DOF: 10/30/2012

Norma Oficial Mexicana NOM-240-SSAl-2012, Instalación y operación de la tecnovigilancia

On the margin a seal with the National Coat of Arms, which reads: United Mexican States - Secretary of Health.

MIKEL ANDONI ARRIOLA PEÑALOSA, Federal Commissioner for the Protection from Sanitary Risks and President of the National Advisory Committee for Standardization of Regulation and Sanitary Promotion, based on articles 39 of the Organic Law of the Federal Public Administration; 4 of the Federal Law on Administrative Procedure; 3 fractions XXIII and XXIV, 17 bis fractions I, II, III, VI and VII, 194 fraction II, 194 Bis, 195, 197, 201, 210, 212, 213 and 214 of the General Health Law; 38 section II, 40 fractions I, VIII, XI, XII, XIII and XVIII, 46 and 47 fraction IV of the Federal Law on Metrology and Standardization; 38, 82, 83, 84 and 85 of the Health Supplies Regulations; 28 of the Regulations of the Federal Law on Metrology and Standardization, 2 subsection C) fraction X and 36 of the Internal Regulations of the Ministry of Health, and 3 fractions I literal b and II and 10 fractions IV and VIII of the Regulations of the Federal Commission for the Protection from Sanitary Risks, and

WHEREAS

In compliance with the provisions of article 46, section I of the Federal Law on Metrology and Standardization, the Subcommittee on Health Supplies presented on April 27, 2011, to the National Consultative Committee on Standardization for Health Regulation and Promotion, the preliminary draft of this Mexican Official Standard.

On January 19, 2012, in compliance with the agreement of the Committee and the provisions of article 47 fraction I of the Federal Law on Metrology and Standardization, the draft of this standard was published in the Official Gazette of the Federation, so that within the following sixty calendar days after such publication, interested parties could submit their comments to the National Consultative Committee on Standardization for Health Regulation and Promotion.

On a previous date, the response to the comments received by the aforementioned Committee was published in the Official Gazette of the Federation, in accordance with the terms of article 47 section Ill of the Federal Law on Metrology and Standardization.

In view of the above considerations, and with the approval of the National Consultative Committee for Standardization of Regulation and Health Promotion, I am pleased to issue and order the publication in the Official Gazette of the Federation of the Mexican Official Standard NOM-240-SSA1-2012, Installation and Operation of Technovigilance.

PREFACE

The agencies, institutions and organizations below participated in the preparation of this standard:

SECRETARÍA DE SALUD.
Comisión Federal para la Protección contra Riesgos Sanitarios
Centro Nacional de Excelencia Tecnológica en Salud.

CONSEJO DE SALIBRIDAD GENERAL.
Comisión Interinstitucional del Cuadro Básico y Catálogo de
Insumos del Sector Salud.

INSTITUTO MEXICANO DEL SEGURO SOCIAL.

INSTITUTO DE SEGURIDAD Y SERVICIOS SOCIALES DE LOS TRABAJADORES DEL ESTADO.

UNIVERSIDAD NACIONAL AUTÓNOMA DE MEXICO.
Facultad de Química.
Centro de Ciencias Aplicadas y Desarrollo Tecnológico.

INSTITUTO POLITÉCNICO NACIONAL.
Escuela Nacional de de Ciencias Biológicas
Escuela Superior de Medicina.

CÁMARA NACIONAL DE LA INDUSTRIA DE LA TRANSFORMACIÓN.
Sector Industrial Médico.

CÁMARA NACIONAL DE LA INDUSTRIA FARMACÉUTICA.

Sección de Productos Auxiliares para la Salud.
Sección de Reactivos y Sistemas de Diagnósticos

CÁMARA NACIONAL DE LA INDUSTRIA DE ACEITES, GRASAS, JABÓNES Y DETERGÉNTES.
CÁMARA NACIONAL DE LA INDUSTRIA DE PRODUCTOS COSMÉTICOS
ACADÉMIA NACIONAL DE CIENCIAS FARMACÉUTICAS A.C.
ASOCIACIÓN FARMACÉUTICA MEXICANA A.C.
COLEGIO NACIONAL DE QUÍMICOS FARMACOCÉUTICOS BIÓLOGOS A.C.
PRODUCCIÓN QUÍMICO FARMACÉUTICA A.C.
ASOCIACIÓN MEXICANA DE LABORATORIOS FARMACÉUTICOS, A.C.
ASOCIACIÓN MEXICANA DE INDUSTRIAS INNOVADORAS DE DISPOSITIVOS MÉDICOS, A.C.
ASOCIACIÓN MEXICANA DE FARMACOVIGILANCIA , A.C.

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0. Introduction

The purpose of technovigilance is to guarantee that the medical devices available in the market function as indicated in accordance with the manufacturer's intended use (indicated in the corresponding sanitary authorization issued by the Ministry of Health) and, if not, to take the corresponding actions to correct and/or reduce the probability of recurrence of the adverse incidents, thus seeking to improve the protection of the health and safety of the users of medical devices. The risk assessment obtained from the adverse incidents reported by the manufacturers, users and/or operators to the Secretary of Health will make it possible to reduce the probability of recurrence or address the consequences of such incidents, through the dissemination of information.

It is of utmost importance that there is a difference in the management of adverse incidents and incidents related exclusively to the quality system, where the product in the latter has not been in contact with patients, the containers are kept closed and the investigation shows specific quality failures in the production process, which are identified in the Quality Systems section as Complaints.

This standard allows the unification of application criteria at the national level, with the aim of establishing safety profiles through active participation and communication between each of the members and the health authority, for national medical practice.

1. Objetive

This standard establishes the guidelines under which technovigilance activities should be carried out in order to ensure the protection of patient health and product safety.

2. Scope of application

The present standard s of mandatory in the national territory for institutions of the public, social and private sectors of the National Health System, as well as for the professionals, technicians and health assistants, the holder of the sanitary registration of medical devices or their legal representative in Mexico, the distributors and marketers, establishments dedicated to the sale and supply of health supplies and clinical research units that carry out studies with them and for the users of the medical devices.

