Commentary

USP 42–NF 37, Second Supplement

June 1, 2019

In accordance with USP's Rules and Procedures of the Council of Experts ("Rules"), and except as provided in Section 7.02 Accelerated Revision Processes, USP publishes proposed revisions to the *United States Pharmacopeia and the National Formulary* (*USP–NF*) for public review and comment in the *Pharmacopeial Forum (PF),* USP's free bimonthly journal for public notice and comment. After comments are considered and incorporated as the Expert Committee deems appropriate, the proposal may advance to official status or be re-published in *PF* for further notice and comment, in accordance with the Rules. In cases when proposals advance to official status without re-publication in *PF,* a summary of comments received and the appropriate Expert Committee's responses are published in the Revisions and Commentary section of USP.org at the time the official revision is published.

The *Commentary* is not part of the official text and is not intended to be enforceable by regulatory authorities. Rather, it explains the basis of Expert Committees' responses to public comments on proposed revisions. If there is a difference between the contents of the *Commentary* and the official text, the official text prevails. In case of a dispute or question of interpretation, the language of the official text, alone and independent of the *Commentary*, shall prevail.

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General Chapter/Section(s): <795> Pharmaceutical Compounding – Nonsterile Preparations
Expert Committee(s): Compounding
No. of Commenters: 1317

Sections:

General Comments

Commentary Summary #1: Multiple commenters suggested removing provisions of the chapter that lack an evidence base.
Response: Comment not incorporated. The standards in the chapter are based on evidence when available, as well as expertise of the Compounding Expert Committee, and input from stakeholders.
Commentary Summary #2: Multiple commenters suggested including the rationale and data supporting the changes within the revised chapter.
Response: Comment not incorporated. The standards in the chapter are supported by a combination of evidence when available, expertise of the Compounding Expert Committee, and input from stakeholders.
Commentary Summary #3: Commenter suggested revising the chapter to be less onerous for rural pharmacies that do not compound high volumes of medications or proposing a section with rural compounding pharmacy requirements.
Response: Comment not incorporated. The chapter is intended to provide standards for quality Compounded Nonsterile Preparations (CNSPs) regardless of where the preparation is prepared. The chapter does not stratify different quality requirements based on the location of compounding.
Commentary Summary #4: Several commenters requested that a statement be added to state that the chapters do not pertain to the administration or dispensing of CNSPs to patients in veterinary practice settings.

Response: Comment partially incorporated. The Compounding Expert Committee added a provision for administration. Preparation of a single dose for a single patient for administration within 4 hours is not required to meet the standards in the chapter. The requirements of this chapter are equally relevant to CNSPs for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary practice settings.

Commentary Summary #5: Commenter requested the addition of a statement to exempt veterinary clinical practice settings from the chapter.

Response: Comment not incorporated. The requirements of this chapter are equally relevant to CNSPs for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary practice settings.

Commentary Summary #6: Commenters suggested that USP develop a chapter specific for veterinary practice.

Response: Comment not incorporated. The Compounding Expert Committee may consider development of a specific veterinary compounding chapter in the future.

Commentary Summary #7: Commenter suggested retaining the section on "Compounding for Animal Patients," noting that compounding for animal patients requires special expertise and training.

Response: Comment incorporated. Practitioners compounding for animal patients should be knowledgeable of more information than contained in the version of the chapter that became official on May 1, 2011. The Compounding Expert Committee may consider development of a specific and more extensive veterinary compounding chapter in the future.

Commentary Summary #8: Several commenters suggested adding a statement that the chapter is not intended to supersede any state laws regarding compounding in veterinary practices.

Response: Comment not incorporated. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Accreditation or credentialing organizations may adopt and enforce USP standards. Regulators and/or accreditation bodies may choose to enforce the requirements of <795> with respect to veterinary practice settings.

Commentary Summary #9: Commenter noted that a revision to the chapter is not needed in the absence of patient/employee harm or risk.

Response: Comment not incorporated. The purposes of the chapter revision are to improve the quality standards for nonsterile compounding, respond to stakeholder input, and clarify frequently misconstrued areas.

Commentary Summary #10: Commenter suggested that the revised chapter imposes semi-sterile requirements and would require facilities to expend resources to build a new facility or require patients to travel further for their medications.

Response: Comment not incorporated. The commenter did not provide specific provisions that would prohibit existing facilities from continuing to compound for patients. The chapter was revised to provide less stringent requirements overall and alternatives based on other stakeholder input.

Commentary Summary #11: Commenter suggested adding a provision that the compounder is solely responsible for the finished preparation.

Response: Comment not incorporated. The CNSP should be the responsibility of all those involved in the compounding of the CNSP.

Commentary Summary #12: Multiple commenters requested that the chapter maintain the existing categories of compounding (simple, moderate, and complex). Another commenter suggested adding a Category 1 (simple/moderate) and Category 2 (complex) as an alternative to the categories of compounding (simple, moderate, and complex).

Response: Comments not incorporated. The Compounding Expert Committee determined that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP. Renaming to Category 1 and Category 2 may also lead to confusion with the requirements for sterile compounding in <797> *Pharmaceutical Compounding – Sterile Preparations*.

