IRISH MEDICINES BOARD

news LETTER

MEDICAL DEVICES

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IRISH MEDICINES BOARD, KEVIN O'MALLEY HOUSE, EARLSFORT CENTRE, EARLSFORT TERRACE, DUBLIN 2 TEL: 01 676 4971 FAX: 01 634 4033 EMAIL: MEDICALDEVICES@IMB.IE

Letter from the Editor

Welcome to this edition of the medical devices newsletter.

In this edition we are providing two specific articles in relation to system and procedure pack manufacturing and the status of the legislation in relation to reclassification of total hip, knee and shoulder joint replacements. Regarding the former we have initiated post market surveillance activity in relation to system and procedure packs and feel that it would be useful to provide some clarity as to what is expected in this area. The latter article has been written in response to a number of questions from manufacturers regarding the status off the legislation surrounding the reclassification of total joints. We hope both articles will provide clarity and answers to the issues that are being raised.

At the Irish Medicines Board (IMB) we are celebrating our tenth anniversary. The IMB was set up by way of the IMB Act 1996 on 1st January 1996. It is now ten years on and in that time the IMB has taken on many new responsibilities including becoming the Competent Authority for medical devices in 2001. A new Board has recently been appointed and includes for the first time a member with special interest in medical devices, namely Mr. Wilf Higgins.

As always readers are encouraged to provide feedback particularly in relation to articles that may be of interest by contacting us at **medicaldevices@imb.ie**.

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Picture top left: Pat O'Mahony, CEO and Pat O'Mahony, Chairman of the Board.

Picture top right: Maria Carleton, Dr. Niall MacAleenan and Andrea Hanson.

Picture bottom: Mr. Wilf Higgins, Dr. Joan Gilvarry, Mr. Pat O'Mahony, Mr. John Lynch, Mr. Pat O'Mahony, Ms. Ann O'Connor, Dr. Brendan Buckley and Ms. Rita Purcell

Reclassification of Hip, Knee and Shoulder Joint Replacements

Commission Directive 2005/50/EC of the 11th August 2005 on the reclassification of hip, knee and shoulder joint replacements in the framework of Council Directive 93/42/EEC concerning medical devices was published in the Official Journal on the 12th August 2005.

This legislation provides the legal basis for the reclassification of the above devices from class IIb (medium risk) devices to class III (high risk) devices. The main reason for the reclassification of these joints related to risk of failure.

Based on lengthy discussion over the past few years it was considered by the Member States that reclassification of the hip, knee and shoulder joints was appropriate particularly in relation to their sophistication, weight bearing requirements and the possibility of the need for revision surgery over time. It was also noted that the emerging trend in clinical practice is to opt for joint replacement surgery in increasingly younger patients. This results in a need for increased implant durability due to increased patient activity levels and an increasing rate of joint replacement. 'Consequently there is a need for such implants to function properly over the life expectancy of the patient in order to reduce the need for revision surgery and the risks it poses.

During the discussions on reclassification it was identified that specific clinical data including long term performance data were not always available for hip, knee and shoulder replacements before they were placed on the market and put into service. It was felt that particular attention needed to be placed on examination of clinical data for these devices. It was also felt that multiple modifications following initial introduction of hip, knee and shoulder replacements could have an impact on clinical performance of the devices. Experience showed that what appeared at first sight to be minor post marketing changes to design of previously trouble free replacements may lead to serious problems, which ultimately could lead to early failure of the device with the possibility of major safety concerns.

The impact of the reclassification of the hip, knee and shoulder replacements will mean that Notified Bodies are required to carry out an examination of a design dossier for these

devices and that an assessment of changes to the approved design will be required prior to placing a modified device on the market. As there are many of these devices on the marketplace prior to their reclassification it was recognised that appropriate transitional arrangements needed to be put in place for those devices already certified as class IIb devices. The following summarises the transisitional arrangements that manufacturers need to be aware of:

(1) Those devices which have been subjected to a conformity assessment procedure under article 11 (3) (a) of 93/42/EEC before the 1st September 2007 shall be subject to complimentary conformity assessment under point 4, Annex II of 93/42/EEC before the 1st September 2009.

(2) Those devices which have been subject to conformity assessment procedure pursuant to article 11 (3) (b) (iii) of 93/42/EEC before the 1st September 2007 may be subject to a conformity assessment as class III medical devices pursuant to article 11 (1) (b) (i) or (ii) before the 1st September 2010.