3. References

For the correct application of this standard, it is suggested to consult the following Mexican Official Standards or those that may replace them

3.1 :Mexican Official Standard NOM-220-SSA1-2002, Installation and operation of pharmacovigilance.

3.2 Mexican Official Standard NOM-137-SSA1-2008, Labeling of medical devices.

4. Definitions, symbols and abbreviations

4.1 For the purposes of this standard, the following is understood as:

4.1.1 Corrective action, to the action taken to eliminate the cause of a detected nonconformity or other undesirable situation in order to prevent its recurrence.

4.1.2 Field safety corrective action, to the activities carried out by the holder of the sanitary registration of the medical device or its legal representative in Mexico with the intention of reducing the risk of death or serious deterioration of the user's health associated with the medical device that is available and in use in the market. Depending on the type of actions, these must be notified through a warning to the users.

4.1.3 Preventive action, means action taken to eliminate the cause of a potential nonconformity or other potential undesirable situation to prevent its occurrence.

4.1.4 Serious threat to public health, any adverse incident related to the use of a medical device, which presents an imminent risk of death, injury or serious illness and whose incidence is increasing in an unusual and significant way in a sector of the population, requiring some corrective measure to avoid high frequency or dangerous conditions.

4.1.5 National Center for Pharmacovigilance, the area of the Federal Commission for Protection from Health Risks, in charge of organizing pharmacovigilance and technovigilance programs at the national level, as well as proposing pharmacovigilance and technovigilance policies in accordance with the health legislation of the country.

4.1.6 State Pharmacovigilance Center, the Pharmacovigilance Unit of the governments of the federative entities, which will also act as the Technovigilance Unit, which participates in coordination with the National Pharmacovigilance Center, and is responsible for promoting, executing and evaluating the reporting of adverse incidents in the corresponding federative entity and for communicating them to the National Pharmacovigilance Center.

4.1.7 Institutional Center for Pharmacovigilance, to the Pharmacovigilance Unit of the institutions in public sector institutions of the National Health System, providers of health services, which participates in coordination with the National Center for Pharmacovigilance and recognized by it, which is institutionally responsible for organizing, promoting, executing and evaluating the reporting of adverse incidents and communicating them to the National Center for Pharmacovigilance.

4.1.8 Damage, to physical injuries, affectation or deterioration to the health of persons.

4.1.9 Indirect harm, the injury to health that may occur as a consequence of the medical decision or the user's own decision to take or not actions based on the information or results provided by the medical devices that do not act directly on the individual.

4.1.10 Deficiencies in the instructions for use, inaccuracies in the instructions for use or operating and maintenance manual of a medical device.

4.1.11 Serious impairment of health, serious injury relating to life-threatening or life-threatening diseases, permanent impairment of a bodily function or permanent damage to a body structure or to a state of health requiring medical or surgical intervention to prevent permanent impairment of a bodily function or permanent damage to a bodily structure, or permanent damage, indirect damage as a consequence of an incorrect diagnosis or erroneous result of an *in vitro* diagnostic agent according to the manufacturer's instructions.

4.1.12 Medical device, substance, mixture of substances, material, apparatus or instrument (including the software necessary for its proper use or application), used alone or in combination in the diagnosis, monitoring or prevention of disease in humans or auxiliaries in the treatment of the same and of the disability, as well as those employed in the replacement, correction, restoration or modification of human anatomy or physiological processes. Medical devices include products of the following categories: medical equipment, prostheses, orthoses, functional aids, diagnostic agents, dental supplies, surgical and healing materials, and hygienic products.

4.1.13 Error of use, an action or omission that leads to a result different from that intended by the manufacturer or expected by the user. The error of use includes carelessness, mistakes and any foreseeable misuse.

4.1.14 Incident, any event that is related to the use of a medical device.

4.1.15 Adverse incident, is any proven event related to the use of a medical device that has conclusive evidence of the causal relation between the incident and the medical device, and that could be caused by a malfunction or alteration of the characteristics of the medical device and that could result in death or serious deterioration of the user's health. It will not be considered as an adverse incident the one derived from an abnormal use or a use different from the one recommended by the holder of the sanitary registration of the medical device or its legal representative in Mexico.

4.1.16 Unforeseen adverse event, any event that was not considered on the risk analysis performed during the design and development phase of the medical device and that occurs during the use of the medical device under actual conditions as determined by the holder of the sanitary registration of the medical device or its legal representative in Mexico. Death, serious injury or serious illness may be considered unforeseen if they meet the above conditions.

4.1.17 A predicted adverse event, an event known to have occurred as a result of the risk analysis performed during the design and development phase of the medical device.

4.1.18 Intent to use, to the final purpose of the medical device, in accordance with the instructions for use and information

provided by the manufacturer.

4.1.19 Leader of the State Technovigilance Project, the health professional in charge of coordinating Technovigilance activities within the federative entity.

4.1.20 Malfunction or deterioration, the situation that arises when a medical device does not meet its intended use even when operated in the manner indicated in the instructions for use or the operating manual.

4.1.21 Notification, the act by which the existence of an adverse incident, whether foreseen or unforeseen, is communicated and documented to the National Center for Pharmacovigilance. It can be initial, follow-up or final. The follow-up and finalnotifications for the purpose of this rule will be considered reports since they must provide additional information regarding the actions and activities carried out, which must be notified to the National Center of Pharmacovigilance by the holder of the sanitary registration or its legal representative in Mexico.

4.1.21.1 Initial notification, the first notification made by the holder of the sanitary registration of the medical device or its legal representative in Mexico, as well as by any user to the National Center for Pharmacovigilance when an adverse incident has occurred with a medical device, reporting the incident, identifying the user involved and indicating the consequences produced.

4.1.21.2 Follow-up report, to the notification made by the holder of the sanitary registration of the medical device or its legal representative in Mexico, to the National Center of Pharmacovigilance, where he/she informs about the initial investigation carried out regarding the cause of the incident produced by the medical device manufactured or marketed.