Commentary Summary #13: Commenter requested that the simple category of compounding be retained for veterinary practitioners to continue to prepare this type of CNSP.

Response: Comment not incorporated. The Compounding Expert Committee determined that categories of compounding are difficult to assign and arbitrary to define. However, there are certain practices (e.g., administration, reconstitution, and splitting tablets) that are not required to meet the requirements of the chapter. Further, the chapter does not describe different requirements based on the category of CNSP. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary compounding.

Commentary Summary #14: Commenter requested adding a simple category of compounding to include CNSPs that have a USP monograph or information published in a peer-reviewed journal article, or for the reconstituting, mixing, or manipulating of conventually manufactured products.

Response: Comment not incorporated. The Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. However, there are certain practices (e.g., reconstitution in accordance with manufacturer-approved labeling) that are not required to meet the requirements of the chapter. Further, the chapter does not describe different requirements based on the category of CNSP. There may additionally be monographs and published peer-reviewed literature for CNSPs that may be more difficult to prepare.

Commentary Summary #15: Commenter requested a provision to exempt veterinarians from the chapter for preparing a 5-day supply of CNSP.

Response: Comment partially incorporated. The Compounding Expert Committee added a provision for administration. Preparation of a single dose for a single patient for administration within 4 hours is not required to meet the standards in the chapter. The requirements of this chapter are equally relevant to CNSPs for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.

Commentary Summary #16: Commenter requested retaining the provisions that were previously in the section *General Principles of Compounding*.

Response: Comment partially incorporated. All of the provisions in the previous section *General Principles of Compounding* are imbedded in the chapter in the corresponding sections.

Commentary Summary #17: Commenter requested retaining the previous provision on patient counseling, specifically the statement, “At the time of dispensing the prescription, the patient or the patient's agent shall be counseled about proper use, storage, handling, and disposal of the compounded preparation."

Response: Comment not incorporated. Patient counseling should be provided to patients regardless of whether it is a compounded preparation or a conventionally manufactured product. Patient counseling should be out of the scope of a compounding chapter as it applies to pharmacy practice and dispensing.

Commentary Summary #18: Commenter supports removing the counseling provision because patient counseling is part of routine pharmacy practice.

Response: Comment incorporated.

Commentary Summary #19: Commenter requested a delayed implementation date for the chapter based on the additional requirements.

Response: Comment not incorporated. The Compounding Expert Committee revised the chapter based on stakeholder input and lessened the implementation burden associated with many of the requirements in the chapter. The Expert Committee does not think that a delayed implemetation period is needed based on the revisions in the chapter.

Commentary Summary #20: Commenter noted that the proposed revision will require modifications to existing physical layouts; modifications to airflow; purchase and installation of compounding equipment; development and implementation of training requirements; revision of Standard Operating Procedures (SOPs); development, testing, and implementation of software to meet record-keeping requirements; development and execution of stability-indicating assays to extend beyond-use dates (BUDs); development and execution of antimicrobial effectiveness tests to extend BUDs; and development and implementation of a quality assurance (QA) program. Therefore, the commenter requested a delayed implementation of 18 months.

Response: Comment not incorporated. The Compounding Expert Committee revised the chapter based on stakeholder input and lessened the implementation burden associated with many of the requirements in the chapter. The chapter does not require physical layout changes and there is no additional compounding equipment required. The chapter allows for a process assessment to determine whether particle-generating activities should be done in a closed system processing device. Closed system

processing devices include containment ventilated enclosures (CVEs), biological safety cabinets (BSCs), and single-use containment glove bags. The Expert Committee does not think that a delayed implementation period is needed based on the revisions in the chapter.

Commentary Summary #21: Commenter requested that USP monitor and evaluate the implementation of the standard.

Response: Comment not incorporated. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, assuring compliance with USP standards is the responsibility of regulatory bodies. In addition, accreditation or credentialing organizations may adopt and enforce USP standards.

Commentary Summary #22: Commenter noted that having <795> and <800> *Hazardous Drugs – Handling in Healthcare Settings* as separate chapters may facilitate reading and understanding, but it may be challenging to have two documents, one covering nonsterile hazardous and one covering nonhazardous compounding.

Response: Comment not incorporated. The chapter references <800> for handling of hazardous drugs (HDs). Facilities preparing HD CNSPs must follow both <795> and <800>.

Commentary Summary #23: Commenter suggested adding hyperlinks and/or anchor tabs to glossary terms that are used within the chapter.

Response: Comment not incorporated. Hyperlinking to all of the glossary terms would inundate the reader and reduce the readability of the chapter. However, hyperlinks are included for cross-referenced sections and chapters.

Commentary Summary #24: Several commenters noted that compounding of nonsterile radiopharmaceuticals should be out of the scope of <795>, and instead General Chapter <825> *Radiopharmaceuticals—Preparation, Compounding, Dispensing, and Repackaging* should be referenced.

Response: Comment incorporated.

