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Aged Care

IPC Community of Practice:
Aged Care Connexion
Resources
Webinars



Cytotoxic medication and related waste management

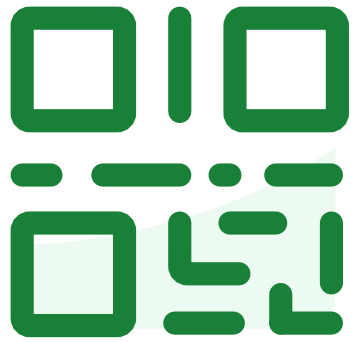
Carrie Spinks



Acknowledgement to Country

ACIPC acknowledges Aboriginal and Torres Strait Island people as the traditional custodians of country throughout Australia and respects their continuing connection to culture, land, waterways, community, and family.





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Where are you from?



What is your role?

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Q&A



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- Questions and comments are encouraged
- Please place all questions/comments in the Q&A function or Slido Q&A for presenters to respond
- Any unanswered questions from the webinar will be posted in the 'aged care connexion' forum.
- Webinar recording and PowerPoint will be uploaded onto the ACIPC Aged Care IPC Webinar Series webpage <https://www.acipc.org.au/acipc-aged-ipc-webinar-series/> post the session



Aged Care IPC Resources



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One stop shop aged care IPC resources – anything you need in aged care IPC is located on this page

<https://www.acipc.org.au/aged-care/resources-australasian-aged-care/>

Webinar resources, templates, guides, forums are all also located her

You do not need to be a member to access

Aged Care - this is your space!





**Do you have any residents/clients on
cytotoxic treatment?**

Cytotoxic medication and risk to workers



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- Cytotoxic medications are detrimental or destructive to cells within the body
 - sensitizing, mutagenic, carcinogenic or toxic to reproduction.
- Ongoing exposure to cytotoxic medications and/or related waste can have personal health risks to staff



Cytotoxic medication use



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Used in:

- Health Care, Community Settings, Laboratories and Veterinary Practices

Used for:

- Cancer treatment
- Chronic conditions: Rheumatoid Disorders, Multiple Sclerosis, Autoimmune Disorders, Skin Disorders



Cytotoxic Medications

What you need to know



Non cytotoxic hazardous medication



- Not all hazardous medications are cytotoxic hazardous medications
- Non-Cytotoxic Hazardous medications adversely affect the reproductive system, endocrine system, immune system, respiratory system
- The hazardous effects are often on the person taking them and potentially to pregnant staff
- Different precautions may be required for non-cytotoxic hazardous medications and cytotoxic hazardous medications

CYTOTOXIC and NON-CYTOTOXIC HAZARDOUS MEDICATIONS			
CYTOTOXIC HAZARDOUS MEDICATIONS		NON-CYTOTOXIC HAZARDOUS MEDICATIONS	
altretamine	gemtuzumab ozogamicin	abiraterone	iloprost
arsacrine	hydroxyurea	acitretin	imatinib
arsenic	IDArubicin	alitretinoin	ISotretinoin
azacitidine	ifosfamide ipilimumab	ambrisentan	lapatinib
azathioprine	irinotecan	anastrozole	leflunomide
bacillus calmette guerin (bladder instillation only)	lenalidomide	bexarotene	letrozole
• biohazardous agent	lomustine	bicalutamide	leuprolide
• requires cytotoxic handling and precautions	mechlorethamine	bosentan	megestrol
bendamustine	melphalan	buserelin	methy(TE)STOSTERone
bleomycin	mercaptopurine	cetorelix	mifepristone
busulfan	methotrexate	choriogonadotropin alfa	misoprostol
busulfan	mitomycin		

