

12/2/04

## ERROR ALERT

Dear Member of the Media:

A recent tragic medication error that claimed the life of a 69-year old Seattle woman serves as a compelling example of why **unlabeled medications and solutions in the sterile field are dangerous**. During surgery, a technician accidentally injected the patient with an antiseptic skin prep solution, chlorhexidine, instead of contrast media as indicated. Both solutions were clear and in unlabeled cups. There have been many other similar errors reported, and the Institute for Safe Medication Practices (ISMP) hopes this most recent tragedy will act as a wake-up call.

A detailed account of the circumstances surrounding the error was published in the December 1 issue of the *ISMP Medication Safety Alert!* newsletter (see attached). The hospital's decision to switch antiseptics from a brown providine-iodine solution to a clear chlorhexidine solution resulted in a two look-alike solutions on the sterile field. The mix-up resulted in severe injury to the blood vessels of the patient's leg at the injection site, causing profound injury and swelling. During the next two weeks, her condition deteriorated and she underwent a leg amputation, followed by a stroke and the multiple organ failure that led to her death.

Recent findings from the 2004 ISMP Medication Safety Self-Assessment for Hospitals, which represent data from more than 1,600 respondents, show that less than half of our nation's hospitals (41%) always label containers on the sterile field, including syringes, basins, or other vessels used to store drugs. Eighteen percent do not label medications and solutions on the sterile field at all, and another 42% apply labels inconsistently. Although this represents an improvement from the 2000 medication safety self-assessment findings (25% reported full labeling, 24% reported no labeling), it still points to an area that needs significant improvement.

### **ISMP Safe Practice Recommendations:**

To reduce the risk of errors, ISMP suggests that health care delivery sites develop and implement policies and procedures for safe labeling of medications and solutions used in perioperative settings, including traditional ORs, labor and delivery rooms, ambulatory surgery units, physicians' offices, cardiac catheterization suites, endoscopy suites, radiology departments, and other areas where operative and invasive procedures may be performed.

Hospitals should consider the following recommendations, most of which are mentioned in a recently published Association of Perioperative Registered Nurses (AORN) guidance document (<http://www.aorn.org/About/positions/pdf/7f-safemeds-2004.pdf>):

- **Provide labels.** Purchase sterile markers, blank sterile labels, and preprinted sterile labels that can be opened onto the sterile field during all procedures. When feasible, prepare surgical packs with those items.
- **Require labels.** Make sure all medications, medication containers, or other solutions on and off the surgical field are labeled, even if there is only one medication or solution involved. Require labels on all solutions, chemicals, and reagents that are used in perioperative units, even including saline solutions.
- **Differentiate look-alike products.** If drug or solution names are similar, use tall man lettering on the labels to differentiate them, or highlight/circle the distinguishing information. When possible, purchase skin antiseptic products in prepackaged swabs or sponges to reduce risk of accidental injection.

- **Label one at a time.** Individually verify each medication and complete its preparation for administration, delivery to the sterile field, and labeling on the field before another medication is prepared. Verify any medication listed on the physician's preference list with the physician beforehand.
- **Confirm medications and labels.** In the OR, require the scrub person and circulating nurse to concurrently verify all medications/solutions visually and verbally. If there is no designated scrub person, the circulating nurse should verify the medication/solution with the licensed professional performing the procedure. When passing a medication to the person performing the procedure, confirm again. Keep all original medication/solution containers in the room for reference until the procedure is completed.
- **Re-verify with relief staff.** At shift change or relief for breaks, require the entering and exiting personnel to concurrently note and verify all medications and their labels on the sterile field.
- **Discard unlabeled medications.** Don't assume that you know what is contained in an unlabeled syringe, cup, or basin. Discard any solution or medication found in the perioperative area without an identification label.
- **Conduct walk-arounds.** Perform regular safety rounds in perioperative areas to observe labeling procedures and ask about barriers to implementing this important safety practice. Enhance staff awareness about tragic mix-ups to help motivate practice changes.

*ISMP is a nonprofit organization that works closely with health care practitioners, consumers, hospitals, regulatory agencies and professional organizations to provide education about preventing medication errors. The Institute represents nearly 30 years of experience in helping healthcare practitioners keep patients safe, and continues to lead efforts to improve the medication use process. In 2004, ISMP is celebrating the 10<sup>th</sup> anniversary of its official incorporation as a nonprofit organization.*