FOOD AND DRUGS AUTHORITY

GUIDELINE FOR GOOD DISTRIBUTION PRACTICES FOR FINISHED PHARMACEUTICAL PRODUCTS, BIOLOGICAL PRODUCTS, HERBAL MEDICINES, FOOD SUPPLEMENTS AND PHARMACEUTICAL RAW MATERIALS

ACKNOWLEDGEMENT

The Food and Drugs Authority (FDA) acknowledges the technical support of the World Health Organization (WHO) in the development of these guidelines.

Preamble

In pursuance to Sections 122, 130,131 and 132 of the Public Health Act, 2012 (Act 851) these guidelines are hereby made to provide for the proper importation, exportation, storage, handling, transportation and distribution of regulated products so as to ensure that these products maintain their integrity throughout their shelf lives.

1. Introduction

Distribution is an important activity in the integrated supply-chain management of pharmaceutical products. Various people and entities are generally responsible for the handling, storage and distribution of such products. The objective of these guidelines is to assist in ensuring the quality and identity of pharmaceutical products during all aspects of the distribution process. These aspects include, but are not limited to, storage, distribution, transportation, documentation and record-keeping practices. This document sets out appropriate steps to assist in fulfilling the responsibilities involved in the different aspects of the distribution process within the supply chain and to avoid the introduction of counterfeits into the marketplace via the distribution chain. The relevant sections should be considered by various participants as applicable to the particular role that they play in the distribution of pharmaceutical products.

Counterfeit pharmaceutical products are a real threat to public health and safety. Consequently, it is essential to protect the pharmaceutical supply chain against the penetration of such products. Nonconformance to Good Distribution Practices (GDP) in the distribution processes of pharmaceutical products provides an avenue for counterfeiting.

These guidelines are intended to be applicable to all persons and outlets involved in any aspect of the distribution of pharmaceutical products from the premises of the manufacturer of the product to the person dispensing or providing pharmaceutical products directly to a patient or his or her agent. This includes all parties involved in the trade, supply, distribution and manufacturers of medicines including pharmaceutical, herbal and food supplements in Ghana. The relevant sections of these guidelines should also be considered for implementation by, among others, governments, regulatory bodies, international procurement organizations, donor agencies and

certifying bodies, as well as all parties involved in any aspect of the trade and distribution of pharmaceutical products, including health care workers.

2. Scope of the document

This document lays down guidelines for the storage and distribution of pharmaceutical, products, biological products, herbal products and food Supplements.

3. Glossary

The definitions provided below apply to the words and phrases used in these guidelines.

Agreement

Arrangement undertaken by and legally binding on parties.

Auditing

An independent and objective activity designed to add value and improve an organization's operations by helping the organization to accomplish its objectives by using a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.

Batch

A defined quantity of products processed in a single process or series of processes so that it is expected to be homogeneous.

Batch number

A distinctive combination of numbers and/or letters which uniquely identifies a batch, for example on the labels, its batch records and corresponding certificates of analysis.

Consignment

The quantity of products supplied at one time in response to a particular request or order. A consignment may comprise one or more packages or containers and may include products belonging to more than one batch.

Container

The material employed in the packaging of a product. Containers include primary, secondary and transportation containers. Containers are referred to as primary if they are intended to be in direct contact with the product. Secondary containers are not intended to be in direct contact with the product.

Contamination

The undesired introduction of impurities of a chemical or microbiological nature, or of foreign matter, into or on to a starting material, intermediate or product during handling, production, sampling, packaging or repackaging, storage or transportation.

Contract

Business agreement for the supply of goods or performance of work at a specified price.

Counterfeit product

A pharmaceutical product which is deliberately and fraudulently mislabeled with respect to identity and/or source. Counterfeiting can apply to both branded and generic products, and counterfeit products may include products with the correct ingredients, with the wrong ingredients, without active ingredients, with an incorrect quantity of active ingredient or with fake packaging.

Cross-contamination

Contamination of a starting material, intermediate product or finished l product with another starting material or product during production, storage and transportation.

Distribution

The procuring, purchasing, holding, storing, selling, supplying, importing, exporting, or movement of products, with the exception of the dispensing or providing products directly to a patient or his or her agent.

Expiry date

The date given on the individual container (usually on the label) of a product up to and including the date on which the product is expected to remain within specifications, if

stored correctly. It is established for each batch by adding the shelf-life to the date of manufacture.

First expiry/first out (FEFO)

A distribution procedure that ensures that the stock with the earliest expiry date is distributed and/or used before an identical stock item with a later expiry date is distributed and/or used

Forwarding agent

A person or entity engaged in providing, either directly or indirectly, any service concerned with clearing and forwarding operations in any manner to any other person and includes a consignment agent.

