

# EPIDEMIOLOGY

KSU

College of Applied Medical Sciences

CHS 334

Epidemiology

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# Hospital Epidemiology

- The quality of a hospital's or health center's infection control program is a reflection of the overall standard of care provided by that institution.
- Good infection control programs reduce nosocomial infections, length of stay in the hospital, and costs associated with hospitalization.

# Hospital Epidemiology

- Countries with developed health care systems have responded to the need to control hospital infections, by establishing infection control programs that span the spectrum of hospital practice and clinical activity and provide means of evaluating the outcome of infection by clinical audit.
- Good programs develop standards for quality care of patients that are integrated into clinical practice.

# Hospital Epidemiology

- In developing health care programs, however, the situation is different. Infection control programs are either in their infancy or nonexistent.
- Individual hospitals and physicians struggle to establish programs with little support from policy makers and government officials.
- Infection control is considered a low priority.

# Hospital Epidemiology

## Mission

The mission of the Department of Hospital Epidemiology and Infection Control at the [Johns Hopkins Hospital](#) is to support the institution's tripartite mission of research, teaching, and patient care; to promote patient safety by reducing the risk of acquiring and transmitting infections; and to be a leader in healthcare epidemiology and infection control.

# Hospital Epidemiology

The Department of Hospital Epidemiology Hospital Epidemiology

## Departmental Functions

- Perform comprehensive surveillance for healthcare-associated infections and epidemiologically significant organisms
- Identify and investigate clusters or outbreaks of infection
- Analyze procedure and device-associated infections
- Create evidence-based interventions to prevent healthcare-associated infections
- Evaluate methods and technologies to reduce transmission of pathogens within the institution
- Create and maintain appropriate infection control policies

# Hospital Epidemiology

## The Department of Hospital Epidemiology Hospital Epidemiology Departmental Functions

- Develop and maintain educational programs regarding infection control for all hospital employees, physicians, and trainees
- Provide consultation to health care providers in the assessment and management of patients and employees with communicable diseases
- Provide input for the content and scope of occupational health and safety programs related to infection control and prevention
- Advise senior leadership on issues related to reduction of infection risks and regulatory requirements
- Administer ongoing programs and initiatives for continuous quality assessment, quality improvement, and infection risk reduction (e.g. hand hygiene promotion and monitoring).



# The Infection Control Committee

- The modern hospital epidemiologist has broad perspectives and influence across clinical departmental lines.
- The opportunities to improve patient care by expanding traditional areas of focus beyond infection control are great.
- Useful skills include epidemiology, communication, and respect for colleagues.



# The Infection Control Committee

- The hospital epidemiologist needs training in methods for surveillance, prevention, and control of nosocomial infections.
- The hospital epidemiologist also must know how to apply these methods to other areas, including the epidemiology of noninfectious adverse outcomes of medical care.

# The Infection Control Committee

- Hospital epidemiologists are professionals who use their knowledge and skills to determine the potential causes of disease and find out how diseases spread.
- Hospital epidemiologists translate their expertise into institutional policy and gain the support of administrators through the infection control committee.

# The Infection Control Committee

- The infection control committee is the arm of hospital administration that regulates most infection control activities throughout the organization.
- Committee members have the important task of helping disseminate information to all important hospital constituencies.

# The Infection Control Committee

## Purpose of the Infection Control Committee

- The infection control committee is responsible for assuring that the internal hospital environment minimizes the exposure of both patients and hospital personnel to infectious complications. It therefore develops policies and procedures relative to infection control and assures accurate reporting of infections occurring in the hospital.

# The Infection Control Committee

## Purpose of the Infection Control Committee

- The committee's purpose is to ratify the ideas of the infection control team and to disseminate infection control information.
- The committee provides the political support that empowers the infection control team to implement infection control policies.

# The Infection Control Committee

## Purpose of the Infection Control Committee

- Committee members who understand the policies will take critical information to their work areas where they can relay it to peers.
- The committee itself does not do the actual work of infection control and rarely generates independent ideas.

# The Infection Control Committee

## Committee Membership

- The hospital epidemiologist should recruit people who can help the committee meet its goals.
- The committee should include a core group that does the real day-to-day work of infection control.



# The Infection Control Committee

## Committee Membership

- The infection control "team" should include the hospital epidemiologist, the infection control professionals, the clinical microbiologist, and the employee health director, the people who perform surveillance, analyze trends, and develop policies.

# The Infection Control Committee

## Committee Membership

- Other members should represent important department, depending on the structure of the health care organization; administration, nursing, family practice, internal medicine, surgery, pediatrics, pharmacy, and central services.

# The Infection Control Committee

## Committee Chair

- The chair of the infection control committee is usually the hospital epidemiologist.
- He or she is often an infectious disease specialist or medical microbiologist with training in infection control.

# The Infection Control Committee

## Logistics

- The committee should meet at a set time and place monthly or quarterly, on the same week of the same month and day of the week.
- The committee members should receive the agenda several days in advance to remind them of the meeting and to allow them to prepare for it.

# The Infection Control Committee

## Getting Things Done

- To keep things running smoothly in today's bureaucratic environment, the hospital epidemiologists must prepare extensively before each meeting.
- He or she must know who is in the power structure and gain their support ahead of time.
- Once he or she has gained the administrator's approval, you should have the authority to implement the policy as needed.

# The Infection Control Committee

## Getting Things Done

- The hospital epidemiologist should consult with persons who have expertise in the area addressed by the proposed policy.
- It would be wise to have the expert present relevant background data at the infection control meeting.

# The Infection Control Committee

## Getting Things Done

- Finally, you should identify people who are likely to oppose your goal.
- If you talk with opponents individually in a non-confrontational manner before the meeting, you may disarm them and win their support.



# The Infection Control Committee

## Minutes

- The minutes of the infection control committee are a legal document.
- They record the topics that the committee discussed and the policies or procedures that the committee approved.

# The Infection Control Committee

## Minutes

- An appointed secretary should compose them with care.
- Copies should be sent to committee members for review.
- The committee should approve the minutes at the next scheduled meeting.

# The Infection Control Committee

## Meeting Agenda

- The agenda should be structured so that the meeting will finish within its allotted time.
- "Old business" should be limited to updates on items of ongoing interest, for example outbreaks, TB, or antibiotic-resistant organisms. "New business" at each meeting should include a brief summary of surveillance data.

# The Infection Control Committee

## Meeting Agenda

- Overly detailed reports of infection rates usually do not interest the full committee.
- You should discuss new policies or procedures and substantial revisions to current protocols.

# The Infection Control Committee

## Meeting Agenda

- You should try approving one new policy or procedure per meeting and do not schedule a policy for discussion until your team has thoroughly reviewed the literature and sought the advice of clinical experts.

# The Infection Control Committee

## Reassessment

- The infection control committee should periodically reassess its performance.
- Infection control team members should list and evaluate their accomplishments and state their priorities.
- This way the infection control committee can adapt to changes in the health care environment.

*THANK you*