DEFINITIONS

Chemotherapy - A chemical agent used to treat diseases. The term usually refers to a drug used to treat cancer. However, it may also be prescribed for non-cancer treatment.

Client - a term used to describe a client, patient or resident.

Independent Double-Check - the process where two clinicians separately check (alone and apart from each other, then compare results) each component of prescribing, dispensing and verifying the high-alert medication for errors before it is administered to the patient. The clinician checking has to form an independent judgment without cues from the clinician doing the initial work.

ROLES

Graduate Nurses (GNs): GNs identified by their manager in targeted practice settings will be certified in the RN Specialty Practice (RN Procedure): Chemotherapy Bladder Instillation (Intravesical) - Care of Client, but only with direct supervision of an RN who is certified in this RN Specialty Practice.

Registered Nurses (RNs): RNs identified by their manager in targeted practice settings will be certified in the RN Specialty Practice (RN Procedure): Chemotherapy Bladder Instillation (Intravesical) - Care of Client.

Licensed Practical Nurses (LPNs): LPN certification for this Additional Competency is under review by the Nursing Practice Committee. As assigned, LPNs currently educated or certified may continue to provide care for client with Chemotherapy Bladder Instillations (Intravesical). LPNs requiring initial certification or education will not be certified or educated until the review is completed.
1. PURPOSE

1.1. To safely care for clients receiving a chemotherapy drug for cancer treatment.

1.2. To provide a safe environment for staff working with chemotherapy drugs.

2. POLICY

2.1. The RN certified in this RNSP will have first completed the following learning modules/activities prior to providing care:

2.1.1. Attend an educational session on care of the client who has received a chemotherapy drug intravesically.

2.1.2. Completed the learning package and quiz and returned to CNE.

2.1.3. Complete a competency checklist with certified RN to validate and ensure safety checks are followed appropriately.

2.2. Only nurses certified in the care of clients who have received Chemotherapy Drugs for Cancer and Non-Cancer may clean up drug spills.

2.3. Employees who are pregnant, attempting to conceive or breastfeeding may refrain from caring for the client post intravesical chemotherapy instillation. This must be communicated in writing as soon as possible to the Manager of the unit prior to commencement of their shifts.

2.4. Employees who have potential for exposure to chemotherapy drugs at least weekly should arrange to have a general health review and blood work drawn twice a year by their family physician or medical centre. Tests include blood work for CBC and reticulocyte count and urine test for blood.

2.5. A physician must write all orders for chemotherapy drugs. Nursing staff will not accept verbal/telephone orders for chemotherapy drugs or adjustments to chemotherapy drug doses, except to hold or stop chemotherapy administration. Faxed orders are accepted as written orders.

2.6. If the physician’s order is faxed from the Saskatoon Cancer Centre and is available, two registered nurses, one registered nurse/one physician or one registered or licensed nurse/one pharmacist will independently verify the chemotherapy drug dose is correct.

2.6.1. Documentation of independent double-checks will be completed on the medication administration record and include provider initials and time of double-check.

2.6.2. When an independent double check cannot be performed, the professional staff will be aware of and alerted to all high risk medication.

2.7. Pharmacy will identify all chemotherapy drugs on the drug packaging and the Medication Administration Record will identify them as requiring Chemotherapy Drug Precautions.

2.8. Pharmacy will prepare all chemotherapy drugs. The Chemotherapy drug will be delivered in a sealed transport bag.

2.9. The physician will administer the intravesical chemotherapy drug.
2.10. When handling body waste, follow Chemotherapy Drug Precautions for **48 hours** post administration of last chemotherapy dose, regardless of route. During this period, ensure Drug Precaution labels are placed on the on front of the client’s chart, urinary catheter, catheter drainage tubing and empty/measuring containers. Refer to Appendix A.

**Note**: Post catheter removal, male clients should be instructed to void sitting down for 48 hrs.

2.11. Post a Drug Precautions sign above the patient bed or on the room door. Refer to Appendix B.


2.13. A Chemotherapy/Hazardous Drug Spill Kit must be readily available on the unit. Refer to Appendix C for SKU numbers for the Spill Kit.