(3) Member States shall accept until the 1st September 2009 the placing on the market and putting into service of hip, knee and shoulder replacements under article 11 (3) (a) before the 1st September 2007.

(4) Member States shall accept until the 1st September 2010 the placing on the market of hip, knee and shoulder replacements covered under article 11 (3) (b) (iii) issued before the 1st September 2007 and permit such total joint replacements to be put into service beyond that date.

KEY POINTS TO NOTE

There are a number of key points which should be noted by manufacturers of hip, knee and shoulder joint replacements as follows:

(1) The Directive came into force on the 1st September 2005.

(2) The provisions of 2005/50/EC shall be applied by Member States from the 1st September 2007.

(3) Transposition of 2005/50/EC shall take place by the 1st March 2007 into national law by way of an Irish Regulation, which has to be written.

(4) Transition periods are allowed depending on which route was used to certification (see above) i.e. placing on the market products under article 11 (3) (a) until the 1st September 2009 or article 11 (3) (b) (iii) until the 1st September 2010.

(5) Once devices certified under 11 (3) (b) (iii) are placed on the market before 1st September 2010, the legislation allows devices to be put into service beyond that date.

The legislation may be downloaded from the EU Commission website at **http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32005L0050:EN:HTML**

Clinical Investigations

Clinical research & development is now widely recognised as being hugely important to ensure continued excellence in the provision of healthcare in Ireland and continued excellence in Irish academic institutions.

R&D is also hugely important for maintaining stable employment in an economy, which is supported by many major multinational healthcare manufacturers. Many recognise that increasing competition from lower factor cost markets has put extraordinary pressure on the Irish hi-tech manufacturing base and that attracting more research and development is imperative. Recently, the level of interest in conducting clinical investigations in Ireland, which involve medical devices, has increased. It is paramount that devices used in clinical investigations must perform safely and effectively so as not to pose unnecessary risk to public health.

The Irish Medicines Board (IMB), as the national Competent Authority for medical devices, is notified of and reviews applications to conduct clinical investigations, which involve specific types of medical devices, typically the higher risk class devices. Medical device manufacturers design such investigations to gather sufficient clinical data to support their application to a Notified Body (e.g. NSAI) to obtain a CE mark for their medical device. If a device is awarded a CE mark the manufacturer is free to market their device across the European Union.

Typically clinical investigations which are notified and reviewed by the IMB involve novel non-CE marked medical devices that are being used for the first time in human subjects. Clinical investigations utilising existing CE marked medical devices may require review if they are to be used outside of

the manufacturer's intended purpose or stated indications for use during the course of the investigation. Medical devices which have had significant design changes, utilise new and untested materials or are to be used in a different body location are also likely to require notification and review by the IMB. The vast majority of clinical investigations notified to the IMB originate from medical device manufacturers who are gathering evidence to obtain a CE mark for their device or to extend their device's existing indications for use.

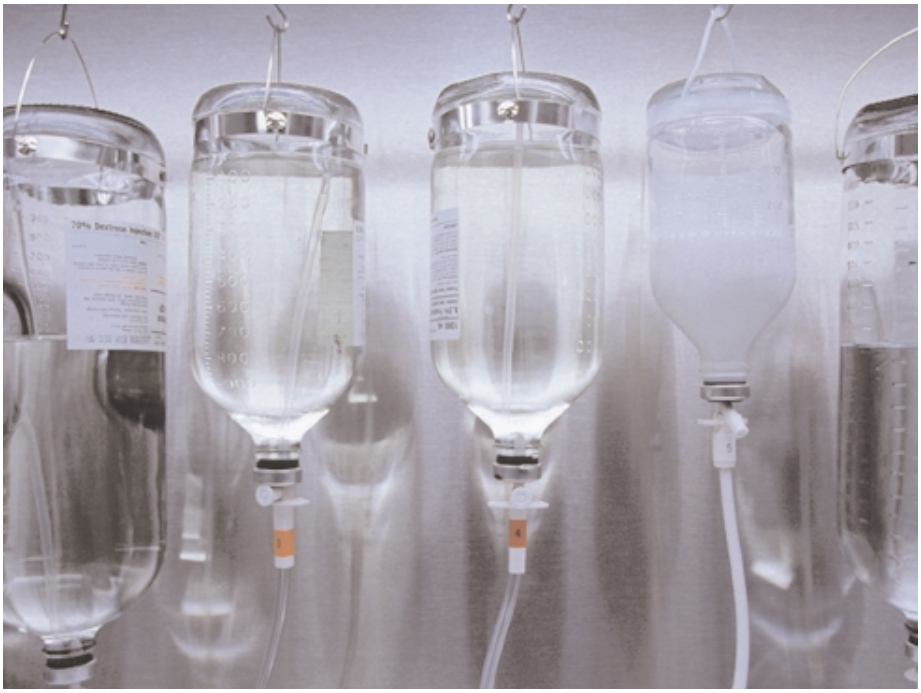
A distinction should be made for device research that is designed by clinicians within healthcare institutions in which the device manufacturer is not directly involved. Notification to the IMB and review is not required if the device is being used entirely within its intended indications as defined for the CE mark and may not be required if the device is being used outside the terms of its CE mark provided it is used within professional and ethical boundaries and for non-commercial purposes.