Cytotoxic definitions



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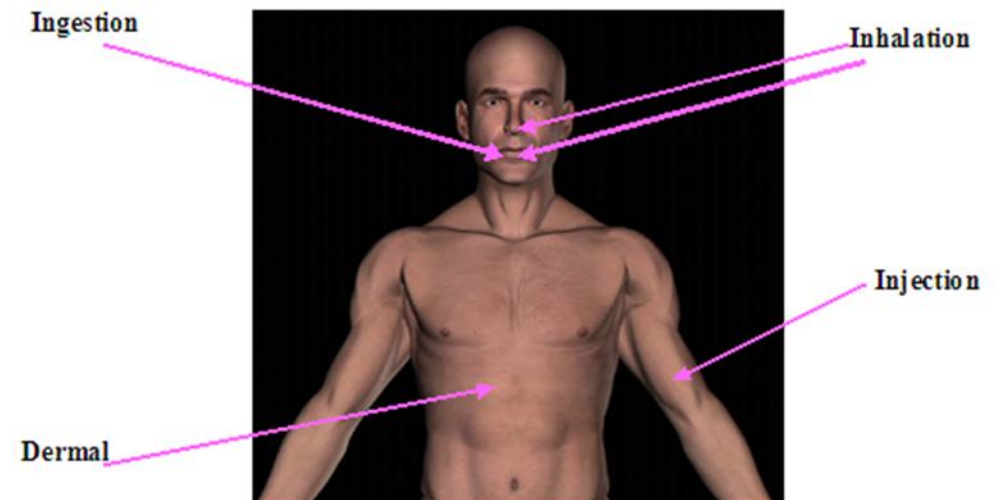
- Cytotoxic Medication
- Cytotoxic Human Waste
- Cytotoxic Material
- Cytotoxic Waste





Cytotoxic Exposure Routes

- Absorption - Skin contact
- Inhalation - medication particles or waste vapours
- Ingestion
- Injection



Who could be at cytotoxic exposure risk



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- Registered/Enrolled Nurses
- Carers
- Cleaning staff
- Laundry Staff
- Maintenance Staff
- Pharmacists/Pathologist
- At home family members



Assess the risk to staff



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- Identify and assess resident/client - dependent/independent
- Risk of exposure to contaminated body products or materials
- Routes of exposure – aerosols, contact, ingestion, injection
- Drug type / form and administration means
- Identify staff at exposure risk – RN/EN, Carer, Cleaner, Launderer
- Drug storage, labelling and transport risks
- Facility layout/setting risks
- Spill risk
- Cytotoxic waste management



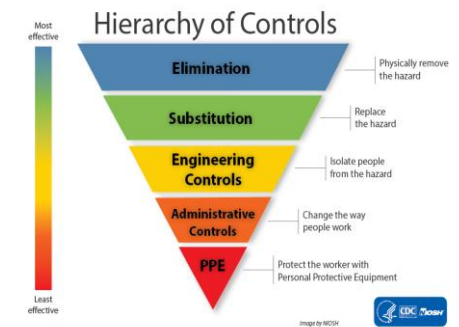


**What safety controls does your facility
put into place? - 1-2 words**



Operation procedure Risk controls

- Access: State/territory/local Cytotoxic Medication and Related Waste procedure, Medication procedure, Cytotoxic Management resources and teaching tools
- Medication Safety data sheet – stored in medication folder
- Provision of staff information, instruction and training
- Consultation with staff - assess workers' risk to health
- Resident/client cytotoxic drug prescription/administration recorded via electronic medication system or other
- RN/EEN administering cytotoxic drugs recorded via electronic medication system or other
- Resident/client documentation and risk assessment in notes or electronic system





Special Precautions for Staff

- All staff must be informed of resident/client on cytotoxic medications
- All staff should attend cytotoxic training and be aware of guidelines
- Staff who are:
 - pregnant,
 - breastfeeding
 - planning to become pregnant

should not be administering cytotoxic drugs or attending care/cleaning where body products are present – due to possible effects on foetal development.





