



Safety Alert 002/09

16 June 2009

Guidewire Alert

Reducing incidents involving guidewire insertion techniques

Relevant for any intravascular devices using guidewires for insertion including central lines; peripherally inserted central catheter (PICC) lines; dialysis catheters; parenteral nutrition lines.

Background

Central venous catheter (CVC) insertion is a frequently performed invasive procedure associated with risk of mechanical and infective complications. A number of incidents have been reported where guidewires have been retained in the patient post insertion. The incidents have required surgical recovery. The incidents are most commonly attributable to:

- Loss of control of the guidewire during insertion due to inexperience with the Seldinger technique and/or insufficient supervision
- Guidewires left in the PICC line until X-ray confirmation of position which are then not removed.

Mandatory actions for reducing retention of guidewires

- Ensure clinicians who insert intravascular devices are made aware of the risks and correct procedures.
- Remind clinicians that control of the guidewire must be maintained at all times during the insertion and positioning process.
- Remind clinicians it is critical the guidewire is removed once insertion is complete.
- Ensure clinicians complete a central line (or as appropriate) insertion checklist for every insertion, document the guidewire has been removed, and confirm the guidewire has been sighted by the proceduralist and an independent observer to confirm that the guidewire is intact. This should be recorded on a Central Venous Catheter Insertion Checklist.²
- Only trained or experienced clinicians should insert intravascular devices.
- All clinicians new to inserting central lines must complete a training program that includes both knowledge and practical components. The minimum training and assessment requirements for CVC insertion are outlined in the *Training Framework for Clinicians New to Inserting Central Lines in NSW*.¹ Supervision requirements are also specified.

References

- *Training Framework for Clinicians New to Inserting Central Lines in NSW, CLAB ICU Project, Preventing Central Line Infections*, September 2008. <http://www.cec.health.nsw.gov.au/moreinfo/CLAB.html>
- Central Venous Catheter Insertion Checklist. <http://www.cec.health.nsw.gov.au/moreinfo/CLAB.html>
- Safety Alert 002/08 Peripherally Inserted Central Catheter (PICC Line) Released 13/10/08 <http://www.health.nsw.gov.au/quality/sabs/index.html>

Action required by Area Health Services

1. Ensure that this safety notice is distributed to all clinical staff involved in the insertion of intravascular devices using guidewires for insertion.
2. Ensure only trained or experienced clinicians insert intravascular devices and are made aware of the risks and correct procedures associated with guidewires.
3. Ensure staff members who are new to inserting intravascular devices have completed Central Venous Catheter insertion training based on the *Training Framework for Clinicians New to Inserting Central Lines in NSW* available at <http://www.cec.health.nsw.gov.au/moreinfo/CLAB.html>
4. Ensure clinicians complete a central line insertion checklist for every insertion, document that the guidewire has been removed, is intact, and sighted by the proceduralist and independent observer. The CVC Checklist is at <http://www.cec.health.nsw.gov.au/moreinfo/CLAB.html>
5. AHS use the CVC Checklist as a guide for any intravascular devices inserted using a guidewire.
6. Ensure staff are aware that further information is available via the CIAP website at <http://www.ciap.health.nsw.gov.au> or <http://internal.health.nsw.gov.au>

Distributed to:

- Chief Executives
- Directors of Clinical Governance
- Directors of Clinical Operations

Action required by:

- Chief Executives
- Directors of Clinical Governance
- Directors of Clinical Operations

For response by:

- Directors of Clinical Governance

We recommend you also inform:

- Directors of Ambulance Services
- Directors of Anaesthesia & Surgery
- Directors of Cancer Care
- Directors of Emergency Medicine
- Directors of Intensive Care
- Directors of Medical Services
- Directors of Specialty Training Units
- Directors of Vascular Access Team
- Directors of Nursing and Midwifery
- Medical staff
- Nurses
- Dietician/Nutritionist

Deadline for completion of action

10 July 2009

Expert Reference Group

- Clinical Excellence Commission
- CLAB ICU Expert Group

Quality and Safety Branch

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