

ADVERSE INCIDENT REPORTS CONCERNING MEDICAL DEVICES AND EQUIPMENT

The following list provides some examples of medical devices. It is not a comprehensive list and is provided for guidance only.

- Medical Devices and equipment for the diagnosis or treatment of disease, or monitoring of patients e.g.: non-medicated dressings; surgical instruments and equipment; IV administration sets and pumps; anaesthetic equipment; powered implants (e.g. pacemakers); implantable defibrillators; radiotherapy equipment (brachytherapy, external beam); ophthalmic equipment; sphygmomanometers; vaginal speculae; examination gloves; catheters (e.g. urinary, cardiac); endoscopes; patient monitoring equipment (e.g. cardiac monitors); surgical implants (e.g. orthopaedic prostheses, bone cements, heart valves); x-ray systems, ultrasound imagers and CT/MR scanners; dental equipment and materials; chiropody equipment; thermometers; physiotherapy equipment; syringes and needles; blood warming cabinets.
- Medical Devices and equipment for critical care, e.g.: ventilators; defibrillators.
- Medical Devices and equipment used in the care of patients, e.g.: wheelchairs and special support seating; walking aids; patient hoists; orthotic and prosthetic appliances; pressure relief equipment.
- Medical Devices and equipment used by ambulance services, e.g.: stretchers and trolleys; resuscitators
- Medical Devices and equipment for daily living, e.g.: commodes, urine drainage systems; incontinence products; hearing aids; domiciliary oxygen therapy systems; prescribable footwear; bathing and showering equipment; special chairs.

Medical devices and equipment also include the following:

- *In-vitro* diagnostic medical devices and their accessories, e.g.: devices for blood glucose measurement; pregnancy test kits; urine test strips; hepatitis and HIV test kits; blood gas analysers; specimen collection tubes.
- intra-uterine devices (IUDs); contact lenses and care products; condoms.

We are also interested in products which, whilst not themselves medical devices, are used closely in conjunction with these devices, e.g.: blood and tissue storage systems; disinfecting and sterilizing equipment e.g. bench top sterilizers; chemical and biological indicators used in sterilization processes.

Medical devices do not include general workshop equipment such as power or machine tools.

Some equipment is designed to be permanently connected to installed services, e.g. medical gas pipework, ducting or electrical supply. In these cases, the device should be regarded as comprising all parts up to and including the means of connection to the installed service.

ADVERSE INCIDENT REPORTS CONCERNING NON-MEDICAL EQUIPMENT, PLANT AND BUILDINGS

The following list provides some examples of non-medical equipment, plant and building fabric that we are interested in:

- Engineering plant and services of all types e.g. boilers, generators, heating, ventilation, water, drainage, and electrical installations and any other fixed plant.
- Fire Protection installations and equipment.
- Permanently installed sterilizers, bedpan washers and disposal units.
- Equipment in laundries, catering departments, workshops and any plant or equipment used for maintenance or cleaning.
- Piped medical gas and vacuum installations, Vacuum Insulated Evaporators (VIE) and anaesthetic gas scavenging systems.
- Fixed luminaires, including operating and examination lamps
- Communications equipment e.g. telephone, nurse call, paging, alarms and radio.
- Lightning protection and anti-static precautions.
- Built environmental aspects of COSHH
- Installation aspects of fume cupboards and microbiological safety cabinets, including ductwork and their interaction with ventilation systems.
- Buildings and building components and plant used in maintenance and construction.
- Ambulances but excluding motor vehicles such as those for disabled persons and lease hire and goods vehicles.

ROLE OF LIAISON OFFICERS

Each HPSS organisation has now nominated a liaison officer. If you need to let us know about a change in liaison officer details e.g. name, address, phone, fax numbers and e-mail address, please contact us at telephone number 02890 523704; fax: 02890 523900, e-mail: NIAIC@dhsspsni.gov.uk.

Reporting Adverse Incidents

Guidance for establishing procedures for reporting adverse incidents to NIAIC is outlined in this Notice. Local procedures for adverse incident reporting should also ensure that relevant local staff are kept informed of any adverse incidents e.g. by copying any report made to NIAIC to relevant staff or forwarding all reports to NIAIC via the Liaison Officer. This is the preferred procedure as it allows the HPSS organisation to demonstrate compliance with Health & Safety legislation by having a record of all reports of adverse incidents. A sample staff information sheet is provided at Annex G.

