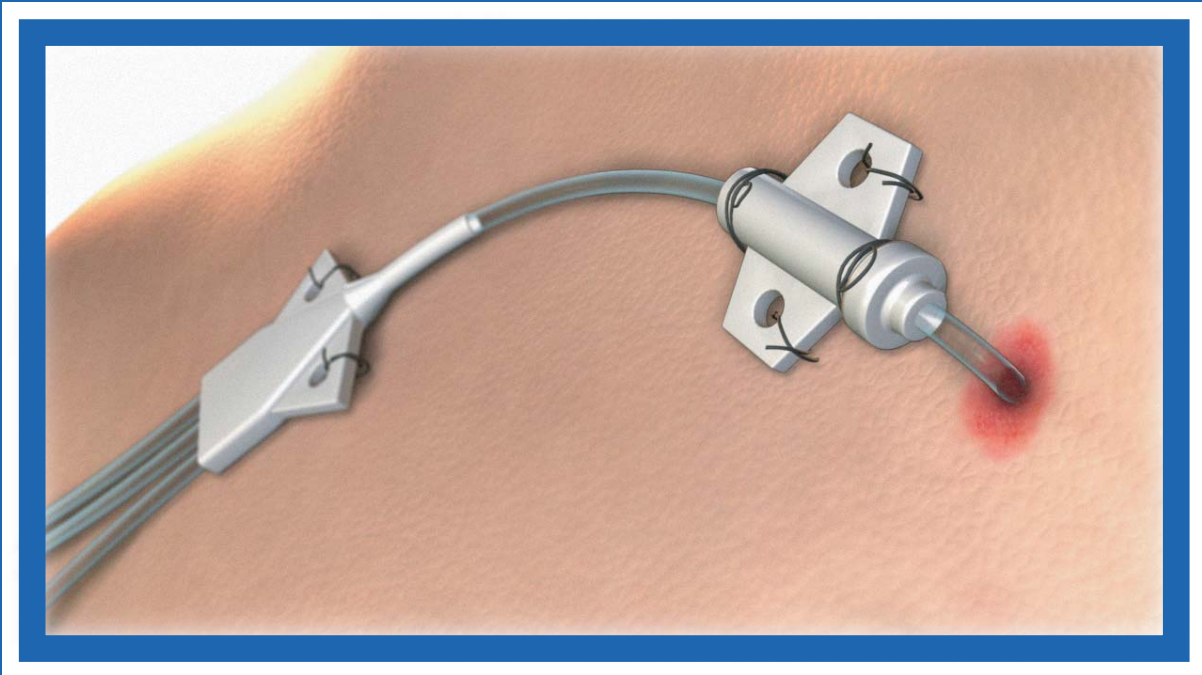


# WHAT DOES **ONE** INVASIVE LINE INFECTION COST?



# Invasive Line Management

Medical Simulation Corporation (MSC) has developed a self-paced, Web-accessible didactic course to educate healthcare providers on the management of invasive lines and the appropriate prevention practices as recommended by the Centers for Disease Control. The goal of this course is to assist hospitals and their staff in meeting quality initiatives in decreasing central line infection rates and, ultimately, the morbidity and mortality that follow.

## Course Objectives

At the end of this course, the participant should be able to:

- Review the indications for invasive line placement.
- Identify appropriate treatment modalities associated with each invasive line.
- Describe the management and care of invasive line catheters.
- Recognize the signs and symptoms of infection.
- Identify the recommended treatment for infections.
- Understand patient teaching for long-term invasive line therapy.

## Course Description

This course is designed for healthcare professionals who provide routine care for different types of invasive lines.

Content includes:

- Pre-test to assess baseline knowledge
- Clinical indications and contraindications for central line placement
- Types of invasive lines
  - ◆ Long term
  - ◆ Short term
- Routine management and care
- Complications
  - ◆ Focus on signs and symptoms of infection
  - ◆ Recommended treatment
- Post-test

## Benefits

- Online convenience and flexibility: available anytime, anywhere
- Self-paced learning
- Guideline driven
- Consistent with The Joint Commission standards
- Integration into Quality Improvement Programs

## Clinical Applicability

Healthcare-associated infections in U.S. hospitals account for two million infections and 90,000 deaths annually.<sup>1</sup> Central line-associated blood stream infections (BSIs) are the third most common healthcare-associated infections reported by medical/surgical ICUs participating in the National Nosocomial Infection Surveillance (NNIS) system. Each year, an estimated 250,000 cases of central line-associated BSIs occur in hospitals in the United States, with an estimated attributable mortality of 12 - 25% for infection.<sup>2</sup> The Centers for Disease Control (CDC) has identified catheter-associated adverse events, including BSIs, as one of its seven healthcare safety challenges, with a goal to reduce such complications by 50% in five years.<sup>3</sup>

Several states have recently adopted laws that require hospitals to report healthcare-associated infections (HAIs) to states, which in turn would disclose the information to the public. Carlene Muto, MD, director of infectious diseases at Pittsburg-based UPMC Health Systems stated ". . . hospitals tend to focus on ICUs and target such problem areas as central line infections, which account for 40% of primary bacteremias in ICU patients and also have substantial morbidity and mortality."<sup>4</sup>

### References:

<sup>1</sup>Weinstein RA. *Nosocomial infection update*. Emerg Infectious Disease 1998; 4:416-20

<sup>2</sup>CDC. *Guidelines for the prevention of intravascular catheter-related infections*. MMWR 2002; 51 (No. RR-10).

<sup>3</sup>CDC. *Issues in healthcare settings: CDC's seven healthcare safety challenges*. Atlanta, GA: US Department of Health and Human Services, CDC; 2001.

<sup>4</sup>State reports on infection rates. *Materials Management* 2006.

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