# GUIDELINES ON GOOD DISTRIBUTION PRACTICES FOR PHARMACEUTICAL PRODUCTS

## Document No: CDSCO/GDP.PP Ver.: 00

***DRAFT GUIDANCE***

*This guidance document is for feedback purposes only. Comments suggestions, if any, may please be submitted to the office of Drugs Controller General India within thirty days*

**CENTRAL DRUGS STANDARD CONTROL ORGANIZATION**
**DIRECTORATE GENERAL OF HEALTH SERVICES**
**MINISTRY OF HEALTH & FAMILY WELFARE**
**GOVT. OF INDIA**

# PREFACE

Distribution and storage are essential activity in the integrated supply-chain management of pharmaceutical products. Various individuals and entities are generally responsible for the handling, storage and distribution of such products. So it is important to have adequate controls over the entire chain of distribution. To maintain the original quality of pharmaceutical products, every party involved in the distribution chain has to comply with the applicable requirement. Each activity in the distribution of pharmaceutical products shall be carried out according to the principles of Good Distribution Practices (GDP) as applicable.

The nature of the risks involved is likely to be similar to that for risks encountered in the manufacturing environment, e.g. mix-ups, adulteration, contamination, cross-contamination, spurious. The involvement of unauthorized entities in the distribution and sale of pharmaceutical products is a particular concern. Only a joint approach of all parties involved in the supply chain can be successful in the fight against spurious/not of standard quality pharmaceutical products. Therefore, all parties in supply chain shall take an active part in collaborative activities to protect the pharmaceutical supply chain against the penetration of spurious/substandard pharmaceutical products

Earlier, CDSCO had introduced guidelines on good distribution practices for biological products vide Document No: CDSCO/GDP.BP Ver.: 00 Effective Date: 08/10/2012. Later, the draft guidelines on Good Distribution Practices for Pharmaceutical products was published / circulated on 25/09/2018 through Notice vide F. No. 15-14/2018-DC seeking comments from stakeholders.

This document prepared in line with WHO TRS on Good Storage and Distribution practices for Pharmaceutical products sets out steps to assist in fulfilling the responsibilities involved in the different stages within the supply chain and to avoid the introduction of spurious, adulterated, misbranded and not of standard quality products into the market and is intended to be applicable to all entities involved inany aspect of the storage and distribution of pharmaceutical products, from the premises of the manufacturer of the medical product to his or her agent, or the person dispensing or providing medical products directly to a patient.

## TABLE OF CONTENTS

## 1.0 INTRODUCTION

This document sets out steps to assist in fulfilling the responsibilities involved in the different stages within the supply chain and to avoid the introduction of not of standard quality and spurious products into the market. The relevant sections should be considered as particular roles that entities play in the storage and distribution of medical products. Not of standard quality and spurious products are a significant threat to public health and safety.

Consequently, it is essential to protect the supply chain against the penetration of such products. This guideline is intended to be applicable to all entities involved in any aspect of the storage and distribution of medical products, from the premises of the manufacturer of the medical product to his or her agent, or the person dispensing or providing medical products directly to a patient.

This includes all entities involved in different stages of the supply chain of medical products; manufacturers and wholesalers, as well as brokers, suppliers, distributors, logistics providers, traders, transport companies and forwarding agents and their employees.

This guideline can be used as a tool in the prevention of distribution of not of standard quality and spurious products.

## 2.0 OBJECTIVE

The objective of these guidelines is to ensure the quality and identity of pharmaceutical products during all aspects of the distribution process. These aspects include, but are not limited to procurement, purchasing, storage, distribution, transportation, documentation and record-keeping practices.

## 3.0 SCOPE

These guidelines are intended to be applicable to all persons and outlets involved in any aspect of the storage and 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 trade and distribution of pharmaceutical, including the manufacturers of bulk, finished products, wholesalers, as well as others such as suppliers, distributors, Government institutions, international procurement organization, donor agencies and certifying bodies, logistics providers, traders, transport companies and forwarding agents and their employees as well as health workers.

It also covers biological products in general. However, for specific purpose, guidelines on Good Distribution Practices for Biological Products as published in CDSCO website shall be referred.

## 4.0 GENERAL PRINCIPLES

4.1. According to Drugs & Cosmetics Act 1940 and Drugs & Cosmetic Rules 1945, Rules 64 and 65 specify the conditions to be fulfilled to sell, stock, exhibit or offer for sale or distribute the drugs.