Commentary Summary #25: Commenter suggested addition of the following statement: “Specialty areas such as radiopharmaceuticals require special training and are beyond the scope of this chapter. Compounders shall acquire and maintain knowledge and skills in all areas (e.g., dosage form, patient population, and medical specialty) for which they compound” along with a clarification that radiopharmaceuticals are subject to the requirements in <825>.

Response: Comment partially incorporated. The preparation, compounding, dispensing, and repackaging of radiopharmaceuticals requires more than special training. A provision was added to clarify that the handling of radiopharmaceuticals is not subject to <795> and is subject to the requirements in <825>.

Commentary Summary #26: Commenter requested addition of provisions to address compounding for provider use (e.g., CNSPs prepared for provider offices).

Response: Comment not incorporated. The chapter is intended to provide quality standards for CNSPs regardless of where they are compounded. Appropriate regulatory bodies may have additional or different requirements for compounding for provider use.

Commentary Summary #27: Commenter requested guidance on when it is allowable to transfer CNSPs from one facility to another and then to another patient.

Response: Comment not incorporated. Transferring CNSPs between facilities should be addressed in the facility’s SOP and is out of the scope of the chapter.

Commentary Summary #28: Commenter requested differentiating between types of CNSPs that are typically prepared in a retail pharmacy and those commonly prepared at a compounding pharmacy.
Response: Comment not incorporated. The chapter is intended to provide quality standards for CNSPs regardless of where they are compounded. However, there are certain practices (e.g., administration, reconstitution, and splitting tablets) that are not required to meet the requirements of the chapter.
Commentary Summary #29: Commenter noted that the chapter should not attempt to address all different types of formulations. For example, some topical creams may have well-established stability information and can be maintained longer than the BUDs in the chapter.
Response: Comment partially incorporated. The chapter provides standards for preparing CNSPs. BUDs longer than those stated in the chapter may be used as described in 10.5 *Extending BUDs for CNSPs*, specifically if the CNSP has a compounded preparation monograph or if there is stability information available. USP additionally has a Compounded Preparation Monograph Donation Program to facilitate the development of monographs where there is stability information.
Commentary Summary #30: Multiple commenters requested that access to General Chapter <795> to be free of charge in order to come into compliance.
Response: Comment incorporated. General chapters <795>, <797>, and <800> will be posted for free on the USP Website for a period of time.

1. Introduction and Scope

Commentary Summary #1: Commenter requested clarification on whether the chapter applies to repackaging of nonsterile products.
Response: Comment incorporated. A provision was added to clarify that the chapter does not apply to repackaging of nonsterile conventionally manufactured products.
Commentary Summary #2: Several compounders requested a provision for immediate administration to exempt compounders from the requirements of the chapter when there is a need for emergency compounding.
Response: Comment incorporated.
Commentary Summary #3: Commenter suggested that the definition for CNSP does not define whether packaging oral solids into unit doses falls under the chapter.
Response: Comment incorporated. Revised to add a statement on repackaging, which is out of scope.
Commentary Summary #4: Commenter suggested adding a definition for "Compounding Facility" that indicates whether it is engaged in the production of compounded products for humans or animals. Commenter suggested that veterinarians would be allowed to continue to treat their patients within economically feasible parameters.
Response: Comment partially incorporated. Revised to add a provision for administration, which would be out of scope of the chapter. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of

regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.
Commentary Summary #5: Commenter suggested that a definition for administration needs to be differentiated from compounding, especially when a medication is given immediately to patients and will not be stored.
Response: Comment incorporated. Revised to add a provision for administration.
Commentary Summary #6: Commenter expressed concern that compounding is defined to include “combining, admixing, diluting, pooling, reconstituting other than as provided in the manufacturer's labeling, or otherwise altering a drug or bulk drug substance to create a nonsterile medication.” Commenter requested that the terms used to define compounding be defined.
Response: Comment not incorporated. The terms are intended to define the scope of compounding. Practices that are not subject to the requirements of the chapter are further described in the section.
Commentary Summary #7: Commenter suggested that the definition of compounding, which includes the term “combining,” is too vague. Preparation of two creams, ointments, or gels should not be required to follow the requirements of the chapter.
Response: Comment not incorporated. CNSPs, including those prepared by combining two ingredients, must be prepared in accordance with the chapter to ensure a quality CNSP. For example, the compounder must prepare the CNSP in clean, orderly, and sanitary conditions and must consider the physical and chemical stability of the CNSP.
Commentary Summary #8: Several commenters requested clarification on whether splitting tablets constitutes compounding.
Response: Comment incorporated. Splitting tablets (e.g., breaking or cutting a tablet) into smaller portions is not required to meet the standards in the chapter.
Commentary Summary #9: Commenters requested clarification on whether nasal sprays and nasal irrigations may be nonsterile.
Response: Comment incorporated. Added examples of dosage forms within the scope of the chapter.
Commentary Summary #10: Commenter expressed concern that reconstitution of conventionally manufactured products would be required to meet all of the requirements in the chapter.
Response: Comment incorporated. Added a provision to the chapter that reconstitution of a conventionally manufactured nonsterile product in accordance with the manufacturer’s approved labeling is not required to meet the standards in the chapter.
Commentary Summary #11: Multiple commenters suggested adding a statement that the addition of flavoring should not be considered compounding.
Response: Comment not incorporated. The addition of flavoring may affect the chemical and physical stability of the CNSP.
Commentary Summary #12: Commenter suggested excluding reconstitution, tablet splitting, and preparation of pre-measured kits from the scope of the chapter.
Response: Comment incorporated. Reconstitution of a conventionally manufactured nonsterile product in accordance with the directions in the manufacturer approved labeling is not required to meet the standards in the chapter. If the pre-measured kit is a conventionally manufactured product and reconstitution is performed in accordance with

