

NURSING SERVICES GUIDELINE OPERATING ROOM

Guideline: **Handling and administration of hazardous antineoplastic chemotherapy in the operating room**

Responsibility: Operating Room Staff

Purpose of Guideline: To ensure protection of individuals working with hazardous antineoplastic chemotherapeutic medications, as well as to ensure proper clean-up and disposal. Individuals present in the operating room during the administration of the agents are required to receive safety training.



Effective Date:
October 2025

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November 2017

Procedure:

(1) SCHEDULING CASES INVOLVING HAZARDOUS CHEMOTHERAPEUTIC AGENTS.

Certain surgical procedures with the intention of using hazardous antineoplastic chemotherapy during the intraoperative time must be scheduled in advance and the scheduling office must notify:

- (a) Operating room manager or designee (x2588 or x3900).
- (b) Surgical services educators: operating room (x2649) and pre-op/PACU (x2657).
- (c) Environmental health and radiation safety (419-530-3600).
- (d) Perfusion staff (if applicable).

(2) OPERATING ROOM MANAGER OR DESIGNEE.

Notifies specific operating room staff and anesthesia staff ahead of time that they will provide care for the surgery and be fit-tested and trained. Pregnant/breastfeeding staff should be informed of the potential hazard and transferred to comparable duties not involving handling hazardous drugs. A similar procedure is followed for personnel trying to conceive a child ([Procedure HM-08-028](#)).

(3) PERIOPERATIVE EDUCATOR.

Educes the specific operating room staff and anesthesia staff and conducts N95 respirator fit-test. They will review guidelines for donning personal protective equipment

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(PPE) and safety compliance when handling and disposing of antineoplastic chemotherapy drugs as hazardous waste.

(4) ENVIRONMENTAL HEALTH AND RADIATION SAFETY.

Provides hazardous waste bin for day of surgery: red bin with yellow hazardous waste sticker.

(5) PERfusion STAFF.

Provides supplies for and participates in the case.

(6) PERSONAL SAFETY.

Staff providing care during surgical procedure when antineoplastic chemotherapy drugs are also in the operating room must wear PPE (Procedure HM-08-005) and take appropriate safety measures during handling and disposal of drug. Overt contamination of gloves and gowns, or direct skin contact should be treated as follows: immediately remove gloves or gown, wash the affected skin immediately with soap and water. If eye contact occurs, flush eyes for at least 15 minutes with water or isotonic eyewash. If there is eye contact, or if skin irritation develops, seek medical attention immediately. Complete an injury/incident report.

(7) OPERATING ROOM GUIDELINES ON DAY OF SURGERY

(a) The only staff who can administer medication is the attending surgeon or surgeon's designated resident, or other approved professional who has official documented competency.

RNs, surgical techs, and other staff will not administer antineoplastic medications since they have not completed competency in administration of antineoplastic chemotherapy drugs.

(b) Obtain hazardous waste disposal bin for day of surgery: red bin with yellow hazardous waste sticker (Call environment health and radiation safety 419-530-3600).

(c) Call pharmacy to obtain antineoplastic chemotherapy drug. It will arrive with a chemo pack consisting of non-sterile gloves and gown, chuck and a chemo-resistant disposal bag used to dispose of any un-used antineoplastic drug.

(d) The pneumatic tube system must not be used to transport antineoplastic drugs.

(e) Personnel transporting the antineoplastic drug must wear gloves.

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- (f) Staff must don antineoplastic-drug resistant PPE found in the chemo bin obtained from SSC. This includes chemo-resistant impermeable sterile or non-sterile gown, N95 respirator and face shield. When passing off and/or handling the medication, staff must also double-glove with antineoplastic-resistant gloves. Change gloves every 45 minutes.
- (g) A medication time-out is performed and documented at time of delivery of antineoplastic drug to the administering professional. The time-out confirms the following: patient name and medical record number match that on the drug label, drug name, dose, infusion volume or drug volume, route, rate (if applicable), and expiration date/time. Document this in the electronic medical record in the nurse's notes section.
- (h) Specimens removed from patient after receiving antineoplastic drug during the procedure must have a yellow sticker labeled "CAUTION: ANTINEOPLASTIC MATERIAL."
- (i) Antineoplastic-contaminated refuse: bag in red bags and dispose of in red bin with yellow hazardous waste sticker.
 - (i) Gloves, gowns, masks, eye shields, chucks, drapes, and empty containers.
 - (ii) Sharps - placed in small sharps box.
 - (iii) Cloth linens.
 - (iv) Fluid in canisters – with solidifying agent added.
- (j) To clean up a spill of more than 5ml of antineoplastic drug, use a "small spill clean-up kit" from decontamination room or central supply x1384. Call x2600 if large spill emergency.
- (k) For un-used antineoplastic drugs, place drug in chemo-resistant disposal bag from chemo pack and contact environmental health and radiation safety (419-530-3600) for disposal.
- (l) Notify sterile processing at x5107 that the instruments coming down on the case cart are "CHEMO-CONTAMINATED". Label the cart cover with yellow "CHEMO" sheet from chemo bin. Wear anti-neoplastic gown and 2 pairs of anti-neoplastic gloves when handling used instruments and case cart. Send hazardous waste bin with cart for sterile processing staff to dispose of their hazardous waste after processing instruments.

(8) References.

Neuss, M. et.al. (2017). 2016 Updated American Society of Clinical Oncology/Oncology Nursing Society Chemotherapy Administration Safety Standards, Including Standards for Pediatric Oncology. *Oncology Nursing Forum*, 44(1). doi:10.1188/17.onf.31-43.

The University of Toledo Procedure No: HM-08-013 (6/24/2016). Hazardous Material Spill Procedures.

The University of Toledo Health Science Campus Procedure No: HM-08-005 (01/13/2017). Handling of Hazardous Drugs i.e., Antineoplastic and Carcinogenic Agents.

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The University of Toledo Medical Center Nursing Service Policy No: 3364-110-05-07 (04/2016). Administration of Antineoplastic Chemotherapy and Biotherapy Agents Including Agents with a Known Potential for Hypersensitivity Reactions.

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