4.2. It shall be the responsibility of all parties involved in the distribution of pharmaceutical products to ensure that the quality of pharmaceutical products and the integrity of the distribution chain are 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 shall be applicable both to pharmaceutical 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, as a result of the return or recall thereof and shall be applicable for donated pharmaceutical products.

4.4. There shall be collaboration between all parties including government, custom agencies, law enforcement agencies, regulatory authorities, manufacturers, distributors and entities responsible for the supply of pharmaceutical products to patients to ensure the quality and safety of pharmaceutical products, prevent the exposure of patients to spurious pharmaceutical products and to ensure that the integrity of distribution chain is maintained.

4.5. An agreement shall be in place with all the individual agencies involved in the storage, transportation and distribution.

## 5.0 REGULATION OF THE DISTRIBUTION OF PHARMACEUTICAL PRODUCTS

5.1. The activities of persons or entities involved in the distribution of products shall be regulated by Drugs and Cosmetics Act 1940 and rules 1945 made thereunder.

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

5.3. Only authorized persons or entities who hold the appropriate license shall be entitled to import or export pharmaceutical products.

5.4. Distributors or their agents shall obtain their supplies of pharmaceutical products from persons or entities authorized to sell or supply such products to a distributor and shall supply pharmaceutical 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 tosell or supply products directly to a patient or to his or her agent.

5.5. If the activity of a distributor or his or her agent is subcontracted to another entity, the person or entity to which the activity is subcontracted shall be appropriately authorized to perform the subcontracted activity and shall uphold the same standards as the distributor.

5.6 The activity of distributor and retailer shall be taken under supervision of qualified staff as specified in Drugs Rules 1945.

**5. Quality management**

5.1 Entities involved in the storage and distribution of pharmaceutical products ~~should~~ shall have a comprehensively designed, documented and correctly implemented quality system that incorporates GSP, GDP, principles of quality risk management and management review.

5.2 Senior management has the ultimate responsibility to ensure that an effective quality system is established, resourced, implemented and maintained.

5.3 The quality system shall ensure that:

- GSP and GDP are adopted and implemented to ensure that the quality of pharmaceutical products is maintained throughout their shelf life in the supply chain; and pharmaceutical products are appropriately procured, stored, distributed and delivered to the appropriate recipients,
- operations are clearly specified in written procedures;
- responsibilities are clearly specified in job descriptions;
- all risks are identified and necessary, effective controls are implemented;
- processes are in place to assure the management of outsourced activities;
- there is a procedure for self-inspection and quality audits;
- there is a system for quality risk management;
- there are systems for managing returns, complaints and recalls; and
- there are systems to manage changes, deviations and corrective an preventive actions (CAPAs).

5.4 There shall be an authorized, written quality policy describing the overall intentions and requirements regarding quality. This may be reflected in a quality manual.

5.5 There shall be an appropriate organizational structure. This shall be presented in an authorized organizational chart. The responsibility, authority and interrelationships of personnel shall be clearly indicated.

5.6 Roles and responsibilities shall be clearly defined and understood by the individuals concerned, and recorded as written job descriptions.

5.7 The quality system shall include appropriate procedures, processes and resources.

**6. Quality risk management**

6.1 There shall be a system to assess, control, communicate and review risks identified at all stages in the supply chain.

6.2 The evaluation of risk shall be based on scientific knowledge and experience and ultimately be linked to the protection of the patient.

6.3 Appropriate controls shall be developed and implemented to address all risks. The effectiveness of the controls implemented shall be evaluated at periodic intervals.

**7.0 ORGANIZATION AND MANAGEMENT**

7.1. An adequate organizational structure for each entity in the chain of distribution shall be defined with the aid of an organizational chart. The responsibility, authority and interrelationships of all personnel shall be clearly indicated. An organogram/ organizational chart shall be in place.

7.2. There shall be clearly defined duties and responsibilities for individuals and shall be recorded as written job descriptions. At every level of the supply chain, employees shall be fully informed and trained in their duties and responsibilities.

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

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

7.5. It shall be ensured that the responsibilities placed on any one individual shall not be so extensive as to present any risk to product quality.

7.6. There shall be arrangements in place to ensure that management and personnel are not subject to commercial, political, financial and other pressures or conflict of interest that may have an adverse effect on the quality of service provided or on the integrity of pharmaceutical products.

