Background

There is a global shortage of thiopental (also known as thiopentone) 500 mg powder for injection. Stock of thiopental injection (Pentothal®) is estimated to return 1 April 2019. There are no alternative brands of this product available, and no unregistered thiopental products available via the Special Access Scheme (SAS) or Section 19A (S19A). It is not anticipated that SAS or S19A stock will become available during this shortage period.

Thiopental is indicated for the induction of general anaesthesia, as a sole anaesthetic agent in short surgeries and for short term control of seizures in critical care areas. It has accepted use in the treatment of raised intracranial pressure and for cerebral protection, such as in neurosurgery.

A number of alternative agents are available, including propofol, isoflurane, sevoflurane, ketamine and midazolam for anaesthetic induction; propofol and ketamine as sole anaesthetic agents for short surgical procedures; propofol for short term control of seizures in critical care areas; and acetazolamide for the management of raised intracranial pressure.

Hospitals should assess thiopental injection usage across their facility and implement local plans to manage the shortage, this includes use of alternative agents where clinically appropriate.

Thiopental stock should be reserved for patients where there are no other options, such as allergy to alternative agents.

Suggested actions by Local Health Districts/Networks

1. Distribute this notice to all relevant stakeholders and departments.

2. Assess the current status of thiopental injection available in each facility, ensuring all locations of stock are identified.

3. Strategies to manage the shortage of thiopental should be planned and implemented at a local level. These measures should include (after risk assessment at the local level):
   - Remove and quarantine stock from clinical areas where thiopental is not routinely used.
   - Reduce and minimise stock levels in clinical areas where thiopental is routinely used.
   - Reserve stock of thiopental for patients unable to receive alternative agents.
   - Use alternative agents to thiopental where clinically appropriate
   - In the event stock of thiopental is depleted, patients with known contraindications to alternative agents should have a thorough risk assessment completed by a Senior Consultant.

4. Ensure a system is in place to document actions taken.