INFECTION CONTROL IN THE EMERGENCY DEPARTMENT

Katherine H. West

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Preface

Each year, the Emergency Department staff is called upon to review and revise its infection control policies and procedures. Each year, the process tends to evoke stress. The contents of this manual are designed to help you create and update your department's infection control policies and procedures. References are furnished to provide sources of additional information on selected topics.

Before this manual was prepared, a survey was conducted to assess the needs of hospital emergency departments in the area of policy development. Survey hospitals were selected at random from around the country. Of the 38 percent that responded, those on the East Coast identified different (indeed, apparently opposing) needs than those on the West Coast.

Survey results of information from the West Coast revealed a need for information on disposal of infectious waste, specific cleaning routines, and tuberculosis. East Coast respondents stated that they needed information on the acquired immunodeficiency syndrome (AIDS) and hepatitis viruses.

Both areas expressed a need to have additional specific information on follow-up procedures for exposure situations and patient education.

This manual attempts to meet the needs of emergency department personnel in both areas.

Acknowledgment

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for its contributions to this manual

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List of Policies and Procedures

Chapter 1

Relationships among Infection Control Practitioners, the Emergency Department, and Prehospital Care Providers

The infection control practitioner (ICP) and the members of the Emergency Department (ED) staff need to develop a working relationship. Areas of discussion that could be mutually beneficial include:

- coordinating a system for reporting communicable diseases
- arranging for educational programming
- counseling employees in perceived or actual exposure situations
- helping develop departmental policies and procedures
- helping develop patient discharge instructions related to infectious diseases
- assisting with family and patient education
- serving as a resource person to see to the isolation needs of patients being admitted
- designating a resource person to deal with police and fire/rescue personnel on patient follow-up and personal exposure
- investigating resources for cost containment measures within the ED[1,2]

REPORTING COMMUNICABLE DISEASES

The ICP and the ED should develop a system for centralized communication of reports of cases of communicable and infectious diseases treated in the ED.

For example, an ED staff member could copy the face sheet of charts of any patients being evaluated for infectious and/or communicable disease. The ICP will collect these sheets daily, confirm the positive results, and report the cases to the Public Health Department. This will also alert the ICP to the possible need for contact follow-up. The ED should maintain the responsibility of notifying the patient regarding diagnosis and treatment.

EDUCATIONAL PROGRAMMING

Educational programming for the ED can be a combined effort by members of the ED staff, infection control staff, and prehospital care providers.

Prehospital care provider groups, emergency medical technicians (EMTs), paramedics, and first responder groups (police) are a vital part of the health care system. Integrating these groups for education will help create an atmosphere conducive to cooperation as well as information and resource sharing.

EMPLOYEE COUNSELING

When situations involving either "perceived" or "actual" exposure cause concern among employees, the ICP is available for one-on-one interaction. The employee's account and concerns about the incident can be reviewed and resource materials used. Such individual sessions may help reeducate employees on the subject of their apprehension, increase their understanding of the disease process, and aid their compliance with isolation procedures.

POLICY/PROCEDURE DEVELOPMENT

As previously stated, having written policies and procedures for infection control is a departmental responsibility. Many people feel that the ICP should be the one to frame those policies and procedures. This is usually due to the fact that ED staff members do not know where to begin with policy development. Consider the other side of the coin, however: the ICP is not always aware of all your department's concerns and needs. Only by working together can you develop practical, realistic policies and procedures. The development process is educational for both the ICP and ED personnel.

PATIENT DISCHARGE INSTRUCTION, PATIENT/FAMILY EDUCATION

To achieve a comprehensive approach to high-quality patient care, we need to develop discharge instructions for patients with communicable diseases who are returning to their home environment. These instructions should be designed to answer the questions that are asked most frequently and to guide patients until a final diagnosis is established. For example, we may give the patient suspected of having hepatitis general instructions to follow until laboratory tests confirm the type of hepatitis. (See the sample in Chapter 9.)

Reviewing these instructions with patients often generates questions you may not feel comfortable to answer. You may seek assistance from the ICP, who may speak to the patient and/or the patient's family; or you can refer them to the ICP for a conference session. The best approach depends on the concern or apprehension that you assess in the patient and the family.

ISOLATION ORDERS

Isolation orders for a patient admitted from the ED should be initiated while the patient is still in the ED. If questions arise about which precautions should be ordered, consult the ICP. This will reduce the confusion of the patient and of the staff in the receiving unit. (Refer to policy for initiating isolation page 97.)

RESOURCE PERSON TO POLICE AND FIRE/RESCUE GROUPS

A current national problem is the question, Who has the responsibility to notify supporting agency members when they have been involved in an exposure situation, and how much information should be given? This void needs to be filled. A system is needed to notify police and fire/rescue personnel if they have been involved in caring for a patient later found to have an infectious disease. Note that the hospital is obligated to conduct exposure follow-up, and our first responder groups need to be brought into the system.

