

Arrow Select Intravenous Administration Set Products
Annotated Bibliography
11-19-08

Guideline for Hand Hygiene in Health-Care Settings 2002

The hand hygiene guidelines were developed by the CDC's Healthcare Infection Control Practices Advisory Committee (HICPAC), in collaboration with the Society for Healthcare Epidemiology of America (SHEA), the Association of Professionals in Infection Control and Epidemiology (APIC), and the Infectious Disease Society of America (IDSA). The hand hygiene guidelines are part of an overall CDC strategy to reduce infections in health care settings to promote patient safety.

Comment: <http://www.cdc.gov/handhygiene/> Website contains free download of the Hand Hygiene Guidelines and a link to the Hand Hygiene Resource Center which contains educational resources.

Also published as: Guideline for Hand Hygiene in Health-Care Settings: recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. Infect Control Hosp Epidemiol. 2002 Dec;23(12 Suppl):S3-40.

Guidelines for the Prevention of Intravascular Catheter Related Infections, Centers for Disease Control and Prevention (2002), MMWR August 9, 2002 / 51(RR10);1-26.

These guidelines were developed to assist practitioners in the care of patients who have intravascular catheters inserted for treatment purposes. More specifically, this report provides background information as well as recommendations to reduce the risk of infections associated with an indwelling catheter. The guidelines were prepared by a working group of professionals from a variety of disciplines and societies. The disciplines include: critical care medicine, infectious diseases, health-care infection control, surgery, anesthesiology, interventional radiology, pulmonary medicine, pediatrics and nursing. The published literature was used to support the recommendations and classified as to the strength of the research published. They replace the previously published guidelines of 1996.

Comment: This document can be retrieved in its entirety from <http://www.cdc.gov/mmwr/> Go to Recommendations and Reports on the left side of the page → click on Past Volumes → click on Volume 51 → Scroll down to RR 10 and click on the title: Guidelines for the Prevention of Intravascular Catheter Related Infections.

Occupational Exposure to Bloodborne Pathogens; Needlestick and Other Sharps Injuries. 66 Federal Register 5317 (2001)(Codified at 29 CFR~1910.1030).

This is the final ruling to the revision of the 1991 Blood Borne Pathogens standards which includes the Needlestick Safety and Prevention Act.

Comment: The document can be retrieved in its entirety from <http://www.gpoaccess.gov/fr/retrieve.html>; choose Federal Register # 66 and type in page 5318 which will take you to the first page of the document.

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Journal of Intravenous Nursing (January/February, 2006), "Infusion Nursing Standards of Practice", Volume 29 (1S).

The 2006 Infusion Nursing Standards of practice were written using evidenced-based practice and research. They are an update from the 2000 edition and were written by a group of committees consisting of experts and reviewers from a broad cross-section of healthcare disciplines. The standards cover a variety of topics dealing with intravenous therapy and signify a framework for practice and education.

Comment: The document can be purchased in its entirety from www.journalofinfusionnursing.com

Bennett SN, McNeil MM, Bland LA, et al. Postoperative Infections Traced to Contamination of an Intravenous Anesthetic, Propofol. N Engl J Med. 1995 July 20;333(3):147-54.

The researchers conducted a case-control or cohort study to identify risk factors associated with bloodstream, unusual surgical site infections and acute febrile episodes occurring after surgical procedures. This research was prompted by unusual outbreaks of infection at seven hospitals which occurred between June 1990 and February 1993 after surgical procedures.

A case patient was defined as any patient who had an organism-specific infection or acute febrile episode after a surgical procedure during the study period in that hospital. Reviews of the procedures, cultures, and microbiologic studies of infecting, contaminating, and colonizing strains were also done.

The researchers found that only the exposure to propofol, a lipid-based anesthetic agent, was significantly associated with the postoperative complications at all seven hospitals. They concluded that with the increasing use of lipid-based medications, which support rapid bacterial growth at room temperature, strict aseptic techniques are essential during the handling of these agents to prevent extrinsic contamination and dangerous infectious complications.

Comments: This research was conducted by the Hospital Infections, National Center for Infectious Diseases, the Division of Bacterial and Mycotic Diseases (M.M.M.), and the Division of Field Epidemiology, Epidemiology Program Office, Centers for Disease Control and Prevention, Atlanta; and the Texas Department of Health, Austin. Article reprints can be obtained from the Centers for Disease Control and prevention, Atlanta GA, attention Dr. Jarvis.

Sklar GE. Propofol and postoperative infections. *Ann Pharmacother.* 1997 Dec;31(12):1521-1523.

This article identifies the importance of strict aseptic technique when preparing and handling propofol. It states that in several places the package insert for propofol stresses the importance of strict aseptic technique in the preparation and handling of the drug, and the potential for infection if these procedures are not followed. It also identifies that in the US, the product has been reformulated to contain disodium edetate 0.005% as a microbial growth

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retardant to inhibit the growth of microorganisms but that this formulation is not considered an antimicrobially preserved product under USP standards. The author also reviews the care and handling of propofol:

- Preparation just prior to administration
- Infusion completed within 6 hours after the ampul or vial is opened
- Unused portion must be discarded at the end of the procedure or at 6 hours (whichever occurs sooner)
- In the ICU:
 - If administered directly from its original container, the tubing and any unused portion must be discarded after 12 hours
 - If transferred to another container, administration lines and unused drug should be discarded after 6 hours
- Hospital personnel involved in the preparation and handling of propofol must be educated on, and adhere to, the recommendations outlined by the manufacturer to prevent further outbreaks of infections.

Comment: Read the manufacturer's insert before preparation, handling and administration.