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

**8. Management review**

8.1 There shall be a system for periodic management review. The review shall include at least:

- senior management;
- review of the quality system and its effectiveness by using quality metrics and key performance indicators;
  identification of opportunities for continual improvement; and

follow-up on recommendations from previous management review meetings.

8.2 Minutes and related documentation from management review meetings should be available.

**9.0 PERSONNEL**

9.1. All personnel involved in distribution activities shall be trained an qualified in the requirements of GDP, as applicable. Training shall be based on written standard operating procedures (SOPs), GSP and GDP. Personnel shall 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 shall include the topic of product handling, safety and security, as well as aspects of product identification, the detection of spurious pharmaceutical product and the avoidance of spurious pharmaceutical product entering the supply chain. A record of all training, which includes details of subjects covered and participants trained, shall be kept.

9.2 Personnel dealing with hazardous 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, fire or explosion) should be given specific training.

9.3. Key personnel involved in the distribution of pharmaceutical products shall have the ability and experience for ensuring that the pharmaceutical products are properly stored and distributed as per the requirement of the product.

9.4. There shall 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.

9.5. Personnel involved in the distribution of pharmaceutical products shall wear garments and adopt other personnel protection measures suitable for the activities that they perform. Protective garments as necessary shall be provided to the personnel dealing with hazardous pharmaceutical products, including products containing materials that are highly active, toxic, infectious or sensitizing materials.

9.6. Procedures for personnel hygiene relevant to the activities to be carried out shall be laid down and observed. Such procedures shall cover health, hygiene and clothing of personnel.

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

## 10.0 QUALITY SYSTEM

10.1. All pharmaceutical product distributors shall establish and maintain Quality System. There shall be documented quality policy describing the overall intentions and requirements of distributors regarding quality, authorized by the management.

10.2. There shall be an appropriate organizational structure with defined responsibilities of the personnel recorded as job descriptions.

10.3. A responsible person shall be appointed by the management for each distribution site, who shall have defined authority and responsibility for ensuring that a quality system is implemented and maintained.

10.4. Senior management shall ensure that all parts of quality system are adequately resourced with competent personnel and suitable and sufficient premises, equipment's and facilities.

10.5. There shall be written and approved procedure for all the activities.

10.6. Deviations from established procedures shall be documented and investigated.

10.7. Appropriate corrective and preventive action (CAPA) shall be taken to correct deviations and prevent them.

10.8. Procedures for procurement and release shall be in place to ensure that appropriate pharmaceutical products are sourced only from approved suppliers and distributed by approved entities.

10.9. Inspection, auditing and certification of compliance with a quality system (such as the applicable International Standardization Organization (ISO) series, or national or international guidelines) by external bodies are recommended.

10.10. Procedures shall be in place to ensure safe, transparent and secure distribution system which includes product traceability throughout the supply chain.

10.11. There shall be procedures in place to ensure document traceability of products received and distributed, to facilitate product recall.

10.12. All parties involved in the supply chain shall be identifiable depending on type of product and in accordance with National Legislation.

10.13. Measures shall be in place to ensure that pharmaceutical products have documentation that can be used to permit traceability of the products throughout distribution channels from the manufacturer/imported 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 shall be part of a secure distribution documentation enabling traceability.

## 11.0 PREMISES, WAREHOUSING AND STORAGE

11.1. Storage areas shall be maintained or designed to ensure Good storage practices (GSP).

11.2. Premises shall be suitably located, designed, constructed and maintained, to ensure appropriate operations such as receiving, storage, picking, packing and dispatch of pharmaceutical products. Storage areas shall be suitably secured, structurally sound and of sufficient capacity to allow for the safe storage and handling.

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

11.4. Precautions shall be taken to prevent unauthorized persons from entering storage areas.

11.5. Segregated areas shall be designated for storage of the pharmaceutical products in quarantine and for storage of released, rejected, returned or recalled products as well as those suspected to be spurious.

11.6. Storage areas shall be designed or adapted to ensure appropriate and good storage conditions and shall be clean and dry and maintained within acceptable temperature limits. Pharmaceutical products shall be stored off the floor and suitably spaced to permit cleaning and inspection. Pallets shall be kept in a good state of cleanliness and condition.

