seem to be ineffective. Certain facts regarding infection with these viruses are known, however, and may be helpful in establishing general guidelines for control of these infections in hospitals.

Most adults shed virus from their respiratory tracts for a relatively short time during illness (1 to 5 days) whereas children shed virus for longer periods (7 to 10 days). Among adults, when symptoms such as sneezing, coughing, fever, etc., begin to subside, viral shedding usually ceases. Studies of rhinovirus and respiratory syncytial virus indicate that the airborne route of transmission does not seem to be important; contaminating one's hands with respiratory tract secretions and then touching another person appears to be the most efficient route of transmission. Data concerning the optimal routes of transmission for the other viruses mentioned are less well documented. Simple hand-washing with plain soap will remove sufficient virus from the hands to reduce significantly the chance of transmission by this route.

Based on this information, the following guidelines seem appropriate. First, a uniform policy for managing employees with upper respiratory infections should be established in consultation with the hospital administration, employee health director, and

chiefs of nursing and physician personnel. Such a policy should include elements such as handwashing before having direct patient contact and after handling one's own respiratory secretions; a statement that at the first sign of respiratory illness an employee should be relieved of direct patient care responsibilities until signs and symptoms of infection begin to subside (if able, the employee can work in non-patient care areas); a current recommendation on the use of influenza immunization and amantadine for hospital employees. Second, visiting policies should be examined with the idea that visitor education (pamphlets, signs, etc.) may help reduce patient risk from these sources. Most visitors, if the rationale is explained, probably would be willing to wash their hands before touching the patient and would understand if children with respiratory infections were not allowed direct contact with the patient. Third, through education of the hospital staff (again, if the rationale behind the policy is explained) it can be stressed that enforcement of the policy is everyone's responsibility. It is important to state that the mechanism of transmission of these viruses is the same for employee-patient transmission as it is for employee-employee or community-employee transmission.

Therefore, it is in the hospital's interest, in terms of avoiding employee absenteeism, that the hospital educate its employees in techniques for avoiding upper respiratory illness.

*Timothy R. Townsend, M.D.  
The Johns Hopkins University  
School of Medicine  
Baltimore, Maryland*