Dissemination of NIAIC warning notices (Hazard Notices, Advice Notices and Safety Notices)

A complete record of advice and recommendations issued by NIAIC should be maintained by each HPSS organisation. Warning notices should be distributed to the appropriate people in the organisation and recommendations contained within implemented.

One colour-coded copy (PINK for Hazard Notice, WHITE for Advice Notice and BLUE for Safety Notice) is sent by first class post to the Chief Executive/General Manager and the Liaison Officer in all HPSS organisations. Hazard Notices & Advice Notices are faxed in advance to Liaison Officers. Liaison Officers also receive all warning notices by e-mail (Notices will be in MS Word format).

Warning notices concerning High Voltage equipment will be distributed to HPSS Trusts that have HV switchgear only. This will ensure that all warning notices are relevant to the organisations concerned.

There may be occasions when the warning notice refers to a medical device, non-medical equipment, plant or building item that users do not use. When a safety related concern arises, NIAIC's priority is to alert all potential users of the particular device, equipment, plant or building item. This includes professionals who do not use the medical device or item of equipment, but have contact with members of the public that may. In the interests of patient, staff and client safety it is vital that each warning notice received is checked and acted upon as necessary.

Organisations should:

- identify a fax number and e-mail address for the primary receipt of Hazard Notices and Advice Notices;
- arrange for someone to deputise in the Liaison Officer's absence;
- establish procedures to record action taken following the receipt of warning notices indicating to whom they have been sent;
- develop procedures to ensure that new staff are made aware of recent warning notices, Device Bulletins or Guidance Booklets (for example: establish the procedure in codes of practice wherever possible; set up a folder of warning notices; establish an electronic library of warning notices etc.)

- distribute Hazard Notices and Advice Notices immediately. Safety Notices could take a less immediate route depending on the subject and the local situation;
- ensure that each Hazard Notice, Advice Notice and Safety Notice is distributed individually. Do not accumulate and staple warning notices together;
- target Hazard Notices, Advice Notices and Safety Notices to the appropriate recipient identified on each notice and is brought to the attention of all who need to know or be aware of it in accordance with local procedures. We recommend that you identify a candidate recipient in each relevant area for your organisation and the procedures for reaching;
- maintain records to show (for example):
 1. date issued;
 2. signed assurance from recipient that required action has been taken (for example – appropriate staff have been made aware of the Notice);
- do not cut and paste text from any NIAIC Warning Notice (this could change the context of the message).

Dissemination of NIAIC Device Bulletins, Guidance Booklets and Evaluation Reports

Device Bulletins are issued when guidance and information is needed over an extended area, for example, decontaminating endoscopes. They deal effectively with problems which keep recurring and which can be solved by good training and practice, rather than by modifying or withdrawing a particular product. It is vital that they are issued to all staff with responsibility for training, staff responsible for setting organisational policies for equipment management and any other relevant staff.

Guidance Booklets are produced occasionally when guidance is needed for topical issues and a Device Bulletin would not be a suitable format. Their distribution is outlined in the publication.

Device Bulletins and Guidance Booklets are produced in printed form. NIAIC will distribute an agreed number to each Liaison Officer for distribution within their organisation. HSS Board Liaison Officers are additionally responsible for ensuring that Registration and Inspection Units distribute to Residential and Nursing Homes and Private Clinics when the publication is relevant to these areas. NIAIC will arrange for distribution to General Medical Practitioners, General Dental Practitioners, Opticians and Community Pharmacists.

Equipment Evaluation Reports, Disability Equipment Assessments and Pressure Sore Prevention Reports should be made available to staff responsible for equipment purchasing in these specific areas.

DEFECTIVE OR CONTAMINATED ITEMS AND EVIDENCE

Defective Items

Defective items should not be repaired (either in-house or by a third party), returned to the manufacturer/supplier or discarded before an investigation has been carried out. The manufacturer or supplier should be informed promptly, and allowed to inspect the items if accompanied by an appropriate person. To facilitate an investigation, it may be possible to provide the manufacturer with a sample(s) of unused stock from a large batch. However, the manufacturer must not be allowed to exchange, interfere with, or remove any part of the product implicated in the incident if this would prejudice NIAIC investigations, or those of other official bodies.