Good distribution practices (GDP)

That part of quality assurance that ensures that the quality of a product is maintained by means of adequate control of the numerous activities which occur during the distribution process as well as providing a tool to secure the distribution system from counterfeits, unapproved, illegally imported, stolen, substandard, adulterated, and/or Misbranded products.

Good manufacturing practices (GMP)

That part of quality assurance which ensures that pharmaceutical products are consistently produced and controlled to the quality standards appropriate to their intended use and as required by the marketing authorization.

Good storage practices (GSP)

That part of quality assurance that ensures that the quality of products is maintained by means of adequate control throughout the storage thereof.

Good trade and distribution practices (GTDP)

That part of quality assurance that ensures that the quality of products is maintained by means of adequate control throughout the numerous activities which occur during the trade and the distribution process.

Importation

The act of bringing or causing any goods to be brought into a customs territory (national territory, excluding any free zone).

Intermediate product

Partly processed product that must undergo further manufacturing steps before it becomes a bulk finished product.

Labeling

Process of identifying a product including the following information, as appropriate: name of the product; active ingredient(s), type and amount; batch number; expiry date; special storage conditions or handling precautions; directions for use, warnings and precautions; names and addresses of the manufacturer and/or the supplier.

Manufacture

All operations of purchase of materials and products, production, packaging, labeling, quality control, release, storage and distribution of products, and the related controls.

Marketing authorization

A legal document issued by the competent medicines regulatory authority for the purpose of marketing or free distribution of a product after evaluation for safety, efficacy and quality. It must set out, inter alia, the name of the product, the pharmaceutical dosage form, the quantitative formula (including excipients) per unit dose (using INNs or national generic names where they exist), the shelf-life and storage conditions, and packaging characteristics. It specifies the information on which authorization is based (e.g. “The product(s) must conform to all the details provided in your application and as modified in subsequent correspondence”). It also contains the product information approved for health professionals and the public, the sales category, the name and address of the holder of the authorization, and the period of validity of the authorization.

Once a product has been given marketing authorization, it is included on a list of authorized products — the register — and is often said to be “registered” or to “have registration”. Market authorization may occasionally also be referred to as a “license” or “product license”.

Pedigree

A complete record that traces the ownership of and transactions relating to a product as it is distributed through the supply chain.

Pharmaceutical product

Any product intended for human use, or veterinary product intended for administration to food-producing animals, presented in its finished dosage form, which is subject to control by pharmaceutical legislation in either the exporting or the importing state and includes products for which a prescription is required, products which may be sold to patients without a prescription, biologicals and vaccines. It does not, however, include medical devices, cosmetics and household chemicals.

Product recall

A process for withdrawing or removing a product from the distribution chain because of defects in the product, complaints of serious adverse reactions of the product and/or concerns that the product is or may be counterfeit. The recall might be initiated by the manufacturer, importer, wholesaler, distributor or a responsible agency.

Quality assurance

A wide-ranging concept covering all matters that individually or collectively influence the quality of a product. It is the totality of the arrangements made with the object of ensuring that products are of the quality required for their intended use.

Quality system

An appropriate infrastructure, encompassing the organizational structure, procedures, processes and resources, and systematic actions necessary to ensure adequate confidence that a product (or services) will satisfy given requirements for quality.

Quarantine

The status of products isolated physically or by other effective means while a decision is awaited on their release, rejection or reprocessing.

Sampling

Operations designed to obtain a representative portion of a product, based on an appropriate statistical procedure, for a defined purpose, e.g. acceptance of consignments or batch release.

Shelf-life

The period of time during which a product, if stored correctly, is expected to comply with the specification as determined by stability studies on a number of batches of the product. The shelf-life is used to establish the expiry date of each batch.

Standard operating procedure (SOP)

An authorized, written procedure giving instructions for performing operations not necessarily specific to a given product but of a more general nature (e.g. equipment operation, maintenance and cleaning, validation, cleaning of premises and environmental control, sampling and inspection).

Storage

The storing of products up to the point of use.

Supplier

A person or entity engaged in the activity of providing products and/or services.

Transit

The period during which products are in the process of being carried, conveyed, or transported across, over or through a passage or route to reach the destination.

Vehicles

Trucks, vans, buses, minibuses, cars, trailers, aircraft, railway carriages, boats and other means which are used to convey products.

4. General principles

4.1 All parties involved in the distribution of products have a responsibility to ensure that the quality of products and the integrity of the distribution chain is maintained throughout the distribution process from the site of the manufacturer to the entity responsible for dispensing or providing the product to the patient or his or her agent.

4.3 The principles of GDP are applicable both to products moving forward in the distribution chain from the manufacturer to the entity responsible for dispensing or providing pharmaceutical products to the patient and to products which are moving backwards in the chain, for example, as a result of the return or recall thereof.

4.4 The principles of GDP should also be adhered to in the case of products which are donated.

4.5 All entities involved in the distribution process should apply due diligence with adherence to the principles of GDP, for example, in procedures relating to traceability and in recognition of security risks.

