

To the Editor:

I was chagrined to find, in the abstract of the article on Methicillin-resistant *Staphylococcus aureus*, [Saroglou G, Cromer M, Bisno AL. Methicillin-Resistant *Staphylococcus aureus*: Interstate Spread of Nosocomial Infections with Emergence of Gentamicin-Methicillin Resistant Strains. *Infect Control* 1980; 1(2):81-89] the statement: "it may be imprudent to admit such patients to hospitals that are free of the potential pathogen." As hospital epidemiologists and infection control "officers," we may wish to protect the hospital environment, but as physicians and nurses our task is to care for the sick, even if this means admitting a "dirty" patient to a "clean" hospital! Surely a better and more humane approach to control of these infections is to utilize the *other* measures described, and employed to good effect, by the authors of this otherwise excellent article.

W. Edmund Farrar, Jr., M.D.
Professor of Medicine & Microbiology
Director, Infectious Diseases and
Immunology Division
Medical University of South Carolina
Charleston, South Carolina

This letter was referred to Dr. Bisno, who wrote the following reply:

The issue raised in Dr. Farrar's letter is admittedly a thorny one. Certainly, no one would suggest denying admission to a critically ill patient, regardless of his personal bacterial flora. The situation may be quite different, however, in the case of an individual who is seeking elective admission or transfer to a given hospital. Here one may be able to decide upon the most appropriate facility for hospitalizing the patient without in any way jeopardizing that patient's care.

For example, the index case in our paper had a purulent infection of a burn wound that was not deemed to be life-threatening. The facts were as follows: (1) the patient was infected with methicillin-resistant *Staphylococcus aureus* (MRSA); (2) MRSA is endemic in the hospital (hospital A) where he had been treated previously; (3) MRSA had never been isolated at City of Memphis Hospital (CMH); (4) CMH was at that time an older facility with open wards and limited facilities for patient isolation. Given this set of facts, I maintain that had the patient's history of MRSA infection been known and had hospital A been a local institution, it would have been much more appropriate to refuse admittance to the patient at CMH and encourage him to re-enter hospital A. As it was, despite the prompt and vigorous control measures instituted, six other clinically significant MRSA infections occurred at CMH, and there was one death.

In summary, I agree with Dr. Farrar that under no circumstances should a patient's colonization with a

potentially dangerous organism be allowed to compromise his medical care. There are times, however, when, if appropriate community-wide surveillance mechanisms could be devised, the twin goals of providing optimal care to the patient and optimal protection to the community can be harmonized.

Alan L. Bisno, M.D.
Professor of Medicine
Chief, Division of
Infectious Diseases
The University of Tennessee
Center for the Health Sciences
Memphis, Tennessee

To the Editor:

Our orthopedic surgeon is interested in knowing the number of times the air is exchanged in our O.R. Could you send us information re: the procedure one must use to find what our air exchange is; could you also tell us what is required by the CDC?

Betty Boehler, R.N.
Infection Control
Clark Fork Valley Hospital
Plains, Montana

This letter was referred to Karen Paul, who wrote the following reply:

The National Fire Protection Association sets standards for ventilation in their publication No. 56A, Appendix A, and this includes a requirement for 25 air changes per hour for operating rooms. However, this applies only to facilities built since 1976; upgrading of older facilities is not required.

The rate of air exchange in a room can be calculated using one of several instruments; a commonly used one is called a velometer. They may be purchased or rented. The velometer, when held near an air vent, will either read directly or allow you to calculate using a correction factor, the number of cubic feet of air per minute passing by. This will enable you to calculate the number of air exchanges if you know the volume of the room. For example, a 20x20x10 foot room contains 4000 cubic feet. If the velometer showed 600 cubic feet per minute, this would be 36,000 cubic feet per hour. Dividing the amount of air drawn through the vent by the volume of the room (36,000 by 4000) gives the number of air exchanges, in this case nine.

Your hospital engineers should be able to do this for you, or there are firms that will. Look under "air balancing" in the telephone directory.

Karen Paul, B.S., M.S.
Infection Control Officer
The Medical College of Pennsylvania
and Hospital
Philadelphia, Pennsylvania