The policy set out below has been written in response to the National Medication Safety Alert (December 2005\(^1\)) arising from a fatal incident due to incorrect administration of vincristine by the intrathecal route. The aim of this policy is to minimise the risk of intrathecal instead of intravenous administration of cytotoxic drugs. This guideline should be used in conjunction with existing cytotoxic chemotherapy policies and the related “Policy for the Safe Administration of Vinca Alkaloid Drugs” published contemporaneously. These policy guidelines were developed by an expert working group of the WA Medication Safety Group (WAMSG) and have been endorsed by the WA Therapeutics Advisory Group (WATAG). They shall apply at all Western Australian public hospitals.

The guidelines contain provisions for training of staff qualified in the preparation, handling or administration of intrathecal chemotherapy. These provisions are strongly recommended to minimise the risk of intrathecal drug administration errors.

Health Service Managers and Clinical Directors are requested to:

- bring this Circular to the attention of all medical, pharmacy and nursing staff.
- ensure that local policies and procedures comply with the requirements of this policy; and
- implement the provisions of this circular promptly.

Dr Simon Towler  
ACTING DIRECTOR GENERAL  
DEPARTMENT OF HEALTH

Western Australian Policy for Safe Administration of Intrathecal Chemotherapy

PERSONNEL

1. All facilities providing intrathecal chemotherapy must develop and maintain a record of “intrathecal-qualified” personnel, who are credentialled to prepare, dispense or administer intrathecal cytotoxic chemotherapy according to their usual professional role. The record will include pharmacists, pharmacy technicians, nurses and doctors at all grades of staff. If a person not qualified in intrathecal administration is required to prepare, dispense or administer intrathecal cytotoxic drugs, they must do so under the appropriate supervision of an intrathecal-qualified clinician, and obtain intrathecal administration training when appropriate.

INDUCTION TRAINING AND CONTINUING PROFESSIONAL DEVELOPMENT

2. All staff and all grades of staff involved in the prescribing, dispensing, checking or administration of intrathecal chemotherapy must receive education and training appropriate for their professional roles, as part of a formal induction, in order to become “intrathecal-qualified”. This education and training must be provided by individual institutions.

3. Induction for all staff (nursing, pharmacy and medical) must cover all potential clinical hazards associated with intrathecal chemotherapy, the danger posed to patients if drugs, particularly vinca alkaloids, are accidentally administered intrathecally, and an analysis of how errors have occurred in the past.

4. Institutions must record details of the training courses to be provided and a plan how the training will be extended to new staff members as part of the induction process, within a period of 3 months of the publication of these guidelines.

PRESCRIBING

5. All prescriptions for intrathecal cytotoxic chemotherapy must be signed or countersigned by a haematology/medical oncology consultant or senior registrar.

6. The full drug name and the route “intrathecal” must be written in full on the prescription.

7. Unless dictated by protocol, intrathecal chemotherapy must not be planned on the same day as intravenous chemotherapy.

DRUG PREPARATION

8. All intrathecal injections must be placed inside a sealed yellow outer bag.

9. All layers of outer packaging including the outer sealed bag must be labelled with the patient name, name of drug and a clear warning “For Intrathecal Use Only”.

10. Syringes for intrathecal therapy must be labelled with a warning “For Intrathecal Use Only”. To avoid obscuring information, “flag”-type labels must be applied to small syringes.

ISSUING AND DELIVERY FROM PHARMACY

11. Intrathecal injections prepared by the Pharmacy Department shall be delivered to the designated location under the direct control of an intrathecal-qualified nurse or pharmacist.

12. In the case of the administration not proceeding (eg failed lumbar puncture) the drug must be returned to the Pharmacy Department intact and disposed of. If another attempt to administer the drug is required, a new dose should be prepared.

13. Notwithstanding item (7) above, where circumstances make same-day administration of chemotherapy drugs by intrathecal and intravenous routes unavoidable, the order of route of administration must be standardised and the second drug to be administered
shall be issued from pharmacy only after the pharmacist in charge has positively confirmed that the first therapy has been given successfully by examining the signed administration order.

DRUG ADMINISTRATION

14. Unless dictated by protocol, all intrathecal chemotherapy should be administered during normal working hours and when a full complement of intrathecal-qualified staff is present.

15. Cytotoxic intrathecal chemotherapy will be administered only in designated cytotoxic suites or wards managing cancer patients, theatre or radiology suites.

16. Before the cytotoxic drug is administered, the intrathecal-qualified nurse or pharmacist will verify the correct patient, route, drug and dose with the intrathecal-qualified person who administers the drug to the patient.

17. Only a haematology/medical oncology registrar, consultant or other intrathecal-qualified senior medical personnel, including radiologists, may administer intrathecal chemotherapy.