5. Regulation of the distribution of regulated products

5.1 The Food and Drugs Authority has put in place to regulate the activities of persons or entities involved in the distribution of products namely pharmaceutical products, biological products, herbal products and food supplements.

5.2 The distributor or the organization to which the distributor belongs should be an entity that is appropriately authorized in terms of applicable legislation to perform the function(s) that it intends to perform. The distributor or the organization to which it belongs should be held accountable for the activities that it performs which relate to the distribution of products.

5.3 Only persons or entities which are authorized to do so and/or which hold the appropriate licence are entitled to import or export regulated products.

5.4 Distributors or their agents may only distribute a product within or to a country or territory if a marketing authorization or similar authorization has been granted, which allows the use of that product in that country or territory.

5.5 Holders of an authorization to distribute products should obtain their supplies of products only from persons or entities which are in possession of the applicable authorization to sell or supply such products to a distributor.

5.6 Distributors or their agents should supply products only to persons or entities which are themselves authorized to acquire such products either in terms of an authorization to act as a distributor or to sell or supply products directly to a patient or to his or her agent.

5.7 Some duties and responsibilities may be delegated or contracted out to suitably designated persons or entities as authorized and as necessary. Duties and responsibilities may only be delegated to entities which are suitably authorized in line with the provisions of the Public Health Act 2012, Act 851 and other applicable national legislation. Duties and responsibilities should be specified in a written agreement. There should be no gaps or unexplained overlaps with regard to the application of GDP.

These delegated and contracted out activities should be documented in agreements or contracts. There should be a periodic audit of such activities with regard to application of GDP.

5.8 If a distributor or his or her agent subcontracts an activity to another entity, the person or entity to whom the activity is subcontracted must be appropriately authorized to perform the subcontracted activity and should uphold the same standards as the distributor.

6. Organization and management

6.1 There should be an adequate organizational structure for each entity defined with the aid of an organizational chart. The responsibility, authority and interrelationships of all personnel should be clearly indicated.

6.2 Duties and responsibilities should be clearly defined and understood by the individuals concerned and recorded as written job descriptions.

At every level of the supply chain, employees should be fully informed and trained in their duties and responsibilities.

6.3 A designated person should be appointed within the organization, who has defined authority and responsibility for ensuring that a quality system is implemented and maintained.

6.4 Managerial and technical personnel must have the authority and resources needed to carry out their duties and to set up and maintain a quality system, as well as to identify and correct deviations from the established quality system

6.5 The responsibilities placed on any one individual should not be so extensive as to present any risk to product quality.

6.7 Safety procedures relating to all relevant aspects including the safety of personnel and property, environmental protection and product integrity, should be in place.

7. Personnel

7.1 All personnel involved in distribution activities should be trained and qualified in the requirements of GDP. Training should be based on written standard operating procedures (SOPs). Personnel should receive initial and continuing training relevant to their tasks, and be assessed as applicable, in accordance with a written training programme. In addition, training of the personnel should include the topic of product security, as well as aspects of product identification, the detection of counterfeits and the avoidance of counterfeits entering the supply chain. A record of all training, which includes details of subjects covered and participants trained, should be kept.

7.2 Key personnel involved in the distribution of pharmaceutical products should have the ability and experience appropriate to their responsibility for ensuring that pharmaceutical products are distributed properly.

7.3 There should be an adequate number of competent personnel involved in all stages of the distribution of pharmaceutical products in order to ensure that the quality of the product is maintained.

7.4 Food and Drug Authority’s regulations relating to the qualifications and experience of personnel should be adhered to.

7.5 Personnel dealing with hazardous pharmaceutical products (such as highly active materials, radioactive materials, narcotics, and other hazardous, environmentally sensitive and/or dangerous pharmaceutical products, as well as products presenting special risks of abuse, fi re or explosion) should be given specific training.

7.6 Personnel involved in the distribution of pharmaceutical products should wear garments suitable for the activities that they perform. Personnel dealing with hazardous pharmaceutical products, including products containing materials that are highly active, toxic, and infectious or sensitizing, should be provided with protective garments as necessary.

7.7 Appropriate procedures relating to personnel hygiene, relevant to the activities to be carried out, should be established and observed. Such procedures should cover health, hygiene and clothing of personnel.

7.8 Procedures and conditions of employment for employees, including contract and temporary staff, and other personnel having access to pharmaceutical products must be designed and administered to assist in minimizing the possibility of such products coming into the possession of unauthorized persons or entities.

7.9 Codes of practice and punitive procedures should be in place to prevent and address situations where persons involved in the distribution of pharmaceutical products are suspected of, or found to be implicated in, any activities relating to the misappropriation, tampering, diversion or counterfeiting of any product.

