

Safe Handling of Hazardous Medications

Kathy Baker RN, MSN and Barbara Donovan, RN, MSN

TAP TO GO BACK TO KIOSK MENU

Introduction/Problem

Definition: A hazardous drug (HD) is an agent that exhibits one or more of the following characteristics in humans or animals:

- carcinogenicity
- teratogenicity or developmental toxicity
- reproductive toxicity
- organ toxicity at low doses
- genotoxicity

Hazardous drugs are identified via NIOSH's list of Antineoplastic and Other Hazardous Drugs in Healthcare Settings. United States Pharmacopeia (USP) General Chapter <800> Hazardous Drugs provides standards for safe handling of hazardous drugs to minimize the risk of exposure to healthcare personnel, patients and the environment. Beginning in December 2019 this will be a new standard of care for hospitals. Certain personal protective equipment (PPE) must be worn, depending on the route of the administration. Previously the focus had been on antineoplastic medications. With new information on drug toxicity and recent studies showing drug metabolites in the urine of health care workers (HCW), the focus has shifted to protecting the HCW.

Aim/Goal

- To protect HCW during administration and discontinuation of hazardous medications.
- To educate staff about the new PPE recommendations for routine medications where PPE had not previously been required.

The Team

- Kim Sulmonte, Associate Chief Nurse Quality and Safety
- Pharmacy: Peggy Stephens, MS< RPh ,Christine Huynh ,Pharm D BCPS, Denise Arena RPh
- Nursing: Kathy Baker, Sharon O' Donoghue, Barb Donovan, and Jillian Dooley
- Environment: Gary Schweon
- Materials MGMT: Brian Bertrand
- EOHS: Matt Rabesa
- EVS: Chris Minette

The Interventions

- Examined current National Institute for Occupational Safety and Health (NIOSH), the Centers for Disease Control (CDC), and USP recommendations and developed BIDMC inpatient nursing and pharmacy education. Education to include new PPE, disposal of hazardous waste, clean up hazardous waste spills reflecting the new standards.
- Developed patient education to support nursing with new PPE.
- Scripted answers to potential patient and nurse questions and concerns.

Results/Progress to Date

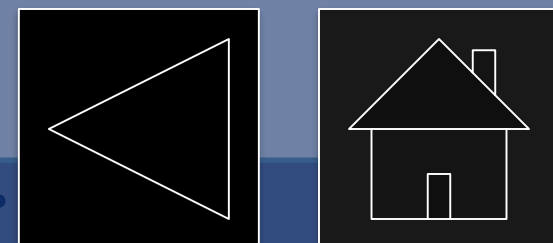
Training has been developed and assigned to all inpatient units.
 Training has been shared with Respiratory Therapy colleagues.
 Training will be adapted for other groups after the rollout to the inpatient MedSurg areas.

Mandatory PPE	Single Glove*	Double Glove*	Waterproof Procedure Gown	Eye/Face protection	N95 Respirator
					

* Powder-free chemotherapy gloves should be worn when handling all hazardous drugs.

For more information, contact:

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More Results/Progress to Date

Activity	Single Glove*	Double Glove*	Waterproof Procedure Gown	Eye/Face protection	N95 Respirator
Administration of intact tablet/capsule, or ½ or ¼ cut tabs prepared by pharmacy				 if potential to vomit or spit up	
Administration of oral liquid or feeding tube					
Crushing ^{†‡} tablets or Opening [†] capsules				 optional	

Education has been prepared to help Nurses address patient concerns

Example

“Why are you wearing a gown to administer this medication to me? Is it harmful to me?”

You are receiving this medication for its therapeutic benefit to you. Nurses administer these frequently and that exposes us to small amounts of medications on a regular basis. The greatest risk of exposure to staff occurs *during our preparation and administration* of this medication.

By wearing gloves and gowns we reduce the unintended absorption through the skin of the nurse. By wearing the mask this prevents the inhalation during the preparation of the medication. We are trying to reduce the unintended exposure to staff who administer this medication frequently.

This Appendix to the Hazardous medications policy has been made into a poster and will be shared with inpatient units. We recommend they are displayed in medication rooms in the inpatient areas

This patient education is available as a handout via the portal

Currently MyPath training has been sent out to 2100 nurses. Pharmacy staff have been trained and this training was shared with the respiratory and medicine physician groups.

Lessons Learned

- Supply chain disruptions of PPE resulted in a delayed implementation timeline. Since USP <800> will become a standard December 1,2019 many institutions are increasing their par levels of PPE whci may have contributed to these disruptions.

Next Steps

- Surveillance of the environment and staff by EOHS will be developed.

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