3. **PROCEDURE**

3.1. **Chemotherapy Bladder Instillation (Intravesical) by Physician**

3.1.1. Equipment and supplies required:
- PPE: impervious gown, doubled nitrile gloves, eye/face protection
- Alcohol based hand cleaner
- Chemotherapy/Hazardous Spill Kit SPD #201903
- Drug Precautions labels SPD #211571
- Drug Precautions Sign Printing Services #103392 (see Appendix B)
- Sharps & Fluid Resistant Waste Container
- Sign alerting staff to use the chemotherapy sharps & fluids resistant waste container (form # 103446, 103168)
- Soft-Sided Container (red bag)
- Transport waste container (for soft sided waste)
- plastic-backed absorbent liner
- alcohol swabs
- Closed male connector(provided from pharmacy with medication) SPD #206080
- urinary catheter (3-way irrigation catheter if applicable)
- catheter insertion tray
- sterile 4x4 gauze pads
- luer lock catheter adapter (blue) SPD #86507
- catheter clamps (2)
- urinary drainage bag

3.1.2. The physician will:
- Don PPE (see Appendix C).
- Insert the appropriate urinary catheter into the bladder. If irrigation is required, irrigation tubing may be attached to the irrigation port of the 3-way catheter or the irrigation port will be clamped.

**Note**: If the irrigation tubing is attached, the irrigation port must be clamped before the medication is instilled and remain clamped until the irrigation is to begin.

- Attach the syringe and the blue luer lock catheter adapter to the drainage port of the catheter.
- Instill the chemotherapy drug into the bladder via the drainage port.
- Clamp the drainage port.
3.1.3. The registered nurse will:
- Don PPE (see Appendix C).
- Ensure plastic-backed absorbent pads are placed beneath the client where leaking may occur at catheter connection.
- Always use a 4x4 gauze at the connection when disconnecting any tubing or adapter from the catheter.
- Connect the irrigation tubing to the irrigation port, if indicated.
- Attach a urinary drainage bag to the catheter drainage port after removing the blue luer lock adapter.
- Attach Drug Precautions label (see Appendix A) to the catheter drainage bag/tubing.

Note: The ports remain clamped for 30-60 minutes as ordered. If the catheter is removed immediately following instillation, the client is instructed not to void for a prescribed period.

3.1.4. Dispose of contaminated supplies in the appropriate Sharps & Fluid Resistant Waste Container. Refer to Appendix C.

3.1.5. Remove PPE. Dispose in the Soft-Sided Container (red bag).

3.2. Care of the Client Who Has Received Intravesical Chemotherapy

3.2.1. After chemotherapy drug is instilled, clamp the main catheter port.
- In outpatient areas, clients should ambulate or turn every 15 minutes while lying down to maximize drug contact with all surfaces of the bladder wall.
- The client may feel irritation and burning in the bladder.
- Normally, the client should not feel pain after instillation. If they do, notify their physician immediately.

3.2.2. Gather equipment and supplies:
- PPE: impervious gown, doubled nitrile gloves, eye/face protection
- Alcohol based hand cleaner
- Chemotherapy/Hazardous Spill Kit SPD #201903
- Drug Precautions labels SPD #211571
- Drug Precautions Sign Printing Services #103392 (see Appendix B)
- Sharps & Fluid Resistant Waste Container
- Sign alerting staff to use the chemotherapy sharps & fluids resistant waste container (form # 103446, 103168)
- Soft-Sided Container (red bag)
- Transport waste container (for soft sided waste)
- plastic-backed absorbent liner
- alcohol swabs
- Closed male connector (provided from pharmacy with medication) SPD #206080
- urinary catheter (3-way irrigation catheter if applicable)
- catheter insertion tray
- sterile 4x4 gauze pads
- luer lock catheter adapter (blue) SPD #86507
- catheter clamps (2)
- urinary drainage bag

3.2.3. Don PPE (see Appendix C).
3.2.4. After the chemotherapy drug has remained in the bladder for the prescribed length of time, release the clamp to the catheter to drain the chemotherapy drug from the bladder.

3.2.5. Place Sharps & Fluid Resistant Waste, Soft-Sided Container (red bag) at bedside.
   3.2.5.1. Place plastic-backed absorbent pad under catheter connection.
   3.2.5.2. Ensure all urine in the catheter and drainage tubing is drained into the urinary drainage bag.
   3.2.5.3. Clamp catheter.
   3.2.5.4. Disconnect drainage bag and insert sterile catheter plug cap into Foley. Place sterile tubing plug cap onto the open end of the drainage bag to avoid spillage.
   3.2.5.5. Place the drainage bag directly into the Sharps & Fluid Resistant waste container.