The Medical Devices Department of the IMB encourages communication from investigators and manufacturers in relation to medical device investigations. We encourage manufacturers and investigators who intend to conduct clinical investigations involving medical devices to meet with us prior to submission of their applications for review. This allows both parties to address key issues and concerns early in the process and helps to ensure that data and documentation that is likely to be required during the IMB review is submitted with the initial application. This facilitates the review process, which takes place over a period of sixty calendar days as defined in the relevant Irish and European legislation.

Legislation relating to clinical investigations involving medical devices is contained within the Medical Device Directive (93/42/EEC) and the Active Implantable Medical Devices Directive (90/385/EEC) and the corresponding Statutory Instruments (S.I. No. 252 of 1994 and S.I. No. 253 of 1994). It is important to note that the Clinical Trials Directive (2001/20/EC) applies to pharmaceutical trials and does not specifically apply to medical device investigations. The medical devices legislation has some distinctions, for instance, for device investigations Ethics Committee approval is required prior to submission to the IMB from each Irish centre in which the investigation is to be conducted. Applications to conduct device investigations to the IMB should be made as defined in the European Directives and the Harmonised Standards ISO 14155 Parts 1 & 2 "Clinical Investigations involving Medical Devices in Human Subjects".

The Medical Devices Department of the IMB will be writing specific guidelines regarding clinical investigations involving medical devices tailored towards Ethics Committees. We welcome communication from Ethics Committees regarding issues and concerns relating to device investigations. Please contact Dr. N. MacAleenan, Medical Assessor for Medical Devices by telephone at 01-6764971 or by email niall.macaleenan@imb.ie. A guidance note on conducting clinical investigations involving medical devices can be found on the Medical Devices Department website at www.medicaldevices.ie under the publications section.

Regulatory Update



Since January 2006 the European Council Working Group on Medical Devices has met five times under the Austrian presidency. The working group has met to discuss the draft proposals in relation to the amendments to 93/42/EEC concerning medical devices and 90/385/EEC concerning active implantable medical devices. Significant debate continues to take place in relation to the definition of a medical device and the need ensure clarity for the future in the borderline areas particularly in relation to advanced therapies. Discussions are also ongoing regarding the overlap between the proposed Advanced Therapies Directive and the amendments to the Medical Devices Directive. It is hoped that these discussions will bring legal clarity in relation to classification of future products and will also eliminate any issues regarding the appropriate legislation to apply particularly in the area of combination products. Regarding review by Parliament, the Rapporteur for the amendments to the Medical Devices Directive was appointed in February. Due to this delay it is not likely that Parliament will have an outcome until the autumn and as a result it is not expected that the proposed amendments to the legislation will be adopted until early 2007. At this point it is hoped that at Council Working Group the main points will be agreed during the Austrian presidency.

The Clinical Evaluation Task Force (CETF) is currently preparing guidelines on coronary stents with some focus to be given to coronary stents that contain medicinal substances. A draft paper is expected in the summer. It should also be noted that the European Medicines Evaluation Agency (EMEA) is also looking at this subject in context of the medicinal substance.

A meeting took place of the Market Surveillance Operations Group (MSOG) at the request of the Council Working Group on Medical Devices. The meeting was convened to specifically look at the role of the authorised representative, distributor, and importer and how the text of the legislation should be amended. A proposal was put together by the Austrian presidency in relation to these three players which is being considered by the Council working group. No other items were reviewed.

