



POSITION STATEMENT

Ensuring the Health and Safety of Workers When Handling Hazardous Drugs

INTRODUCTION

Hazardous drugs are chemicals that demonstrate one or more of the following characteristics: carcinogenicity, genotoxicity, teratogenicity, reproductive toxicity, or organ toxicity (Oncology Nursing Society (ONS), 2019). New drugs with structural or toxicity profile that mimics an agent known to be hazardous by one of the ONS criteria should be treated as such (National Institute of Occupational Safety and Health [NIOSH], 2016). Handling of any hazardous drugs (HDs) can result in exposure for healthcare workers, as documented in a multitude of case studies throughout the medical literature. Exposure to HDs has been associated with acute symptoms such as nasal sores, hair loss, skin rash, adverse reproductive outcomes such as infertility and miscarriage, genetic changes (e.g., chromosomal aberrations, sister-chromatid exchanges), and an increased occurrence of cancer (Centers for Disease Control (CDC), 2019).

RATIONALE

The Occupational Safety and Health Administration (OSHA) acknowledged the occupational risks of HDs and issued recommendations for safe handling more than 30 years ago. Since then, NIOSH and professional societies have published guidelines addressing the need for HD-related P&P, education and training, and safe-handling precautions in settings in which HDs are present. These safe-handling precautions include the use of engineering controls, safety equipment, safe work practices, and personal protection equipment (PPE). When used appropriately and consistently, recommended precautions reduce occupational HD exposure (NIOSH, 2004; NIOSH 2016).

RECOMMENDATIONS

The Oncology Nursing Society (ONS, 2019) recommends that settings in which HDs are present

and/or prepared and administered, should:

- establish evidence-based policies and procedures for safe handling that comply with regulatory requirements and standards,
- ensure that PPE indicated for handling HDs is available to all staff to minimize exposure,
- provide and maintain primary engineering controls, such as biologic safety cabinets and compounding aseptic containment isolators, in conjunction with secondary engineering controls, such as buffer rooms or segregated compounding areas, consistent with USP chapters,
- ensure the use of supplemental engineering controls at the point of compounding and administration when the dosage form allows,
- provide education and training specific to each staff member whose work puts them at risk for exposure to HDs. Education, training, and competency evaluation will include the risks of exposure, including the reproductive and developmental effects, the recommended precautions for specific handling activities, safe handling of contaminated patient excreta, proper disposal of contaminated waste, and how to handle acute exposure,
- protect the rights of staff who are trying to conceive, who are pregnant, or who are breast feeding to engage in alternative duty that does not require HD handling,

- ensure that patients who receive these drugs and their caregivers receive education about safe handling to minimize unintended exposure in both the institutional and home setting,
- ensure that HD waste is disposed of according to regulatory guidelines and in a manner that protects staff and the environment,
- engage in medical surveillance of staff, and
- conduct surface wipe testing as a measure of exposure control to aid in the continuous process improvement for handling HDs.

AAOHN along with other professional healthcare associations support and encourage continued research and generation of new knowledge about the risks of HD exposure and the efficacy of risk-reduction strategies. The professional organizations must:

- continue to explore evidence-based strategies for mitigation of risk associated with handling HDs,
- share recommendations with their members,
- support and encourage compliance with all NIOSH recommendations, USP compounding standards, and regulatory requirements, and
- support and encourage advocacy efforts to make recommendations and standards into enforceable laws that best protect staff and the environment (ONS, 2019).

REFERENCES

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