

IREDELL HEALTH SYSTEM

Proper Administration of Hazardous Drugs	
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Purpose

Hazardous Drugs (HDs) in the workplace may pose significant risks to the health of all employees handling. This following policy details appropriate administration techniques and procedures.

Policy

Exposure to HDs shall be minimized for nurses and other patient care service personnel involved in direct or indirect patient care during administration and post-administration.

The use of Personal Protective Equipment (PPE) is necessary for health care workers to prevent occupational exposure to HDs. For HD handling, PPE includes, gloves tested for use with HDs, gowns made of material shown to resist permeating by HDs, face shields and/or goggles. Nursing shall avoid touching IV bags or syringes without proper PPE due to potential drug residue being on the exterior of finished product. Gowns shall not be worn outside of designated patient care area to avoid spreading HD contamination and exposing other health care workers. Disposable gowns must not be reused.

Registered nurses who have completed an educational program on antineoplastic agents and approved by Iredell Health System may administer initial IV antineoplastic agents.

Refer to *Safe Handling of Intravesicular Mitomycin* policy for intravesicular Mitomycin administration and post-administration procedures.

Procedure for Administration of Intravenous HDs

Administration of all intravenous antineoplastic agents shall follow the specific PPE procedures detailed below. Refer to Assessment of Risk (AOR) for non-antineoplastic agents in the requirement of PPE for intravenous administration.

For *gowning and gloving*, nursing shall:

1. Perform proper hand hygiene as outlined in *Hand Hygiene* policy
2. Don first pair of chemotherapy rated gloves
3. Don designated chemotherapy rated gown
4. Don face shield and goggles, if eye, mouth, or nasal splashing is possible
5. Don second pair of chemotherapy rated gloves. Double-gloving requires one glove to be worn under the cuff of the gown and the second glove over the cuff.

For *removal* of PPE (after handling and disposing of HDs), nursing shall:

1. Remove outer gloves one at a time, turning them carefully inside out to avoid touching the outside.
2. If worn, remove face shield

3. Remove the gown, pulling away from the body, not pulling it over the head. Turn the gown inside out, fold it tightly and discard.
4. Remove face shield and goggles (if worn).
5. Finally, remove the inner gloves
6. Perform proper hand hygiene as outlined in *Hand Hygiene* policy

Gloves shall be replaced every 30 minutes, if a tear or puncture occurs, when visibly contaminated, and after each individual patient contact. Gowns shall be changed every two to three hours or immediately after a spill or splash.

Nursing shall place a plastic-backed absorbent pad underneath work area to protect from HD contamination.

Tubing to be used for administration shall be attached and primed with appropriate solution by pharmacy during the preparation process. Closed-system transfer devices (CSTDs) shall be used during administration of antineoplastic agents and as outlined in AOR for non-antineoplastic hazardous agents. Under no circumstances should tubing be primed in such a way as to allow the escape of HDs into the environment. (e.g., priming into gauze pads, sinks or trash containers) Tubing shall never be removed from an IV bag containing a HD. Spiking or unspiking of a prepared HD product shall occur only in a Containment Primary Engineering Controls (C-PEC). Nursing shall not disconnect tubing at other points in the system until tubing has been thoroughly and adequately flushed.

Appropriate disposal containers are made available as per the *Hazardous Drug and Waste Disposal* policy.

Procedure for Administration of Subcutaneous and Intramuscular injections of HDs

Administration of all subcutaneous and intramuscular injections of antineoplastic agents shall follow the specific PPE procedures detailed below. Refer to AOR for non-antineoplastic agents in the requirement of PPE for administration.

For *gowning and gloving*, nursing shall:

1. Perform proper hand hygiene as outlined in *Hand Hygiene* policy
2. Don first pair of chemotherapy rated gloves
3. Don designated chemotherapy rated gown
4. Don second pair of chemotherapy rated gloves. Double-gloving requires one glove to be worn under the cuff of the gown and the second glove over the cuff.

For *removal* of PPE (after handling and disposing of HDs), nursing shall:

1. Remove outer gloves one at a time, turning them carefully inside out to avoid touching the outside.
2. Remove the gown, pulling away from the body, not pulling it over the head. Turn the gown inside out, fold it tightly and discard.
3. Finally, remove the inner gloves
4. Perform proper hand hygiene as outlined in *Hand Hygiene* policy

As dosage form allows, closed-system transfer devices (CSTDs) shall be used during administration of antineoplastic agents and as outlined in AOR for non-antineoplastic hazardous agents.

Nursing shall place a plastic-backed absorbent pad underneath work area to protect from HD contamination and, when CSTDs are not used, under administration sites to catch any leakage.

Nursing shall not expel air from syringe or prime the needle at any time. After administering the medication, nursing shall not recap, clip or crush the needle. The syringe shall be disposed off according to the *Hazardous Drug Disposal* policy

Procedure for Administration of *oral* HDs

For antineoplastic agents, double chemotherapy-rated gloves are required, as is a face shield if there is a potential for spraying, aerosolization, or splashing. For non-antineoplastic agents, refer to AOR to determine required PPE for administration.

Nursing shall open the package carefully as even intact HD tablets or capsules may be coated with residual HD dust. The tablet or capsules shall be placed directly into a medicine cup for administration. Pharmacy shall prepare any oral antineoplastic HD agent that requires manipulation (i.e splitting, crushing) within a C-PEC as well as any non-antineoplastic agent as specified in AORs.

For administration of HDs via nasogastric or enterostomy tubes, pharmacy shall prepare final dosage form for administration. Nursing shall follow proper procedures for medication administration via nasogastric or enterostomy tubes per *Medication Administration through Enteral Feeding Tubes* policy. Due to increased risk of exposure, this route of administration requires the use of a gown, double gloves and a mask with face protection. Nursing shall place a plastic-backed absorbent pad underneath work area to protect from HD contamination and under administration site to catch any leakage.

Procedure for Administration of *topical* HDs

For antineoplastic agents, double chemotherapy-rated gloves are required. For non-antineoplastic agents, refer to AOR to determine required PPE for administration.

Procedure for Administration of *ophthalmic* HDs

For antineoplastic agents, double chemotherapy-rated gloves are required. For non-antineoplastic agents, refer to AOR to determine required PPE for administration.

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