the directions in the manufacturer approved labeling, it is not subject to the requirements of the chapter. Tablet splitting is also not subject to the requirements of the chapter.

Commentary Summary #13: Several commenters requested that the preparation of "compounding kits" be excluded from the requirements of the chapter.

Response: Comment partially incorporated. Reconstitution of conventionally manufactured "compounding kits" in accordance with directions in the manufacturer approved labeling is not required to meet the standards of the chapter. However, the standards in the chapter do apply to preparation of other compounding kits that are not conventionally manufactured products.

Commentary Summary #14: Several commenters requested clarification on whether "compounding kits" are required to meet the requirements in the chapter.

Response: Comment not incorporated. Reconstitution of conventionally manufactured "compounding kits" in accordance with directions in the manufacturer approved labeling is not required to meet the standards of the chapter. However, the preparation of other compounding kits that are not conventionally manufactured is subject to the standards in the chapter.

Commentary Summary #15: Commenter requested that the statement "This chapter describes the minimum standards… " be changed to "This chapter describes the minimum standard… " to indicate that it is a single standard.

Response: Comment not incorporated. The chapter contains many standards for nonsterile compounding.

Commentary Summary #16: Commenters requested adding a reference to <1168> *Compounding for Phase I Investigational Studies* to ensure that the chapter also applies to compounded investigational products.

Response: Comment not incorporated. Preparation of investigational preparations should follow <1168>. General Chapter <1168> specifies that preparation of nonsterile compounds should follow both <1168> and <795>.

Commentary Summary #17: Commenter suggested limiting the scope of the chapter to CNSPs prepared for humans and animals that are used for food.

Response: Comment not incorporated. The requirements of this chapter are equally relevant to CNSPs for humans and animals, regardless of whether the animals are for companionship, performance, or food. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to animal use.

Commentary Summary #18: Multiple commenters suggested that the reconstitution provision should not contain the requirement that it "not be stored for future use." Conventionally manufactured products are reconstituted and may be stored up to 14 days.

Response: Comment incorporated.

Commentary Summary #19: Multiple commenters suggested that the reconstitution provision should not contain the requirement that it is "prepared for an individual patient." Conventionally manufactured products are reconstituted and may be used for more than one patient in a neonatal and children's setting.

Response: Comment incorporated.

Commentary Summary #20: Several commenters noted that individuals reconstituting conventionally manufactured products should wear gloves and a mask. Sometimes conventionally manufactured products for reconstitution release powders into the air when opened and this may be problematic if the compounder has respiratory issues.
Response: Comment not incorporated. Reconstitution of conventionally manufactured nonsterile products in accordance with directions in the manufacturer approved labeling is out of the scope of the chapter. Facilities may have additional requirements and/or protections in their SOPs, especially for practitioners who have respiratory issues.
Commentary Summary #21: Commenter noted that reconstitution of conventionally manufactured products and "compounding kits" should not be excluded from the chapter. Some conventionally manufactured products for reconstitution may release powders into the air when opened and thus should not be excluded from the standards in the chapter.
Response: Comment not incorporated. Reconstitution of conventionally manufactured nonsterile products in accordance with directions in the manufacturer approved labeling is out of the scope of the chapter. Facilities may have additional requirements and/or protections in their SOPs.
Commentary Summary #22: Commenter noted that reconstitution of conventionally manufactured products for reconstitution (e.g., dry powder preparations) must be done in a closed system.
Response: Comment not incorporated. Reconstitution of conventionally manufactured nonsterile products in accordance with directions in the manufacturer approved labeling is out of the scope of the chapter. Facilities may have additional requirements and/or protections in their SOPs.
Commentary Summary #23: Commenter noted that reconstitution of conventionally manufactured products may be done in accordance with the chapter. Performing reconstitution in a designated compounding area is more stringent and should be encouraged.
Response: Comment not incorporated. Reconstitution of conventionally manufactured nonsterile products in accordance with directions in the manufacturer approved labeling is out of the scope of the chapter. Facilities may choose to adopt the standards in <795> for conventionally manufactured products.
Commentary Summary #24: Commenters requested the addition of a statement that ophthalmic and respiratory preparations are not subject to <795> and are required to meet the standards in <797>.
Response: Comment not incorporated. The chapter lists examples of dosage forms that are nonsterile and must comply with the chapter. General Chapter <797> provides a list of example dosage forms that are sterile and must comply with <797>.
Commentary Summary #25: Commenters requested the addition of a statement that compounding of sterile preparations must comply with <797>.
Response: Comment not incorporated. General Chapters <797> and <795> apply to sterile compounding and nonsterile compounding, respectively.
Commentary Summary #26: Commenter requested adding oral preparations for taste studies (e.g., swish no swallow) as example dosage forms that must comply with the requirements in the chapter.

