Allergen Extract Compounding of In-Office Immunotherapy Vials

Background

Allergy diagnosis and management includes the need for physicians to prepare the immunotherapy prescription sets in their office. This preparation falls within the US Pharmacopoeia (USP) definition of sterile compounding. Physicians with training and expertise in allergen immunotherapy are qualified to safely compound allergy immunotherapy vials in their own office, if specific criteria are met. These criteria are defined by the USP and fall under USP General Chapter <797> Pharmaceutical Compounding — Sterile Preparation.

The American Academy of Otolaryngic Allergy (AAOA) working in concert with its allergy cohort and other impacted medical specialties worked closely to help assure allergen immunotherapy compounding was not compromised in the updated guidance.

In addition to adherence to USP General Chapter <797>, FDA guidance on sterile compounding also applies to the preparation of allergy immunotherapy.

Ultimately, each office needs a standard operating procedure (SOP) that outlines its formal mixing standards and procedures. Within this SOP, documentation regarding training, personnel qualifications, prescription mixing logs, allergenic extract supply logs, temperature logs, physician supervision, and related details to meet both the practice's SOP and USP General Chapter <797> guidance should be maintained.

The compounding bill, passed by Congress in November 2013, enforces regulation of compounding pharmacies. The statute contains two provisions that impact allergy immunotherapy:

- All compound sterile preparations must have a prescription
- Physicians must comply with all of the USP General Chapter <797> Pharmaceutical Compounding — Sterile Preparation criteria [1]

Like allergy testing, allergy immunotherapy compounding falls under both "Direct Supervision" and "Incident to" rules. Compliance with direct supervision and "incident to" requirements apply to in-office allergen extract compounding for allergen prescription set vial preparation. Code 95165 & 95144 describe the supervision and provision of antigens for allergy immunotherapy, whether single or multiple antigens.

- CPT codes are assigned a level of supervision:
    - **General:** Physician does not need to be on premise, but have management responsibility for staff who does the test
    - **Direct:** Physician needs to be in the office suite, but does not need to be in the room when the test is done.
    - **Personal:** Physician needs to be in the room when the test is performed
- Supervision for preparation of immunotherapy falls under ***direct supervision*** —meaning the physician needs to be in the office suite, but does not need to be in the room.
- Immunotherapy services are ***"incident to"***, requiring direct supervision within the office suite
- "Incident to" also confirms that this service must be done in the physician's office under the physician's supervision; If you ***outsource*** compounding you ***cannot bill*** codes 95165 or 95144.

Rules defining scope of practice for APPs vary by state. We recommend consulting with your state medical society for a better understanding of how supervision and incident to apply to AAPs in your state. For more on scope of practice, please review the AAOA Clinical Care Statement on State Regulations.

1 Lin, SY et al. Impact of newly revised sterile medication compounding guidelines USP <797> on allergy vial prep. Otolaryngology-Head and Neck Surgery (2008): 139, 5-6.

Note: American Academy of Otolaryngic Allergy's (AAOA) Clinical Care Statements attempt to assist otolaryngic allergists by sharing summaries of recommended therapies and practices from current medical literature. They do not attempt to define a quality of care for legal malpractice proceedings. They should not be taken as recommending for or against a particular company's products. The Statements are not meant for patients to use in treating themselves or making decisions about their care. Advances constantly occur in medicine, and some advances will doubtless occur faster than these Statements can be updated. Otolaryngic allergists will want to keep abreast of the most recent medical literature in deciding the best course for treating their patients.

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USP General Chapter <797> Compliance

USP General Chapter <797> Pharmaceutical Compounding — Sterile Preparations – 2019 Update Details

Under the new standards, in-office compounding of individual treatment sets for allergen immunotherapy, beginning Dec. 1, 2019 **(currently postponed until further notice)**, need to comply with the following:

Personnel Qualifications

- Designate one person with training and expertise in allergen immunotherapy to ensure all personnel who will be preparing allergen immunotherapy are trained, evaluated, and supervised.
- All personnel must complete training and be able to demonstrate knowledge of principles and skills for sterile compounding
- Annual personnel training and competency must be documented.
- Personnel must demonstrate proficiency in sterile compounding procedures by passing written or electronic testing before they can be allowed to compound allergenic extract prescription sets.
- All compounders must successfully complete gloved fingertip and thumb sampling on both hands, no fewer than 3 separate times. Each fingertip and thumb evaluation must occur after performing separate and complete hand hygiene and garbing procedure.