4.1.21.3 Final report, the notification made by the holder of the sanitary registration of the medical device or its legalrepresentative in Mexico, to the National Center of Pharmacovigilance where it reports the complete investigation of the incident including causes, corrective measures, preventive measures and final conclusions of closure of the investigation.

4.1.22 Standard operating procedure, a document containing the necessary instructions for carrying out an operation in a reproducible manner.

4.1.23 Risk, the combination of the probability of occurrence a damage and the severity of that damage.

4.1.24 Health Professional, a professional with a degree or certificate of specialization legally issued and registered by the competent educational authorities, who exercises professional activities to provide or guarantee health care to humans.

4.1.25 Technovigilance (surveillance of the safety of medical devices), the set of activities aimed at identifying and evaluating adverse incidents produced by medical devices in use as well as identifying the risk factors associated with them, based on the systematic reporting, recording and evaluation of adverse incident reports, in order to determine the frequency, severity and incidence of such incidents in order to prevent their occurrence and minimize their risks. In general, the information of the technovigilance system is shared between competent authorities and manufacturers/distributors in order to facilitate technovigilance activities, as well as preventive and corrective actions for each case at the national and international level that have an impact on the national territory.

4.1.26 Technovigilance Unit, in charge of the development and implementation of activities related to the surveillance of the safety of medical devices. It includes the public, social and private sectors of the national health system, as well as the areas designated for such purposes by the holder of the sanitary registration or its legal representative in Mexico, as well as the distributors and marketers involved in the distribution chain of the medical devices and any other establishment involved in the supply of the medical devices to reach the patient or end user.

4.1.27 Abnormal use, to the use outside the intended purpose as a consequence of acts or omissions by the user of a medical device as a result of a conduct that goes beyond the risk control carried out by the manufacturer.

4.1.28 User, to the health institution of the public, social and private sectors; to the health professional, technician or auxiliary; to the operator of the medical device; to the person in charge of the patient's care or the patient who uses the medical device.

4.1.29 Service life, the period of time within which a medical device retains its quality and functional properties.

4.2 Abbreviations

When this standard refers to the next abbreviations, it shall be understood as follows:

4.2.1 COFEPRIS, the Federal Commission for Protection from Health Risks.

4.2.2 CNFV, the National Center for Pharmacovigilance.

4.2.3 FEUM, to the Pharmacopoeia of the United Mexican States.

4.2.4 PNO, to Standard Operating Procedure.

5. General Provisions

5.1 The holder of the sanitary registration of the medical device or legal representative in Mexico, shall be responsible for the implementation of the technovigilance activities of its products in Mexico, in accordance with the provisions of this.

5.2 On the part of the holder of the sanitary registration of the medical device or legal representative in Mexico, there must be documentary evidence regarding the risk posed by the use of the medical device according to the risk analysis carried out in the development and post-marketing stage of the device so that, based on this information, the expected adverse events can be established and delimited in the corresponding labels, instructions for use or operation manuals.

5.3 Adverse incidents should be reported in writing to the CNFV in accordance with the requirements of this standard.

5.4 Adverse incident reports should be recorded in accordance with the principle of truthfulness of the data provided.

5.5 In the case of adverse incidents, follow-up and final reports should be supported with documentary evidence and, when applicable, also the initial notification.

5.6 Any information that has not been validated yet should be treated with confidentiality.

5.7 The information collected in the adverse incident reports will not be used in any case to make value judgments about the user's actions.

5.8 As a general principle, there should be a willingness to report rather than not report when in doubt about reporting an adverse incident.

5.9 The confidentiality of records that could identify the users involved must be protected, respecting privacy in accordance with current regulations.

5.10 The person responsible of the evaluation of adverse incidents in the technovigilance units should be qualified,by education, training and experience, to perform his or her work.

5.11 All information relating to incidents and untoward incidents should be recorded, handled and stored in a manner that allows for accurate reporting, verification and interpretation.

5.12 The appropriate investigation should be carried out by the holder of the sanitary registration or the legal representative in Mexico to evaluate an adverse incident before communicating it to the community, just if the latter is necessary.

5.13 Technovigilance units should ensure that systems and procedures are in place to guarantee the quality of the processes for the generation, management and processing of adverse event information.

5.14 Technovigilance units should document reports of adverse events that pose a serious threat to public health as a matter of priority.

6. Responsibilities

6.1 The CNFV will be responsible for proposing the policies, programs and procedures on technovigilance in the national territory, issued by the Ministry of Health.

6.1.1 The CNFV will maintain communication with the registrants or their legal representatives in Mexico when the user of the medical device notifies the CNFV directly.

6.2 Technovigilance should be carried out by:

6.2.1 The initial notification of adverse incidents involving medical devices with sanitary registration in Mexico.

6.2.2 Follow-up and final reports of adverse incidents involving medical devices with sanitary registration in Mexico, including preventive, corrective and/or corrective field safety actions carried out both in national and international territory.

6.2.3 The technovigilance report, which is generated as part of the extension (renewal) process of sanitary registrations.

6.3 All the State Centers must have a technovigilance project leader.

6.4 The State Centers must make the initial notification of adverse incidents to the CNFV, and simultaneously send a copy of the same to the holders of the records or to their legal representatives in Mexico and suppliers.

6.5 The Institutional Centers must have a technovigilance manager, who must be a health professional in the field of chemistry, medicine, pharmacy or biomedical engineering. They may also have a technovigilance committee that will be coordinated by the technovigilance manager and integrated by a representative of each of the hospital services and will be responsible for promoting the reporting of adverse incidents, as well as for recording and compiling the adverse incident reports that are presented.

6.5.1 The Institutional Centers must inform by means of free writing addressed to the CNFV and delivered through the Integral Center of Services of the COFEPRIS or the Federal Sanitary System through the units of attention to the public that receive procedures, the identity of the health professional responsible for the designated technovigilance unit, who will be the only valid interlocutor in terms of technovigilance before the CNFV. Likewise, inform any change that may occur.

