

<u>Infection Control Issues in Acute Care Settings:</u>

Acute care medical settings are a unique environment for infection control guidelines. The facility serves an ill population, including the very young, and the severely immune-compromised. Additionally, employees - that is, health care personnel, represent multiple professions, with various levels of knowledge and training related to infection control issues. The target population in an acute care medical facility with whom infection control issues should be addressed includes all people who provide or receive services, including patients, visitors, and health care workers, all of whom have the potential for exposure to infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air. Health care workers may include emergency medical service personnel, laboratory personnel, autopsy personnel, nurses, nursing assistants, physicians, technicians, therapists, pharmacists, students and trainees, contractual staff not employed by the health care facility, and persons not directly involved in patient care but potentially exposed to infectious agents (e.g., clerical, dietary, housekeeping, maintenance, and volunteer personnel).

An acute care medical facility may consider the following goals in their infection control program:

- Educating personnel, patients, and visitors about the principles of infection control and stressing individual responsibility for infection control.
- Collaboration between the infection control department and all other departments in monitoring and investigating potentially harmful infectious exposures and outbreaks among patients and personnel.
- Providing care to personnel for work-related illnesses or exposures identifying work-related infection risks and instituting appropriate preventive measures.

Medical screening and preventive health are important aspects of infection control in an acute care medical setting. Medical screening of employees for immunity to certain vaccine-preventable diseases, and for infection with tuberculosis (TB) is recommended by the Centers for Disease Control and Prevention (CDC) and the California Department of Health Services (DHS). Assessment of employees may include:

- Immunization status or history of vaccine-preventable diseases (e.g., chickenpox, measles, mumps, rubella, hepatitis B).
- History of any conditions that may predispose personnel toward acquiring or transmitting infectious diseases.

A record should be maintained for each health care worker. The record should reflect any information obtained during medical evaluations, documented disease and immunization history, including any immunizations administered during employment, results of tests obtained in any screening or control programs, and reports of work-related illnesses or exposures in accordance with state and federal regulatory requirements.

Personnel should also be provided initially, annually, and whenever the need arises, with in-service training and education on infection control practices and topics that are appropriate for their work assignments. The following topics could be included in trainings on infection control:

- Hand washing
- Personal protective equipment
- Aseptic technique
- Cleaning and disinfection
- Sterilization
- Waste management
- Importance of complying with standard precautions and reporting exposure to blood and body fluids to prevent transmission of blood borne pathogens.
- Isolation precautions
- Modes of transmission of infection and importance of complying with standard and transmission based precautions
- Importance of reporting certain illnesses or conditions (whether work related or acquired outside the hospital), such as generalized rash, skin lesions, jaundice, illnesses that do not resolve within a designated period (e.g., a cough that persists for >2 weeks, gastrointestinal illness, or febrile illness with fever of >103 ∘F lasting >2 days), and hospitalizations resulting from febrile or other contagious diseases;
- tuberculosis control
- Immunization and exposure management
- Importance of cooperating with infection control personnel during outbreak investigations

Post exposure work restrictions ranging from restriction of contact with high-risk patients to complete exclusion from duty are appropriate for health care workers who are not immune to certain vaccine-preventable diseases. Recommendations for restricting employees with infectious diseases can be found in Appendix ___.

Acute care medical facilities should consider developing policies for management

and control of outbreaks of any infectious disease. An outbreak is generally defined as the occurrence of more cases of a disease than normally expected, or among a specific group of people in a short time period. Actual or potential outbreaks could be identified by one or more of the following methods:

- Laboratory surveillance may show an increase in the number of isolates of a specific organism
- Staff may notice an increased incidence of a specific organism or a cluster of people with similar symptoms
- Employee Health or the infection control practitioner may notice an increase in a specific infection or incidence of similar symptoms.

Outbreak management should always include notification of California Department of Health Services Licensing and Certification Division (L & C), and San Mateo County Health System Communicable Disease Control Program.

Responsibilities of acute care facility staff during an outbreak include:

- Confirm existence of an outbreak
- Verify diagnoses of affected persons(patients or staff)
- Implement infection control measures in the affected area(s)
- Develop a working case definition (may occur in consultation with the Health Department)
- Direct staff on affected units to identify patients who meet case definition and exposed individuals.
- Provide education to staff, patients, visitors, and volunteers about the organism, infection control measures (including isolation precautions),
- exclusion criteria (for staff, visitors and volunteers)

Additional goals of the facility may include:

- Controlling the spread of infection in the unit and facility
- Controlling spread of disease
- Communication with the public and media
- Monitoring the effectiveness of the interventions
- Preventing recurrence of infections

The Health Department will provide the facility with parameters for clearance of the outbreak. Typically, at least one incubation period should occur before the facility can feel comfortable that the outbreak has ceased. When in doubt, facilities should ALWAYS consult with the Health Department prior to re-implementation of procedures and activities that were restricted or prohibited during the outbreak.

References:

<u>Guideline for Infection Control in Healthcare Personnel</u> (1998). Centers for Disease Control and Prevention (CDC) and the Hospital Infection Control Practices Advisory Committee (HICPAC).

Requirements for Infrastructure and Essential Activities of Infection Control and

Epidemiology in Hospitals: A Consensus Panel Report (1998). Infection Control and Hospital Epidemiology 19 (2) 114-124.