

Hospitals are finally turning up the heat on hand hygiene.

With rising alarm over hospital infections, which cause 90,000 deaths annually, a growing number of hospitals are adopting aggressive hand-hygiene surveillance and monitoring programs, and in some cases imposing penalties for doctors, nurses, and other health-care workers who don't follow the rules.

In an effort to be launched this week, the Centers for Disease Control and Prevention is collaborating with the nonprofit Institute for Healthcare Improvement and two leading infection-control professional societies in a program to boost compliance using behavior-modification techniques, "best practice" guidelines, and rigorous programs to monitor adherence.

Despite strict guidelines issued by the CDC to stop the spread of bacteria on contaminated hands, and wide adoption of alcohol-based hand-rub dispensers in patient rooms and hospital corridors to make it easier for harried health-care workers to disinfect between patients, compliance rates remain mired at 40% to 50% nationwide, studies show.

The IHI program recommends a far more activist approach that holds hospital administrators and staffers accountable for failure.

"It no longer is tolerable to accept noncompliance rates of more than 50% when we are dealing with critically ill patients," says Don Goldmann, a senior vice president of IHI and a professor of pediatrics at Harvard Medical School, who notes that computer-chip makers have better hand-cleaning standards than most hospitals. While the IHI program emphasizes education and positive feedback, "repeated violations in health-care, or any industry, need to have consequences," Dr. Goldmann says.

The CDC's hand-hygiene guidelines, issued in 2002, asked hospitals to track and monitor compliance, "but we've increasingly recognized that there is a tremendous gap between what we are recommending and what's out there in practice," says John Jernigan, a medical epidemiologist and one of the experts leading the CDC's efforts to improve adherence to infection-control recommendations. By collaborating with IHI on the new program, the aim is to help "remove barriers that exist in the health-care system" to good hand hygiene.

Some hospitals already have adopted tougher tactics, with encouraging results. After outbreaks of the drug-resistant bacteria MRSA a few years ago, Greenview Regional Hospital and the Medical Center, two hospitals in Bowling Green, Ky., that share medical staffs, found widespread noncompliance with basic hand-hygiene rules among hospital employees and doctors. The hospitals began a program to identify offenders, requiring them to undergo hand-hygiene tutorials and education, and then escalating the severity of penalties for noncompliance -- including disciplinary action or dismissal for repeated violations.

Compliance rates, which had been in the single digits in some units and barely measurable in others, improved to 85% for health-care workers overall and 95% for physicians alone last year at Greenview Regional and close to 100% for all staffers at the Medical Center, while bacteria outbreaks were resolved, according to reports presented at the recent meeting of the Society for Healthcare Epidemiology of America.

"We are in an era of smarter bacteria and we need to be more aggressive in ensuring patient safety," says Rebecca Shadowen, the infectious-disease specialist who led the study. While only one health-care worker -- who also had numerous unrelated violations -- was dismissed, the program emphasized that the hospital's top officials were monitoring compliance and prepared to use disciplinary action, just as they would for any serious infraction of hospital policies, Dr. Shadowen says.

Shands Hospital at the University of Florida uses staff monitors who observe workers and report violations. Hand-hygiene compliance is now part of the hospital's performance evaluations, with punitive measures for repeat offenders, says Loretta Litz Fauerbach, director of infection control and a board member of the Association for Professionals in Infection Control and Epidemiology, a sponsor of the IHI hand-hygiene program. But compliance rates have risen to 95% from 80% over the last year, she says, and "we'd rather take a positive approach and keep reinforcing that."

John Boyce, an infectious-disease specialist who helped write the CDC guidelines and runs a free instructional Web site, handhygiene.org, says hospitals often view monitoring hand-hygiene compliance as time-consuming, tedious and ineffective. "We need to come up with monitoring strategies that are simple, whose results are believable," Dr. Boyce says.

Robert Wise, vice president of the Joint Commission on Accreditation of Health Care Organizations, which requires hospitals to have infection-control programs as a condition of accreditation, warns that workers may feel animosity and resentment toward those trying to monitor them. "While you may achieve an increase in hand hygiene, I don't know if you'll produce a culture of cooperation," Dr. Wise says.

IHI also admonishes hospitals to do their part, such as making sure employees know they have to clean their hands after removing gloves, because bacteria from the gloves can be transferred to the hands. Hospitals also have to be vigilant about maintaining alcohol-rub dispensers, which often don't work, aren't refilled, or aren't placed conveniently, the group says.

Hospitals also can enlist staffers in making hand-hygiene rules easier to follow, says Charles Huskins, an author of the IHI tool kit for hand hygiene and an infectious-disease expert at the Mayo Clinic in Rochester, Minn. Compliance rates at Mayo hospitals were sharply improved, in part, because employees were allowed to test different alcohol hand rubs, and chose one with strong moisturizers to avoid irritation that might lead to discontinued use. "That made a really big difference in a chilly northern climate in winter," Dr. Huskins says.