The revision to the MED.DEV on vigilance reporting is continuing under the leadership of Germany. The plan is to finish this work in the latter half of 2006 with the aim of submitting the final text to the Medical Devices Expert Group (MDEG) meeting in the autumn of 2006. The role of the Notified Body will be included in the new text. Further detail on the proposals can be found in medical devices newsletter of November 2005.

Regarding standardisation a proposal has been made to by the BT Technical Board for revitalisation of CHeF into an Advisory Board for Healthcare Standards (ABHS). ABHS would have an extended scope and follow all issues relating to standards and health including medical devices, IT, regulatory matters relating to standards, quality systems etc. It is proposed that small task forces will be set up to look at specific issues. ABHS would also make recommendations to the CEN BT Technical Board and Technical Committees and regulatory groups such as the Commission and the Medical Devices Expert Group

The *In-vitro* Diagnostic Technical Group is currently considering changes to the Common Technical Specification (CTS) regarding Annex II list A devices. All Member States have been asked to provide comments and proposal for change to the EU Commission for consideration. The Commission hopes to bring the proposals to adoption stage by the end of the year.

The European Commission issued a proposal aimed at banning mercury in medical thermometers in February 2006. It has been put forward as an amendment to Directive 96/769/EC on restrictions on the marketing and use of certain dangerous substances and preparations. The proposal also looks at the need to ban other measuring devices containing mercury that are intended for sale to the public such as sphygmomanometers and thermometers other than fever thermometers. The proposed changes are designed to cut environmental waste and pollution. The consultation which occurred with Member States concluded that hospitals need a high level of accuracy and reliability and that for the foreseeable future mercury based sphygmomanometers will be required as no suitable alternatives have been identified. The proposals will now go to the European Parliament and the Council of Ministers for adoption.

Systems and Procedure Packs

It is the policy of the Medical Devices Department of the IMB to ensure the uniform application of legislation in relation to medical devices placed on the Irish market. Systems and procedure packs were identified as a focus area for the Medical Devices Department's post market surveillance programme for 2006 to 2007.

The practice of assembling / manufacturing systems or procedure packs brings the assembler / manufacturer of such system and procedure packs within the scope of the medical devices legislation as a system or procedure pack manufacturer. Therefore, there are specific obligations placed on such a manufacturer under the aforementioned regulations, in particular relating to registration with the Medical Devices Department of the Irish Medicines Board and the drawing up of specified declarations and documentation.

TYPES OF SYSTEMS OR PROCEDURE PACKS

Under the medical devices legislation, there are two different ways in which medical devices may be placed or packaged together in order to place them on the market. These are:

1. Procedure Packs:

A procedure pack comprises of medical devices that are packaged together and placed on the market with the intended use for medical treatment or surgical procedures. The components of the procedure pack may not necessarily be used in combination or at the same time. The manufacturer of a procedure pack may manufacture all of the components or source them from different manufacturers.

Examples of procedure packs include:

- First aid kits
- Surgical packs for specific procedures
- Theatre dressing packs
- Orthodontic procedure packs
- Skin traction kits

2. Systems:

A system is comprised of medical devices that are intended to be used in combination as a unit.

Examples of systems include:

- Joint replacement system
- Orthopaedic drill system
- Prosthetic system
- Orthotic system

CE MARKING OF SYSTEMS OR PROCEDURE PACKS

A system or procedure pack must either bear the CE marking on each individual medical device included in the system or procedure pack or alternatively the system or procedure pack must bear a CE marking as a combined product on the outer label. These two scenarios are further explained below:

1. Systems or Procedure Packs containing Medical Devices that all Individually Bear the CE Marking:

Every individual medical device placed on the market as part of the system or procedure pack must bear the CE marking in a visible, legible and indelible form —

(a) on the device or its sterile pack, where practicable and appropriate;
(b) on the instructions for use of each device; and
(c) on any sales packaging

It should be noted that, with the exception of class I medical devices, the CE marking shall in each case be accompanied by the identification number of the relevant Notified Body for that device. In this case, it should be noted that the outer pack cannot bear an additional CE marking but shall be accompanied by the information needed to use the devices safely and to identify the manufacturer(s), taking account of the training and knowledge of the potential users

2. Systems or Procedure Packs containing Medical Devices that do not all Individually Bear the CE Marking:

A system or procedure pack comprised of medical devices only shall be treated as a device in its own right and shall be subjected to the relevant conformity assessment procedure where —

(a) it incorporates any device which does not bear a CE marking; or
(b) the chosen combination of devices is intended to be put to a different use to any intended by the original manufacturer for each individual device.