Cytotoxic medication administration

Medication administered by RN/EN and at differing round to routine medications

TOPICAL AGENTS

- Avoid unnecessary contact with topical agent
- Minimize contact with a person's clothing
- Apply with a disposable spatula
- Dispose of all contaminated equipment as cytotoxic waste
- PPE –Nitrile gloves and long sleeve waterproof gown

ORAL AGENTS

- Use a non-touch technique
- Do not crush or break tablets or capsules
- Isolate and discard damaged tablets or capsules as cytotoxic waste and notify pharmacy for collection
- Discarding contaminated medication cup and equipment as cytotoxic waste
- PPE – Nitrile gloves





Cytotoxic medication precautions



Labelling of Cytotoxic Medication



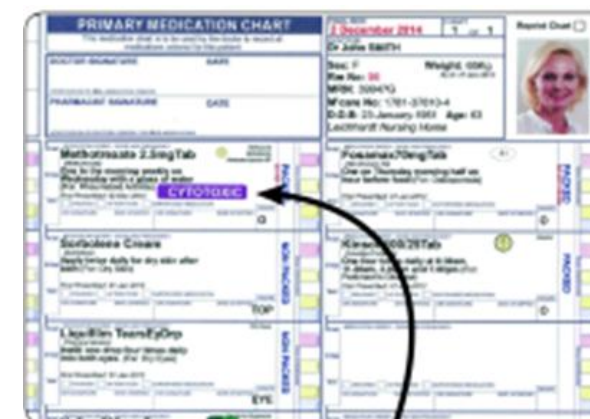
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- Labelling on medication charting (special instruction) and medication to include:
 - Cytotoxic drug
 - Oral cytotoxic medications – ‘Do Not Crush or Break’
 - Topical cytotoxic medications – ‘Apply with Spatula’
 - Any other special precautions
 - Purple identifying cytotoxic sticker/warning





Cytotoxic labelling controls



CYTOTOXIC





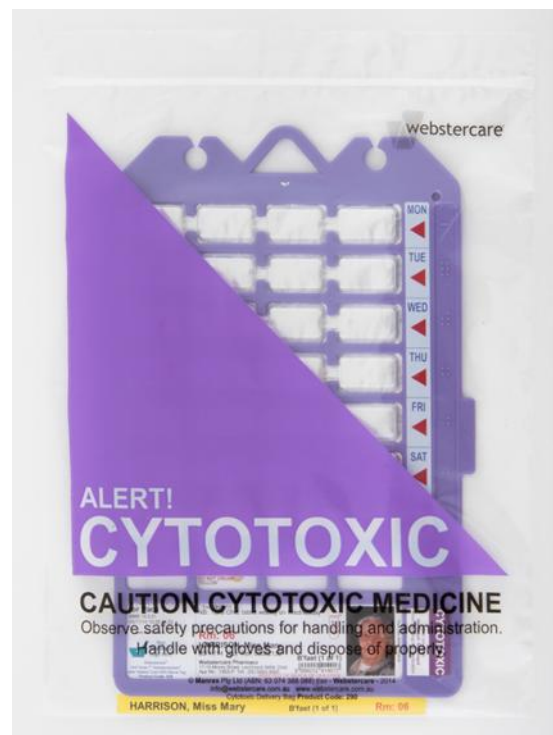
Storing of Cytotoxic Medications

- Cytotoxic medication storage:
 - Oral - sealed purple blister dose administration pack/boxed bottle in labelled zip lock bag
 - Topical -individually placed boxed tube/bottle in labelled zip locked bag
- Store in a labelled plastic basket (clearly marked cytotoxic), separated from other medications
- Storage must be in a lockable medication room/trolley or safely in the home





Medication storage controls





Cytotoxic Waste

- PPE – P2/N95 mask, nitrile gloves, long sleeve waterproof gown, eye wear (if splash risk)
- All non reusable cytotoxic contaminated items go into cytotoxic waste (used PPE, incontinence aids)
- Bag waste (double) at point of care/production and dispose immediately
- Cytotoxic waste must be in labelled and identified purple bagged containment – not over filled
- Cytotoxic Waste must be segregated and stored separately
- Transport, removal, treatment and destruction in accordance with Waste Act and Waste Regulation
- Homecare – double bag waste and place in general waste



Cytotoxic waste management controls



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Cytotoxic Body Waste Management

