

Medical Device/Equipment ALERT

Ref. MDEA(NI)2007/102

Issued: 4th December 2007



HEALTH ESTATES

creating healing environments

For:

IMMEDIATE ACTION	
ACTION	✓
UPDATE	
INFORMATION	

	Section								
Medical Device/Equipment: Intravenous (IV) infusion lines: all brands.	▶ ①								
Problem: Risk of back-tracking when more than one IV line is connected through a single access point.	▶ ②								
Action by: All medical and nursing staff.	▶ ③								
Action: <ul style="list-style-type: none"> Where appropriate, consider using IV lines with one-way valves to prevent backtracking. (Examples of one-way valves are check, non-return or anti-reflux valves or anti-siphon/anti free-flow valves). Apply clamps (where available) to lines not in use. Be aware that needle free connectors are not one-way valves and will allow back-tracking when connected to IV devices. 	▶ ④								
Distributed by NIAIC to: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Chief Executive of each HSS Board</td> <td style="width: 50%;">General Medical Practitioners</td> </tr> <tr> <td>Chief Executive of each HSS Trust</td> <td>Hospices</td> </tr> <tr> <td>Chief Executive of each Agency</td> <td></td> </tr> <tr> <td>NIAIC Liaison Officers</td> <td></td> </tr> </table>	Chief Executive of each HSS Board	General Medical Practitioners	Chief Executive of each HSS Trust	Hospices	Chief Executive of each Agency		NIAIC Liaison Officers		▶ ⑤
Chief Executive of each HSS Board	General Medical Practitioners								
Chief Executive of each HSS Trust	Hospices								
Chief Executive of each Agency									
NIAIC Liaison Officers									
Contacts Details of manufactures and NIAIC contacts for technical and clinical aspects.	▶ ⑥								
Feedback Requirements to NIAIC None required.	▶ ⑦								

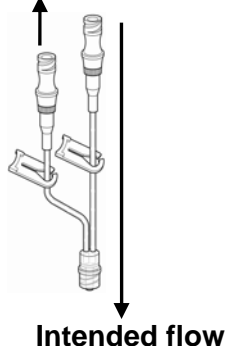
This Alert is on our web site: <http://www.dhsspsni.gov.uk/niaic>

1. DEVICE/EQUIPMENT:

Intravenous infusion lines that will allow fluid to flow in both directions. For example multi-lumen Intravenous extension sets, Intravenous administration sets with side port/Y-site and Intravenous multi-way connectors such as stopcocks, Y-connectors and manifolds.

2. PROBLEM:

Backtracking flow



When more than one IV line is connected to a single access point, backtracking of fluids can occur if one line has no flow or a slower flow of fluid running through it. The fluid will back-track, as it will take the path of least resistance (see diagram).

This can also occur during occlusions. If a downstream occlusion occurs when an infusion pump is being used, the occlusion alarm may not be activated.

Bolus delivery can occur following backtracking, when flow in the line is increased, the line is flushed or the occlusion is released.

3. ACTION BY:

All medical and nursing staff.

4. ACTION:

- Where appropriate, consider using Intravenous lines with one-way valves to prevent backtracking. (Examples of one-way valves are check, non-return or anti-reflux valves or anti-siphon/anti free-flow valves).
- Apply clamps (where available) to lines not in use.
- Be aware that needle free connectors are not one-way valves and will allow back-tracking when connected to Intravenous devices.

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:

- All clinical departments
- All wards
- Ambulance services directors
- Ambulance staff
- Anaesthesia, directors of
- Chief Pharmacists
- Clinical governance leads
- Hospital at home units
- Intensive care units
- IV nurse specialists
- Medical directors
- Neonatal nurse specialists
- Nursing executive directors
- Nutritional nurse specialists
- Outpatient clinics
- Outpatient theatre managers
- Palliative care teams
- Paramedics
- Pharmacists
- Radiographer superintendents
- Resuscitation officers and trainers
- Risk managers
- Supplies managers
- Theatre managers
- Community midwives
- Community nurses
- District nurses
- Independent Health and Social Care Providers – Private Hospitals & Clinics, Residential and Nursing Homes through RQIA

6. CONTACTS:

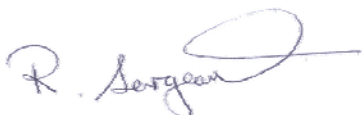
Enquiries to NIAIC should quote reference number MDEA(NI)2007/102 and be addressed to:

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