

Pharmacy FAQ

Orientation to Oncology Pharmacy for CON Sites

What are the recommended readings and courses for orientation to oncology in a Community Oncology Network (CON) hospital pharmacy for pharmacists, pharmacy technicians and pharmacy assistants?

Each centre at BC Cancer develops its own training/orientation program based on the requirements of that particular pharmacy. However, the same basic principles for safe handling of hazardous drugs, preparation of sterile parenteral cancer therapy, cancer therapy order review and product checking and dispensing apply to all pharmacies to ensure standardized safe delivery of cancer treatment to patients.

In addition to the policies and standards outlined by the Health Authority, CON Hospital pharmacy staff can use the information provided below to orient pharmacists, technicians and assistants to oncology pharmacy. New CON staff can contact their site's [CON Pharmacy Educator](#) to be added to the **What's New at BC Cancer** and the [Systemic Therapy Update](#) mailing lists, or to request orientation to BC Cancer website pharmacy resources.

The Canadian Association of Pharmacy in Oncology (CAPHO) has released a document titled [Competencies for Oncology Pharmacists in Canada](#) which describes the knowledge, skills and attitudes (KSA) required by oncology pharmacists in Canada.

General Safe Handling Orientation (Pharmacists, Technicians and Assistants)

It is important for all staff working with hazardous drugs to be informed and educated about procedures and standards that should be followed when receiving, storing, sterile compounding, dispensing, transporting, and disposing these agents.

Resource	Learning Activity
National Institute for Occupational Safety and Health (NIOSH)	<ul style="list-style-type: none"> NIOSH List of Antineoplastic and Other Hazardous Drugs (2016)
<p>Register on the LearningHub for these Courses:</p> <p>A list and links to the Learning Hub Modules is also available from the BC</p>	<p>Core Clinical Practice Safe Handling Modules*:</p> <ul style="list-style-type: none"> Safe Handling Part 1: General Overview (Course #5923) Safe Handling Part 2: Parenteral (Course #6189) (applicable sections for your role)

Cancer Pharmacy Education Program webpage.	<ul style="list-style-type: none"> • Safe Handling Part 3: Hazardous Drug Spills (Course #1852)
<p>BC Cancer Website Resources</p>	<p>Safe Handling Standards Manual BC Cancer Pharmacy Practice Standards for Hazardous Drugs</p> <ul style="list-style-type: none"> • Module 1: Safe Handling of Hazardous Drugs Module • Module 1: Safe Handling of Hazardous Drugs Checklists (step-by-step checklists of technical routines) • Supplementary Resources (procedures) <p>Cancer Drug Manual</p> <ul style="list-style-type: none"> • BC Cancer’s Hazardous Drug List links to the BC Provincial Hazardous Drug List • Oncology High Alert Medication List (drugs with high risk of patient harm if used in error) <p>Pharmacy Frequently Asked Questions</p> <ul style="list-style-type: none"> • Safety for Pregnant Staff

* The **Provincial Hazardous Drug Exposure Control Plan [Hazardous Drugs Safety for Pharmacy Staff](#)** Curriculum of 4 short courses (Course #27286) accessed through the LearningHub is included in the Safe Handling 1, 2 and 3 modules above.

Parenteral Cancer Medication Preparation Orientation (for Technicians and Assistants - in addition to General Safe Handling Orientation section above)

Pharmacy technicians and assistants require individual instruction and practice to ensure they have mastered their aseptic and safe handling techniques when preparing cancer medications in the Containment Primary Engineering Control (C-PEC)/Biological Safety Cabinet (BSC).

Resource**	Learning Activity
<p>Register on the LearningHub for this Course.</p>	<p>Core Clinical Practice Safe Handling Module (recommendation to complete in General Safe Handling Orientation section above)</p> <ul style="list-style-type: none"> • Safe Handling Part 2: Parenteral (Course #6189) (applicable sections for your role)
<p>BC Cancer Website Resources</p>	<p>Safe Handling Standards Manual BC Cancer Pharmacy Practice Standards for Hazardous Drugs (see Module and Supplementary Resource information recommendation in General Safe Handling Orientation section above)</p> <p>Cancer Drug Manual</p> <ul style="list-style-type: none"> • Chemotherapy Preparation and Stability Charts • Intravenous Bag Size and Vial Selection Table <p>Pharmacy Frequently Asked Questions</p> <ul style="list-style-type: none"> • Volume Maximums

** The [Canadian Association of Pharmacy in Oncology \(CAPhO\)](#) Essential Series offers an online, self-study program, **Safe Handling of Hazardous Drugs** based on NAPRA standards. This resource is not currently part of BC Cancer orientation but may be helpful to some CON sites. Membership to CAPhO is required.

Clinical Checking of Cancer Treatment Orders (Pharmacists)

Pharmacists require education and guidance to ensure competency to interpret, assess and evaluate treatment protocols and orders. A step-by-step process can be used to ensure all clinical review elements are completed.