3.2.6. Connect a new drainage bag labeled with Drug Precautions label and dispose of catheter plug and plastic-backed absorbent pad into the above waste container. Place new plastic-backed absorbent pads under the client where leakage may occur.

3.2.7. Connect and infuse one litre (or prescribed amount) of 0.9% sodium chloride IV solution through the irrigation port of the 3-way catheter over 30-60 minutes as ordered.

3.2.8. Remove PPE. Dispose in Soft-Sided Container (red bag).

3.2.9. **After the irrigation is complete the catheter is to remain in the client**
   3.2.9.1. Don PPE (see Appendix C).
   3.2.9.2. Remove the irrigation set from the catheter and insert a sterile catheter plug into the irrigation port. Dispose in the regular garbage.
   3.2.9.3. Repeat steps in 3.2.5 (3.2.5.1 – 3.2.5.5)
   3.2.9.4. Connect a new drainage bag labeled with Drug Precautions label and dispose of catheter plug and plastic-backed absorbent pad into the above waste container.

   **Note:** A total of two undrained irrigation sets will be discarded into the Sharps & Fluid Waste Container.

3.2.9.5. Document irrigation complete and drainage bag change on nurses notes.

3.2.9.6. After the initial irrigation is complete and the urinary drainage bag has been changed, the physician may order the Foley to straight drainage or continuous bladder irrigation. Empty urine drainage bag using Chemotherapy Drug Precautions for **48 hrs**. Wear double gloves, face and eye protection and a disposable gown.

3.2.9.7. Perform pericare once a shift around the catheter and more often if the urine is bypassing catheter. In this case, obtain a physician’s order to change or irrigate the catheter as soon as possible.

   **Note:** Use appropriate PPE (including face shield) during pericare and irrigation.

3.2.10. **After the irrigation is complete and the catheter is ordered to be removed**
   3.2.10.1. Don PPE (see Appendix C).
   3.2.10.2. Place Sharps & Fluid resistant Waste and Soft-Sided Container (red bag) at bedside.

   **Note:**
3.2.10.3. Remove the irrigation set from catheter and insert a sterile plug into the irrigation port. Dispose in the regular garbage.
3.2.10.4. With a plastic-backed absorbent pad under the client, deflate the balloon and remove the catheter while using a sterile 4x4 gauze to absorb drug waste from the catheter tip.
3.2.10.5. Wrap gauze and catheter with disposable absorbent pad and dispose into the Sharps & Fluid Resistant Waste Container.
3.2.10.6. Remove PPE. Dispose in Soft-Sided Container (red bag).

3.2.11. After catheter has been removed, perform pericare after the client voids for the following 48 hours.

3.2.12. For clients on inpatient nursing units: document in Nursing Care Plan start time of chemotherapy drug instillation and body waste precaution stop time 48 hours post instillation. Post the Drug Precautions sign #103392 (Appendix B) in client’s room.

3.3. **Chemotherapy Drug Precautions for Body Waste and Supplies**

3.3.1. When disposing of urine, cover toilet/hopper with a plastic backed absorbent pad with absorbent side down prior to flushing to prevent backsplash. Dispose of the plastic-backed absorbent pad after every use in the Soft-Sided Waste Container (red bag).

**Note:** Client does not require a private bathroom.

3.3.1.1. Place soiled linens into a plastic laundry bag. No special handling is required.
3.3.1.2. Items being returned to SPD for cleaning should be handled in the appropriate manner (e.g. dressing trays, scissors).