If medical devices or other equipment are required to be kept in use, where possible remove defective parts so that the equipment may be repaired for re-use. Any parts so removed must be quarantined and securely stored pending investigation. NIAIC's advice should be sought and, in all cases, the defective parts should be clearly identified and kept secure. If it is not possible to remove defective parts or withdraw the machine from use, staff should be made aware of the need for increased vigilance and extra caution during use (see Evidence below).

Contaminated Items

Advice on procedures to be followed if healthcare equipment is contaminated and constitutes a biohazard is contained in PEL(94)34 and SAN(NI) 95/24. NIAIC can provide advice where necessary, particularly on whether arrangements should be made for the item to be examined prior to any decontamination.

Where decontamination/cleaning would destroy vital evidence, the item should be placed in protective containment, labelled and placed in quarantine. NIAIC and the manufacturer/supplier should be contacted for advice prior to any further action being taken.

IT IS ILLEGAL TO SEND CONTAMINATED ITEMS THROUGH THE POST

Evidence

All material evidence should be labelled and kept secure under the charge of a responsible officer. This includes the products themselves and, where appropriate, packaging material or other means of batch identification. The evidence should not be interfered with in any way except for safety reasons or to prevent its loss. If necessary, a record should be made of all readings, settings and positions of switches, valves, dials, gauges and indicators, together with any photographic evidence and eyewitness reports.

INVESTIGATION OF ADVERSE INCIDENTS

INITIAL ACTION

When a report is received by NIAIC:

- It is logged on to the NIAIC database;
- an acknowledgement is sent to the reporter; and
- senior management are alerted if a fatality is involved
- If the report concerned a Medical Device, the Medical Devices Agency (MDA) are contacted to determine if similar incidents have been reported

The report is passed to one of NIAIC Investigation Officers to review the report and decide on the most appropriate method of investigation.

INVESTIGATION

In the course of an investigation, staff may:

- talk with the user and manufacturer;
- visit the site of the incident when necessary;
- review evidence; and
- if appropriate, issue safety advice to the HPSS.
- notify the MDA of investigation outcomes for incidents involving medical devices and NHS Estates for incidents involving non-medical equipment, plant and buildings.

LEGAL RESPONSIBILITIES OF MEDICAL DEVICE MANUFACTURERS

As a result of UK Medical Device Regulations implementing the EC Medical Devices Directives concerning medical devices, manufacturers of medical devices are required by law to report to the UK Competent Authority (Medical Devices Agency) certain incidents involving their products. This system is known as the 'Vigilance System' and it covers incidents which have led to, or which might have led to, death or serious deterioration in health and/or product recall.

For the majority of adverse incidents reported to NIAIC, the manufacturer is provided with information about the incident, where it occurred and the device involved. The manufacturer takes responsibility for resolving the incident but NIAIC monitors progress and reviews the manufacturer's response. If an adverse incident involved death or serious injury, or the potential to do so is high, NIAIC may ask MDA to take the lead on the investigation.

An investigation is re-appraised if new information comes to light. Outcomes of investigations are reviewed in order to identify patterns or clusters of incidents, which may require possible further investigation.

NIAIC REPORT

On investigation completion, NIAIC investigation officers will review the information available and provide the reporter of the incident with a report.

TYPES OF WARNING NOTICE ISSUED

Where necessary, NIAIC will issue advice in the form of warning notices. The criteria for the various warning notices, in broad terms, are as follows:

Hazard Notices are issued: -

- in cases of actual death or serious injury, or when death or serious injury would have occurred, but for fortuitous circumstances or the timely intervention of health care staff or a carer, and
- where the medical device, non-medical equipment, plant or building item is clearly implicated, and
- where immediate action is necessary to prevent recurrence.

Advice Notices are issued: -

- in cases where there is the potential for death or serious injury, or there may be implications arising from long term use, and
- where the medical device, non-medical equipment, plant or building item is likely to be implicated, and
- where the recipient is expected to take immediate action on the advice.

Safety Notices are used to recommend or inform: -

- where action by the recipient will improve safety,
- where it is necessary to repeat warnings on long standing problems,
- to support or follow up manufacturers' field modifications.