The conceptual model (Fig. 1-1) illustrates the current and proposed flow of information in such cases. The solid lines depict the existing communication system. In most cases, the ICP reports all communicable disease patients who are

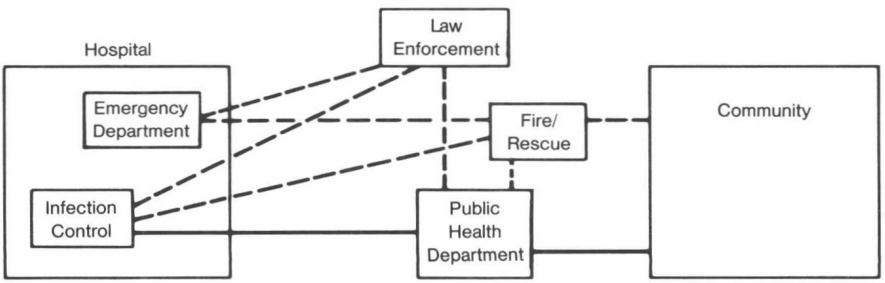

Figure 1-1 Conceptual Model. *Source:* © Katherine H. West, 1987.

admitted to the facility or who are treated and released from the ED. These cases are reported to the Public Health Department, which may go into the community to do a contact investigation later. Members of fire/rescue and law enforcement have been left out of this system, however. Their omission has been a problem of such concern for these groups that some states—Florida, Pennsylvania, and California—have passed legislation requiring hospitals to notify these groups within forty-eight hours.

The dotted lines illustrate the desired flow of information. To keep calls to a minimum and to coordinate the transmission of accurate information, one individual should be designated as the contact person. Having the ICP play this role would eliminate a burden on the ED and would ensure consistency. The ICP would also be able to assist in distinguishing between actual and perceived exposures. Coordination of information with a single individual responsible will help maintain patient confidentiality and protect the care provider's right to know.[3,4]

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Chapter 2

The Infection Control Practitioner's Role

Infection control, a relatively new field, began in England in the late 1950s. The role of the infection control nurse was first developed in this country in 1963 at Stanford University. The discipline grew throughout the nation and in 1972 the Association for Practitioners in Infection Control (APIC) was founded.[1]

Traditionally, this role is filled by a registered nurse (RN); recent studies report that 80 percent are RNs.[2] Others who have become active participants in the field include medical technologists, sanitarians, and pharmacists. Thus this discipline is broadly based, with a wide range of resources. Consequently, physicians are beginning to enter the field. The presence of physicians adds a new dimension to the role and to the field of practice. To address those people in the field who may not be nurses, the title has been changed to infection control practitioner (ICP).

The ICP's overall role may vary depending on the size of the hospital. In a small community hospital, the individual designated the ICP may wear more than one hat. Infection control is often combined with employee health, quality assurance, or risk management.[3,4] In a larger community hospital, one with more than 300 beds, a single individual may handle infection control or a team concept may be in place. The components of the program are guided by administrative commitment, the Joint Commission on the Accreditation of Hospitals (JCAH), and recommendations from the Study on the Efficacy of Nosocomial Infection Control (SENIC). That study recommends a staffing level of one full-time equivalent (FTE) per 250 beds.[5]

The ICP's role encompasses many duties and responsibilities, and these are hospitalwide; they cross all division boundaries and even reach out into the community. Many of the duties are mandated by state licensure as well as the JCAH.[6] Mandatory activities center on data collection to monitor the incidence of hospital-acquired, or nosocomial, infections in the facility. It is estimated that about 5 to 20 percent of all patients entering the hospital setting will develop a

nosocomial infection. Such infections may result in prolonged recovery time, disability, or even death.

Given the current atmosphere in cost containment and litigation, these cases can translate into large sums of money. For example, under the diagnosis-related group (DRG) system for reimbursement, hospitals may not be paid in total moneys for the treatment of hospital-acquired infections that prolonged the patient's hospital stay. Studies have estimated that a hospital-acquired infection, on the average, translates into $693 per patient.[7,8]

Let us discuss some of the aspects of the ICP's activities.

SURVEILLANCE MONITORING

Surveillance monitoring includes identifying, documenting, and reporting the rate or incidence of nosocomial infections. Such reports are usually made monthly.

This review system makes available information broken down according to nursing unit and special department (e.g., special procedures radiology) as well as on the types and sites of each infection. For example, if the ED wanted to investigate the incidence of line infections on intravenous lines that were started in the ED, these data could be retrieved with the ICP's help.

This ongoing monitoring process, which is primarily a combination of concurrent and retrospective review, helps identify clusters of infections and/or outbreaks in a given area. For example, a monthly review may identify an increase (say, from five to twelve) in urinary tract infections on the ortho/neuro unit. This would suggest the need for further investigation.

This segment of the job can demand a major portion of the ICP's time, especially if the data are collected and tabulated by hand rather than with computer support. Some ICPs are conducting problem-oriented surveillance activities rather than full surveillance in an effort to decrease surveillance time while focusing on problem areas. Surveillance of the incidence of infection and implementation of measures to reduce that incidence, in both patients and hospital personnel, constitute both quality assurance and risk management in practice.

EDUCATION

Education is another vital element of the ICP's role. When problems are identified, and their cause or potential cause noted, this information must be shared with the people closest to the problem. Problem review, analysis of facts, and recommendations for change must be presented to and discussed with all concerned. In this regard, the ICP is viewed as a change agent.