

# Initial specimen diversion device cuts culture contamination

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(HealthDay)—For patients undergoing blood cultures in an emergency

department setting, use of a device that diverts and sequesters the initial 1.5 to 2.0 mL of blood (initial specimen diversion device [ISDD]) is associated with a decrease in blood culture contamination, according to a study published online May 17 in *Clinical Infectious Diseases*.

Mark E. Rupp, M.D., from the University of Nebraska Medical Center in Omaha, and colleagues conducted a prospective controlled trial comparing ISDD with standard phlebotomy procedures for patients with clinical suspicion of serious infection. Data were included for 904 nonduplicative subjects with 1,808 [blood](#) cultures.

The researchers found that, compared with the standard procedures, blood culture contamination was significantly reduced through use of the ISDD (0.22 versus 1.78 percent, respectively;  $P = 0.001$ ). There was no compromise in sensitivity: true bacteremia was seen in 7.2 and 7.6 percent of samples using the ISDD and standard procedure, respectively ( $P = 0.41$ ). There were no reports of needlestick injury or potential bloodborne pathogen exposure. Comparing the six-month after with before intervention periods, phlebotomists using the ISDD experienced a significant decrease in blood culture contamination, while nurses not using the ISDD did not. There was widespread user satisfaction among the 73 percent of phlebotomists who completed a post-study anonymous survey.

"Use of the ISDD was associated with a significant decrease in blood [culture](#) contamination in patients undergoing blood cultures in an emergency department setting," the authors write.

The study was funded by Magnolia Medical Technologies, which manufactures the ISDD used in the study; one author disclosed financial ties to 3M.

**More information:** [Abstract/Full Text](#)

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