

Medical Device/Equipment ALERT

Ref. MDEA(NI)2007/37

Issued: 2 May 2007

For:

IMMEDIATE ACTION	
ACTION	✓
UPDATE	
INFORMATION	



HEALTH ESTATES

creating healing environments

	Section
<p>Medical Device/Equipment: IV cannulas used in conjunction with automatic powered injectors.</p>	▶ ①
<p>Problem: Air embolisms may occur during contrast imaging procedures if air is entrained in contrast medium administered by automatic powered injectors via IV cannulas.</p>	▶ ②
<p>Action by: This notice should be brought to the attention of all appropriate managers, staff and users.</p>	▶ ③
<p>Action: Prior to any imaging procedure involving an automatic powered injector and IV cannula, the Instructions For Use provided with the cannula should be checked to ensure it is suitable for high pressure injections.</p>	▶ ④
<p>Distributed by NIAIC to:</p> <p>Chief Executive of each HSS Board Chief Executive of each HSS Trust Chief Executive of each Agency NIAIC Liaison Officers</p>	▶ ⑤
<p>Contacts Details of manufacturer contacts and NIAIC contacts for technical aspects.</p>	▶ ⑥
<p>Feedback Requirements to NIAIC None required</p>	▶ ⑦

This Alert is on our web site: <http://www.dhsspsni.gov.uk/niaic>

1. DEVICE/EQUIPMENT:

IV cannulas and automatic powered injectors.

2. PROBLEM:

Air embolism (air bubbles in the bloodstream) can occur during any intravenous injection. Small quantities of air can be absorbed by the body, so small air emboli may never be detected if patients are asymptomatic. However, large air emboli can cause seizures, permanent neurological damage or occasionally death.

An incident has been reported in which a patient undergoing a CT examination received an air embolus from an automatic powered contrast medium injector through an IV cannula. Fortunately, there was no adverse patient effect on this occasion.

3. ACTION BY:

This notice should be brought to the attention of all appropriate managers, staff and users.

4. ACTION:

Prior to any imaging procedure involving an automatic powered injector and IV cannula, the Instructions For Use provided with the cannula should be checked to ensure it is suitable for high pressure injections. Where possible, it is recommended that non-ported cannulas should be used during procedures involving powered injections.

When using an automatic powered injector and IV cannula, the Instructions For Use provided by the manufacturers of the injector and cannula should be followed. The following items should always be checked:

- a) There is an adequate quantity of contrast medium in the syringe,
- b) The syringe and tubing have been purged of air,
- c) The cannula has been primed,
- d) The injector syringe and tubing are adequately connected to the cannula.

Prior to initial injection, and between multiple injections, the cannula and its connection with the power injector system should be inspected to verify that no air is present.

5. ONWARD DISTRIBUTION TO:

Please bring this notice to the attention of all who need to know or be aware of it. This will include distribution to:

- Liaison Officers
- Risk Managers
- Health & Safety Officers/Advisors
- Clinical Governance Leads
- Device Managers
- Radiology / Imaging
- Accident & Emergency
- Intensive Care Units
- Radiology Labs
- MRI Scanning
- Catheterisation Labs
- Radiography
- Special Care Baby Units

6. CONTACTS:

Enquires to NIAIC should quote reference number MDEA(NI)2007/37 and be addressed to:

Northern Ireland Adverse Incident Centre (NIAIC)
Health Estates
Estate Policy Directorate
Stoney Road
Dundonald
Belfast BT16 1US

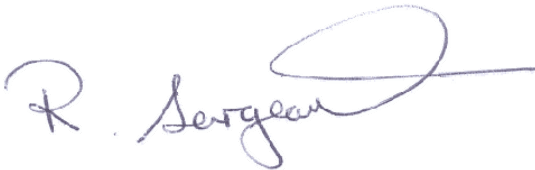
Tel: 028 9052 3868

Fax: 028 9052 3900

Email: NIAIC@dhsspsni.gov.uk

7. FEEDBACK:

None Required



Robert Sergeant
NIAIC Operational Manager

HOW TO REPORT ADVERSE INCIDENTS

Adverse Incidents relating to medical devices, non-medical equipment, plant and buildings should be reported to NIAIC as soon as possible. Advice on how to report is given in MDEA(NI)2006/01. If you are in doubt about how to report incidents, please speak to your liaison officer or contact NIAIC using the telephone number provided. Adverse Incident reporting forms and an on-line reporting facility are available on the NIAIC website at www.dhsspsni.gov.uk/niaic

Heath Estates is an Executive Agency of the Department of Health, Social Services and Public Safety