6.5.2 The Institutional Centers must make the initial notification of the adverse incidents to the CNFV, and at the same timethey will send a copy of the same to the holders of the records or to their legal representatives in Mexico and suppliers.

6.6 The other institutions of the National Health System must assign a person responsible for carrying out the surveillance of medical devices.

6.6.1 Notifications about adverse incidents should be directly to the CNFV, they will simultaneously forward a copy of the same to the record holders or their legal representatives in Mexico and suppliers.

6.7 The holders of sanitary registrations of medical devices or their legal representative in Mexico must:

6.7.1 To have a technovigilance unit.

6.7.1.1 Inform in writing to the CNFV and delivered through the Integral Service Center of COFEPRIS or the Federal Sanitary System through the public attention units that receive procedures, the identity of the professional responsible for the designated technovigilance unit, who

will be the only valid interlocutor in terms of technovigilance before the CNFV. Likewise, inform any change that may occur.

6.7.2 To give continuity to the actions determined by the Ministry of Health, including those carried out in coordination with foreign health authorities that arise from any notification of an adverse incident in this country and that correspond to any medical device sold in national territory.

6.7.3 Develop and maintain updated PNOs that ensure that adequate means are in place to:

6.7.3.1 Receive any incident report or communication.

6.7.3.2 Record any incident communications and adverse incident reports, including those of misuse, from users and received by company personnel.

6.7.3.3 Investigate incidents and adverse incidents to determine the impact or risk they represent for users.

6.7.3.4 Validate data by verifying sources.

6.7.3.5 Detect possible duplicate reporting of adverse incidents.

6.7.3.6 Retain all data concerning the collection and documentation of the notification, investigation and technovigilance report for five years or one year after the useful life of the product.

6.7.3.6.1 Any information received related to the adverse incident, including verbal, should be documented and filed.

6.7.4 At the request of the CNFV, estimate the frequency of the incident and investigate the possible risk factor.

6.7.5 The Technovigilance Units of the registrants or their legal representatives in Mexico shall inform the CNFV of incidents related to medical devices when they have an increase in their trends, in accordance with the provisions of the regulatory appendix A of this standard.

6.7.6 Guarantee the confidentiality of the identity of users and informants in accordance with current regulations.

6.7.7 Ensure the integrity of data storage and transmission, especially computer data.

6.7.8 Provide assigned personnel with information, training and education on technovigilance, including PNO management.

6.7.9 Report adverse incidents to the CNFV within the established timeframe.

6.7.10 Communicate to the CNFV about the implementation of the required preventive, corrective and corrective field safety actions and the deadlines stipulated by the competent authority of the country where the adverse incidents occur abroad with the use of products that are also marketed in Mexico.

6.7.11 Train representatives and technicians in the regulations, methods and objectives of technovigilance, as well as the role they play in the collection of notifications and the transmission of information.

6.7.12 To make a technovigilance report, every five years, as part of the process of extension (renewal) of the sanitary registration, which will contain:

6.7.12.1 Brief monograph.

6.7.12.1.1 Generic name.

6.7.12.1.2 Distinctive designation.

6.7.12.1.3 Medical device category, group or subgroup.

6.7.12.1.4 Medical device risk level (I, II, Ill).

6.7.12.1.5 Code or Model or catalog number, when the information is available.

6.7.12.1.6 Batch/serial number, provided that it can be located according to the information provided by the user.

6.7.12.1.7 Condition (new/rebuilt).

6.7.12.1.8 .8 Health registration number.

6.7.12.1.9 Company name of the manufacturer of the product, registration holder in Mexico or distributor (when applicable).

6.7.12.1.10 Software version (if applicable).

6.7.12.1.11 Clinical characteristics: indications for use, dosage, pharmaceutical form, route of administration, precautions and contraindications (if applicable) Product description.

6.7.12.2 Reporting period.

6.7.12.3 Date of elaboration.

6.7.12.4. Safety data sheet in Mexico.

6.7.12.4.1 Description of adverse incidents reported to the CNFV by the registrant during the period.

6.7.12.4.2 Total number of adverse events reported to the CNFV by the Health Registrant in Mexico.

6.7.12.4.3 Number of serious adverse events reported to the CNFV by the registrant.

6.7.12.4.4 Description and number of serious adverse events reported to the CNFV by the registrant.

6.7.12.4.5 Description and number of unanticipated adverse events reported to the CNFV by the registrant.

6.7.12.4.6 Number of units sold per year in Mexico.

6.7.12.4.7 Time of permanence in the market.

6.7.12.4.8 Data that can estimate the number of patients exposed.

6.7.12.4.9 Information concerning the safety of the medical device (Alerts, field safety corrective action).

6.7.12.4.10 Results of the adverse incident presented (death, deterioration in the patient's health, physician intervention,others).

6.7.12.4.11 Corrective actions, and field safety corrective actions, established by the manufacturer to eliminate andavoid recurrence of adverse incidents or justification for not doing so.

6.7.12.5. The technovigilance report may be submitted in tables and should be submitted to the CNFV at least three months before the renewal of the registration of the medical device is contemplated, with a letter specifying that it is a technovigilance report. It must contain the information gathered during the last 5 years of its commercialization in Mexico. The CNFV will issue an acknowledgement of receipt of the information.

6.7.13 Make the initial notification and, when required, the follow-up report or final report of the adverse incidents identified.

