Joint Commission Issues Alert On Dangerous Tubing Misconnections

(OAKBROOK TERRACE, Ill. – April 3, 2006) The Joint Commission on Accreditation of Healthcare Organizations today issued a *Sentinel Event Alert* that urges health care organizations to pay special attention to how tubes and catheters are connected to patients and challenges the manufacturers of these devices to redesign them in ways that will make dangerous misconnections much less possible.

Reports to the Joint Commission, ECRI, the Food and Drug Administration (FDA), the Institute for Safe Medication Practices, and United States Pharmacopeia show that tubing and catheter misconnection errors occur frequently and lead to deadly consequences in many instances. This reality prompted the Joint Commission to issue a *Sentinel Event Alert* to more than 12,000 health care organizations nationwide, including hospitals, ambulatory care centers, home care agencies, nursing homes and behavioral health care facilities, to create new awareness of the problem and offer practical solutions to avoiding these occurrences.

“The basic lesson from the reported cases of tubing and catheter misconnection error is that if it can happen, it will happen,” says Dennis S. O’Leary, M.D., president, Joint Commission. “Thankfully, many tubing misconnections are caught before the patient is injured, but these errors pose a real threat to patient safety that can be overcome through heightened vigilance and a systematic approach to avoiding misconnections.”

Important warning signs of a possible misconnection, according to the *Alert*, include having to force-fit tubes together or having to use an adaptor. Using a tube or catheter for something other than its intended purpose also may signal, or cause, a misconnection.
To reduce the risk of errors related to tubing misconnections, the Joint Commission’s Sentinel Event Alert newsletter recommends that health care organizations take the following specific steps:

- Avoid purchasing non-intravenous equipment with tubing connectors that permit connection with intravenous (IV) connectors.
- Conduct tests on and assess risks of new tubing and catheter purchases to identify the potential for misconnections, and take appropriate preventive measures before using.
- Always trace a tube or catheter from the patient to the point of origin before connecting any new device or infusion.
- Route tubes and catheters having different purposes in different, standardized directions, e.g., IV lines are routed toward the head; enteric lines are routed toward the feet.
- Recheck connections and trace all patient tubes and catheters to their sources as a standard of care when a patient arrives in a new care setting.
- Emphasize the risk of tubing misconnections in clinician orientation and training programs.
- Inform patients and their families of the importance of getting help from nurses or doctors whenever there is a real or perceived need to connect or disconnect devices or infusions.

The warning about tubing misconnections is the latest in a continuing series of Sentinel Event Alerts issued by the Joint Commission. Much of the information and guidance provided in these Alerts are drawn from one of the nation's most comprehensive voluntary reporting systems for serious adverse events in health care. The Sentinel Event Database includes detailed information both about the adverse events and their underlying causes. Previous Alerts have addressed wrong-site surgery, medication mix-ups, health care-associated infections and patient suicides, among others. The complete list and text of past issues of Sentinel Event Alert can be found on the Joint Commission website.