

Managing Personal Protective Equipment for the administration of hazardous drugs during COVID-19 pandemic

Background

Occupational Health and Safety and Worker Compensation authorities^{1, 2} as well as various Professional Practice Standards^{3, 4, 5} uniformly mandate the use of personal protective equipment (PPE) by healthcare workers who handle hazardous drugs and related waste.

The Cancer Institute NSW and eviQ support the use of PPE for safe handling and administration of hazardous cancer drugs for those drugs listed on the National Institute for Occupational Safety and Health's (NIOSH) ⁶ [Group 1 Hazardous drugs list](#).

Personal protective equipment (PPE) shortages are currently posing a challenge across NSW during the COVID-19 pandemic. It is anticipated that facilities who deliver systemic anticancer treatments (hazardous drugs) across NSW may, at times, have difficulty accessing the required PPE, especially gowns and seek alternative ways to provide patient care and/or optimise current supply.

Personal Protective Equipment (PPE) – Gown Specification

All PPE should comply with the Australian Standard or equivalent. Selection criteria for chemotherapy gowns includes: ⁵

- Disposable, lint free, and rated to resist chemotherapy.
- Long sleeves and elastic or knit cuffs, fasten in the back (no open front), and be without seams or closures that could allow HD exposure.
- Polyethylene-coated polypropylene or other laminate is recommended.

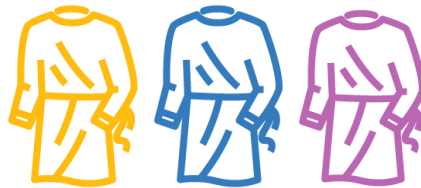
Do not use cloth laboratory coats, scrubs, or isolation gowns.

Optimisation strategies and recommendations

Strategies to optimise the current stock of gowns are necessary to support decision making and staff and patient safety in clinical cancer care during the COVID-19 pandemic.

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Procurement of gowns during this time may result in the *brand or colour varying* from the standard supply, however ALL must comply with Australian Standards and provide the same protection and be disposed of as cytotoxic waste.



Strategies to preserve supply include:

1. Reserving chemotherapy gowns for when handling and administering hazardous cytotoxic drugs and related waste i.e. those on [Table 1 NIOSH list](#) ⁶
 - The use of gowns is not warranted for either dose preparation or administration of monoclonal antibodies,⁷ **except** those conjugated to a cytotoxic agent, fusion protein or a radioisotope.
2. In the event of critical shortages, the use of chemotherapy gowns for handling waste for at least 48 hours⁵ after completion of cytotoxic drug administration.
 - Recommended to check the excretion time of each drug in the treatment protocol. Timeframes and routes for excretion of cytotoxic drugs in the patient's body waste following administration can be found in Appendix 10 in Safe Work NSW¹ guide.
3. In the event of no chemotherapy rated gown being available, a long sleeved fluid repellent disposable gown may be considered.⁸
4. Consideration around the allocation of tasks rather than individual patient care e.g. one nurse hangs bags, or performs all takedowns chemotherapy. Note that, patient assessment does not require the use of a chemotherapy approved gown.

Healthcare facilities should use standard practices (including the use of gloves, goggles/face shield, mask) whenever possible.

For more information refer to eviQ Education's rapid learning around [COVID-19 and Personal Protective Equipment](#).

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References

1. [SafeWork NSW. 2017. Cytotoxic Drugs and Related Waste Risk Management Guide 2017. New South Wales Government](#)
2. Queensland Workplace Health and Safety Strategy. Guide for handling cytotoxic drugs and related waste. Last updated October 2014
3. SHPA Committee of Specialty Practice in Oncology, Standards of Practice for the Safe Handling of Cytotoxic Drugs in Pharmacy Departments. Journal of Pharmacy Practice and Research 2005; 35(1); 44-52
4. ISOPP standards of practice. 2007 "Safe handling of cytotoxics." J Oncol Pharm Pract 13 Suppl:1-81.
5. [Toolkit for Safe Handling of Hazardous Drugs for Nurses in Oncology. Oncology Nursing Society. 2018](#)
6. NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings, 2016
7. eviQ safe handling of monoclonal antibodies in the cancer care setting: <https://www.eviq.org.au/clinical-resources/administration-of-antineoplastic-drugs/188-safe-handling-and-waste-management-of-hazardou#safe-handling-of-monoclonal-antibodies-in-the-canc>
8. Oncology Nursing Society (ONS) [Interim Guidelines during the COVID-19 Pandemic](#)

*Disclaimer: This guidance is for when the availability of gowns for the administration and handling of hazardous drugs is in short supply. Otherwise PPE for the safe handling and waste management of hazardous drugs **should not deviate** from [current practice](#), which is based on current evidence and best practice.*