



Press Release

For Immediate Release: March 1, 2011

Contact: [CDC Media Relations \(/media/\)](#)
(404) 639-3286

ICUs show that preventing infections is possible; other health care settings must adopt prevention practices

The number of bloodstream infections in intensive care unit patients with central lines decreased by 58 percent in 2009 compared to 2001, according to a new [CDC Vital Signs \(/vitalsigns/\)](#) report. During these nine years, the decrease represented up to 27,000 lives saved and \$1.8 billion in excess health care costs. Bloodstream infections in patients with central lines can be deadly, killing as many as 1 in 4 patients who gets one.

A central line is a tube usually placed in a large vein of a patient's neck or chest to deliver treatment in an intensive care unit, elsewhere in the hospital, and during dialysis. A bloodstream infection can happen when germs enter the blood through a central line, often because proper procedures were not used while the central line was placed or maintained. In recent years, studies have proven that health care providers can prevent most bloodstream infections in patients with central lines by following [CDC infection control recommendations \(/HAI/prevent/prevent_pubs.html\)](#), which include removing central lines as soon as medically appropriate. In hemodialysis patients, central lines should only be used when other options are unavailable.

"Preventing bloodstream infections is not only possible, it should be expected. Meticulous insertion and care of the central line by all members of the clinical care team including doctors, nurses and others at the bedside is essential. The next step is to apply what we've learned from this to other health care settings and other health care-associated conditions, so that all patients are protected," said [Thomas R. Frieden, M.D., M.P.H. \(/about/leadership/leaders/Frieden.htm\)](#), CDC director.

In addition to the ICU findings, the report found that about 60,000 bloodstream infections in patients with central lines occurred in non-ICU health care settings such as hospital wards and kidney dialysis clinics. About 23,000 of these occurred in non-ICU patients (2009) and about 37,000 infections occurred in dialysis clinics patients (2008).

"This reduction is the result of hospital, local, state and national medical and public health efforts focused on tracking infection rates and then using that information to tailor and evaluate prevention programs," said [Denise Cardo, M.D. \(/media/subtopic/sme/cardo.htm\)](#), director of CDC's Division of Healthcare Quality Promotion. "The report findings point to a clear need for action beyond ICUs. Fortunately, we have a prevention model focused on full collaboration that can be applied broadly to maximize prevention efforts."

Infections are one of the leading causes of hospitalization and death for hemodialysis patients. At any given time, about 350,000 people are receiving hemodialysis treatment for kidney failure. Seven in 10 patients who receive dialysis begin that treatment through a central line.

Everyone Has a Role to Play in Prevention

CDC partners with other federal agencies, including the [Agency for Healthcare Research and Quality \(http://www.ahrq.gov/\)](#) and [Centers for Medicare and Medicaid Services \(http://www.cms.gov/\)](#), as well as states, health care providers, and consumer groups. CDC is working toward prevention goals detailed in the [U.S. Department of Health and Human Services' Action Plan to Prevent Healthcare-Associated Infections \(http://www.hhs.gov/ash/initiatives/hai/actionplan/\)](#).

"These partnerships have fueled our prevention success, saving lives and moving us one step closer to eliminating healthcare-associated infections," said Cardo. "Now we must continue to implement what we know works and look at data to measure impact, all while continuing to research and fill remaining knowledge gaps."

To prevent bloodstream infections in patients with central lines, hospitals, dialysis centers, and other medical care locations can:

- Make sure CDC infection control guidelines are followed every time a central line is put in and used.
- Encourage staff members to speak up when guidelines aren't followed.
- Use data for action. Track infection rates and germ types with CDC's [National Healthcare Safety Network \(/nhsn/\)](#) (NHSN) to learn where and why infections are happening, target actions to stop them, and track progress.
- Recognize staff members or units that work hard to prevent central line infections or that solve issues with infection control.