

17. Ruben FL, Johnston F, Streiff EJ. Influenza in a partially immunized aged population: effectiveness of killed Hong Kong vaccine against infection with the England strain. *JAMA* 1974;230:863-866.
18. Barker WH, Borisute H, Cox C. A study of the impact of influenza on the functional status of frail older people. *Arch Intern Med* 1998;158:645-650.
19. Mathur U, Bentley DW, Hall CB. Concurrent respiratory syncytial virus and influenza A infections in the institutionalized elderly and chronically ill. *Ann Intern Med* 1980;93:49-52.
20. Hall WN, Goodman RA, Noble GR, Kendal AP, Steece RS. An outbreak of influenza B in an elderly population. *J Infect Dis* 1981;144:297-302.
21. Hart RJ. An outbreak of respiratory syncytial virus infection in an old people's home. *J Infect* 1984;8:259-261.
22. Falsey AR, Treanor JJ, Betts RF, Walsh EE. Viral respiratory infections in the institutionalized elderly: clinical and epidemiologic findings. *J Am Geriatr Soc* 1992;40:115-119.
23. Nicholson KG, Baker DJ, Farquhar A, Hurd D, Kent J, Smith SH. Acute upper respiratory tract viral illness and influenza immunization in homes for the elderly. *Epidemiol Infect* 1990;105:609-618.
24. Wald TG, Miller BA, Shult P, Drinka P, Langer L, Gravenstein S. Can respiratory syncytial virus and influenza A be distinguished clinically in institutionalized older persons? *J Am Geriatr Soc* 1995;43:170-174.
25. Garner JS, Hospital Infection Control Practices Advisory Committee. Guideline for isolation precautions in hospitals. *Infect Control Hosp Epidemiol* 1996;17:53-80.
26. Leclair JM, Freeman J, Sullivan BF, Crowley CM, Goldmann DA. Prevention of nosocomial respiratory syncytial virus infections through compliance with glove and gown isolation precautions. *N Engl J Med* 1987;317:329-334.
27. Moser MR, Bender TR, Margolis HS, Noble GR, Kendal AP, Ritter DG. An outbreak of influenza aboard a commercial airliner. *Am J Epidemiol* 1979;110:1-6.
28. Dick EC, Jennings LC, Mink KA, Wartgow CD, Inhorn SL. Aerosol transmission of rhinovirus colds. *J Infect Dis* 1987;156:442-448.

Povidone-Iodine Versus Iodine Tincture for Venipuncture-Site Disinfection

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Little and coinvestigators from Washington University School of Medicine, St Louis, Missouri, conducted a study to determine if the method of disinfection at the venipuncture site could reduce contamination rates of blood cultures. Antecubital venipuncture sites were randomly disinfected with povidone-iodine or iodine tincture, and blood cultures (two bottles,

10 mL of blood) were drawn by professional phlebotomists. Scoring of contaminant species was restricted to skin flora.

Of the 3,851 blood cultures collected during the study, 120 (3%) were contaminated with skin flora. The contamination rate for blood cultures collected after povidone-iodine was 4% (74/1,947), compared with a rate of 2% (46/1,904; $P=.01$) after iodine tincture. The difference in mean total hospital costs for patients with contaminated blood cultures and those with sterile

blood cultures was \$4,100 (95% confidence interval, \$740-\$7,400; $P=.02$).

The authors concluded that iodine tincture is superior to povidone-iodine for venipuncture-site antisepsis before blood-culture sampling.

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