Resource	Learning Activity
<p>Register on the LearningHub for these Courses.</p> <p>A list and links to the Learning Hub Modules is also available from the BC Cancer Pharmacy Education Program webpage.</p>	<p>Core Clinical Practice Modules recommended as part of initial orientation:</p> <ul style="list-style-type: none"> • Cancer Drug Order Clinical Assessment (Course #5718) • Parenteral Cancer Drugs: Administration, Complications and Safety Considerations (Course #5922) • Lab Monitoring (Course #5550) • Medication Safety (Course #5921) <p>Other Modules recommended as part of initial orientation:</p> <ul style="list-style-type: none"> • Infusion Reactions (Course #6899) • Drug Interactions (Course #5722)
<p>BC Cancer Website Modules</p>	<p>BC Cancer Clinical Pharmacy Guide - Clinical Assessment of BC Cancer Drug Treatment Protocols (CPG)</p> <ul style="list-style-type: none"> • Module 1 Understanding BC Cancer Treatment Protocols (1 hour) • Module 2 Cancer Drug Order Assessment (1 hour) • Module 3 Laboratory Test Interpretation (1 hour) • Module 4 Parenteral Drug Delivery (1 hour) • Module 5 Supportive Care Medications (1 hour) • Module 6 Radiation Therapy and Dual Modality Protocols (1 hour – given at BC Cancer sites only) • Clinical Pharmacy Guide Case Studies • Appendix A Clinical Cancer Drug Order Review Checklist: Parenteral Drugs • Appendix A Clinical Cancer Drug Order Review Checklist: Take Home Drugs • Appendix B Guidelines for Anthracycline Monitoring Thresholds (more information can be found in the Pharmacy • FAQ: Lifetime Cumulative Dose Documentation of Anthracyclines and Bleomycin

Product Labelling and Checking (Pharmacists, Technicians and Assistants)

As procedures and staff responsibilities differ among sites, it is beneficial to provide clear direction and online resources to support the pharmacists, technicians and assistants involved in this essential product step.

Resource	Learning Activity
<p>BC Cancer Website Resources</p>	<p>Parenteral: Safe Handling Standards Manual BC Cancer Pharmacy Practice Standards for Hazardous Drugs</p> <ul style="list-style-type: none"> • Module 2: Pharmacy Medication Checks (15 minutes) <ul style="list-style-type: none"> ○ Module ○ Checklists • Module 3: Improving Patient Safety and Compliance (15 minutes) <ul style="list-style-type: none"> ○ Module Section A Intrathecal (IT) Doses ○ Module Section B Vinca Alkaloids ○ Module Section E Latex Allergies <p>Cancer Drug Manual</p> <ul style="list-style-type: none"> • Chemotherapy Preparation and Stability Charts • Intravenous Bag Size and Vial Selection Table <p>BC Cancer Clinical Pharmacy Guide - Clinical Assessment of BC Cancer Drug Treatment Protocols (CPG)</p> <ul style="list-style-type: none"> • Appendix C Final Compounded Cancer Drug Product Check <p>Oral: Safe Handling Standards Manual BC Cancer Pharmacy Practice Standards for Hazardous Drugs</p> <ul style="list-style-type: none"> • Module 3: Improving Patient Safety and Compliance (15 minutes) <ul style="list-style-type: none"> ○ Module Section C Blister Packaging of Oral HD ○ Module Section D Outpatient HD Prescription Labelling <p>Cancer Drug Manual</p> <ul style="list-style-type: none"> • Auxiliary Label List

Product Dispensing to Patients (Pharmacists, Technicians and Assistants)

Providing patients with the correct patient information helps them take their cancer medication appropriately, manage side effects, reach out to health care professionals with concerns and questions and ensures safety for them and their caregivers and families when handling hazardous drugs and sharps.

Resource	Learning Activity
<p>Register on the LearningHub for this Course. (Pharmacists only) A list and links to the Learning Hub Modules is also available from the BC Cancer Pharmacy Education Program webpage.</p>	<p>Module for further study (not Core)</p> <ul style="list-style-type: none"> • Patient Counselling: Adherence, Communication, Resources (Course #6900)
<p>BC Cancer Website Resources</p>	<p>Cancer Drug Manual</p> <ul style="list-style-type: none"> • Individual Drug Patient Handouts and Alert Cards • Guidelines for Disposal of Sharp Medical Supplies (Sharps) at Home Patient Handout • Handling Cancer Drugs and Body Fluids in the Home Patient Handout for patients taking Group 1 Hazardous Drugs • Natural Health Products and Breast Cancer Patient Handout • Natural Health Products and Cancer Therapy Patient Handout • Chemotherapy Protocols for protocol-specific patient handouts

Site-Specific Policies and Procedures

Each CON site will have site-specific policies and procedures which follow their hospital and Health Authority directives.