Professional Officer Letters are issued: -

- by the Chief Officer in any of the professional disciplines, e.g. Medical, Nursing, Pharmaceutical, Dental, etc. They are normally used when improper use or misuse of equipment has contributed to an occurrence.

Please note that Hazard Notices and Advice Notices specify immediate actions and it is extremely important that all personnel are instructed in the proper procedures for dealing with safety information and reporting of adverse incidents.



***NORTHERN IRELAND
ADVERSE INCIDENT CENTRE
ADVERSE INCIDENT REPORT FORM***

This form should be used for reports of adverse incidents concerning medical devices, non-medical equipment, buildings and plant. It should be completed and submitted without delay to:

Northern Ireland Adverse Incident Centre (NIAIC)
Health Estates, Estate Policy
Stoney Road
Dundonald, Belfast BT16 1US
Tel: 02890 523714, Fax: 02890 523900, e-mail: NIAIC@dhsspsni.gov.uk

ORIGIN OF REPORT	
Reporting Body:	
Address:	
Person making report:	
Position:	
Telephone/Fax number:	
Date and Time of Incident:	
DETAILS OF MEDICAL DEVICE, NON-MEDICAL EQUIPMENT, BUILDING ELEMENT OR PLANT	
Product:	
Brand Name:	
Model:	
Catalogue Number:	
Serial Number:	
Batch Number:	
Manufacturer:	
Supplier:	
Date of Manufacture:	
Expiry Date:	
Quantity Defective:	
Location of device/equipment:	
Is there a CE-Mark?	YES/NO/Don't Know
If YES, was the manufacturer or supplier contacted?	YES/NO

Please see over page

DESCRIPTION OF INCIDENT	
Was there a fatality?	YES/NO
Was any injury caused?	YES/NO
Nature of injury and treatment:	
Details of Incident or defect:	
Contact Name for further details:	
Telephone number:	
Signature of person making report:	
ACTION TAKEN BY STAFF/MANUFACTURER/SUPPLIER	
IMPORTANT INFORMATION	
<p>Medical Devices that are the subject of this report should not be interfered with except for reasons of safety or to prevent loss of patient related data. Dial settings, position of taps, switches etc. and other relevant information should be recorded.</p> <p>Where the devices have been used, they should be decontaminated, unless this would destroy material evidence in which case the devices should be enclosed in a suitable container to reduce the risk of infection. Contaminated items should not be sent through the post. Advice on decontamination is given in PEL (94) 34.</p> <p>For single use devices or consumables all material evidence, including wrapping materials and containers, should be kept and suitably labelled.</p> <p>The manufacturer of the devices or their agents may be allowed to inspect them in the presence of a responsible officer but must not be allowed to interfere with them, or remove any part, at this stage.</p> <p>Further advice on decontamination, devices held in quarantine, manufacturer access to devices or other related matters can be obtained by contacting NIAIC.</p> <p>If you wish to send samples to NIAIC, please sign the declaration below.</p>	
I confirm that the necessary decontamination has been completed	
Signed:	
Date:	

Please send the completed form to NIAIC at the address overleaf.

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

NORTHERN IRELAND ADVERSE INCIDENT CENTRE



HEALTH ESTATES
ESTATE POLICY

IF AN INCIDENT HAPPENS:

Report the incident if it has led to, or were it to occur again could lead to:

- **death, life-threatening illness or injury;**
- **deterioration in health;**
- **the necessity for medical or surgical intervention;**
- **unreliable test results leading to inappropriate diagnosis or therapy.**

Also report:

- **any other related adverse incidents or minor faults and discrepancies.**
- **adverse incidents even if they appear to be caused by human error.**

What to do:

- **Keep devices/equipment or plant involved in an adverse incident together with other material evidence (e.g. packaging, giving sets used with infusion pumps etc.) clearly identify them and keep in quarantine.**
- **If this is not practicable, record the state of the device(s) at the time of the incident.**
- **Take any local action as necessary to ensure the safety of patients, staff and clients.**

Who to Contact:

- **Liaison Officer for your organisation:**

Telephone:

- **Northern Ireland Adverse Incident Centre (NIAIC)**

Health Estates

Estate Policy Directorate

Stoney Road

Dundonald BT16 1US Telephone 02890 523714

Fax 02890 523900

e-mail NIAIC@dhsspsni.gov.uk