3.4. **Precautions for Drug Spills and Drug Exposure**

3.4.1. **Drug Spill**

3.4.1.1. Only nurses certified in the care of clients who have received chemotherapy drugs for cancer and Non-cancer may clean up drug spills.
3.4.1.2. Do **NOT** leave the area of the spill. Have a co-worker bring the Chemotherapy/Hazardous Drug Spill Kit.
3.4.1.3. Alert persons in immediate area. Immediately notify the Manager/Supervisor.
3.4.1.4. Don PPE from the spill kit.
3.4.1.5. Attend to anyone who has been splashed with the drug. Refer to 3.4.2.
3.4.1.6. Contain the spill from the outer edges to the center by placing absorbent towels over the contaminated area.
3.4.1.7. Wash area three times, first with the detergent (supplied in kit) followed by water. Dry well with absorbent towel. Follow these same guidelines to clean contaminated equipment.
3.4.1.8. Dispose of linen, supplies and waste as indicated in 3.3
3.4.1.9. Remove PPE. Dispose in Soft-Sided Container (red bag). Refer to the Infection Prevention & Control Manual #20-150 Personal Protective Equipment (PPE) – Donning and Removing
3.4.1.10. Wash hands with soap and water.
3.4.1.11. Report incident to Safety Alert System 1600.
3.4.2. **Drug Exposure**

3.4.2.1. **Splash to Eyes**

3.4.2.2. Flush eyes immediately at eyewash station for at least 15 minutes. If eyewash station unavailable, flush with copious amounts of water or normal saline for at least 15 minutes.

3.4.2.3. Report incident to Safety Alert System 1600.

3.4.3. **Splash to Skin**

3.4.3.1. Remove contaminated clothing immediately.

3.4.3.2. Flush area with copious amounts of water for at least fifteen minutes.

3.4.3.3. Follow with washing area with soap and water.

3.4.3.4. Report Incident to Safety Alert System 1600.

3.4.3.5. Launder contaminated clothing at home separately once, then re-wash with regular wash, or arrange for laundry services to launder your uniform for you. If a replacement uniform is not available on your unit, call SPD to arrange pick-up of a decontamination uniform.

4. **REFERENCES**


Centers for Disease Control and Prevention, (2016). The National Institute for Occupational Safety and Health (NIOSH): Occupational exposure to antineoplastic agents and other hazardous drugs. [https://www.cdc.gov/niosh/topics/antineoplastic/](https://www.cdc.gov/niosh/topics/antineoplastic/)


Appendix A

**Drug Precautions Label**

**CAUTION**
Drug Precautions.
Handle & dispose of contaminated
drug/body waste appropriately.
STORE SKU # 211571
Drug Precautions

TO BE FOLLOWED FOR 48 HOURS FOLLOWING LAST DOSE OF DRUG.

1. Wear DOUBLED non-sterile nitrile gloves and disposable impervious gowns when handling drug waste and all body waste.

2. Wear eye/face protection when there is a risk of splashing drug or body waste.

3. Wash hands well before and after client contact.

4. Process all linen in the regular manner (if personal linen/clothing is laundered at the facility, or if linen is soiled, place in plastic bag and label dirty linen with Drug Precautions sticker - staff handling that laundry must wear personal protective equipment-PPE and wash separately from other laundry).

5. Affix the Drug Precautions label on the front of the chart, requisitions, specimens, IV tubing containing the drug, and all tubes exiting from client (i.e. NG, foley catheters, chest tubes, JP drains, etc.).

6. Cover toilet/hopper with a plastic backed absorbent pad prior to flushing and dispose of after use.

7. All waste contaminated with drug or body waste will be disposed of in either the Sharps & Fluid Resistant Waste Container for Drug Precautions OR the Soft-Sided Waste Container for Drug Precautions, as appropriate.

Form #103392
What do I need to do to protect myself?

The use of Personal Protective Equipment (PPE) is one of the best ways for healthcare workers to prevent occupational exposure to hazardous drugs. PPE can be defined as gloves, gowns, respirators as well as eye and face protection. See Infection Prevention and Control Policy 20-150: Personal Protective Equipment (PPE) – Donning and Doffing.