8. Quality system

8.1 Within an organization, quality assurance serves as a management tool. There should be a documented quality policy describing the overall intentions and requirements of the distributor regarding quality, as formally expressed and authorized by management.

8.2 The quality system should include an appropriate organizational structure, procedure, processes and resources and systematic actions necessary to ensure adequate confidence that a product or service and its documentation will satisfy given requirements for quality.

8.3 The quality system should include provisions to ensure that the holder of the marketing authorization, entity identified on the label (if different from the manufacturer) and the FDA is informed about all suspected counterfeit products. Such products should be stored in a secure, segregated area and clearly identified to prevent further distribution or sale.

8.4 Where electronic commerce (e-commerce) is used, i.e. electronic means are used for any of the distribution steps, defined procedures and adequate systems should be in place to ensure traceability and confidence in the quality of the pharmaceutical products concerned. Electronic transactions, (including those conducted via the Internet), relating to the distribution of products, should be performed only by authorized persons or entities.

8.5 Authorized procurement and release procedures for all administrative and technical operations performed should be in place to ensure that appropriate products are sourced only from approved suppliers and distributed by approved entities.

8.6 Inspection, auditing and certification of compliance with a quality system (such as the applicable International Standardization Organization

(ISO) series, by external bodies is recommended. Such certification should not, however, be seen as a substitute for compliance with these GDP guidelines relating to regulated products.

8.7 Measures should be put in place to ensure the integrity of the regulated products in transit and should be managed properly. For example, if seal control programmes for transit shipment are used, numbers should be issued in a tracked and sequential manner, the integrity of seals should be monitored and numbers verified during transit and upon receipt. Written procedures should be in place for use in situations where pharmaceutical products are suspected of being or are found to be counterfeit.

8.8 Distributors should from time to time conduct risk assessments to assess potential risks to the quality and integrity of products. The quality system should be developed and implemented to address any potential risks identified. The quality system should be reviewed and revised periodically to address new risks identified during a risk assessment.

Traceability of pharmaceutical products

8.9 There should be procedures in place to ensure documented traceability of products received and distributed, to facilitate product recall.

8.10 All parties involved in the supply chain should be identifiable,

8.11 Measures should be in place to ensure that products have documentation that can be used to permit traceability of the products throughout distribution channels from the manufacturer/importer to the entity responsible for selling or supplying the product to the patient or his or her agent Records including expiry dates and batch numbers may be part of a secure distribution documentation enabling traceability. Provision should be made for a visual and/or analytical identification of potential counterfeit products..

9. Premises, warehousing and storage

9.1 Good storage practices (GSP) are applicable in all circumstances where products are stored and throughout the distribution process.

Storage areas

9.2 Precautions must be taken to prevent unauthorized persons from entering storage areas. Employees should comply with the company policies to maintain a safe, secure and efficient working environment.

9.3 Storage areas should be of sufficient capacity to allow the orderly storage of the various categories of products, namely; commercial and non-commercial products, products in quarantine, and released, rejected, returned or recalled products as well as those suspected to be counterfeits.

9.4 Storage areas should be designed or adapted to ensure appropriate and good storage conditions. In particular, they should be clean and dry and maintained within acceptable temperature limits. Products should be stored off the floor and suitably spaced to permit cleaning and inspection. Pallets should be kept in a good state of cleanliness and repair.

9.5 Storage areas should be clean and free from accumulated waste and vermin. Organizations in charge of distribution must ensure that premises and storage areas are cleaned regularly. There should also be a written programme for pest control. The pest control agents used should be safe and there should be no risk of contamination of pharmaceutical products. There should be appropriate procedures for the clean-up of any spillage to ensure complete removal of any risk of contamination.

9.6 Receiving and dispatch bays should protect products from the weather. Receiving areas should be designed and equipped to allow incoming containers of products to be cleaned, if necessary, before storage.

9.7 Where quarantine status is ensured by storage in separate areas, these areas must be clearly marked and access restricted to authorized personnel. Any system replacing physical quarantine should provide equivalent security. For example, computerized systems can be used, provided that they are validated to demonstrate security of access.

9.8 Physical or other equivalent validated (e.g. electronic) segregation should be provided for the storage of rejected, expired, recalled or returned products and suspected counterfeits. The products and the areas concerned should be appropriately identified.

9.9 Unless there is an appropriate alternative system to prevent the unintentional or unauthorized use of quarantined, rejected, returned, recalled or suspected counterfeit products, separate storage areas should be assigned for their temporary storage until a decision as to their future has been made.

9.10 Radioactive materials, narcotics and other hazardous, sensitive and/ or dangerous pharmaceutical products, as well as products presenting special risks of abuse, fire or explosion (e.g. combustible or flammable liquids and solids and pressurized gases) should be stored in a dedicated area(s) that is subject to appropriate additional safety and security measures.

9.11 products should be handled and stored in such a manner as to prevent contamination, mix-ups and cross-contamination.

