

#### COUNTY OF LOS ANGELES DEPARTMENT OF HEALTH SERVICES

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Director

### Los Angeles County Department of Health Services

Policy & Procedure Title:			Use of Single and Multi-Dose Parenteral Medication Vials				
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#### **PURPOSE:**

Establish use and storage requirements for single and multi-dose parenteral medication vials within DHS facilities.

## **DEFINITION(S):**

## Single-Dose Vial

 Medications in single-dose vials lack antimicrobial preservatives and are therefore at greater risk to become contaminated and serve as a source of infection when used inappropriately.

#### Multi-Dose Vial

- Medications in multi-dose vials contain antimicrobial preservatives.
- Only vials clearly labeled by the manufacturer for multiple dose use can be used more than once.

#### **Beyond Use Date**

 An assigned date or time, after which the storage or commencing of administration of a drug product or preparation is prohibited.

### **POLICY:**

A single-dose vial or parenteral medication is meant for use in a single patient for a single case/procedure/injection. All multi-dose vials containing parenteral medications are to be labeled with a beyond use date at the time of opening.

The mission of the Los Angeles County Department of Health Services is to ensure access to high-quality, patient-centered, cost-effective health care to Los Angeles County residents through direct services at DHS facilities and through collaboration with community and university partners.

#### PROCEDURE:

- 1) Proper Use of Single Dose Vials
  - a) Used single-dose vials must not be stored for later use, no matter what the size of the vial.
- 2) Proper Use of Multi-Dose Vials
  - a) When multiple-dose vials are used more than once, a new needle and new syringe must be used for each entry.
  - b) In order to minimize contamination of the vial's content, needles or other objects must not be left in vial entry diaphragms between uses.
  - c) All multi-dose vials containing parenteral medications are to be labeled with a beyond use date at the time of opening.
  - d) Once punctured, multi-dose vials must be assigned a beyond use date of 28 days or the manufacturer's expiration date, whichever is earlier.
  - e) Vaccines are exempt from the 28 day limit.
  - f) Under no circumstances will an assigned beyond use date exceed the manufacturer's expiration date.
    - The beyond use date shall be written on the label as "MM/DD/YY."
    - ii) A multi-dose vial will be discarded when it is opened without a beyond-use date documented on the vial.
  - g) A multi-dose or single dose vial will be discarded:
    - i) When it is empty.
    - ii) When suspected or visible contamination occurs
    - iii) When deterioration is suspected
    - iv) When particulate matter is present
    - v) When the rubber septum is damaged or appears to be leaking
    - vi) When it is "cracked" or "leaking."
    - vii) When it is stored outside of manufacturer's recommendations.
- 3) Patient Care and Procedure Areas
  - a) Proper Use of Single Dose Vials
    - i) A single-dose/single-use vial must be used for a single patient during the course of a single procedure.
    - ii) The vial must be discarded after single use and used vials should never be returned to stock on clinical units, drug carts, anesthesia carts, etc.
    - iii) If a single-dose vial must be entered more than once during a single procedure for a single patient to achieve safe and accurate titration of dosage, use a new needle and new syringe for each entry and must be used within 1 hour of puncture, or less if specified by the manufacturer. Disinfect the vial's rubber septum before piercing by wiping with 70% isopropyl alcohol. Allow the septum to dry before inserting a needle or other device into the vial.

### b) Proper Use of Multi-Dose Vials

- i) Limit the use of multiple-dose vials to only a single patient whenever possible, to reduce the risk of contamination.
- ii) The storage of multiple-dose vials must be limited to designated areas outside of immediate patient treatment areas and in accordance with the manufacturer's storage recommendations.
- iii) Disinfect the vial's rubber septum before piercing by wiping with 70% isopropyl alcohol. Allow the septum to dry before inserting a needle or other device into the vials.

## 4) Pharmacy Sterile Compounding Areas

- a) Proper Use of Single-Dose Vial
  - Single-dose vials opened in less than ISO Class 5 air quality must be used within one hour, with any remaining contents discarded.
  - ii) Single-dose vials opened in ISO Class 5 air quality can be used up to six hours.
  - iii) Pharmacy staff must disinfect the vial's rubber septum before piercing by wiping with sterile 70% isopropyl alcohol.
  - iv) Pharmacy staff must not combine or pool leftover contents of single-dose vials.
  - v) Unopened single-dose vials may only be repackaged in multiple single-dose containers (e.g. syringes) in an ISO Class 5 air condition in accordance with standards in the USP Chapter <797> and should be properly labeled with a beyond-use date.

## 5) Quality Assurance

a) Audit Control Personnel per facility policy will conduct monthly quality checks in patient and procedure areas to look for opened single-dose vials and multi-dose vials without a beyond use date or for those that have expired.

### 6) Training

- a) All permanent/temporary staff members who administer injections shall receive annual education addressing injection safety and the use of single and multi-dose vials.
- b) All patients and caregivers who will use injectable products will be offered education on injection safety.

# 7) Reporting

- a)
- Any staff member who becomes aware of injection safety risks, errors and adverse events are to report to the organization as outlined in facility policy.
- b) If unsafe injection and infection control practices are discovered, any affected patients will be notified, assessed for potential harm, and tested for blood borne pathogens.
- c) Each local facility shall report clusters of infection or other adverse events to local and state public health authorities.