6.7.13.1 The initial notification shall contain:

6.7.13.1.1 Details of the person submitting the notification.

6.7.13.1.1.1 Name

6.7.13.1.1.2 Institution, company or individual .

6.7.13.1.1.3 Address.

6.7.13.1.1.4 Telephone number, fax or e-mail address.

6.7.13.1.1.5 Date of notification.

6.7.13.1.2 Corporate name of the manufacturer and distributor.

6.7.13.1.2.1 Name.

6.7.13.1.2.2 Address.

6.7.13.1.3 Medical device operator data, when applicable.

6.7.13.1.3.1 Name or initials of the name.

6.7.13.1.3.2 Address.

6.7.13.1.4 Patient identification whenever the information can be obtained.

6.7.13.1.4.1 The patient's initials or password.

6.7.13.1.4.2 Age.

6.7.13.1.4.3 Sex.

6.7.13.1.4.4 Location of the incident.

6.7.13.1.5 Adverse incident information.

6.7.13.1.5.1 Information on the adverse incident.

6.7.13.1.6 Description of the incident.

6.7.13.1.6.1 Identification of the medical device.

6.7.13.1.6.2 Distinctive designation of the device.

6.7.13.1.6.3 Category and class of medical device

6.7.13.1.6.4 Code, model or catalog number, if available

6.7.13.1.6.5 Location and/or current location of the device, provided that the device can be located according to the informationprovided by the user.

6.7.13.1.6.6 Accessories or associated medical devices, if applicable.

6.7.13.1.6.7 Software version, if applicable.

6.7.13.1.7 Preventive, corrective and corrective field safety actions/measures taken.

6.7.13.2 The follow-up report shall contain, in addition to what is indicated in **6.7.13.1**, the following:

6.7.13.2.1 Progress of the investigation into the cause of the adverse incident.

6.7.13.2.2 Preliminary results.

6.7.13.2.3 Information on similar adverse incidents that have occurred.

6.7.13.2.4 Risk assessment.

6.7.13.3 The final report shall contain, in addition to what is indicated in **6.7.13.1** and **6.7.13.2**, the following:

6.7.13.3.1 Results and conclusions.

6.7.14 The initial notification, as well as the follow-up and final reports (when required), must be submitted to the CNFV withinthe periods indicated in numeral 12 of this standard.

6.8 Corresponds to establishments engaged in the sale, supply and distribution of medical devices:

6.8.1 Report adverse incidents to the holders of the medical device health registrations or to their legal representatives in Mexico.

6.8.2 Have the procedure in the field of Technovigilance, intended for establishments indicated in the supplement of the FEUM.

6.8.3 Comply with the guidelines established by the CNFV.

6.8.4 Respond to requests for information from health authorities.

6.8.5 Participate in coordination with the CNFV in accordance with the provisions established by the CNFV.

6.9 The units for clinical research must:

6.9.1 Notify the CNFV of adverse incidents that occur during the study, within the established timeframes.

6.9.2 Collaborate with the Technovigilance Units of the State and Institutional Centers.

6.10 Corresponds to users of medical devices:

6.10. 1 Make the initial notification of adverse incidents to any Technovigilance Unit, and simultaneously forward a copy of the same to the holders of the registrations or to their legal representative in Mexico and suppliers.

7. Criteria for determining which adverse events should be reported to the National Center for Pharmacovigilance.

7.1 Any incident that meets the three criteria listed in **7.1.1, 7.1.2** and **7.1.3** shall be considered an adverse incident and mustbe reported to the CNFV.

7.1.1 First criterion: When the holder of the sanitary registration or legal representative in Mexico receives information regardingan incident that has occurred in Mexico with their device.

The incidents that occur most frequently are, but not limited to, the following:

7.1.1.1 Malfunction or deterioration of the medical device, if used as intended and according to the manufacturer's instructions.

7.1.1.2 Unforeseen adverse incidents.

7.1.1.3 Inaccuracy or inaccuracy in labeling, directions for use or promotional materials.

7.1.1.4 Adverse incidents caused by patient conditions (idiosyncrasies).

7.1.1.5 Interactions with other substances or products.

7.1.1.6 False positive or false negative

7.1.2 2 Second criteria: When the medical device is related to the incident in conducting the evaluation of the relationship between the medical device and the incident, the following should be considered:

7.1.2.1 Increased frequencies of adverse and unanticipated incidents that become an alarm and represent a potential publichealth risk.

7.1.2.2 Evidence based on information provided by users.

7.1.2.3 The results of the preliminary evaluation of the manufacturer, holder of the sanitary registration or its legal representative in Mexico on the incident itself.

7.1.2.4 Evidence of previous similar adverse incidents

7.1.2.5 Increase in the trend of incidents.

7.1.2.6 Any other information in the possession of the holder of the sanitary registration of the medical device or its legal representative in Mexico, which is related to the incident

7.1.3 Third criteria: When the incident leads to one of the following outcomes:

7.1.3.1 The death of a user.

7.1.3.2 Serious deterioration of a user's health.

7.1.3.3 There was no death or serious impairment of health of a user, but the episode could result in death or serious impairment of health if it were to occur again in a user.

7.1.3.4 When the adverse incident constitutes a Public Health Threat.

7.1.3.5 Fetal damage or death, congenital anomalies or birth defects.

7.1.4 Adverse incidents that do not lead to death or serious deterioration of health as a result of a user's timely intervention should be reported.

7.1.5 When the holder of the sanitary registration of the medical device or its legal representative in Mexico performs the measures established by the health authority or on its own initiative, as a consequence of adverse incidents, which may be: withdrawal from the market, corrective actions and instructions to return the product; it must provide the CNFV with a summary report of the actions carried out.

7.2 Exceptions to notification.

7.2.1 The following incidents should not be reported by the holder of the sanitary registration of the medical device or its legal representative in Mexico:

7.2.1.1 When a malfunction or deterioration in the medical device was found by the user prior to its use.

7.2.1.2 When the holder of the health registration or its legal representative has information that the root cause of the incident is due to a medical condition of the patient that may be pre-existing or occur during the use of the medical device.

To justify the failure to notify the manufacturer, the holder of the sanitary registration of the medical device, or its legal representative in Mexico, must have information that allows reaching the conclusion that the device functioned as intended and did not cause or contribute to the death or serious deterioration of the health of a user, and that allows a person qualified to make medical decisions to reach the same conclusion.

7.2.1.3 The use of medical devices whose useful life has expired as specified by the holder of the sanitary registration of the medical device or its legal representative in Mexico.

7.2.1.4 When the alarm or fail-safe system of the medical device functioned properly, preventing serious impairment of health or death.