A system or procedure pack made up of some medical devices bearing the CE marking and one or more medical devices which does not bear the CE marking must undergo a conformity assessment for the whole system or procedure pack. In this case once the

continued on following page

Systems and Procedure Packs

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conformity assessment is completed the outer pack must bear the CE marking for the pack and be labelled in accordance with the labelling requirements of the medical devices legislation.

OBLIGATIONS OF SYSTEMS OR PROCEDURE PACK MANUFACTURERS

1. Declaration:

In the case of an assembler who puts together devices bearing the CE marking (within their intended purpose and within the limits of use specified by their manufacturers) in order to place them on the market as a system or procedure pack shall draw up a declaration that —

(a) he has verified the mutual compatibility of the devices in accordance with the manufacturers' instructions and he has carried out his operations in accordance with these instructions;
(b) he has packaged the pack and supplied relevant information to users incorporating relevant instructions from the manufacturers; and
(c) his operations are subjected to appropriate methods of internal control and inspection.

This obligation for manufacturers of systems or procedure packs is outlined in Article 11 of S.I. No. 252 of 1994.

The declaration shall be kept available for inspection by an authorised officer of the Irish Medicines Board (IMB) for a period of five years.

2. Registration:

All manufacturers of systems or procedure packs within the State are required, under Article 14 of S.I. No. 252 of 1994, to:

(a) inform the Medical Devices Department of the IMB of his place of business; and
(b) supply the Medical Devices Department of the IMB with descriptions of the devices which are sufficient to identify them.

Further details on how to register may be found on www.medicaldevices.ie.

SYSTEM OR PROCEDURE PACKS THAT REQUIRE STERILISATION

In certain cases a system or procedure pack may require sterilisation in order to use the product in a sterile environment. Any person who sterilises, for the purposes of placing on the market a system or procedure pack comprised of medical devices must meet the requirements of the medical devices legislation regarding sterilisation and make a written declaration that sterilisation has been carried out in accordance with the manufacturer's instructions. It should be noted that a conformity assessment in relation to sterilisation must be carried out by a Notified Body. The outer packaging of the system or procedure pack must bear the CE mark indicating that a Notified Body has assessed it in relation to sterilisation.

Classification of Medical Devices and Borderline Products

The IMB guideline 'What is a Medicinal Product?' is currently under revision to reflect changes arising from updates to the legislation, in particular resulting from Directive 2004/27/EC. This document shall be available on the IMB website shortly at: www.imb.ie.

Article 1 of Directive 2004/27/EC makes changes to the definition of a medicinal product. The revised definition of a medicinal product is:

"a) any substance or combination of substances presented as having properties for treating or preventing disease in human beings or b) any substance or combination of substances which may be used in or administered to human beings either with a view to restoring, correcting or modifying physiological function by exerting pharmacological, immunological or metabolic action or to making the medical diagnosis".

The guide will also address a number

of products, which may fall on the borderline between medicinal, medical device and other legislative categories. For further details, please see the article in the November 2005 newsletter.

The GHTF Document Principles of Medical Devices Classification from the Study Group 1 of the Global Harmonisation Task Force has been published after extensive discussion within the Study Group. It is available on the following website www.ghtf.org.

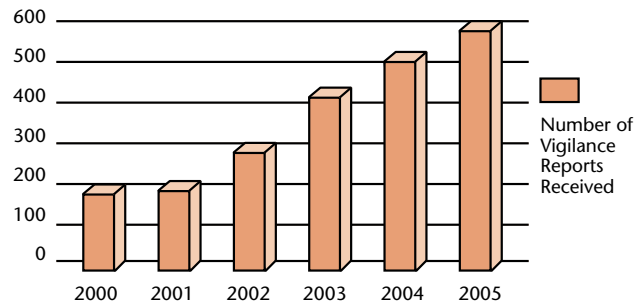
This guidance document is one of a series that together describe a global regulatory model for medical devices. Its purpose is to assist a manufacturer to allocate its medical device to an appropriate risk class using a set of harmonized principles. The general principle is that regulatory controls should be proportional to the level of risk associated with a medical device. The level of regulatory control should increase with increasing degree of risk, taking account of the benefits offered by use of the device.