Response: Comment not incorporated. The chapter provides a list of example preparations (e.g., liquid oral preparations) that are required to comply with the chapter. The list is not intended to be an exhaustive list of examples.

Commentary Summary #27: Commenter requested clarification of the intent of "rectal preparations" and whether it includes "rocket booster enemas" that are prepared by nurses immediately prior to administration.

Response: Comment not incorporated. Rectal preparations include CNSPs that are intended to be administered rectally. However, the Compounding Expert Committee added a provision for administration. Preparation of a single dose for a single patient for administration within 4 hours is not required to meet the standards in the chapter.

Commentary Summary #28: Multiple commenters requested removal of the references to any other chapter, particularly the reference to <800>. Addition of <800> to <795> requires state boards to enforce and require compliance with both chapters.

Response: Comment not incorporated. All HD handling information was removed from <795>. General Chapter <800> was written to complement the compounding chapters. Facilities preparing HD CNSPs should follow both <795> and <800>. Additionally, USP has no role in enforcement of compounding chapters. Pursuant to *General Notices*, 2.30 Legal Recognition, assuring compliance with USP standards is the responsibility of regulatory bodies. Accreditation or credentialing organizations also may adopt and enforce USP standards.

Commentary Summary #29: Multiple commenters indicated that the chapter should not apply to non-pharmacists and non-pharmacy technicians because they do not fall under the regulatory jurisdiction of state boards of pharmacy.

Response: Comment not incorporated. Pursuant to *General Notices*, 2.30 Legal Recognition, assuring compliance with USP standards is the responsibility of regulatory bodies. Regulatory bodies may include bodies such as state boards of pharmacy.

Commentary Summary #30: Multiple commenters requested that the scope of the chapter be limited to pharmacy facilities only. Non-pharmacist professionals do not fall within the jurisdiction of state boards of pharmacy and may ignore the standards.

Response: Comment not incorporated. The chapter is intended to provide standards for quality CNSPs regardless of where the preparation is prepared. Pursuant to *General Notices*, 2.30 Legal Recognition, assuring compliance with USP standards is the responsibility of regulatory bodies. Regulatory bodies may include bodies such as state boards of pharmacy.

Commentary Summary #31: Commenter noted that the chapter should apply to "pharmacy technicians" and not to "technicians" in general.

Response: Comment not incorporated. The chapter is intended to apply to all those who prepare CNSPs, including, but not limited to, technicians. The scope is not limited to solely pharmacy technicians, and positions may have different titles depending on the facility.

Commentary Summary #32: Commenter requested clarification on whether the example dosage form for solid oral preparations includes repackaging of solid dosage forms from a bulk bottle into a unit dose package.

Response: Comment incorporated. A provision for repackaging was added.

Commentary Summary #33: Commenter requested clarification that the "compounding facility" may include a compounding department.

Response: Comment not incorporated. The standards in the chapter apply to any place where compounding is occurring, whether it is in a stand-alone facility or a department within a health system.

Commentary Summary #34: Commenter requested that "compounding facility" be defined. Compounding may be occurring in more than one location within the facility.

Response: Comment not incorporated. The standards in the chapter apply to any place where compounding is occurring. Facilities may have multiple places where compounding is occurring.

Commentary Summary #35: Commenter requested deletion of reference to the compounding facility's "leadership" and indicated that the designated person should be used throughout the chapter.

Response: Comment not incorporated. The facility's leadership and all personnel should be responsible for following the standards in the chapter. The facility's leadership may additionally include the designated person.

Commentary Summary #36: Commenter requested clarification on what is meant by "transporting" under *Affected Personnel and Settings*.

Response: Comment not incorporated. Transporting is described in *13. CNSP Packaging and Transporting.*

Commentary Summary #37: Commenter requested clarification on how to "proactively" identify and remedy potential problems within the compounding facility.

Response: Comment not incorporated. Identification and correction of potential problems is facility-specific and may be addressed through the facility's quality assurance (QA) and quality control (QC) programs. The statement is intended to encourage facilities to take a proactive approach to remedying potential problems.

Commentary Summary #38: Commenter suggested deletion of the statement that "personnel engaged in the compounding of CNSPs must also comply with laws and regulations of the applicable regulatory jurisdiction."

Response: Comment not incorporated. USP has no role in enforcement of compounding chapters. Pursuant to *General Notices*, 2.30 Legal Recognition, assuring compliance with USP standards is the responsibility of regulatory bodies. Compounders must also comply with the laws and regulations of the applicable regulatory jurisdiction.

