

PATIENT SAFETY

WHAT IS THE PUBLIC HEALTH ISSUE?

According to a sentinel 2000 Institute of Medicine (IOM) report on patient safety, about 44,000 to 98,000 Americans die each year from preventable medical errors, and wound infections are the second leading type of preventable adverse events. The report also estimates that costs associated with medical errors are estimated to be as much as \$29 billion annually; adverse events affecting medical care occur in about 3% to 4% of all patients; and existing technology and knowledge can prevent many errors, but prevention strategies have not been widely implemented. Healthcare-associated infections cost the U.S. healthcare system an estimated \$4.5 billion and, according to CDC estimates, contribute to about 90,000 deaths annually, or one death every 6 minutes.

WHAT HAS CDC ACCOMPLISHED?

CDC has expanded the infection control and prevention public health program to prevent other types of healthcare-associated medical injuries. In 2003, CDC continued existing collaborations with state and local health agencies, private-sector consortia and academic medical centers and healthcare providers to develop, implement, and evaluate cutting-edge research and demonstration programs.

Examples of Program in Action

- In the past decade, hospitals participating in CDC's National Nosocomial Infections Surveillance (NNIS) system for monitoring and preventing adverse healthcare events have had a 30% to 50% decline in targeted infections.
- A study conducted in collaboration with investigators in the NNIS system has demonstrated an association between an increased incidence of preventable complications, specifically catheter-associated bloodstream infections in intensive care units and declines in full-time nurses.
- Demonstration projects in collaboration with healthcare providers in Chicago have shown the feasibility and utility of using improved information systems and targeted educational interventions to help providers improve healthcare quality and reduce process variation that can lead to errors and poor outcomes of care, including healthcare-associated infections.
- CDC is collaborating with healthcare providers and sponsoring organizations in Southwestern Pennsylvania in demonstrating the feasibility and potential long-term advantages of both a regional approach to quality improvement and the applicability of industrial process improvement technology to improving patient safety by preventing Methicillin Resistant Staphylococcus aureus.
- A state-wide survey in Iowa to assess clinician perceptions of and barriers and facilitators to patient safety was completed and a demonstration project focusing on patient-provider communication and comprehension is underway.
- CDC collaborates with University of Iowa to assess the incidence of and to prevent microbiology laboratory errors, especially errors in antimicrobial susceptibility testing.
- CDC and other federal and private partners are developing a new activity targeting surgical adverse events, including surgical site infections, with a goal of a 50% reduction over 5 years. The project is proposed as a national rollout in 2005.

WHAT ARE THE NEXT STEPS?

Federal agencies and state and local health departments can facilitate widespread adoption and implementation of strategies to prevent and control healthcare-associated harm. CDC plans to evaluate improved information systems that allow healthcare providers to efficiently identify and monitor errors and adverse events to enhance the healthcare system's capacity to respond to the greatest risks and needs.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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