7.2.1.5 Incidents that have a low probability and low frequency of causing harm and whose risks have been established and documented by the manufacturer as acceptable after performing a risk assessment in accordance with the intended use of the medical device.

7.2.2 Anticipated adverse events that meet the following criteria should not be reported

7.2.2.1 Be clearly identified in the instructions for use, operating manual or label of the medical device or in a warning notice.

7.2.2.2 Be clearly known in the medical, scientific or technological field *as* predictable and with qualitative and quantitativepredictability when the medical device is used and functions in accordance with the manufacturer's intended use.

7.2.2.3 Be documented or referenced in the device master file and an appropriate risk assessment has been performed prior tothe occurrence of the adverse incident.

7.2.2.4 Be clinically acceptable in terms of patient benefit.

7.2.3 Adverse incidents occurring after the manufacturer has issued a warning notice need not be reported separately to the CNFV if they are specified in the warning notice and have the same root cause as that stated for the products listed in the warning notice. Warning notices include product recalls, initiation of corrective actions, and product return instructions.

7.2.4 Exceptions granted by the CNFV at the request of the holder of the sanitary registration of the medical device or its legal representative in Mexico.

8. Usage errors

8.1 Notification of usage errors.

8.1.1 Adverse incidents due to use errors should be evaluated by the holder of the sanitary registration or the legal representative in Mexico. The results should be available upon request from the CNFV.

8.1.2 Usage errors that should be reported are:

8.1.2.1 Those that meet the three criteria described in numeral **7.**

8.1.2.2 All those use errors for which corrective field safety action is initiated to prevent death or serious threats to public health.

9. Handling and notification of abnormal uses

9.1 Incidents of abnormal use of a medical device should not be reported.

9.2 The holder of the sanitary registration or its legal representative in Mexico must carry out the investigation and management of incidents of abnormal use of a medical device.

9.3 Abnormal use must be reported to the manufacturer by the hospital technovigilance unit, the state or institutional center, protecting the confidentiality of the information that could identify the users involved, respecting privacy in accordance with current regulations, in order to carry out an evaluation and provide feedback.

10. Sources of information about an incident

10.1 For the correct implementation of Technovigilance, information on the risks associated with the use of medical devices should be considered, which can come from any of the following sources:

10.1.2 Post-marketing studies.

10.1.3 Information on design risk analysis.

10.1.4 Information on the clinical studies of the medical device.

10.1.5 Information related to the manufacture, storage, sale, distribution, dispensing, prescription and use of medical devices.

10.1.6 Trend analysis (see regulatory appendix A of this standard).

10.1.7 Communiqués and information issued by authorities and international health organizations.

11. Access to the medical device involved in an incident

11.1 The holder of the sanitary registration of the medical device or its legal representative in Mexico may consult with the userof the medical device about the particular incident during the investigation or, if necessary and whenever possible, may request the medical device related to the incident or its packaging, for the purpose of having information to define whether or not the incident should be notified to the competent authority according to the criteria for notification.

11.2 Depending on the characteristics of the medical device, and whenever possible, the user should submit to the holder of the sanitary registration of the medical device or its legal representative in Mexico or the one determined by him, the samples of the products that are related to the incidents in order to verify the functionality of the product and determine if there has been any malfunction that may have caused the incident.

11.3 In case the sample of the product or its container involved in the incident is delivered to the holder of the sanitary registration of the medical device or its legal representative in Mexico.

12. Notification process

12.1 All notifications must be sent in writing to the CNFV.

12.2 The sending of the notification must be carried out by sending the data requested in numeral **6.7.13.**

12.3 The periods for submitting the initial notification of adverse incidents after they become known are as follows:

12.3.1 In the event of a serious threat to public health, notification must be made within two working days of confirmation.

12.3.2 In case of death or a serious deterioration in the user's state of health, notification must be made no later than 10 calendar days after it has been confirmed.

12.3.3 Other adverse events that meet the criteria of paragraph **7** of this standard should be reported no later than 30 calendar days after they have been confirmed.

12.4 The deadline for submitting the follow-up and final report to the CNFV will be a maximum of six months, depending on the seriousness of the adverse event, and the holder of the sanitary registration may request an additional extension no longer than the first period.

13. Conformity with international and Mexican standards

This standard is partially equivalent to the international guideline:

13.1 GHTF/SG2/N54R8:2006 Post-market surveillance of medical devices. Global guidelines on the reporting of adverse events related to medical devices.

13.2 GHTF/SG2/N008R4:2000. Guidance on the management of surveillance reporting information related to medical devices.

14. Bibliography

14.1 General Health Law

14.2 Federal Law on Metrology and Standardization

14.3 Regulation of Health Supplies.

14.4 Regulation of the Federal Law on Metrology and Standardization.

14.5 Regulations of the Federal Commission for Protection from Sanitary Risks.

14.6 Medical devices supplement to the Pharmacopoeia of the United Mexican States.

14.7 Supplement for establishments dedicated to the sale and supply of medicines and other health supplies, of thePharmacopoeia of the United Mexican States.

14.8 Mexican Official Standard NOM-001-SSA1-2010, which establishes the procedure by which the Pharmacopoeia of the United Mexican States will be revised, updated and edited.

14.9 Global Harmonization Task Force. GHTF/SG2/N54R8:2006. Post-market surveillance of medical devices. Globalguidelines on the reporting of adverse events related to medical devices.

14.10 Global Harmonization Task Force. GHTF/SG2/N008R4:2000. Guideline on the management of information on vigilance reports related to medical devices.

14.11 Global Harmonization Task Force. GHTF/SC(PD3)/N4 :2007. Definition and glossary of terms used in GHTF documents.

14.12 European Commission, DG Health and Consumers. MEDDEV 2.12-1/ revision 7. Guidelines on a Medical DevicesVigilance System. March 2012.

14.13 National Institute for Drugs and Food Surveillance. National Technovigilance Program: Adverse Event Reporting Guide for Medical Devices, Bogota, 2008.

14.14 Public Health Institute of Chile. Technical guideline for the technovigilance system of medical devices in Chile. 2009.