Commentary Summary #39: Commenter requested elimination of the "designated person" throughout the chapter. Commenter noted that most retail pharmacies and clinic offices compound and it would not be feasible to impose a requirement to have a designated person for facilities that do not compound on a daily basis and have numerous physical locations over a geographical area.

Response: Comment not incorporated. The chapter is intended to ensure the quality of CNSPs regardless of where they are compounded. Facilities with numerous physical locations may designate one or several individuals as the designated person to oversee nonsterile compounding.

Commentary Summary #40: Commenter noted that all the compounding is checked by a pharmacist and suggested that a designated person is not needed when there is a checking pharmacist.

Response: Comment not incorporated. The designated person may be the "checking pharmacist."

Commentary Summary #41: Commenter noted that it would be impossible to have one designated person to be in charge of all nonsterile compounding activities.
Response: Comment partially incorporated. The designated person may be one or more individuals.
Commentary Summary #42: Commenter requested that the chapter specify a "lead designated" person, especially for facilities that have more than one designated person. Since the chapter allows responsibilities to be distributed among more than one individual, a lead should be identified.
Response: Comment not incorporated. Facilities may determine how the responsibilities of the designated person are distributed and facilities may designate one person as the lead.
Commentary Summary #43: Commenter noted that designated person should be plural and recommended a universal change to "designated person(s)" to emphasize that the designated person may be one or more individuals.
Response: Comment incorporated.
Commentary Summary #44: Commenter requested that the list of responsibilities for the designated person be expanded to encompass all of the duties and responsibilities.
Response: Comment partially incorporated. The list of responsibilities was revised to be more general and is not intended to be all-inclusive. Additional responsibilities are described throughout the chapter and the facility may specify additional duties and clarifications on roles and responsibilities.
Commentary Summary #45: Commenter suggested adding to the chapter that (1) the designated person does not have to be on site where compounding is performed, (2) that the responsibilities for the designated person should not be required for complex compounding, (3) that the training requirements should be duty specific, and (4) there should be no need for a designated person if the facility has a prescription department manager.
Response: Comment not incorporated. Facilities may determine who may serve as the designated person and that person may be on or off site. Categories of compounding were eliminated as the Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define, and the chapter does not differentiate between different requirements based on the category of compounding. The chapter states that the designated person is responsible for overseeing the training program, and *2. Personnel Training and Evaluation* specifies that the training should include the required skills necessary to perform the assigned tasks. Additionally, facilities may designate the prescription department manager as the designated person responsible for the nonsterile compounding activities.
Commentary Summary #46: Commenter requested that the chapter specify the training and licensure requirements for the designated person.
Response: Comment not incorporated. The facility and/or regulatory bodies may impose requirements for the qualifications (e.g., training and licensure) of the designated person.
Commentary Summary #47: Commenter requested adding eligibility requirements for the designated person.
Response: Comment not incorporated. The Compounding Expert Committee decided that it would be too prescriptive to add eligibility requirements for the designated person.

The facility and/or regulatory bodies may establish eligibility requirements for the designated person.

Commentary Summary #48: Commenter requested confirmation on whether the compounding must be overseen by a pharmacist or whether a nurse or technician can be trained without pharmacist oversight.

Response: Comment not incorporated. The chapter applies to all persons who compound CNSPs, including, but not limited to, pharmacists, technicians, nurses, physicians, dentists, naturopaths, and chiropractors. The facility and/or regulatory body may specify additional requirements for oversight within the facility.

Commentary Summary #49: Commenter suggested removing the requirement for the designated person because the licensed pharmacist is responsible for checking all compounded medications and is accountable for all preparations leaving the pharmacy.

Response: Comment not incorporated. The chapter does not limit the number of designated persons a facility may designate. The facility should have designated person(s) to perform certain activities, including, but not limited to, overseeing training, selecting components, monitoring compounding activities, establishing SOPs, and ensuring implementation of SOPs.

Commentary Summary #50: Several commenters requested clarification that the list of responsibilities applies to all of the designated persons and that no single designated person is responsible for all the bullets listed.

Response: Comment partially incorporated. The text was changed to indicate designated “person(s).” Designated person is defined in the glossary to be one or more individuals.

Commentary Summary #51: Multiple commenters noted that individuals other than the designated person should be able to train new staff. For example, the designated person may train the trainer for all new staff.

Response: Comment incorporated. Chapter revised to state that the designated person must oversee training. However, others in the facility may conduct the actual training.

Commentary Summary #52: Several commenters suggested changing the responsibilities of the designated person so that the designated person is not charged with developing the training program. The designated person can implement a training program without developing it. The development of a training program should be left to the facility based on the needs of the facility and the requirements of boards of pharmacies.

Response: Comment incorporated. The designated person is responsible for overseeing the training program.

Commentary Summary #53: Several commenters requested language that allows for corporate entities to have one designated person for multiple sites. The corporate designated person can develop the policies, procedures, and training. The enforcement and execution of the SOPs would be the responsibility of an additional designated person or other individual at the pharmacy level.

Response: Comment not incorporated. The chapter already does not require that the designated person be on site. The corporate entity may determine the best approach for selecting the designated person, whether at the corporate level, compounding facility level, or both.

