



Provincial Health Services Authority

Improving Patient Safety and Compliance

Module 3

**Includes
Recommended Procedures**

Table of Contents

Section A	1
A.1 Intrathecal (IT) Doses	1
Section B	1
B.1 Vinca Alkaloids	1
Section C	2
C.1 Blister Packaging of Oral Hazardous Drugs.....	2
Section D	2
D.1 Outpatient Hazardous Drug Prescription Labelling	2
Section E	3
E.1 Latex Allergies	3
References	4

Section A

A.1 Intrathecal (IT) Doses

An intrathecal (IT) injection is administered directly into the spinal canal.

Standard:

Preparation of IT doses must be performed accurately given the limitations of syringe technology while following the principles of aseptic technique for the safety of the patient and to minimize exposure of staff to the hazardous drugs.¹

All intrathecal doses will have a label stating the patient name, date, generic drug name, dose and route in full (i.e. By INTRATHECAL Injection). This labelling will be attached to the syringe and to the outer zip-lock bag. Intrathecal doses will be provided in luer lock syringes. Intrathecal syringes and labels will have an auxiliary label highlighting the route for intrathecal use attached to the syringe and the outer zip-lock bag. These will be bright in colour, route in all capital letters and clearly visible.

For example:



Intrathecal doses will be packaged in separate outer containers for transport to the centre-specific treatment location. Intrathecal doses will be delivered separately from all other chemotherapy doses.

For protocols in which intrathecal drugs and drugs administered by other parenteral routes are all to be given in one same treatment cycle, the non-intrathecal drugs will NOT be released from pharmacy until the nurse or physician confirms that the intrathecal drug administration is complete.

Note:

- All drug and diluent used in the preparation of IT doses MUST be preservative free²
- All drug used MUST be labelled 'for intrathecal use' by the manufacturer²
- Gloves MUST be changed immediately prior to preparing the intrathecal dose¹

Refer to Module 1 Checklists – Parenteral Doses Requiring Further Dilution

Refer to BC Cancer's Systemic Therapy Procedure Number [III-50 - Administration of High-Alert Medications by the Intrathecal Route via Lumbar Puncture or Ommaya Reservoir](#)

Section B

B.1 Vinca Alkaloids

Intrathecal (IT) injection of vinca alkaloids is fatal. It is imperative to prevent the accidental intrathecal injection of vinca alkaloids.

Standard:

All Vinca Alkaloids must be dispensed in a 50 mL minibag to be given over 5-15 minutes and labelled with an auxiliary label with the words ‘WARNING: FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES’³

Refer to [BC Cancer’s Systemic Therapy Policy Number V-40 - Dispensing and Labelling of Vinca Alkaloid Preparations](#)

Section C

C.1 Blister Packaging of Oral Hazardous Drugs

When taken inappropriately, oral chemotherapy medications can cause serious harm to patients. This risk of harm is increased when a patient needs to take a medication which requires a mix of multiple strengths of tablets/capsules to make up the correct dose. Factors such as the number of medications the patient is on, their age, and language barriers can further compound the potential for problems.

Pharmacy should blister package capecitabine for patient’s in-home administration to address these possible issues. Physicians or patients may request the blister packaging of other oral HD medications (e.g., hydroxyurea). Using blister packaging increases patient compliance and promotes safe administration of oral chemotherapy.

Section D

D.1 Outpatient Hazardous Drug Prescription Labelling

Standard:

All hazardous drugs dispensed for outpatient use must be labelled according to the current labelling standards found in the Health Professions Act (HPA) Bylaws; College of Pharmacists of BC.

A recognized strategy to improve comprehension of the directions on outpatient prescription labels and to reduce inadvertent medication errors is to standardize drug labelling practices.⁴