11.7. Premises and storage areas shall be cleaned regularly. Where possible, receiving and dispatch bays shall be separate, to avoid mix-ups. Bays shall protect products from weather conditions.

11.8 Activities relating to receiving and dispatch shall be done in accordance with authorized procedures. Areas should be suitably equipped for the operations.

11.9. There shall also be a written programme for pest control and the pest control agents used shall be safe and there shall be no risk of contamination of pharmaceutical products. There shall be appropriate procedures for the clean-up of any spillage to ensure complete removal of any risk of contamination.

11.10. If sampling is performed in the storage area, it shall be conducted in such a way as to prevent contamination or cross-contamination. Adequate cleaning procedures shall be in place for the sampling areas.

11.11. Receiving and dispatch bays shall protect pharmaceutical products from the weather. Receiving areas shall be designed and equipped to allow incoming containers of pharmaceutical products to be cleaned, if

necessary, before storage. Handling and storage of pharmaceutical products shall in such a manner as to prevent contamination, mix-upsand cross-contamination.

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

11.13. Arrangement shall be made for withdrawing broken or damaged items from unusable stock and storing separately.

11.14. There shall be appropriately identified areas with adequate segregationfor storage of quarantined, rejected, expired, recalled or returned products to prevent unintentional or unauthorized use of such products.

11.15. Dedicated area(s) with appropriate additional safety and security measures shall be provided for storage of radioactive materials, narcotics and other hazardous, sensitive and/or dangerous pharmaceuticalproducts as well as products presenting special risks of abuse, fire or explosion (e.g combustible or flammable liquids and solids and pressurizedgases).

11.16 Toilets, washing, rest and canteen facilities should be separate from areas where products are handled. Food, eating, drinking and smoking should be prohibited in all areas where medical products are stored or handled.

## 12.0 TEMPERATURE, ENVIRONMENT AND STOCK CONTROL

**12.1** Storage and handling conditions shall comply with applicable National regulations.

12.2. Storage conditions for pharmaceutical products shall be in compliance with the recommendations of the manufacturer. This is key to ensure quality of all pharmaceutical products.

12.3. Facilities shall be available for the storage of all pharmaceutical products under appropriate conditions (e.g environmentally controlled when necessary).

12.4. Records shall be maintained of storage conditions if they are critical for the maintenance of the characteristics of the pharmaceutical products. Records of temperature monitoring data shall be available for review. Thereshall be defined intervals for checking temperature. The equipment used for monitoring shall be checked at suitable predetermined intervals and the results of such checks shall be recorded and retained. All monitoring records shall be kept for at least the shelf-life of the stored product plusone year.

12.5. Storage areas shall be temperature mapped under representativeconditions. Temperature mapping shall show uniformity of the temperature across the storage facility. It is recommended that temperature monitors be located in areas that are most likely to show fluctuations.

12.6. Equipment used for monitoring of storage conditions shall also be calibrated at defined intervals.

12.7 Records of stock levels for all pharmaceutical products in store shall be maintained, in either paper or electronic format. These records should be updated after each operation (e.g. entries, issues, losses, adjustments). These records shall be kept for a suitable period of time and readily available. Periodic stock reconciliation shall be performed at defined intervals, by comparing the actual and recorded stock.

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

12.9. The root cause for stock discrepancies shall be identified and appropriate CAPAs taken to prevent recurrence.

12.10 When damaged containers are received, this shall be brought to the attention of the person responsible for quality. Any action taken shall be documented. (These containers shall not be issued unless the quality of the pharmaceutical products has been shown to be unaffected.)

12.11. All stock shall be checked at regular intervals, to identify those items that are close to their retest or expiry date. Appropriate action shall be taken, such as removal of these items from useable stock.

**13.0 TRANSPORTATION**

13.1. Pharmaceutical products shall be transported in accordance with the storage conditions indicated on the packaging information and on the label.

13.2. The individuals responsible for the transportation of pharmaceutical products shall be informed about all relevant conditions for storage and transportation. These requirements shall be adhered throughout transportation and at any intermediate storage stages.

13.3. Pharmaceutical products shall be stored and transported in accordance with procedures such that:

13.3.1. The identity of the product is not lost.
13.3.2. The product does not contaminate and is not contaminated by other products.

13.3.3. Adequate precautions are taken against spillage, breakage, misappropriation and theft. Spillage during transport shall be handled as per type of vaccine (eg. live, killed, etc.) according to the standard operating procedures of the manufacturer.