9.12 A system should be in place to ensure that the products due to expire first are sold and/or distributed first (first expiry/first out (FEFO)). Exceptions may be permitted as appropriate, provided that adequate controls are in place to prevent the distribution of expired products.

9.13 Broken or damaged items should be withdrawn from usable stock and stored separately.

9.14 Storage areas should be provided with adequate lighting to enable all operations to be carried out accurately and safely.

Storage conditions and stock control

9.15 Storage conditions for products should be in compliance with the recommendations of the manufacturer.

9.16 Facilities should be available for the storage of all products under appropriate conditions (e.g. environmentally controlled when necessary). Records should be maintained of these conditions if they are critical for the maintenance of the characteristics of the products stored.

9.17 Records of temperature monitoring data should be available for review. There should be defined intervals for checking temperature. The equipment used for monitoring should be checked at suitable predetermined intervals and the results of such checks should be recorded and retained. All monitoring records should be kept for at least the shelf-life of the stored product plus one year. It is recommended that temperature monitors be located in areas that are most likely to show fluctuations.

9.18 Equipment used for monitoring of storage conditions should also be calibrated at defined intervals.

9.19 Periodic stock reconciliation should be performed by comparing the actual and recorded stocks. This should be done at defined intervals.

9.20 Stock discrepancies should be investigated in accordance with a specified procedure to check that there have been no inadvertent mixups, incorrect issues and receipts, thefts and/or misappropriations of products. Documentation relating to the investigation should be kept for a predetermined period.

10. Vehicles and equipment

10.1 Vehicles and equipment used to distribute, store or handle products should be suitable for their purpose and appropriately equipped to prevent exposure of the products to conditions that could affect their stability and packaging integrity, and to prevent contamination of any kind.

10.2 The design and use of vehicles and equipment must aim to minimize the risk of errors and permit effective cleaning and/or maintenance to avoid contamination, build-up of dust or dirt and/or any adverse effect on the quality of the products being distributed.

10.3 Where feasible, consideration should be given to adding technology, such as global positioning system (GPS) electronic tracking devices and engine-kill buttons to vehicles, which would enhance the security of products while in the vehicle.

10.4 Dedicated vehicles and equipment should be used, where possible, when handling pharmaceutical products and biological products.

10.5 Where non-dedicated vehicles and equipment are used, procedures should be in place to ensure that the quality of the pharmaceutical product or biological product will not be compromised. Appropriate cleaning should be performed, checked and recorded.

10.6 Procedures should be in place to ensure that the integrity of the products is not compromised during transportation.

10.7 Where third-party carriers are used, distributors should develop written agreements with carriers to ensure that appropriate measures are taken to safeguard pharmaceutical products, including maintaining appropriate documentation and records. Such agreements should be in line with these guidelines.

10.8 Defective vehicles and equipment should not be used and should either be labeled as such or removed from service.

10.9 There should be procedures in place for the operation and maintenance of all vehicles and equipment involved in the distribution process, including cleaning and safety precautions.

10.10 Vehicles, containers and equipment should be kept clean and dry and free from accumulated waste. Organizations in charge of distribution must ensure that vehicles used are cleaned regularly.

10.11 Vehicles, containers and equipment should be kept free from rodents, vermin, birds and other pests. There should be written programs and records for such pest control. The cleaning and fumigation agents used should not have any adverse effect on product quality.

10.12 Equipment chosen and used for the cleaning of vehicles should not constitute a source of contamination. Agents used for the cleaning of vehicles should be approved by management.

10.13 Special attention should be paid to the design, use, cleaning and maintenance of all equipment used for the handling of pharmaceutical products which are not in a protective shipping carton or case.

10.14 Where special storage conditions (e.g. temperature and/or relative humidity), different from, or limiting, the expected environmental conditions, are required during transportation, these should be provided, checked, monitored and recorded. All monitoring records should be kept for a minimum of the shelf-life of the product distributed plus one year. Records of monitoring data should be made available for inspection by the FDA

10.15 Equipment used for monitoring conditions, e.g. temperature and humidity, within vehicles and containers should be calibrated at regular intervals.

10.16 Vehicles and containers should be of sufficient capacity to allow orderly storage of the various categories of products during transportation.

10.17 Where possible, mechanisms should be available to allow for the segregation during transit of rejected, recalled and returned products as well as those suspected of being counterfeits. Such goods should be securely packaged, clearly labeled, and be accompanied by appropriate supporting documentation.

10.18 Measures should be in place to prevent unauthorized persons from entering and/or tampering with vehicles and/or equipment, as well as to prevent the theft or misappropriation thereof.

11. Shipment containers and container labeling

11.1 products should be stored and distributed in shipment containers that have no adverse effect on the quality of the products, and that offer adequate protection from external influences, including contamination.