- PPE- P2/N95 mask, nitrile gloves, long sleeve waterproof gown, eye wear (if splash risk)
- Cytotoxic body waste is disposed in the normal sewage system (toilet) , flush twice/lid down
- Contaminated incontinence aids, wound dressings, catheters, urology/stoma bags etc. are double bagged and disposed in cytotoxic bin
- Contaminated reusable items (bedpans, urinals, bowls) should be emptied in the toilet, covered and clean/disinfectant in sanitizer washer

Home care – double bag aids/used dressings etc into general waste and utilise an allocated wash area for reusables



Body waste controls



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Liner/Light
Absorbency Pad



Medium to Heavy
Absorbency Pads



Heavy
Pants





Cytotoxic Laundry

- **Non contaminated clothing/linen is washed normally**
- PPE- P2/N95 mask, nitrile gloves, long sleeve waterproof gown, eye wear (if splash risk)
- Contaminated linen is bagged at the point of care
- Internal laundering: Contaminated linen is placed in purple soluble bag and purple linen bag
- External laundering: Contaminated linen is placed in cytotoxic waste bags or as requested
- Bagged cytotoxic contaminated linen is separately stored and labelled
- Cytotoxic contaminated linen is washed separately (infectious can be combined) on a high wash cycle (Ozone or heat at 71 degrees - 3 minutes)
- A cytotoxic waste bin must be in the laundry for used PPE and other items
- Homecare – wash separately x2 in washing machine and dry outdoors



Laundry controls



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Cytotoxic Cleaning

- Standard cleaning precautions apply in bedrooms and common areas
- Risk of exposure to body fluids/vapours in bathroom or spills
- PPE - P2/N95 mask, nitrile gloves, long sleeve waterproof gown, eye wear
- Disposable cleaning equipment should be used as possible
- Reusable equipment – designated purple cleaning equipment (as possible) – clean between
Used mops/cloths must be placed in purple soluble bags and tied, at point of cleaning
- Waste cytotoxic management streams
- Homecare – segregate cleaning equipment by area, and clients own



Cleaning controls



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Cytotoxic Spill and Spill Kit

- Cytotoxic Spill kits to be in all sanitation (sluice, pan) rooms
- Cytotoxic spills (cytotoxic medication, contaminated body products) must be attended immediately
- Care staff attend to the immediate spill cleaning – cleaners disinfect second
- PPE:
 - Body waste or topical medication: P2/N95 mask, nitrile gloves, long sleeve waterproof gown, eye wear (if splash risk), overshoes and hairnet
 - Oral medication: nitrile gloves only
- Staff member must complete incident/risk form and notify the person in charge.



A collection of various personal protective equipment (PPE) items including gloves, gowns, masks, and eye protection, along with a box of Cytotoxic Spill Kit and a caution sign.





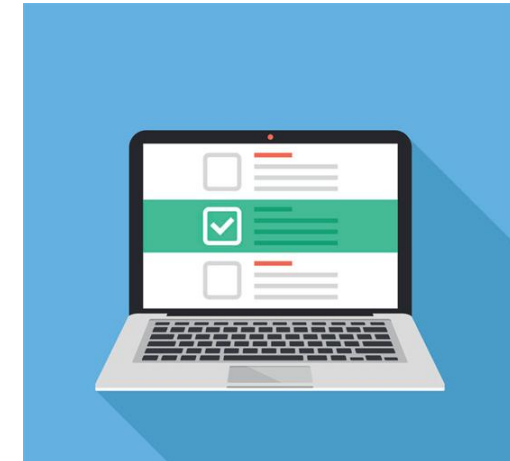
Specimen collection

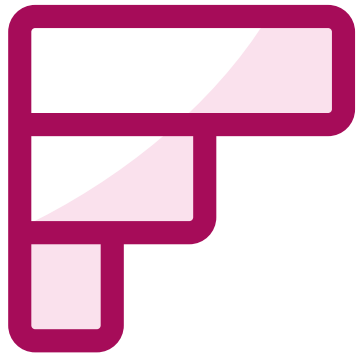
- Only essential specimens are to be collected
- PPE for body product specimens - P2/N95 mask, nitrile gloves, long sleeve waterproof gown, eye wear (if splash risk)
- Specimens and request form must be labelled and identified with purple cytotoxic label



Documentation

- The cytotoxic management plan (risk assessment) is to include details of:
 - Risk assessment
 - Cytotoxic medication and administration
 - Body waste management
 - Waste management
 - Laundering management
 - Staff precautions





Rank 1-5 (i most important) What do you see as the most important controls to keep staff safe?