13.3.4. Appropriate environmental conditions are maintained, e.g. using cold chain for thermo labile products.

13.4. A written agreement between the manufacturer, Government Institution, agent and Transport Company shall be in place.

13.5. Appropriate transport methods shall be employed which may include transport by air, road, sea, rail or a combination of the above. Regardless of the chosen mode, it shall be demonstrated that the products have not been subjected to conditions during transportation that may compromise their quality. A risk based approach be utilized when planning transportation routes.

13.6. The required storage conditions for pharmaceutical products shall be maintained during transportation within the defined limits as described on the packaging information.

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

13.8. If a deviation has occurred during transportation, this shall be reported to the distributor and recipient of the affected pharmaceutical products. Written procedures shall be in place to investigate and deal with any failure to comply with storage requirements, e. g temperature deviations.

13.9. In cases where the recipient notices the deviation, it shall be reported to the distributor. Where necessary, the manufacturer of the pharmaceutical product shall be contacted for information about appropriate steps to be taken.

13.10. Pharmaceutical 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), shall be stored in safe, dedicated and secure areas and transported in safe, suitably designed, secured containers and vehicles and the requirements of applicable National legislation shall be met.

13.11. Products containing narcotics and other dependence- producing substances shall be transported in safe and secure containers and vehicles and be stored in safe and secure areas and applicable international agreements and National legislation shall be complied with. Spillage shall be cleaned up as soon as possible to prevent possible contamination, cross-contamination and hazards and written procedures shall be in place for handling of such situation.

13.12. Adequate segregation shall be provided for the storage and distribution during transit of rejected, expired, recalled or returned pharmaceutical products. The products shall be appropriately identified, securely packaged, clearly labelled and be accompanied by appropriate supporting documentation.

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

13.14. Properly designed packaging materials and shipment containers shall be provided to prevent damage of pharmaceutical products during transport.

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

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

13.17. Pharmaceutical products in transit shall be accompanied by the appropriate documentation.

13.18. It is the responsibility of the distributor to ensure that vehicles and equipment used to distribute, store or handle pharmaceutical products are suitable for their use and appropriately equipped to prevent exposure of the products to conditions that shall affect their quality and packaging integrity, and to prevent contamination of any kind.

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

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

13.21. Particular attention shall be paid to the fact that cleaning agents shall not adversely affect the product quality.

13.22. Vehicles, containers and equipment shall be kept free from rodents, vermin, birds and other pests. There shall be written programs and records for such pest control.

13.23. Equipment used for temperature and humidity monitoring (Data Logger) during transport within vehicles and/or containers, shall be maintained and calibrated at regular intervals at least once a year or earlier depending upon the criticality of the product.

13.24. All monitoring records shall be kept for a minimum of the shelf- life of the product distributed plus one year or as required by National legislation.

13.25. Records of monitoring data shall be made available for inspection by the Regulatory Authority.

13.26. Equipment chosen and used for the cleaning of vehicles shall not constitute a source of contamination and cleaning agents shall be approved by management. It is essential to pay special attention 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.

13.27. Dedicated vehicles and equipment shall be used, where possible, when handling pharmaceutical products. Procedures shall be in place to ensure that the quality of the pharmaceutical product shall not be compromised where non-dedicated vehicles and equipment shall be used.

13.28. Appropriate documents shall accompany pharmaceutical products in transit.

13.29. Vehicles and containers selected shall be of sufficient capacity to allow orderly storage of the various categories of pharmaceutical products during transportation.

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

13.31. Adequate measures shall be taken to ensure that no unauthorized persons enter and tamper the vehicles and/or equipment, so as to preventthe theft or misappropriation thereof.

## 14.0 SHIPMENT CONTAINERS AND LABELING

14.1. Pharmaceutical products shall be transported in shipment containers that have no adverse effect on the quality of the products, and that offer adequate protection from external influences, including contamination.

14.2. Selection of a container and packaging shall be based on the storage and transportation requirements of the pharmaceutical products; namely the space required for the amount of products; the anticipated external temperature extreme; the estimated maximum time for transportation including transit storage at customs and the validation status of the packaging and shipment containers.

14.3. Labels on the containers shall bear sufficient information on handling and storage requirements and precautions to ensure that the products are

properly handled and secured at all times. The containers shall enable identification of the contents of the containers and the source.

