Factors Influencing Nurses’ Use of Hazardous Drug Safe-Handling Precautions

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Hazardous drugs (HDs) are defined by the National Institute for Occupational Safety and Health ([NIOSH], 2004) using one or more of the following criteria: carcinogenicity, teratogenicity, reproductive toxicity, genotoxicity, organ toxicity at low doses, and drugs that mimic existing HDs in structure or toxicity. Most of the drugs that match the HD description are cytotoxic antineoplastic agents; however, other classes of drugs are included in this category, such as antivirals, antibiotics, and hormones (NIOSH, 2004).

According to the Centers for Disease Control and Prevention ([CDC], 2012), about 8 million healthcare providers in the United States work in environments that could increase their risk of HD exposure. Exposure occurs via inhalation, dermal absorption, ingestion, or contact with conjunctiva (NIOSH, 2004). HD exposure risk occurs during drug-handling activities, such as administration, preparation, and disposal of the drug and patient excreta (Polovich & Martin, 2011). Nurses working in oncology settings frequently handle chemotherapeutic agents, making the nurses particularly vulnerable to exposure.