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**For immediate release**

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***National Alert Issued: Dosing Confusion with Colistimethate for Injection***

A National Alert for Serious Medication Errors ([www.ashp.org/DocLibrary/Policy/PatientSafety/NANAlert-Colistimethatesodium.aspx](http://www.ashp.org/DocLibrary/Policy/PatientSafety/NANAlert-Colistimethatesodium.aspx)) has been issued by the American Society of Health-System Pharmacists (ASHP) and the Institute for Safe Medication Practices (ISMP), warning that potentially fatal errors may occur with dosing for the antibiotic colistimethate for injection. The use of this drug has been increasing due to its value as a last resort treatment for multi-drug resistant organisms.

Colistimethate is a prodrug, a pre-cursor of a drug that converts to an active drug in the human body as it is metabolized. However, in the U.S., the strength of all FDA-approved colistimethate for injection products is labeled in terms of the base drug, colistin, not the prodrug. The label expresses the strength as 150 mg of colistin base per vial ([www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm](http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm)).

Dosing information also is expressed in terms of the colistin base. However, on the Internet and in some journal references, dosing information is based on the prodrug, colistimethate. This has resulted in situations where the prodrug dose is ordered but confused as a colistin dose, which results in doses approximately 2.5 times higher than intended.

In a recent case, a physician mistakenly ordered a dose of colistimethate as the prodrug, but the amount was dispensed as the colistin base. The patient developed complications including acute renal failure and later died.

The alert provides recommendations to prevent misdosing of colistimethate, which include developing dose limits, restricting prescribing to infectious disease specialists, and monitoring the patients' renal function. Physicians, pharmacists, and nurses are expected to use these recommendations to take immediate action to prevent serious medication errors at their facility.

Alerts are issued by ASHP and ISMP when a significant risk for serious or fatal errors is detected through ISMP's National Medication Error Reporting Program (MERP). Alerts are distributed to healthcare practitioners and organizations through ISMP, ASHP, and the National Council on Medication Error Reporting and Prevention.

### **About ASHP**

For more than 60 years, the American Society of Health System Pharmacists (ASHP) has helped pharmacists who practice in hospitals and health systems improve medication use and enhance patient safety. The Society's 35,000 members include pharmacists and pharmacy technicians who practice in inpatient, outpatient, home care, and long-term-care settings, as well as pharmacy students. For more information about the wide array of ASHP activities and the many ways in which pharmacists help people make the best use of medicines, visit ASHP's website, [www.ashp.org](http://www.ashp.org), or its consumer site, [www.safemedication.com](http://www.safemedication.com).

### **About ISMP**

The Institute for Safe Medication Practices (ISMP) is an independent, nonprofit charitable organization that works closely with healthcare practitioners and institutions, regulatory agencies, consumers, and professional organizations to provide education about medication errors and their prevention. ISMP represents more than 35 years of experience in helping healthcare practitioners keep patients safe, and continues to lead efforts to improve the medication use process. ISMP is a federally certified patient safety organization (PSO), providing healthcare practitioners and organizations with the highest level of legal protection and confidentiality for patient safety data and error reports they submit to the Institute. For more information on ISMP, or its medication safety alert newsletters and other tools for healthcare professionals and consumers, visit [www.ismp.org](http://www.ismp.org) or its consumer website, [www.consumermedsafety.org](http://www.consumermedsafety.org).