14.4. Special care shall be taken when using dry ice in shipment containers. It shall be ensured in addition to safety issues, that Pharmaceutical products do not come in direct contact with dry ice which may have an adverse effect on the quality of the product.

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

14.6. The need for any special transport and/or storage conditions shall be stated on the shipment container label. If a pharmaceutical 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 shall also be included on the container label.

## 15.0 DISPATCH AND RECEIPT

15.1. Selling or distribution of pharmaceutical products shall be done to persons or entities that are authorized to acquire such products in accordance with the applicable national, state and international legislation. It is required to obtain written proof of such authority prior to the distribution of products to such persons or entities.

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

15.3. Only after the receipt of a valid delivery order or material replenishment plan, the dispatch and transportation of pharmaceutical products shall be undertaken, which shall be documented.

15.4. Written procedures for the dispatch of pharmaceutical products shall be established. Such procedures shall take into account the nature of the product as well as any special precautions to be observed. Pharmaceutical products under quarantine shall require release for dispatch by the person responsible for quality.

15.5. Records for the dispatch of pharmaceutical products shall 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 shall at least be kept at receipt to facilitate traceability).

15.6. It shall be ensured that records of dispatch contain enough information to enable traceability of the pharmaceutical product. Such records shall facilitate the recall of a batch of a product, if necessary, as well as the investigation of spurious or potentially spurious pharmaceutical products; the assigned batch number and expiry date of pharmaceutical products shall be recorded at the point of receipt to facilitate traceability.

15.7. It shall be ensured that the volume of pharmaceutical products ordered does not exceed the capacity of storage facilities at the destination.

15.8. There shall be no supply or receipt of pharmaceutical products 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.

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

15.10. Batch number and expiry date of pharmaceutical products shall be recorded at the point of receipt to facilitate traceability.

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

15.12. Delivery schedules shall be established and routes planned considering the local needs and condition and shall be realistic and systematic. When planning the schedules and routes of delivery, security risks shall also be taken into account.

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

## 16.0 DOCUMENTATION

16.1. Documentation comprises all written procedures, instructions, contracts, records and data, in paper or in electronic form. Documents shall be

appropriately designed, completed, reviewed, authorized, distributed and kept as required. Documents shall be readily available.

16.2. Written instructions and records which document all activities relating to the distribution of pharmaceutical products, including all applicable receipts and issues (invoices) shall be available.

16.3. Distributors shall keep records of all pharmaceutical products received. Records shall contain at least the following information:

- Date;
- Name of the pharmaceutical product, batch no, manufacturer's name.
- Quantity received, or supplied; and
- Name and address of the supplier.

16.4. Procedures shall be established and maintained for the preparation, review, approval, use of and control of changes to all documents relating to the distribution process.

16.5. The contents of documents shall be clear, accurate, legible, traceable, attributable and unambiguous. In particular, instructions and procedures relating to activity that may have an impact on quality of pharmaceutical products shall be designed, completed, reviewed and distributed with care.

16.6. Documentation shall be approved, signed and dated by appropriate authorized persons, as required. It shall not be hand-written; although, where documents require the entry of data, sufficient space shall be provided for such entries.

16.7. Any alteration made in the documentation shall be signed and dated; the alteration shall permit the reading of the original information. Where appropriate, the reason for the alteration shall be recorded.

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

16.9. All records shall be stored and retained using facilities that prevent unauthorized access, modification, damage, deterioration and/or loss of documentation during the entire life-cycle of the record. Records must be readily retrievable. Documents shall be retained for a period of 1 year after expiry of the product.

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

16.11. Documents shall be reviewed regularly and kept up to date.

16.12. Records shall be kept either in the form of purchase/sales invoices, delivery slips, or on computer or in any other form, for any transaction in pharmaceutical products received or supplied.

16.13. Records shall be made at the time each operation is taken and in such a way that all significant activities or events are traceable.

16.14. If electronic copies/data are stored then validation of computers and database management system shall be in place.

16.15. Mechanisms shall exist to allow for transfer of information, including quality or regulatory information, between a manufacturer and a customer, as well as the transfer of information to the relevant regulatory authority as required.

16.16. Records relating to storage of pharmaceutical products shall be kept and be readily available. Pharmacopoeial requirements and current National regulations concerning labels and containers shall be respected at all times.