Local directives and training for hazardous drug exposure prevention would include hazardous drug (HD) personal protective equipment (PPE) orientation, training and testing, aseptic technique training and competency assessment, HD preparation, labelling, receiving, storing, disposal, packaging and transport procedures, HD spill kit contents and location and accidental HD exposure procedure, personal exposure records, blood and body fluid exposure protocol and emergency shower and eyewash use and locations.

Local directives and training for clinical review and dispensing would include drug interaction and information resources, adverse drug reporting, clinical documentation, clinical competency assessment, OSCAR billing procedure and patient safety reporting system.

BC Cancer Policies and Procedures on Shared Health Organization Portal (SHOP)

BC Cancer policies and procedures are available to some CON sites through their Health Authority network. Many are linked throughout the [Safe Handling Standards Manual](#) modules and checklists.

Examples of policies that contain information regarding the safe handling, preparation, clinical check and dispensing processes recommended at BC Cancer for oncology medications are:

- Systemic Therapy Policy [V-10 Hazardous Drug Safe Handling Policy](#)
- Systemic Therapy Policy [III-10 Systemic Therapy Delivery Process](#)
- BC Cancer Pharmacy Policy [III-30-07 Medication Orders](#)
- BC Cancer Policy Pharmacy Policy [III-30-12 Auxiliary Labelling of Outpatient Medications Practice Guidelines](#)

BC Cancer Resources:

[BC Cancer Library](#)

- BC Cancer Provincial Library portal containing both health care professional and patient resources along with BC Cancer Library staff contact information.

[Cancer Drug Manual](#)

- [Individual Drug Monographs and Patient Handouts](#)
- Drug Preparation and Stability Information
 - [Chemotherapy Preparation and Stability Chart](#)
 - [IV Bag Size and Vial Selection Table](#)
- Safe Handling Information
 - [BC Provincial Hazardous Drug List](#)
 - [Guidelines for Safe Disposal of Sharp Medical Supplies at Home Patient Handout](#)
 - [Handling Cancer Drugs and Body Fluids in the Home Patient Handout](#)
 - [Auxiliary Label List](#)
- Appendix
 - [Fluorouracil and Capecitabine Dosing Based on DPYD Activity Score \(DPYD-AS\)](#)
 - NIH [Common Terminology Criteria for Adverse Events \(CTCAE\)](#)
 - [Natural Health Products and Breast Cancer Patient Handout](#)
 - [Natural Health Products and Cancer Therapy Patient Handout](#)

[Chemotherapy Protocols](#)

- BC Cancer protocol summaries, preprinted orders and protocol-specific patient handouts categorized under Tumour Group

[Pharmacy Education Program webpage](#)

A list and links to the “Core Clinical Practice” and “Modules for further study” can be located under Modules+ from this webpage.

Additional Resources – Pharmacology

- [Cancer Drug Pharmacology Table](#)

Pharmacy Webpage

- [Drug Funding](#)
- [Clinical Pharmacy Guide \(CPG\)](#)
- [Frequently Asked Questions](#)
- [Safe Handling Standards Manual](#)
- [Symptom & Side Effect Management Resource Guide](#)

Systemic Therapy

Quick links to the policies, procedures and documents can also be found on the main [Pharmacy](#) webpage under Policies.

- [PHSA Shared Health Organizations Portal](#) – all Health Organizations [SHOP](#)
- [Provincial Pharmacy Procedures and Directives](#) are accessible from [SHOP](#)
- [Provincial Systemic Therapy Program Policies and Procedures](#) are accessible from [SHOP](#)
- [Systemic Therapy](#)
 - [Systemic Therapy Scheduling Guide](#) - Provides guidance for nurse and chair times required to provide BC Cancer protocols.
- [Systemic Therapy Update Newsletter](#)
 - Monthly Provincial Pharmacy newsletter providing up-to-date information on relevant cancer treatment topics in British Columbia which is available to all health care professionals.

What's New @ BC Cancer Newsletter

- CON Pharmacy Educator bimonthly newsletter containing information on continuing education opportunities, new programs and protocols highlighted in the Systemic Therapy Update newsletter and changes in BC Cancer policies and procedures relevant to pharmacy.

References:

1. Pharmacy Orientation for Oncology Staff H/Pharm-Prov/Orientation Updated March 2023
2. BC Cancer website; accessed December 4, 2024. Available at <http://www.bccancer.bc.ca/health-professionals>.
3. Shared Health Organizations Portal (SHOP); accessed December 4, 2024. Available at <https://shop.healthcarebc.ca/phsa/bc-cancer>
4. LearningHub; accessed December 4, 2024. Available at <https://learninghub.phsa.ca/Learner/Home>
5. Competencies for Oncology Pharmacists in Canada Canadian Association of Pharmacy in Oncology; accessed December 4, 2024. Available at

https://www.capho.org/sites/default/files/assets/file/media_file/5005_CAPhO%20Competencies_English_Final.pdf