

Letters to the Editor

A Model for Developing Infection Control Policies/Procedures

To the Editor:

As a recently hired infection control nurse, I am planning to revise the Infection Control Policies/Procedures for our hospital. The existing ones seem to be presenting a problem with the JCAH.

I will certainly use the existing policies/procedures as a guideline, but I need some more explicit help, ie, specific isolation requirements and their provision for patients who require them, with specific reference made to patients in the recovery room, operating room, emergency department, labor/delivery and newborn nursery.

Can you help me in locating a model to use in developing policies/procedures specifically for our hospital (and meet the recommendations of the JCAH)? Our hospital has 113 beds.

Janet H. Broadwell, RN
Infection Control Nurse
Betsy Johnson Memorial Hospital
Dunn, North Carolina

Sue Crow, RN, BSN, MSN, Associate Editor of Infection Control, was asked to respond to Ms. Broadwell's query.

It has been years since I was a beginning infection control nurse but I still remember feeling as you—where do I begin and how do I know that I have been correct and comprehensive when writing policies and procedures that

affect patient care? Today there is much more literature available to assist in developing policies and procedures. The new guidelines from the Centers for Disease Control published within the last year and published in recent editions of *Infection Control* are a valuable tool in writing policies and procedures. The latest guidelines on isolation precautions published in *Infection Control's* July/August 1983 supplement should also answer many of your questions. The book, *Hospital Infections* edited by Bennett and Brachman is also an excellent guide in the development of policies and procedures.

There are several manuals that can aid in writing infection control policies and procedures. One is *Infection Control Policies and Procedures*, published by McKay, P.O. Box 811, Metairie, LA 70004 (504-885-8891). Manuals such as these should be used strictly as intended: as models. Individual policies and procedures for each hospital must still be developed.

When developing policies and procedures you should observe the specific area, take note of the activities, and then write procedures geared to aseptic technique (ie, keeping the number of microorganisms in that area to a minimum number). Then review the above guidelines for completeness of your material.

The department that is primarily involved in the policy and procedure should be the instigator of the policy and procedure. Your responsibility should be that of a resource person. After the policy and procedure has been written, it should be approved by

the Infection Control Committee and carried out by the staff development program to ascertain that all personnel are familiar with the change. You choose whether it is necessary to be part of the inservice program. When isolation guidelines are being discussed and implemented the Infection Control Nurse should have a great deal of input because of his/her expertise.

Sue Crow, RN, MSN
Associate Editor
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Transmission of Infection Via Laboratory Clothing

To the Editor:

In replying to a letter to the editor in Volume 4, Number 5 of *Infection Control*, Gröschel advocates infection control personnel supporting laboratory requests for surgical scrub dresses or suits. While this may be most appropriate in labs working with aerosol studies, animals, and high-risk agents (ie, USPHS Class 3-5) in conjunction with structural and procedural safeguards, it is doubtful that wearing scrub clothing under a lab coat will provide any real benefit for the average hospital lab to offset the cost and logistical problems involved.

Since the concern centers on whether dangerous organisms are being carried home, pertinent points are:

1) Class 1-2 organisms are, for the

most part, normal flora; the majority of cultures therefore expose staff to “no growth” or organisms already colonizing most individuals.

- 2) The infectious dose, route of transmission and portal of entry involved for most of the pathogens encountered in bacteriology preclude staff clothing (under the lab coat) from being a noteworthy hazard. Lack of published reports regarding outbreaks of infection among contacts of lab staff (as opposed to staff themselves who have become infected from their *Salmonella* teaching cultures, etc.) substantiates this point.
- 3) The “How safe is safe enough?” aspect of this question is, perhaps, best addressed in the concept of “spray factor” discussed by Dimmick, Vogl and Chatigny (in Hellman et al (eds): *Biohazards in Biological Research*, Cold Spring Harbor Laboratory, 1973). The better question would be, “Do lab staff members carry home a sufficient number of pathogenic organisms on clothing which then act as a suitable vehicle for transmission of infection to family members?”

On epidemiologic grounds, lack of documented transmissions weighs against this fear being a significant problem. On microbiologic grounds, assuming reasonable competence in techniques and hygiene, the probability of significant levels of clothing contamination is very low. Unless extremely virulent organisms or unusually low infectious doses are involved, changing the clothing under a protective laboratory coat or gown does not deserve the support of infection control personnel. Control mea-

asures should be appropriate to the level of risk involved, and, hopefully, cost-effective. I hope that the revised CDC/NIH guidelines, presumably replacing their 1974-1975 documents, will reflect differences in the nature and magnitude of risk in various types of laboratories, therefore, differences in the degree of safeguards required.

Infection control practitioners have an obligation to promote epidemiologic approaches to risk analysis. Gröschel, in using *Mycobacterium tuberculosis* as an example, has selected an organism usually transmitted by droplet nuclei. While an effective barrier garment may be prudent in working with TB cultures, the aerosols produced by clothing are of large mean mass diameters, well beyond the size range capable of penetrating to deep lung areas. Unless one’s family chewed on the clothing worn home, it is difficult to envisage a suitable means of transmission and portal of entry!

Unless clearer citations documenting proven risk could be provided, I respectfully submit that the policy of Nazareth Hospital’s Bacteriology Department is over-reactive.

David Birnbaum, MPH
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Dieter H.M. Gröschel, MD, was given the opportunity to respond to Mr. Birnbaum’s comments.

The finally completed CDC/NIH guidelines for biosafety in microbiological and biomedical laboratories still advocate the wearing of protective garments by the bench worker.

Whether these are laboratory coats, uniforms, wrap-around gowns or scrub suits will depend on the bio-safety level and the policy of the laboratory. Birnbaum’s letter is based on his own interpretation of both Domm’s letter to the editor and my reply. He states that staff clothing is not a hazard and supports this by an epidemiological approach to risk analysis. I, too, am not aware of published reports implicating staff garments in the transmission of infections to a laboratory worker’s family. I did not see this as the key issue of the inquiry; rather, the question of whether infection control personnel should support the request from laboratory personnel and the pathologist (who is responsible for laboratory safety and, in this case, also the chairman of the Infection Control Committee) for hospital provided garments. Clinical microbiologists handle specimens with unknown microorganisms and, despite proper techniques, laboratory accidents will happen. “Reasonable competence in . . . hygiene. “Reasonable competence in . . . hygiene” suggests that the laboratory worker wear protective garments “to prevent contaminating or soiling of street clothes” (CDC/NIH). Prevention requires foreseeing the unusual. As long as we worry about cryptic transmission of laboratory-acquired infections we must consider the possibility of transmitting pathogens by clothing contaminated by spills and should prevent children from chewing on mother’s laboratory uniform.

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