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

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

16.19. Backup shall be maintained to prevent any accidental data loss where the records are generated and kept in electronic form.

**17.0 COMPLAINTS**

17.1. Written procedure shall be in place for the handling of complaints. A distinction shall be made between complaints about a pharmaceutical 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 shall be informed as soon as possible.

17.2. There shall be written procedure for reviewing carefully all complaints and other information concerning potentially defective and potentially spurious pharmaceutical products describing the action to be taken, including the need to consider a recall where appropriate.

17.3. Any complaint concerning a material defect shall be recorded and thoroughly investigated to identify the origin or reason for the complaint.

17.4. A risk based consideration shall be given to whether other batches of the pharmaceutical product shall also be checked if a defect relating to a pharmaceutical product is discovered or suspected.

17.5. Appropriate follow-up action shall be taken after investigation and evaluation of the complaint where necessary. A system shall be 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. All complaints shall be recorded and appropriately investigated. The root cause shall be Identified, and the impact (e.g. on other batches or products) risk-assessed. Appropriate CAPAs should be taken.

17.6. There shall be documentation of product quality problems or suspected cases of spurious products, misbranded, adulterated, not of standard quality and sharing of the information with the appropriate national and/or state regulatory authorities.

17.7 Where required, the information shall be shared with the Licensing Authority and a recall initiated where appropriate

**18.0 RECALLS AND RETURNS**

18.1. There shall be a written procedure for the management of recalls of defective pharmaceutical products with a designated person responsible for recalls. The effectiveness of the procedure shall be checked annually and updated as necessary.

18.2. The system of recall shall comply with Drugs & Cosmetics Act and Rules thereunder and the Guidelines on Recall and Rapid Alert System for Drugs (including Biological and Vaccines) as given on CDSCO website( www.cdsco.nic.in/www.cdsco.gov.in).

18.3. In the event of recall the original manufacturer and/or marketing authorization holder shall be informed. Consultation with the original manufacturer and /or marketing authorization holder shall take place, where possible, before the recall is instituted in case recall is instituted by an entity other than the original manufacturer.

18.4. National or State Regulatory Authority shall be shared with information on recall.

18.5. Recall operations shall be capable of being initiated promptly and at any time.

18.6. The distributor shall follow the instructions of a recall message, which shall be approved, if required, by the competent authorities.

18.7. Any recall operation shall be recorded at the time it is carried out and records shall be made available to the competent authorities.

18.8. The distribution records shall be readily available to the person(s) responsible for the recall, and shall contain sufficient information on distributors and directly supplied customers (with addresses, phone

and/or fax numbers inside and outside working hours, batches and quantities delivered).

18.9. Recalled pharmaceutical products shall be identified and stored separately in a secure area while awaiting a decision on their disposition.

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

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

18.12. All customers and competent authorities of all countries to which a given pharmaceutical product may have been distributed shall be informed promptly of any intention to recall the product because it is, suspected to be defective.

18.13. All records shall be readily available to the designated person(s) responsible for recalls containing sufficient information on pharmaceutical products supplied to customers (including exported products).

18.14. The progress of the recall process shall be recorded and a final report shall be issued, including reconciliation between the delivered and recovered quantities of the pharmaceutical products.

18.15. When necessary emergency recall procedures shall be implemented as per guideline on Recall and Rapid Alert System for Drugs (including Biological and Vaccines) as given on CDSCO website( www.cdsco.nic.in).

18.16. Rejected pharmaceutical products and those returned to a distributor shall be appropriately identified and handled in accordance with a procedure which involves at least:- the physical segregation of such pharmaceutical products in quarantine in a dedicated area; or other equivalent (e. g electronic) segregation.

18.17. Destruction of pharmaceutical products shall be done in accordance with international, national and local requirements regarding disposal of such products, and with due consideration to protection of the environment.

18.18. Records of all returned, rejected and/or destroyed pharmaceutical products shall be kept for a predetermined period.

18.19 Returned pharmaceutical products shall be handled in accordance with authorized procedures.

18.20 All returned pharmaceutical products shall be placed in quarantine upon receipt. The status of the goods shall be clear. Precautions shall be taken to prevent access and distribution until a decision has been taken with regard to their disposition. The particular storage conditions applicable to the pharmaceutical products shall be maintained until their disposition.