- Use whole numbers instead of alphabet characters to describe doses, concentrations, and frequencies as much as possible (e.g., use ‘2’; *not* ‘two’)⁴
- For doses that include partial tablets, use alphabet characters instead of fractions (e.g., Use ‘half’, ‘quarter’; *not* ‘1/2’, ‘1/4’, etc.), (use ‘one and a half’; *not* ‘1.5’)⁴
- Dose and interval should be clearly separated and contain specific dosing and interval times as much as possible. (e.g., ‘Take 2 tablets in the morning and take 2 tablets in the evening’; *not* ‘Take two tablets twice a day’), (e.g., ‘Take 1 tablet in the morning’; *not* ‘Take once daily’)⁴
- Avoid awkward terms such as ‘twice’, ‘bi-monthly’, ‘bi-weekly’, etc.; (e.g., Use ‘2’)⁴
- Use common terminology (e.g., no medical jargon)⁴
- Use capital letters only in the first letter of sentence (avoid all capital letters for full sentences). Use all capital letters to selectively make key words stand out⁴
- Avoid negative statements. Tell the patient what they should do, and not what they shouldn’t do. (e.g., use ‘Take by mouth’, *not* ‘Not for rectal use’)⁴
- Different strengths of the same medication should be expressed in the same manner. (e.g., ‘250 mg, 500 mg, 1000 mg’, *not* ‘1 g’)⁴
- Include properly spaced commas for dose numbers above 9999. (e.g., use ‘10,000’, *not* ‘10000’)⁴
- Use standard metric abbreviations. (e.g., use ‘kg, g, mg, mcg, or mL’, *not* ‘mLs, gm, or gms’)⁴

- Include a space between the drug name, strength, dosage form, and dosage units *unless* it causes the strength and dosage unit to fall on separate lines. (e.g., use 'capecitabine 500 mg', *not* 'capecitabine 500mg')⁴
- Avoid symbols and abbreviations on the Institute for Safe Medication Practices (ISMP) 'Do not Use' list. (e.g., spell out the word 'unit', *not* 'u')⁴
- Ensure the most essential information is at the beginning of the directions (e.g., 'On radiation therapy days only'). Keep less essential information near the end. (e.g., 'Total dose = 500 mg')⁴
- When more than one strength for a drug is dispensed, include information at the end of the directions to instruct the patient to take the two strengths together. (e.g., 'Take EACH dose with ____ x ____ mg tablets')⁴
- **Standard: All boxes/bottles must be individually labelled; multiple boxes must not be affixed together with a label on a single box⁵**
- **Standard: Vials, blister cards, boxes, bottles and jars containing hazardous drugs must be clearly labelled with a "Hazardous Drug" warning auxiliary label^{5,6}**

See Warning Labels in Module 1 Section F.1.6

Section E

E.1 Latex Allergies

Exposure to natural rubber latex (latex) can pose a health concern for patients with a latex allergy. Reactions to latex can range from mild to life-threatening.⁷

To reduce this risk, patients with a latex allergy should avoid contact with medical devices and parenteral drug products containing latex.

When applicable, patients are classified by their oncologist with either a latex sensitivity or as latex allergic. Patients with a latex sensitivity require no special precautions with respect to their parenteral drug preparation. Patients with a latex allergy require special precautions with respect to their parenteral drug preparation.

References

1. BC Cancer Division of Pharmacy. BC Cancer Best Practice Safe Handling Standards. 2008
2. BC Cancer Division of Pharmacy. BC Cancer, Cancer Drug Manual. BC Cancer; Accessed June 4, 2008. Available at: <http://www.bccancer.bc.ca/health-professionals/clinical-resources/cancer-drug-manual>
3. WHO. World Health Organization Information Exchange System Alert No. 115. 2007;115
4. BC Cancer Provincial Pharmacy Safety Officer/P4C. BC Cancer Systemic Therapy VI-90-02 - Outpatient Prescription Labels: Guidelines for Oral Medication Label Instructions and Selection of Oral Drug Strengths. BC Cancer ; May 9, 2011<http://shop.healthcarebc.ca/phsa/BCCancer/Provincial%20Pharmacy/70488.pdf>
5. SHPA Committee of Specialty Practice in Cancer Services. SHPA Standards of Practice for the Provision of Oral Chemotherapy for the Treatment of Cancer. Journal of Pharmacy Practice and Research ; 2007;37(2):149–152
6. ASHP Council on Professional Affairs. ASHP Guidelines on Handling Hazardous Drugs. American Journal of Health-System Pharmacy ; 15 Jun, 2006;63(12):1172–1191DOI: <https://dx.doi.org/10.2146/ajhp050529>
7. Hamilton R, Brown R, Veltri M, et al. Administering pharmaceuticals to latex-allergic patients from vials containing natural rubber latex closures. Am J Health-Syst Pharm. ; Sept 1, 2015;62:1822–7DOI: <https://doi.org/10.2146/ajhp050021>