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**ERROR ALERT**

Dear Member of the Media:

Problems continue to persist with **life-threatening tubing misconnections in hospitals**. Past error reports include incidents of tubing from blood pressure devices or air supply hoses accidentally being connected to patients' IV lines. Now another source has been identified.

A recent tragic error has been reported involving the connection of oxygen tubing to a pediatric patient's IV line. The child had been receiving medication via a nebulizer to treat asthma, and while still attached to a wall outlet, the oxygen tubing (AIRLIFE, from Allegiance Healthcare Corporation) became disconnected from the nebulizer fluid chamber. Later, a hospital staff member accidentally reconnected the oxygen tubing to the injection port on a Baxter CLEARLINK Needleless Access System IV tubing Y-site. The oxygen tubing disconnected from the IV tubing in seconds, but not before the pressure of the compressed oxygen supply forced the needleless valve open and allowed air into the tubing. The child died instantly.

Baxter has issued a safety alert advising of this hazard, but only to directors of nursing, so other health professionals, including respiratory therapists, may have missed it. ISMP has tested a variety of additional needless devices that also accommodate oxygen tube connections. Right now, oxygen tubing could connect to organizations' needleless or standard IV tubing, including systems from Alaris, Baxter, B. Braun, BMP Inc., Catheter Innovations, Clave, and Hospira (formerly Abbott). There are several reasons why these errors continue to occur--all medical gasses and most fluids are clear, making it virtually impossible to distinguish between them when observed through transparent medical tubing, and many tubing "attachment" sites look similar. With typical oxygen flow rates in liters per minute, a fatal pneumatic misconnection would require only seconds of flow.

***ISMP Safe Practice Recommendations:***
To reduce the risk of errors, ISMP suggests that health care delivery sites:

- Review the medical equipment used in their facilities to identify the potential for misconnections to IV tubing.
- Educate all staff, including nonclinical employees who work in patient care units, about this potential hazard--perhaps using storyboards to communicate the point effectively.
- Require staff, before tubing is connected or reconnected to a patient, to completely trace it from the patient to the point of origin for verification.
- Appropriately label IV lines, which could help alert staff if they are about to access a line accidentally.
- Identify all types of staff who may manipulate various forms of tubing attached to patients, and consider whether that falls within their scope of practice. Make it clear during orientation who should be performing those tasks, and offer practice in turning down requests to manipulate medical tubing.

Please contact ISMP media relations at 704-321-3343 or rbrehio@ismp.org to arrange interviews on this issue or receive photographs illustrating the problem. For a copy of an ISMP newsletter article on tubing misconnections, visit ISMP online at http://www.ismp.org/MSAarticles/tubing.htm

*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. ISMP is recognized as the premier international resource in all matters pertaining to safe medication practices in health care organizations.*