11.2 Shipping containers should bear labels providing sufficient information on handling and storage conditions and precautions to ensure that the products are properly handled and secure at all times. The shipment container should enable identification of the container's contents and source.

11.3 The need for any special transport and/or storage conditions should be stated on the shipment container label. If a product is intended for transfer to areas outside the control of the manufacturer's products management system, the name and address of the manufacturer, special transport conditions and any special legal requirements, including safety symbols, should also be included on the container label.

11.4 Normally, internationally and/or nationally accepted abbreviations, names or codes should be used in the labeling of shipment containers.

11.5 Special care should be taken when using dry ice in shipment containers. In addition to safety issues it must be ensured that the pharmaceutical product does not come into contact with the dry ice, as it may have an adverse effect on the quality of the product.

11.6 Written procedures should be available for the handling of damaged and/or broken shipment containers. Particular attention should be paid to those containing potentially toxic and hazardous products.

12. Dispatch and receipt

12.1 Pharmaceutical products and biological products should only be sold and/or distributed to persons or entities that are authorized to acquire such products. - Documented proof (License/ permit) of such authority must be obtained prior to the distribution of products to such persons or entities.

12.2 Prior to the dispatch of the products, the supplier should ensure that the person or entity, e.g. the contract acceptor for transportation of the pharmaceutical products, is aware of the products to be distributed and complies with the appropriate storage and transport conditions.

12.3 The dispatch and transportation of products should be undertaken only after the receipt of a valid delivery order/request or material replenishment plan, which should be documented.

12.4 Written procedures for the dispatch of products should be established. Such procedures should take into account the nature of the product as well as any special precautions to be observed. Products under quarantine will require release for dispatch by the person responsible for quality

12.5 Records for the dispatch of products should be prepared and should include at least the following information:

— date of dispatch;
— complete business name and address (no acronyms), type of entity responsible for the transportation, telephone number and names of contact persons;
— complete business name, address (no acronyms), and status of the addressee (e.g. retail pharmacy, hospital or community clinic);
— a description of the products including, e.g. name, dosage form and strength (if applicable);
— quantity of the products, i.e. number of containers and quantity per container (if applicable);
— applicable transport and storage conditions;
— a unique number to allow identification of the delivery order; and assigned batch number and expiry date (where not possible at dispatch, this information should at least be kept at receipt to facilitate traceability).

12.6 Records of dispatch should contain enough information to enable traceability of the product. Such records should facilitate the recall of a batch of a product, if necessary, as well as the investigation of counterfeit or potentially counterfeit pharmaceutical products.

12.7 In addition, the assigned batch number and expiry date of products should be recorded at the point of receipt to facilitate traceability.

12.8 Methods of transportation, including vehicles to be used, should be selected with care, and local conditions should be considered, including the climate and any seasonal variations experienced. Delivery of products requiring controlled temperatures should be in accordance with the applicable storage and transport conditions.

12.9 Delivery schedules should be established and routes planned, taking local needs and conditions into account. Such schedules and plans should be realistic and systematic. Security risks should also be taken into account when planning the schedules and routes of the delivery.

12.10 Care should be taken to ensure that the volume of products ordered does not exceed the capacity of storage facilities at the destination.

12.11 Vehicles and containers should be loaded carefully and systematically, where applicable on a first-out/last-in basis, to save time when unloading, prevent physical damage and reduce security risks. Extra care should be taken during loading and unloading of cartons to avoid damage.

12.12 Products should not be supplied or received after their expiry date, or so close to the expiry date that this date is likely to be reached before the products are used by the consumer.

12.13 Incoming shipments should be examined to verify the integrity of the container/closure system, ensure that tamper-evident packaging features are intact, and that labeling appears intact.

13. Transportation and products in transit

13.1 Products and shipment containers should be secured to prevent or provide evidence of unauthorized access. Vehicles and operators should be provided with additional security, as appropriate, to prevent theft and other misappropriation of products during transportation.

13.2 Product shipments should be secured and include the appropriate documentation to facilitate identification and verification of compliance with FDA’s requirements.

Policies and procedures should be followed by all persons involved in the transportation, to secure products.

13.3 The people responsible for the transportation of products should be informed about all relevant conditions for storage and transportation. These requirements should be adhered to throughout transportation and at any intermediate storage stages.

13.4 Products should be stored and transported in accordance with procedures such that:

- The identity of the product is not lost.
- The product does not contaminate and is not contaminated by other products.
- Adequate precautions are taken against spillage, breakage, misappropriation and theft.
- Appropriate environmental conditions are maintained, e.g. using cold chain for thermo labile products.

13.5 The required storage conditions for products should be maintained within acceptable limits during transportation. If a deviation has been noticed during transportation by the person or entity responsible for transportation, this should be reported to the distributor and recipient. In cases where the recipient notices the deviation, it should be reported to the distributor. Where necessary, the manufacturer of the product should be contacted for information about appropriate steps to be taken.