Guideline Variance

Note:

- Guidelines can vary:

i.e. ONS and NIOSH recommend that 2 pairs of gloves are worn during any activity involving hazardous drugs except during administration of intact oral drugs. However, the various state and territory Work Health Safety guidelines of Australia and New Zealand recommend wearing one pair of purpose manufactured gloves as part of standard PPE for hazardous drugs

- Glove choice:

i.e. Nitrile preferred material; however, latex can be used, if they meet the strict ASTM D6978 standard and are specifically tested and verified for chemotherapy drug permeation resistance.

(Not all latex gloves have this capacity – procurement must have knowledge in this.)



Resources Australia - National

- **Medication management in residential aged care facilities - GUIDING PRINCIPLES**

<https://www.health.gov.au/sites/default/files/2025-05/guiding-principles-for-medication-management-in-residential-aged-care-facilities.pdf>

- **Cytotoxic Medication Management in the Community – ACIA**

<https://www.acia.net.au/ACIA%2045%20Cytotoxic%20Medication%20Management%20in%20the%20Community.pdf>



Resources Australia - state



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- **Guide for handling cytotoxic drugs and related waste – Safework QLD**
https://www.worksafe.qld.gov.au/_data/assets/pdf_file/0024/22884/guide-handling-cytotoxic-drugs-related-waste.pdf
- **Waste Management of Clinical and Related Wastes – Queensland**
https://www.des.qld.gov.au/policies?a=272936%3Apolicy_registry%2Fpr-gl-clinical-and-related-waste.pdf
- **Cytotoxic Drugs and Related Waste Risk Management – Safework NSW**
https://www.safework.nsw.gov.au/_data/assets/pdf_file/0005/287042/SW08559-Cytotoxic-drugs-and-related-risk-management-guide.pdf
- **Safe Handling and Waste Management of Hazardous Drugs – eviQ - NSW**
<https://www.eviq.org.au/clinical-resources/administration-of-anti-cancer-drugs/188-safe-handling-and-waste-management-of-hazardou>
- **Chemotherapy safety at home – eviQ-NSW**
<https://www.eviq.org.au/getmedia/fc0178ba-3db6-41ea-acc3-ad00a7b271ff/eviQ-PI-3095-Chemotherapy-safety-at-home-V6.pdf.aspx?ext=.pdf>

Resources Australia –state and territory



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- **WorkSafe Victoria – Cytotoxic Medicines**
https://www.victag.org.au/VicTAG_Handling_of_Hazardous_Medicine_Framework_Nov_2021_Final.pdf
- **WorkSafe Victoria – Managing Cytotoxic Waste**
<https://www.worksafe.vic.gov.au/cytotoxic-medicines-managing-cytotoxic-waste>
- **Cytotoxic Therapy PHC Remote Guideline - NT**
<https://digitallibrary.health.nt.gov.au/nthealthserver/api/core/bitstreams/eb7c2b45-174d-4eb4-a5d9-e229fe6541c9/content>
- **Cytotoxic Drugs and Related Waste – A Risk Management Guide for South Australian Health Services**
<https://www.sahealth.sa.gov.au/wps/wcm/connect/f8aa68004b3f6cf6a340afe79043faf0/Safe%2BHandling%2BCytotoxic%2BGuidelines.pdf>
- **Hazardous and cytotoxic drugs – Safework SA**
<https://www.safework.sa.gov.au/workplaces/chemicals-and-substances/storage,-use-and-transport-of-hazardous-chemicals/hazardous-and-cytotoxic-drugs>



Resources NZ

- **Practice Guide for Cytotoxic Drugs – WorkSafe New Zealand WorkSafe**

<https://kaitiaki.org.nz/article/practice-guide-for-cytotoxic-drugs/>





Audience Q&A

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Thank you

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