Commentary Summary #54: Commenter suggested rewording the responsibilities of the designated person to be similar to text in <800>. The text should ensure that the designated person should be an overarching supervisor-type person to ensure that the tasks are completed, but should not necessarily be the one to do them.
Response: Comment incorporated.
Commentary Summary #55: Commenter suggested deleting the subsection *Affected Personnel and Settings* as the information is duplicative of that in *2. Personnel Training and Evaluation*. Commenter cautioned against using the term "routinely" in the document because the chapter is referenced in laws and/or regulations and such terms are difficult to comply with or enforce.
Response: Comment partially incorporated. The subsection *Affected Personnel and Settings* is intended to provide an overview of the personnel that the chapter applies to and the general responsibilities of the designated person. Some duplicative language on training was eliminated. The term "routinely" was deleted.
Commentary Summary #56: Commenter recommended that the responsibilities of the designated person must include a determination of the competency of personnel involved in compounding, handling, and preparing CNSPs.
Response: Comment incorporated.
Commentary Summary #57: Commenter noted that "training program" is too broad and requested that the term be defined.
Response: Comment not incorporated. Training is further described in 2. *Personnel Training and Evaluation*. The training program must be specific to the facility.
Commentary Summary #58: Commenter noted that "routine monitoring and observing" is ambiguous and could be interpreted as a requirement to be performed every week or every year.
Response: Comment incorporated. Wording removed.
Commentary Summary #59: Commenter noted that certain state labor laws do not allow designated person(s) to ask about or document illnesses in the workplace.
Response: Comment incorporated. The responsibility of the designated person to evaluate personnel for certain conditions was eliminated. However, individuals must evaluate whether they pose a personal risk of contaminating the compounding environment and CNSP.
Commentary Summary #60: Commenter requested adding a statement that if the facility has more than one designated person, the designated person(s) should be staff member(s) who routinely work in and supervise the area with oversight to ensure compliance with the chapter.
Response: Comment not incorporated. The facility is responsible for determining whether they have one or more than one designated person and their respective responsibilities.

2. Personnel Training and Evaluation

Commentary Summary #1: Commenter noted that pharmacists with years of experience and training in pharmacy school compounding labs should be grandfathered into the training requirements of the chapter.

Response: Comment not incorporated. Compounders must undergo refresher training every 12 months to ensure continued competency and understanding. Additionally, facility SOPs and master formulation records may change over the year, requiring retraining.

Commentary Summary #2: Commenter expressed concerns that proficiency in the core competencies listed in the chapter must be demonstrated, and specifically that it is unclear who has authority to determine 1) whether the protocols created by designated persons meet the requirements and 2) whether perceived gaps in training may be grounds for reprimand.

Response: Comment partially incorporated. The designated person must oversee the training program, and the training program must equip personnel with the knowledge and skills necessary to perform their assigned tasks. The training and competencies must be specific to the facility and personnel.

Commentary Summary #3: Several commenters noted that the type and extent of training should be commensurate with the type and extent of compounding being performed.

Response: Comment partially incorporated. The designated person must oversee the training program and the training program must equip personnel with the knowledge and skills necessary to perform their assigned tasks. The training and competencies must be specific to the facility and personnel. The chapter lists certain core competencies; however, the training must include facility-specific SOPs and procedures.

Commentary Summary #4: Multiple commenters noted that personnel with certain conditions should be allowed to work in compounding areas before their conditions resolve.

Response: Comment partially incorporated. Individuals are responsible for evaluating whether they pose a personal risk of potentially contaminating the compounding environment and CNSP. The designated person is responsible for evaluating and determining whether these individuals should be excluded from working in the compounding areas before their conditions have resolved.

Commentary Summary #5: Commenter noted that the chapter should be more specific about the types of conditions that would require evaluation for limiting exposure to the compounding area. For example, non-infective coughs or rashes are common and should not preclude personnel from entering the compounding area.

Response: Comment partially incorporated. Individuals are responsible for evaluating whether they pose a personal risk of potentially contaminating the compounding environment and CNSP. The Compounding Expert Committee decided that it would not be possible to list all of the conditions that would preclude personnel from working in the compounding area. The designated person is responsible for evaluating and determining whether these individuals should be excluded from working in the compounding areas before their conditions have resolved.

Commentary Summary #6: Several commenters requested additional guidance regarding what would be contained in an approved training program, and minimum competencies that must be included.