Hygiene and Garbing

- Before beginning allergen immunotherapy prescription set compounding, personnel must perform hand hygiene and garbing procedures according to facility Standard Operating Procedures (SOP).
- Minimum garb requirements:
  - sterile, powder-free gloves;
  - low-lint, sleeved garments that fit snugly around the wrists and enclose at the neck (e.g., gowns or coveralls);
  - low-lint, disposable head covers that cover hair, ears, and if applicable, facial hair
  - face mask

Facilities

- Compounding must occur in either (1) an ISO Class 5 Primary Engineering Control (PEC) **OR** (2) in a dedicated Allergenic Extracts Compounding Area (AECA).
- The PEC or AECA must be located away from unsealed windows, doors that connect to the outdoors, and traffic flow (all of which may adversely affect the air quality).
- Neither the PEC or AECA may be located where environmental control challenges (e.g., restrooms, warehouses, food preparation areas) could negatively affect the air quality.
- The PEC or AECA must be located at least 1 meter away from a sink.
- If used, a PEC must be certified every 6 months, and cleaned and disinfected daily and when surface contamination is known or suspected. Apply sterile 70% Isopropyl Alcohol (IPA) to the work surface between each prescription set.
- An AECA must have a visible perimeter and meet the following conditions:
  - Access restricted to authorized personnel during compounding.
  - No other activity permitted during compounding.
  - All surfaces must be cleanable.
  - No carpet is allowed.
  - Surfaces should be resistant to damage by cleaning and sanitizing agents.
  - Surfaces must be smooth, impervious, non-shedding, and free of cracks or crevices to allow for easier cleaning.
  - Dust-collecting overhangs (e.g., utility pipes, ledges, windowsills) should be minimized or must be easily cleaned.
  - Designed and controlled to provide a well-lighted working environment, with temperature and humidity controls for the comfort of compounding personnel wearing the required garb.

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- Work surfaces must be cleaned and disinfected daily and when surface contamination is known or suspected.
- Apply sterile 70% Isopropyl Alcohol (IPA) to the work surface between each prescription set.
- Walls, doors, and door frames within the perimeter of the Allergenic Extract Compound Area (AECA) must be cleaned and disinfected monthly and when surface contamination is known or suspected.
- Ceilings must be cleaned and disinfected when visibly soiled.

- Vial stoppers on packages of conventionally manufactured sterile ingredients must be wiped with 70% Isopropyl Alcohol (IPA) to ensure that the critical sites are wet and allowed to dry before they are used to compound allergenic extract prescription sets.

Establishing Beyond-use Dates (BUDs)

- The beyond-use date (BUD) for the prescription set must be no later than the earliest expiration date of any allergenic extract or any diluent that is part of the prescription set. The BUD must not exceed 1 year from the date the prescription set is mixed or diluted.

Labeling

- The label of each vial of an allergenic extract prescription set must display the following prominently and understandably:
  - Patient name
  - Type and fractional dilution of each vial, with corresponding vial number
  - Beyond-use date (BUD)
  - Storage conditions

Documentation

All facilities where allergenic extract prescription sets are prepared must have and maintain written or electronic documentation to include, but not limited to, the following:

- Standard Operating Procedures (SOPs) describing all aspects of the compounding process.
- Personnel training records, competency assessments, and qualification records, including corrective actions for any failures.
- Certification reports for Primary Engineering Control (PEC), if used, including any corrective actions for any failures.
- Temperature logs for refrigerator(s).
- Compounding records for individual allergenic extract prescription sets
- Compounding records must include:
  - Name, concentration, volume, vendor or manufacturer, lot number, and expiration date for each component
  - Date and time of preparation of the allergenic extracts
  - Assigned internal identification number
  - Method to identify the individuals involved in the compounding process and verifying the final compounded sterile preparation (CSP)
  - Total quantity compounded
  - Assigned BUD and storage requirements
  - Results of QC procedures (e.g., visual inspection, second verification of quantities)
- Information related to complaints and adverse events.
- Investigations and corrective actions

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