While this document is a useful global reference, the European Commission Directives and associated MEDDEVs remain the primary regulatory documents.

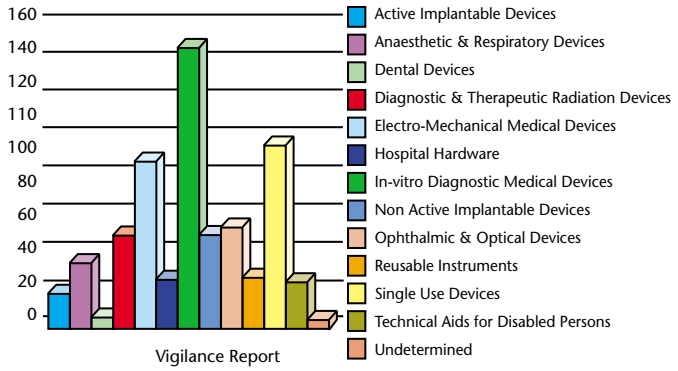
Vigilance Reports for 2005

In the year 2005 there was a continued increase in the number of vigilance reports received by the IMB. Six hundred and eight reports in total were received. An increase of approximately 15% on 2004 and 38% on 2003.

Graph 1
Number of Vigilance Reports Received during 2000 to 2005

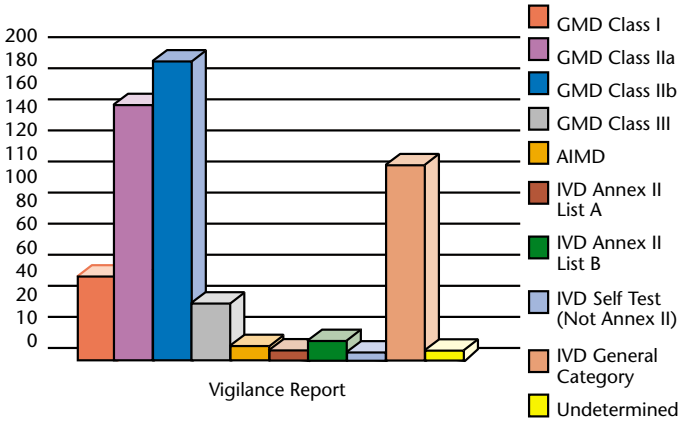


Graph 3:
Family Groups of Devices Implicated in Vigilance Reports in 2005



Class IIa and class IIb general medical devices continue to represent a significant number of the reports received, while reports relating to the general category IVD represent the majority of IVD cases. Single-use devices and electro-mechanical devices again represent the product families with the more noteworthy number of reports in 2005.

Graph 2
Class of Device Implicated in Vigilance Reports in 2005



The three principal issues that were encountered in 2005 were in relation to defibrillators, infusion pumps and blood glucose meters, where manufacturers in some cases circulated multiple communications advising users of performance problems with their devices. Component problems, software problems, inadequate servicing and maintenance problems were found to be the root cause of many of the vigilance issues relating to electro-mechanical medical devices.

ON-LINE VIGILANCE REPORTING SYSTEM FOR MEDICAL DEVICE MANUFACTURERS AND USERS OF MEDICAL DEVICES

In 2004, the Medical Devices Department of the IMB launched the on-line vigilance reporting system for manufacturers and users of medical devices. This system allows manufacturers to submit initial vigilance reports, final vigilance reports and recall reports on-line and users of medical devices to submit adverse incident reports on-line.

This system permits manufacturers and users of medical devices to report incidents on-line, 24 hours a day, seven days a week. Manufacturers can upgrade their reports from an initial report to final report to a recall report. Users also have the ability to view their own archived (closed) reports.

This year, a **new tool** has been incorporated into the on-line vigilance reporting system. Users can download any report, which they have submitted to the IMB using the on-line vigilance reporting system in pdf format. The format of the initial vigilance report and the final vigilance report are the similar to the European format in MEDDEV 2.12-1, rev 4: Guidelines on a Medical Devices Vigilance System.