13.6 Where special conditions are required during transportation that are different from or limit the given environmental conditions (e.g. temperature and humidity) these should be provided by the manufacturer on the labels and should be monitored and recorded.

13.7 Written procedures should be in place for investigating and dealing with any failure to comply with storage requirements, e.g. temperature deviations.

13.8 Transportation and storage of products containing hazardous substances, such as toxic, radioactive material, and other dangerous pharmaceutical products presenting special risks of abuse, fire or explosion (e.g. combustible or flammable liquids, solids and pressurized gases) should be stored in safe, dedicated and secure areas, and transported in safe, suitably designed, secured containers and vehicles.

13.9 Products containing narcotics and other dependence-producing substances should be transported in safe and secure containers and vehicles and be stored in safe and secure areas. In addition, applicable international agreements and FDA legislation should be complied with.

13.10 Spillages should be cleaned up as soon as possible to prevent possible contamination, cross-contamination and hazards. Written procedures should be in place for the handling of such occurrences.

13.11 Physical or other equivalent (e.g. electronic) segregation should be provided for the storage and distribution during transit of rejected, expired, recalled or returned products and suspected counterfeits.

The products should be appropriately identified, securely packaged, clearly labelled and be accompanied by appropriate supporting documentation.

13.12 The interiors of vehicles and containers should remain clean and dry while pharmaceutical products are in transit.

13.13 Packaging materials and shipment containers should be of suitable design to prevent damage of products during transport. Seal Control programmes should be in place and managed properly.

13.14 Drivers of vehicles should identify themselves and present appropriate documentation to demonstrate that they are authorized to transport the load.

13.15 Damage to containers and any other event or problem that occurs during transit must be recorded and reported to the relevant department, entity or authority, and investigated.

13.16 Products in transit must be accompanied by the appropriate documentation.

14. Documentation

14.1 Written instructions and records which document all activities relating to the distribution of products, including all applicable receipts and issues (invoices) should be available. Records should be kept for seven years.

14.2 Distributors should keep records of all products received. Records should contain at least the following information:

- date;
- name of the product;
- quantity received, or supplied; and
- Name and address of the supplier.

14.3 Procedures should be established and maintained for the preparation, review, approval, use of and control of changes to all documents relating to the distribution process. Procedures must be in place for both internally generated documents and those from external sources.

14.4 Documents, and in particular instructions and procedures relating to any activity that could have an impact on the quality of products, should be designed, completed, reviewed and distributed with care.

14.5 The title, nature and purpose of each document should be clearly stated. The contents of documents should be clear and unambiguous. Documents should be laid out in an orderly fashion and be easy to check.

14.6 All documents should be completed, approved, signed (as required) and dated by an appropriate authorized person(s) and should not be changed without the necessary authorization.

14.7 The nature, content and retention of documentation relating to the distribution of products and any investigations conducted and action taken should be retained for at least one year after the expiry date of the product concerned.

14.8 The distributor must establish and maintain procedures for the identification, collection, indexing, retrieval, storage, maintenance, disposal of and access to all applicable documentation.

14.9 All records must be readily retrievable, and be stored and retained using facilities that are safeguarded against unauthorized modification, damage, deterioration and/or loss of documentation.

14.10 Documents should be reviewed regularly and kept up to date. When a document has been revised, a system should exist to prevent inadvertent use of the superseded version.

14.12 Records relating to storage of products should be kept and be readily available upon request by the FDA

14.13 Permanent records, written or electronic, should exist for each stored product indicating recommended storage conditions, any precautions to be observed and retest dates. Pharmacopoeia requirements and current FDA regulations concerning labels and containers should be respected at all times.

14.14 Procedures should be in place for temperature mapping. Systems should be in place for security services to prevent theft or tampering with goods at the storage facilities, destruction of unsaleable or unusable stocks and on retention of the records.

14.15 Where the records are generated and kept in electronic form, backups should be maintained to prevent any accidental data loss.

15. Complaints

15.1 There should be a written procedure in place for the handling of complaints. A distinction should be made between complaints about a product or its packaging and those relating to distribution. In the case of a complaint about the quality of a product or its packaging, the original manufacturer and/ or marketing authorization holder should be informed as soon as possible.

15.2 All complaints and other information concerning potentially defective and potentially counterfeit products should be reviewed carefully according to written procedures describing the action to be taken, including the need to consider a recall where appropriate.

15.3 Any complaint concerning a material defect should be recorded and thoroughly investigated to identify the origin or reason for the complaint (e.g. repackaging procedure or original manufacturing process).

15.4 If a defect relating to a product is discovered or suspected, consideration should be given to whether other batches of the product should also be checked.

15.5 Where necessary, appropriate follow-up action should be taken after investigation and evaluation of the complaint. There should be a system in place to ensure that the complaint, the response received from the original product manufacturer, or the results of the investigation of the complaint, are shared with all the relevant parties.