15. Compliance with the standard

The surveillance of compliance with this standard corresponds to the Secretariat of Health, through the Federal Commission for Protection from Sanitary Risks, and to the governments of the federal entities, in their respective areas of competence.

16. Validity

This standard will become effective 180 calendar days after its publication in the Official Gazette of the Federation

Regulatory appendix A. Trends

A.1 Introduction

This appendix describes the criteria to be used to detect a significant increase in the incident rate and, consequently, to submit a trend report to the competent national authority.

It is also important to recognize that in certain circumstances the manufacturer, the holder of the sanitary registration of the medical device, or its legal representative in Mexico should take immediate action without waiting for a trend to be recorded, based on the severity of the incident or the perceived risks associated with the incident, regardless of the number of cases recorded.

The purpose of this document is not to define statistical techniques for trending or to establish additional requirements beyond the trend analysis of complaints, which is part of every manufacturer's quality system, but rather to explain the reasons why it is important to perform trend analysis with respect to incidents and their reporting, and to provide guidance on some important related issues.

A.2 Incident trend reporting. A trend report should be prepared in cases where there has been a significant increase in therates listed below.

A.2.1 Adverse incidents that were already notifiable. A significant increase in the rate of adverse incidents (reportable ones) represents additional information for the manufacturer, the holder of the medical device's health registration or its legal representative in Mexico, about its medical device or its performance in a given clinical setting. Unless there is a similar trend in the market for the product as a whole, it is unlikely that the CNFV will be able to detect this change since only the manufacturer with access to all market data can create a reasonable estimate of rates and can calculate trends.

A.2.2 Incidents that are currently exempt from the reporting requirement. In general, an exemption from the reporting requirement for certain incidents is granted on the basis that the NMSC believes that the event has been properly characterizedand that they and the industry have taken all reasonable steps to prevent additional adverse incidents from occurring. However, a significant increase in the rate of these exempt incidents may indicate a fundamental change in the performance of the medical device or in its use by users. Either situation would be of considerable value to the CNFV and is an appropriate reason to file a report with the CNFV as soon as the manufacturer, the holder of the medical device's sanitary registration or its legal representative in Mexico observes the change in rate.

A.2.3 Adverse incidents scheduled for periodic reporting. The rationale for reporting any change in the rate of adverse incidents that were considered for periodic reporting is apparent from the above analysis: first of all, periodic reporting of data with a numerator (adverse incident) but without a denominator (number of devices on the market or in use) does not provide the CNFV with the data necessary to adequately calculate trends; second of all, although periodic reporting of events may allow the CNFV to examine overall market trends, each manufacturer, medical device health registration holder or its legal representative in Mexico is responsible for reporting any potentially important changes in the safety of the product.

A.3 Incident trend analysis. The decision to submit a trend report should be based on the detection of a significant increase in the number of incidents.

A.3.1 Procedure to perform trend analysis and establish if there was a significant increase

A.3.1.1 Given the diversity of medical devices on the market, it is not possible to define a single trend detection or analysis procedure that is valid for all devices. According to the type of device, the risk classification related to the device, the number of products marketed, whether they are single use or reusable medical devices, whether they have traceability requirements, the lackof information on device disposal and other parameters, the manufacturer, the holder of the medical device sanitary registration or itslegal representative in Mexico, should adopt a trend analysis procedure that is applicable and appropriate for its operations and medical devices.

A.3.1.2 While for many manufacturers, medical device registrants or their legal representatives in Mexico, the use of simple graphs and charts will be sufficient, others will need to employ more complex methods. It is important that valid statistical methods are used for

trend assessment. The CNFV may request the manufacturer, holder of the sanitary registration of the medical device or its legal representative in Mexico to demonstrate that the method applied is appropriate for the particular case.

A.3.1.3 The analysis presented below explains the *significant increase in* the detection of statistical trends. At the same time, this document provides guidance to manufacturers, medical device registrants or their legal representatives in Mexico, on how to establish a reliable point of comparison and provides information to CNFV that may facilitate decisions regarding exemption from the obligation to report certain incidents recorded with medical devices based on well-established points of comparison.

A.3.2 Detection of trends related to claims and trends related to adverse incidents. The detection of trends related to complaints as an established requirement within the quality system provides the basis upon which manufacturers are required to collect and analyze their data. Since complaints are the source of data from which reportable adverse incidents are detected, the development of trends related to adverse incidents uses essentially the same methods as the detection of trends related to complaints. For both processes of analysis or trend detection, the same data base is used: the claim file.

A.3.2.1 The difference is as follows:

A.3.2.1.1 The analysis of complaint trends may lead to the detection of a trend in complaints (and the adoption of the corresponding corrective and preventive measures), but not necessarily to the submission of a report to the CNFV.

A.3.2.1.2 The analysis and detection of certain trends in relation to adverse incidents may lead to the submission of a report to the CNFV.

A.3.2.2 In short, the method for assessing trends in both complaints and adverse incidents can be the same even though the decision-making process and subsequent activities are different.

A.4 Example of statistical analysis of trends and significant increases

A.4.1 Basic parameters of trend analysis

A.4.1.1 The raw data to be collected in order to perform a trend analysis are the number of cases (n) in a given interval (t) and the volume of the related product used (by users) in the market (d) during that interval. For each interval a data point (i) = n/d is calculated which, for the purposes of this appendix, is defined as the observed incidence expressed as a percentage. In the case of medical devices that are intended for continued use, such as implants, patient exposure should be measured or calculated over timeto establish the denominator (d), rather than the used volume of the product. However, when a manufacturer, holder of the sanitary registration of the medical device or its legal representative in Mexico, does not know the data on exposure at use, the number of products in the field can be used as denominator (d).

A.4.1.2 If relevant (e.g., in the case of implants), a trend analysis can also be initiated for clinical outcomes or other variables such as patient age, weight and sex, device age and others.

