

Isolation Guidelines—A or B?

The Centers for Disease Control recently published the "Guideline for Isolation Precautions in Hospitals."¹ This is a long-awaited and greatly needed revision of the manual *Isolation Techniques for Use in Hospitals*. The purposes of the guidelines are to update the precautions needed for new infectious diseases, to address infectious disease precautions, and to provide "prudent practices." Overall, they are a significant improvement over the previous edition. The preface points out that some of the isolation recommendations are based on well-documented modes of transmission identified in epidemiologic studies, while others are based on a reasonable theoretical rationale. A helpful addition to the guidelines would have been a bibliography of the epidemiologic studies that supported the recommendations, since these were obviously available to the working group.

The most significant change in the guidelines is that hospital epidemiologists and infection control practitioners are offered a choice between two alternative systems for isolation precautions: System A: Category-Specific Isolation Precautions; or System B: Disease-Specific Isolation Precautions. The choice of two systems should produce some spirited dialogue in hospitals before a decision is made as to which system each hospital adopts. However, before the two separate systems proposed by CDC are evaluated, it is important to remember that any system in practical use should receive careful attention from the developers for the following criteria:

1. Will the system insure the standard to be maintained? In other words, will it prevent transmission of the disease?
2. Can the standard or system be taught to the large, diverse groups of personnel who must use it routinely?
3. Does it provide a framework which makes it unnecessary to look up or memorize each detail of the system?
4. Is it practical in a busy, acute-care setting?
5. Does it provide a good means of communication but still retain medical confidentiality?

6. Can this system, once taught to the professional nurse or physician, be used in his/her next position and be built upon as future changes occur?

In the category-specific precautions (System A) of the new guidelines, the major changes bring isolation categories more in line with predictable modes of transmission: airborne, droplet, direct contact, and indirect contact. The categories are now more descriptive of transmission modes. The major changes from the previous edition include the appropriate deletion of protective isolation, the addition of AFB isolation, the replacement of wound and skin precautions by contact isolation, and the modification of the other categories to eliminate previous deficiencies. The addition of the disease-specific isolation guideline that considers infants and young children should be helpful for those diseases where age makes a difference in the transmission mode.

Alternative System A seems to meet the six criteria that we have set forth. It will prevent transmission. It is easy to teach all levels of personnel since it involves only a few changes from the second edition of the guidelines. It fits within the framework of the categories of transmission already in use. The pre-printed signs and grouping of categories are practical in a busy patient care unit. It also maintains medical confidentiality, with the possible exception of AFB isolation. (A quick survey of 20 science majors readily evoked the response of "tuberculosis" as the disease.) Medical confidentiality must be absolute, and the AFB designation is not. Moreover, System A allows each hospital to gain skills from other hospitals. Infection control practitioners who have been teaching isolation will have a useful national standard.

System B—disease-specific isolation precautions—offers the attractive advantage over System A of adjusting and adapting each patient and disease on an individual basis. Since this will reduce expenses by saving supplies, it is more attractive in an era of cost containment. However, although System B will prevent disease transmission, it

does not fulfill the other criteria for an acceptable system. In the acute-care hospital, many creative interpretations are likely to occur. Some personnel will simply check "yes" for each category to assure that no precautions are missed. This system could become so fragmented that the overall concept of modes of transmission would be missed. In addition, System B would be difficult to teach to a large, diverse group of health care professionals. Although System B assumes that hospital personnel will be knowledgeable about the modes of transmission, this is not the case for physicians and nurses in most hospitals. As a consequence, the infection control nurse could be forced to become more involved directly in patient assessment rather than fulfilling the more desirable role of educating others about the system and facilitating the isolation process. Though theoretically more desirable, System B will not work well in most hospitals.

Another major flaw in System B is its failure to protect the patient's medical confidentiality. System A identifies isolation precautions without identifying the diagnosis. System B, however, requires a card be displayed conspicuously near the patient—on the door, at the foot or head of the bed, etc.; on the back of the card the disease is to be written in a blank space. This procedure is unacceptable

for diseases such as AIDS, gonococcal ophthalmia neonatorum, or mucocutaneous herpes simplex, to name a few, because the diagnosis could become visible to anyone walking by the patient's room if the card were accidentally turned the wrong way. This shortcoming could be overcome by deleting this requirement in System B.

The new guidelines are very useful and long past due. Now infection control practitioners have a choice between two alternative systems of isolation precautions. However, careful consideration must be given to each system's advantages and disadvantages, including the ability to prevent disease transmission, preservation of medical confidentiality, and the economic impact on the individual's institution.

REFERENCES

1. Garner JS, Simmons BP: CDC guideline for isolation precautions in hospitals. *Infect Control* 1983; 4(suppl):245-325.

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