

PRESS RELEASE

May 30, 2019

For Press Enquiries: Michael R. Cohen, Chair, IMSN
President, ISMP
001-267-679-4767, mcohen@ismp.org

IMSN Introduces New Global Targeted Medication Safety Best Practices

An international medication safety call to action is aimed at preventing fatalities due to medication errors with concentrated potassium injection, inadvertent intraspinal injection of vincristine, and accidental daily instead of weekly dosing of methotrexate in patients with psoriasis or rheumatoid arthritis.

[Horsham, Pa., USA]--The International Medication Safety Network (IMSN) has published its first set of **Global Targeted Medication Safety Best Practices** to identify, inspire, and mobilize widespread international improvement in error prevention. The inaugural best practices address issues that are well known to cause fatal and harmful medication errors despite repeated warnings and are intended to help focus global safety efforts for the next two years on those specific sources of patient harm.

The best practices highlight strategies that can have a higher impact on preventing errors because they are “high leverage” and do not rely on attention and vigilance by individuals. They call for healthcare practitioners and organizations to:

Global Targeted Medication Safety Best Practice 1

Remove ampules and vials of potassium concentrate injections from all inpatient drug storage on nursing units.

Potassium is an electrolyte replenisher required for the maintenance of several physiological processes in the body. Frequently used to treat hypokalemia and other electrolyte abnormalities, intravenous potassium chloride, acetate or phosphate is available in vials or ampules as a concentrate for dilution. Improper administration of concentrated electrolytes is dangerous—tragic errors have occurred, due to rapid direct intravenous push administration of concentrated potassium solutions or wrong product selection (potassium concentrate mistaken for another drug). Vials of potassium also have been accidentally used instead of sterile water or saline to dilute vials of powdered or lyophilized drugs. Outcomes have often been fatal in children and adults and still happen around the world.

Global Targeted Medication Safety Best Practice 2

Prepare and dispense vinca alkaloids in a minibag, never in a syringe.

Vinca alkaloids (vincristine, vinblastine, vinorelbine) are chemotherapy drugs that should be administered intravenously and never by any other route. Deaths have been reported throughout the world when the drug was dispensed in a syringe but given into spinal fluid instead of intravenously. For example, more than 130 cases

have been reported worldwide with vincristine given to leukemic patients. This often happens when a syringe of vincristine is mistakenly used instead of a syringe of cytarabine, hydrocortisone, or methotrexate, which are supposed to be given into spinal fluid to the same leukemic patient. Intrathecal administration of vinca alkaloids leads to the destruction of the central nervous system radiating from the injection site and is almost always fatal. Safety groups such as The World Health Organization, The Institute for Safe Medication Practices, The National Comprehensive Cancer Network and The Joint Commission have called for dispensing only in a minibag, not a syringe.

Global Targeted Medication Safety Best Practice 3

Prevent inadvertent daily dosing of oral methotrexate for non-oncologic conditions.

Methotrexate is a folate antimetabolite used in the treatment of tumor-causing diseases and non-oncological conditions such as psoriasis and rheumatoid arthritis. When used to treat disorders such as rheumatoid arthritis, the drug is administered weekly, while for some types of cancer, a more frequent or higher dose is used. Prescribing, transcribing, and dispensing errors with methotrexate have led to some patients receiving a daily instead of weekly dose. Fatal errors with methotrexate have been reported for many years, occurring both during hospitalization and after discharge.

The best practices document offers specific consensus-based risk reduction strategies for each, that have already been successfully adopted by numerous organizations all over the world, along with references for additional sources of information. The best practices have been reviewed and endorsed by experts from IMSN as well as posted for public comment.

IMSN hopes to work in partnership with hospitals, international professional organizations, and regulators to encourage that these best practices be undertaken as a priority everywhere in the world.

For a copy of the IMSN Global Targeted Medication Safety Best Practices, visit:

<https://www.intmedsafe.net/imsn-global-targeted-medication-safety-best-practices/>

About IMSN: The International Medication Safety Network (IMSN) is an international network of safe medication practice centers, regulators and pharmacovigilance centers, established with the aim of improving medication safety. This is achieved by operating medication error reporting programs and producing guidance to minimize preventable harm from medicine use in practice. IMSN promotes safer medication practices to improve patient safety internationally. For more information, visit:

www.intmedsafe.net/contents/AboutIMSN.aspx

-end-