15.6 Product quality problems or suspected cases of counterfeit products should be documented and the information shared with the FDA

16. Recalls

16.1 There should be a system, which includes a written procedure, to effectively and promptly recall products known or suspected to be defective or counterfeit, with a designated person(s) responsible for recalls. This procedure should be checked regularly and updated as necessary.

16.2 The original manufacturer and/or marketing authorization holder should be informed in the event of a recall. Where a recall is instituted by an entity other than the original manufacturer and/or marketing authorization holder, consultation with the original manufacturer and/or marketing authorization holder should, where possible, take place before the recall is instituted. Information on a recall should be shared with the FDA. If a recall of the original product is necessary because of a counterfeited product which is not easily distinguishable from the original product, the manufacturer of the original product and FDA should be informed.

16.3 The effectiveness of the arrangements for recalls should be evaluated at regular intervals. All recalled products should be stored in a secure, segregated area pending appropriate action.

16.4 Recalled products should be segregated during transit and clearly labeled as recalled products. Where segregation in transit is not possible, such goods must be securely packaged, clearly labeled, and be accompanied by appropriate documentation.

16.5 The particular storage conditions applicable to a product which is subject to recall should be maintained during storage and transit until such time as a decision has been made regarding the fate of the product in question.

16.6 All customers to whom a given product may have been distributed should be informed promptly of any intention to recall the product because it is, or is suspected to be, defective or counterfeit.

16.7 All records should be readily available to the designated person(s) responsible for recalls. These records should contain sufficient information on products supplied to customers (including exported products).

16.8 The progress of a recall process should be recorded and a final report issued, which includes reconciliation between delivered and recovered quantities of products.

16.9 When necessary emergency recall procedures should be implemented.

17. Returned products

17.1 A distributor should receive product returns or exchanges pursuant to the terms and conditions of the agreement between the distributor and the recipient. Both distributors and recipients should be accountable for administering their returns process and ensuring that the aspects of this operation are secure and do not permit the entry of counterfeit products.

17.2 The necessary assessment and decision regarding the disposition of such products must be made by a suitably authorized person. The nature of the product returned to the distributor, any special storage conditions required, its condition and history and the time elapsed since it was issued, should all be taken into account in this assessment. Where any doubt arises over the quality of a product, it should not be considered suitable for reissue or reuse

17.3 Provision should be made for the appropriate and safe transport of returned products in accordance with the relevant storage and other requirements.

17.4 Rejected products and those returned to a distributor should be appropriately identified and handled in accordance with a procedure which involves at least:

— the physical segregation of such products in quarantine in a dedicated area; or
— Other equivalent (e.g. electronic) segregation.

This is to avoid confusion and prevent distribution until a decision has been taken with regard to their disposition. The particular storage conditions applicable to a product which is rejected or returned should be maintained during storage and transit until such time as a decision has been made regarding the product in question.

17.5 Provision should be made for the appropriate and safe transport of rejected products prior to their disposal.

17.6 Destruction of products should be done in accordance with FDA requirements regarding disposal of such products, and with due consideration to protection of the environment.

17.7 Records of all returned, rejected and/or destroyed products should be kept for one year plus the shelf life of the product.

18. Counterfeit products

18.1 Counterfeit products found in the distribution chain should be kept apart from other products to avoid any confusion. They should be clearly labeled as not for sale and FDA and the holder of the marketing authorization for the original product should be informed immediately.

18.2 The sale and distribution of a suspected counterfeit product should be suspended and the FDA notified without delay.

18.3 Upon confirmation of the product being counterfeit a formal decision should be taken on its disposal, ensuring that it does not re-enter the market, and the decision recorded.

19. Contract activities

19.1 Any activity relating to the distribution of a product which is delegated to another person or entity should be performed by parties appropriately authorized for that function and in accordance with the terms of a written contract.

19.2 The contract should define the responsibilities of each party including observance of the principles of GDP and relevant warranty clauses. It should also include responsibilities of the contractor for measures to avoid the entry of counterfeit medicines into the distribution chain, such as by suitable training programs.

19.3 All contract accepters should comply with the requirements in these guidelines.

19.4 Subcontracting may be permissible, under certain conditions and subject to the written approval of the contract giver; however, the subcontractors should be authorized for the function.

19.5 Contract accepters should be audited periodically by the contract giver.

20. Self-inspection

20.1 The quality system should include self-inspections. These should be conducted to monitor implementation and compliance with the principles of GDP and, if necessary, to trigger corrective and preventive measures.

20.2 Self-inspections should be conducted in an independent and detailed way by a designated, competent person.

20.3 The results of all self-inspections should be recorded. Reports should contain all observations made during the inspection and, where applicable, proposals for corrective measures. There should be an effective follow-up program. Management should evaluate the inspection report and the records of any corrective actions taken.