<table>
<thead>
<tr>
<th>Chemotherapy Drug Administration Equipment and Supplies - Bladder Instillation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nitrile Gloves (DOUBLED: 1 pair under gown cuff; 1 pair over gown cuff)</strong></td>
</tr>
<tr>
<td>Small SPD SKU # 61428</td>
</tr>
<tr>
<td>Medium SPD SKU # 61429</td>
</tr>
<tr>
<td>Large SPD SKU # 61430</td>
</tr>
<tr>
<td><strong>Eye/Face Protection</strong></td>
</tr>
<tr>
<td>Eye Shield/Mask SPD SKU # 83128</td>
</tr>
<tr>
<td>Full Face Shield SPD SKU # 46899</td>
</tr>
<tr>
<td><strong>Impervious Gown with white cuffs</strong></td>
</tr>
<tr>
<td>Main Stores SKU # 123011</td>
</tr>
<tr>
<td><strong>Chemotherapy/Hazardous Spill Kit</strong></td>
</tr>
<tr>
<td>SPD SKU # 201903</td>
</tr>
<tr>
<td><strong>Drug Precaution Labels</strong></td>
</tr>
<tr>
<td>SPD SKU # 211571</td>
</tr>
<tr>
<td><strong>Drug Precautions Sign</strong></td>
</tr>
<tr>
<td>Printing # 103392</td>
</tr>
<tr>
<td><strong>Sharps &amp; Fluid Resistant Waste Container</strong></td>
</tr>
<tr>
<td>Cart - optional (Unit Purchase)</td>
</tr>
<tr>
<td>8 gal sharps red hinge lid SKU #207135</td>
</tr>
<tr>
<td><strong>Sign Alerting Staff to Use the Chemotherapy Sharps &amp; Fluid Resistant Waste Container</strong></td>
</tr>
<tr>
<td>Printing # 103446</td>
</tr>
<tr>
<td>Printing # 103168</td>
</tr>
<tr>
<td><strong>Soft-Sided Waste Container</strong></td>
</tr>
<tr>
<td>Linen Hamper (Unit Purchase)</td>
</tr>
<tr>
<td>Red Liner Bags Main Stores SKU # 202734</td>
</tr>
<tr>
<td>Sign for Hamper Printing # 103170</td>
</tr>
<tr>
<td><strong>Transport Waste Container (for soft-sided waste)</strong></td>
</tr>
<tr>
<td>18 gallon red container Stores SKU #201905</td>
</tr>
<tr>
<td><strong>Plastic-backed Absorbent Liner</strong></td>
</tr>
<tr>
<td><strong>Alcohol Swabs</strong></td>
</tr>
<tr>
<td><strong>Closed Male Connector (provided from Pharmacy with medication)</strong></td>
</tr>
<tr>
<td>Spinning Spiros SPD SKU # 206080</td>
</tr>
<tr>
<td>Spiros Sterile Red Cap SPD SKU # 201901</td>
</tr>
<tr>
<td><strong>Urinary Catheter</strong> (3-way irrigation catheter if applicable)**</td>
</tr>
<tr>
<td><strong>Catheter Insertion Tray</strong></td>
</tr>
<tr>
<td><strong>Sterile 4x4 gauze pads</strong></td>
</tr>
<tr>
<td><strong>Luer Lock Catheter Adapter (Blue)</strong></td>
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<tr>
<td>SPD SKU #86507</td>
</tr>
<tr>
<td><strong>Catheter clamps (2)</strong></td>
</tr>
<tr>
<td><strong>Urinary Drainage Bag</strong></td>
</tr>
</tbody>
</table>

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Appendix D

**Chemotherapy Waste Disposal Containers (RED Bins)**

**Soft-Sided Waste Container**

- Drug packaging & drug transport bag
- Disposable gowns, gloves, full face shield
- Drug administration items (i.e. absorbent pads, gauze pads, alcohol swabs, etc.)
- Disposable materials contaminated with body waste (i.e. diapers, absorbent pads, dressings, etc.)
- Body fluid measuring containers

![Soft-Sided Waste Container Images]

Red liner bags SKU 202734

When bag is 3/4 full transfer to red bin.
RED BAGS MUST BE TRANSPORTED IN RED BIN FOR DISPOSAL

18 gallon SKU 201905

**Sharps & Fluid Resistant Waste Container**

- IV bag / tubing and syringes
- Needles and other sharps
- Waste Blood Tubes
- Materials saturated with drug
- Foley bag

![Sharps & Fluid Resistant Waste Container Images]

4 inch SKU #47617
2 gallon SKU #121507
8 gallon SKU #207135
18 gallon SKU #215429

Tape this sign to sharps container in patient room

STOP!
This client is on Drug Precautions.
Please dispose of sharps in the red 
“Sharps & Fluid Resistant Waste Container for Drug Precautions”