

SECTION 3

CLINICAL SYNDROMES: HEALTH CARE–ASSOCIATED INFECTIONS

168 Infections Acquired in Health Care Facilities

Robert A. Weinstein

The costs of hospital-acquired (nosocomial) and other health care-associated infections are great. These infections have affected as many as 1.7 million patients at a cost of ~\$28–33 billion and 99,000 lives in U.S. hospitals annually. Although efforts to lower infection risks have been challenged by the numbers of immunocompromised patients, antibiotic-resistant bacteria, fungal and viral superinfections, and invasive devices and procedures, a prevailing viewpoint—often termed “zero tolerance”—is that almost all health care-associated infections should be avoidable with strict application of evidence-based prevention guidelines ([Table 168-1](#)). In fact, rates of device-related infections—historically, the largest drivers of risk—have fallen steadily

over the past few years. Unfortunately, at the same time, antimicrobial-resistant pathogens have risen in number and are estimated to contribute to ~23,000 deaths in and outside of hospitals annually. This chapter reviews health care-associated and device-related infections as well as basic surveillance, prevention, control, and treatment activities.

ORGANIZATION, RESPONSIBILITIES, AND INCREASING SCRUTINY OF HEALTH CARE–ASSOCIATED INFECTION PROGRAMS

The standards of the Joint Commission require all accredited hospitals to have active programs for surveillance, prevention, and control of nosocomial infections. Education of physicians in infection control and health care epidemiology is required in infectious disease fellowship programs and is available in online courses. Concerns over “patient safety” have led to federal legislation that prevents U.S. hospitals from upgrading Medicare charges to pay for hospital costs resulting from at least 14 specific nosocomial events ([Table 168-2](#)) and have prompted national efforts to publicly