If your organisation would like to report vigilance issues on-line, we request that you register your organisation through the IMB medical devices website at http://www.medicaldevices.ie/static_pages/electronic/regorg/vig.asp?node_id=366. Once the IMB have received the signed condition of use for your organisation, you will be issued with a username, password and security token, which will allow access to the medical devices extranet.

Please note that there is no charge for using this facility. For further information, please contact Sinead Carty at medicaldevices@imb.ie or David Dowling in our IT Department at helpdesk@imb.ie or by telephone at 01-6764971.

Upcoming Events

IMB MEDICAL DEVICES INFORMATION DAY – SAFE MANAGEMENT OF INFUSION DEVICES

The IMB is holding an information day on the 'Safe Management of Infusion Devices', to be held at the Education Theatre of the Adelaide & Meath Hospital incorporating the National Children's Hospital, Tallaght, Dublin 24 on the Wednesday 14th June 2006. This event is intended to discuss the safe management of infusion devices with presentations from guest speakers from the Irish Medicines Board (IMB), the Medicines and Healthcare products Regulatory Agency (MHRA) and representatives from hospitals in Ireland and the United Kingdom.

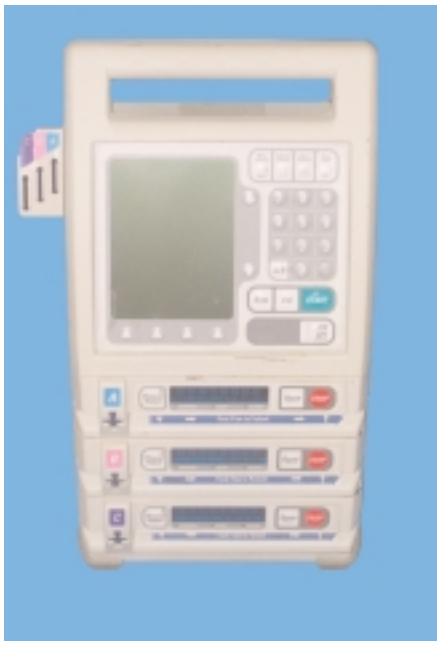
The day will be split into 3 sessions:

Session 1 – general information on infusion devices and related adverse incidents.

Session 2 – points to consider in the management of infusion devices e.g. purchasing, storage and risk management.

Session 3 – training and how training systems can be implemented

Invited speakers include: Alan Glass (Adelaide & Meath Hospital incorporating the National Children's Hospital), Ger Flynn (Cork University Hospital), Jim Lefever (MHRA), Mona Habib (Hammersmith Hospitals NHS Trust), John Riddle (Medical Devices Trainer at Queen's Medical Centre, Nottingham) and Paul Lee (Medical Devices Training Manager for Swansea NHS Trust).



The information day is targeted at all areas of the healthcare profession who use / manage / manufacture medical devices for patients in the healthcare setting. These people may include, but are not limited to Risk Mangers, Clinical Engineers, Pharmacists, Practice Nurses, Nursing Staff, etc.

The agenda (pdf) and two registration forms (word) can be downloaded from the IMB website (one for healthcare professionals and one for industry representatives) at www.imb.ie. A copy of this registration form should be filled in for each attendee and returned by the Friday 2nd June 2006 to Sinead Carty in the Medical Devices Department. A booking fee is being charged for this conference. Refreshments, lunch and conference documentation is included in this fee. Registration applications should be made as soon as possible as there is a limit on the number of places available.

If you have any queries relating to this conference, please contact Sinead Carty at 01-6764971 or email medicaldevices@imb.ie.

THE IMDA GLOBAL ACCESS 220506 CONFERENCE

This conference will host 15 key international speakers, including representatives from the FDA, EU Commission, Irish Medicines Board, Corporate QA / RA Directors and Vice Presidents. The two-day international event will take place in the Radisson Hotel Galway, Ireland on the 22nd and the 23rd May 2006. To register for this event and for further details, please see the IMDA website www.ibec.ie/imda or telephone the Event Organiser, Fiona Harrison, at +353-1-6051529.

GUIDANCE NOTES

Guidance Note Update

Guidance Note	Issue Date
Guidance Note 24 *Guide for Medical Device Manufacturers regarding Auditing by the Irish Medicines Board to the Medical Device Regulations*	***New Publication*** *March 2006*