

**FOR IMMEDIATE RELEASE**  
**July 28, 2003**

Contacts:

Susan E. Dalton, Media Relations

([sdalton@ismp.org](mailto:sdalton@ismp.org))

Michael R. Cohen, RPh, MS, ScD, President

([mcohen@ismp.org](mailto:mcohen@ismp.org))

215.947.7797

## **Pain Control in Hospitals Using Patient-Controlled Analgesia Must Be Made Safer**

HUNTINGDON VALLEY, PA. The Institute for Safe Medication Practices (ISMP) has published a review of medication errors associated with patient-controlled analgesia (PCA), along with recommendations for its safe use. Their findings may be found in the July 10th and July 24th issues of the *ISMP Medication Safety Alert!*<sup>®</sup>, a safety newsletter distributed to all hospitals in the United States. (Read these articles at: [www.ismp.org/MSAarticles/issue2.htm](http://www.ismp.org/MSAarticles/issue2.htm).)

The ISMP analysis involved reviews of actual medication errors reported voluntarily by healthcare practitioners to the USP-ISMP Medication Errors Reporting Program, as well as cases solicited by ISMP that were voluntarily submitted by US hospitals for the project. Some of the most serious errors were related to the fact that the basic premise of PCA was violated. By definition and design, PCA is meant to be controlled *by the patient only*. If a patient is already sedated by his opiate pain medication, he will not activate the PCA pump to deliver another dose. This built-in safeguard protects the patient from overdose. However, family members and healthcare professionals have innocently "pushed the button" for patients, hoping to keep them comfortable. This well-intentioned "PCA by proxy" has led to oversedation, respiratory depression, and even death.

Other factors leading to PCA errors include improper patient selection (not all patients are good candidates), inadequate patient education, ineffective monitoring of the patient's vital signs, insufficient staff training, prescribing errors and other practice-related problems, and design flaws in the PCA pumps, which lead to inaccurate programming of the dosage.

ISMP President Michael Cohen, RPh, MS, ScD, states emphatically that these errors are preventable through appropriate actions taken by US hospitals, PCA pump manufacturers, and regulators. "Hospitals need to address the causes of PCA errors *now*," said Dr. Cohen.

"Appropriate education of patients, family members, and hospital staff is key."

"The solutions are available," added ISMP Vice President Judy Smetzer, RN, BSN. "We know how to prevent these errors, while preserving the benefits of this patient-centered technology. Our findings revealed at least 60 practice-, product-, device-, and regulatory-related efforts that can reduce the risks associated with PCA."

"Just the basic step of teaching surgical patients how to use the pump before surgery can help," added Dr. Cohen. "Often the practice is to teach patients while they're in the recovery room and still groggy from the anesthesia. That's not the best time to learn."

"PCA pump manufacturers can help too," added Ms. Smetzer. "On some pumps, the activation button looks just like a nurse call bell. A patient may think he's calling for a nurse, when in fact he's giving himself an unneeded dose of pain medication."

**For more information, contact Sue Dalton or Mike Cohen at ISMP.**

---

About ISMP: The Institute for Safe Medication Practices is a 501c(3) nonprofit organization that works closely with healthcare practitioners and institutions, regulatory agencies, and professional organizations to provide education about medication errors and their prevention. Over the past 25 years, ISMP has become a highly respected voice in the promotion of medication safety. Its unbiased reports of medication errors are obtained from practitioners who voluntarily submit errors to a national Medication Errors Reporting Program (MERP) operated by the United States Pharmacopeia in cooperation with ISMP. These errors are shared with FDA and with healthcare companies whose products are mentioned. Before dissemination to practitioners, each report is thoroughly investigated by ISMP staff and an independent national advisory board of medication safety experts. Once the underlying system causes are identified, ISMP and its advisers recommend prevention strategies and communicate through one or more of its four newsletters: *ISMP Medication Safety Alert! for Acute Care*, *ISMP Medication Safety Alert! for Community and Ambulatory Care*, *ISMP Medication Safety Alert! - for Nurses*, and *ISMP Medication Safety Alert! - for Healthcare Consumers*.

- end -