18.21. Pharmaceutical products returned shall be destroyed in accordance with international, national and local requirements regarding disposal of such products, and with due consideration to protection of the environment unless it is certain that their quality is satisfactory, after they have been critically assessed in accordance with a written and authorized procedure.

18.22. The nature of the pharmaceutical product, any special storage conditions it requires, its condition and history and the time lapse since it was issued, shall all be taken into account in this assessment. Where any doubt arises over the quality of the pharmaceutical product, it shall not be considered suitable for reissue or reuse. Any action taken shall be appropriately recorded.

18.23 When handling returned goods, the following considerations at least shall be taken:

- a risk-based process shall be followed when deciding on the fate of the returned goods. This shall include, but not be limited to, the nature of the product, storage conditions, condition of the product history, time-lapse since distribution and the manner and condition of transport while being returned;
- the terms and conditions of the agreement between the parties; and
- examination of the returned goods, with decisions taken by suitably qualified, experienced and authorized persons.

18.24. Where products are rejected, authorized procedures shall be followed, including safe transport.

18.25. Records of all returned, rejected and destroyed pharmaceutical products shall be kept for a predetermined period.

18.26. Returned medical products shall be handled in accordance with authorized procedures.

## 19.0 SPURIOUS, MISBRANDED, ADULTERATED AND NOT OF STANDARD QUALITY PHARMACEUTICAL PRODUCTS

**19.1** The quality system shall include procedures to assist in identifying and handling medical products that are suspected to be spurious, misbranded, adulterated and not of standard quality.

**19.2** Where such pharmaceutical products are identified, the holder of the marketing authorization, the manufacturer and the appropriate National and State Drugs Authorities shall be informed.

19.2. Such products if found in the distribution chain shall be completely segregated from other pharmaceutical products, clearly labelled as not for sale and national regulatory authorities and manufacturer of the original product shall be informed immediately.

19.3. The sale and distribution of a suspected spurious, misbranded, adulterated and not of standard quality pharmaceutical product shall be suspended and the national regulatory authority shall be notified without delay.

19.4. A formal decision shall be taken on its disposal, ensuring that it does not re-enter the market upon confirmation of the pharmaceutical product being spurious and the decision shall be recorded.

19.5. Records shall be maintained reflecting the investigations and action taken, such as disposal of the product. Such products shall not re-enterthe market.

## 20.0 IMPORTATION

20.1. Consignments of pharmaceutical products shall be stored under suitable conditions for as short a time as possible, at the port of entry.

20.2. Importers shall take all reasonable steps to ensure that pharmaceutical products are not mishandled or exposed to adverse storage conditions at wharves or airports.

20.3. Procedures shall be in place for quality assessment of imported pharmaceutical products as per applicable National legislation.

20.4. Customs, enforcement agencies and regulatory agencies responsible for supervision of pharmaceutical products shall establish means for cooperation and information exchange in order to prevent importation of spurious pharmaceutical products.

## 21.0 CONTRACT ACTIVITIES

21.1. Only parties appropriately authorized to distribute a pharmaceutical product shall be delegated to perform any activity relating to distribution of such product and in accordance with the terms of a written consent.

21.2. The responsibilities of each party including observance of the principles of GDP and relevant warranty clauses shall be defined in the contract. It shall also include responsibilities of the contractor for measures to avoid the entry of spurious pharmaceutical products into the distribution chain, such as by suitable training programme.

21.3. The requirements in these guidelines shall be complied with by allcontract acceptors.

21.4. Under certain conditions and subject to the written approval of the contract giver, subcontracting may be permissible, provided that the subcontractors shall be authorized for the function.

21.5. There shall be periodic audit of contract acceptors.

## 22.0 SELF-INSPECTION

22.1. Self-inspections shall be included in the quality system. These shall be conducted to monitor implementation and compliance with the principles of GDP and, if necessary, to trigger corrective and preventive measures.

22.2. A designated, competent person shall conduct self-inspection in an independent and detailed way.

20.3. There shall be records of self-inspection results which shall contain all observations made during the inspection and if required proposal for corrective measures. There shall be an effective follow-up programme and evaluation of inspection report and corrective action taken by the management.

20.4 Self-inspections should be conducted periodically, according to an annual schedule.

20.5 The team conducting the inspection should be free from bias and individual members should have appropriate knowledge and experience.

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