A.4.1.3 The point of comparison (IB) and threshold (IT) against which the observed incidence is compared to establish the trend are also expressed as percentages of the volume of the related product used in the market or use exposure. If the volume used for a related product from a related manufacturer is too low to obtain a statistically significant measurement, each incident should be reported to the CNFV. The quality of the statistics increases both with the number of episodes and with the volume installed in the market. Care must be taken in determining the data to be used in the trend analysis: only the market areas where incident reporting has been established should be included since, otherwise, the frequency of known events may not match the volume used, which would result in erroneous results.

A.4.2 Point comparison (IB). in order to establish a realistic benchmark, for example, to avoid unnecessary notifications, various tools and methods can be used, such as the risk analysis, reliability analysis techniques and reliability tests, among others. Another important source of information is the historical data of the manufacturer or of equivalent devices of its competitor. Another important source of information is historical data from the manufacturer or equivalent competitive devices. Additional information also can be found in medical and scientific publications. If there is insufficient information to calculate a reliable and statistically verified point of comparison, incidents should be reported on an individual basis.

A.4.3 Threshold (IT} and interval (t). The characteristic number of episodes recorded in a given interval, for example one month, varies according to the type of product and can range from one or two episodes to a few hundred. Consequently, the interval must be long enough to be able to collect sufficient data for the analysis according to the volume of products sold and the incidents reported. For higher volume products, the typical interval is one month. In addition, it is important that the interval be short enough to allow timely corrective action to be taken, especially for high-risk products. The upper value of the normal range of variation specified by the trend analysis, the IT threshold, will vary according to the product category.

A.4.4 Significant increase in observed incidence. A sustained increase in the observed incidence (i) above the point of comparison over a number of intervals will constitute a significant increase and should trigger a report. On trends before the CNFV (see Figure 1). Whether the increase can be considered sustained or not will depend on the tests andstatistical method chosen. The trend report should be submitted as soon as a significant increase is detected.

A.4.4.1 Depending on the volume of the product in the market, a "significant increase" may be detected as a result of any of the following considerations:

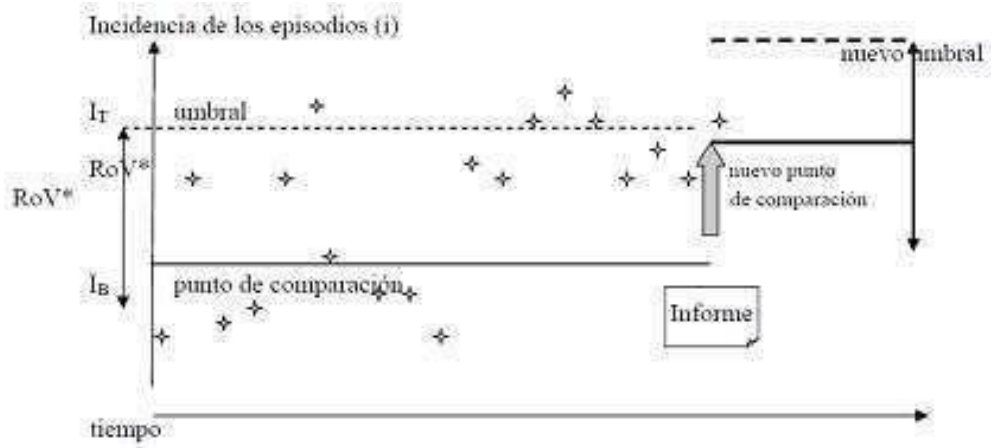
A.4.4.1.1 A rapid and continuous increase in (i) over a limited number of intervals for high volume products, for example, 1 to 3 months.

A.4.4.1.2 A slow and steady increase in (i) over a larger number of intervals for low volume products, for example, 3 to 6 months.

A.4.4.2 Although after a significant increase is detected there will be an upward change in the comparison point, as a basic requirement

of the quality system, corrective and preventive actions must be initiated in order to identify and eliminate the root cause of the problem, reverse the upward trend of the comparison point and return to the previous level or lower.

Figure 1. Upward change of the comparison point and presentation of a trend report.



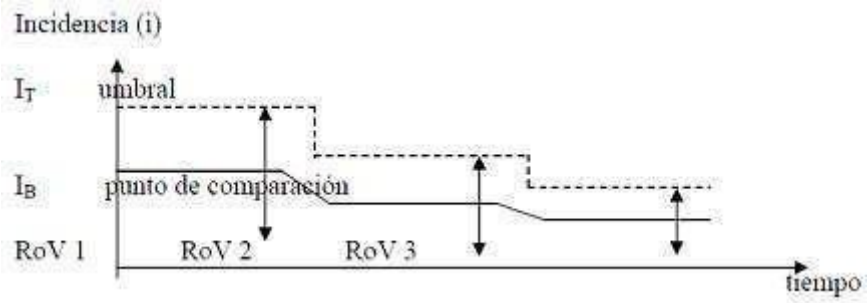
* RoV: normal range of variation

Note: One data point per interval only.

A.4.5 Improvements in the point of comparison. If a sustained decrease in incidence is recorded over several successive intervals, this will lead to a reduction in the comparison point and threshold which should then be used for future trend analysis (see Figure 2).

A.4.5.1 These downward changes in the point of comparison, which may relate to product or process improvements, or refinements in indications or clinical use, are positive developments that lead to a reduction in the number of incidents and a reduction in costs for the manufacturer, as well as for the entire National Health System.

Figure 2. Comparison point improvements.



A.4.6 Exceptional cases. If there is a significant and sudden increase in the incidence (i) or number of occurrences (n), whethersustained or not, it is recommended that a report be submitted to the national competent authority even if the trend assessment may not indicate that a report is required or even if the interval for the current trend analysis period has not ended. A report should be submitted as soon as the exceptionally high value is detected and a related corrective action is initiated, even before the trend is confirmed.

Effective Suffrage. No Reelection.

Mexico City, September 14, 2012.- The Federal Commissioner for Protection from Health Risks and President of the NationalAdvisory Committee for Standardization of Regulation and Health Promotion, **Mikel Andoni Arriola Penalosa.**