Response: Comment not incorporated. The training and competencies must be specific to the facility and personnel. The chapter lists certain core competencies; however, the training must include facility-specific SOPs and procedures.
Commentary Summary #7: Commenter requested that training be waived for pharmacies and compounding personnel who only perform simple compounding.
Response: Comment not incorporated. All personnel involved in the preparation and handling of CNSPs must undergo training regardless of the type of compounding performed. Training should be based on the type of compounding they will be performing and/or their duties.
Commentary Summary #8: Multiple commenters noted that annual refresher training in veterinary practice would be challenging, particularly for solo veterinary practitioners.
Response: Comment not incorporated. Compounders are required to undergo refresher training every 12 months if they perform nonsterile compounding. Training should be based on the type of compounding they will be performing and/or their duties. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary practitioners.
Commentary Summary #9: Commenter requested clarification on whether the designated person(s) must undergo refresher training.
Response: Comment not incorporated. Training and selection requirements for the designated person(s) are facility-specific.
Commentary Summary #10: Commenter requested clarification on how training should be approached for veterinarians. Commenter also requested information on what individual should determine the protocols for training.
Response: Comment not incorporated. Training should be based on the type of compounding they will be performing and/or their duties. A designated person must oversee a training program. The training program must be facility-specific. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.
Commentary Summary #11: Commenter requested clarification on what the annual refresher training entails.
Response: Comment not incorporated. Training, which includes the annual refresher training, should be based on the type of compounding they will be performing and/or their duties. The training program must be facility-specific.
Commentary Summary #12: Commenter requested to change “must demonstrate competency” to “must demonstrate proficiency”.
Response: Comment not incorporated. The training program must include competency to demonstrate that compounding personnel are capable of completing a task.
Commentary Summary #13: Commenter requested a change from “must undergo annual refresher training” to “must re-assess competency every 12 months”.

Response: Comment partially incorporated. The training program must include evaluation of competency to demonstrate that compounding personnel are capable of completing a task. The language was revised to indicate that refresher training must occur every 12 months.
Commentary Summary #14: Commenter suggested that annual refresher training is not necessary if the compounder performs nonsterile compounding at least 30 hours per week.
Response: Comment not incorporated. Personnel must be retrained annually regardless of the time spent on compounding. Training, which includes the annual refresher training, should be based on the type of compounding they will be performing and/or their duties. The training program must be facility-specific.
Commentary Summary #15: Several commenters requested a box to describe minimal aspects of compounding technique, including equipment use.
Response: Comment not incorporated. Compounding techniques and equipment would be specific to the facility and the type of CNSPs compounded at the facility. The training program must be facility-specific.
Commentary Summary #16: Commenter requested that training documentation only be required for initial training and competency assessment, but not for ongoing training and competency, in a facility with only one person in the compounding operation.
Response: Comment not incorporated. All training, both initial and subsequent, must be documented as described in *15. Documentation*.
Commentary Summary #17: Commenter requested changing the requirement for training documentation into a recommendation.
Response: Comment not incorporated. All training must be documented as described in *15. Documentation*.
Commentary Summary #18: Multiple commenters requested allowing on-site training when the facility has only one person in the compounding operation.
Response: Comment incorporated. Section revised to indicate that when a facility only has one person in the compounding operation, that person must document that they have obtained training and demonstrated competency. This does not have to be off-site.
Commentary Summary #19: Commenter requested allowing non-written means for the training program (e.g., electronic).
Response: Comment incorporated. Section revised to remove the stipulation that the program must be written.
Commentary Summary #20: Several commenters noted concern that the designated person(s) requirement is in conflict with the pharmacist-in-charge (PIC), who is responsible for all activities and operation of the pharmacy.
Response: Comment not incorporated. The designated person may be the PIC.
Commentary Summary #21: Commenter requested clarification on the length of time required for “routinely” monitoring and observing compounding activities.
Response: Comment incorporated. Language revised to strike the word “routinely”. SOPs must describe procedures for the monitoring and observing of compounding activities and personnel.
Commentary Summary #22: Commenter suggested that routine monitoring and observation of compounding activities should be a requirement.

Response: Comment not incorporated. It is not possible to have routine monitoring and observation for facilities that have one person in the compounding operation.
Commentary Summary #23: Commenter requested removal of language that suggests the designated person(s) must take corrective action when deficient practices are observed, since SOPs describe these procedures.
Response: Comment not incorporated. Although monitoring and observing compounding activities is described in the SOPs, the designated person(s) must take corrective actions when deficient practices are observed.
Commentary Summary #24: Several commenters requested removing USP standards from inclusion in the training procedure.
Response: Comment not incorporated. Users must read and understand this chapter and other applicable standards.
Commentary Summary #25: Commenter suggested that if deficient practices are observed, the designated person(s) must document observations and corrective actions.
Response: Comment not incorporated. Documentation practices should be determined by the facility. SOPs must describe procedures for the monitoring and observing of compounding activities and personnel.
Commentary Summary #26: Multiple commenters noted that not all compounding personnel will perform calculations, depending on their assigned tasks.
Response: Comment partially incorporated. Revised section to strike demonstrating proficiency in calculations as part of the required core competencies.
Commentary Summary #27: Several commenters noted concern that proficiency and competency must be demonstrated by passing a test. Commenters requested clarification on who would formulate the test.
Response: Comment partially incorporated. Training should be based on the type of compounding personnel will be performing and/or their duties. The training program must be facility-specific. A designated person must oversee the training program.
Commentary Summary #28: Commenter requested addition of knowledge of basic microbiology to the list of core competencies.
Response: Comment partially incorporated. Training should be based on the type of compounding personnel will be performing and/or their duties. The training program must be facility-specific. Knowledge of microbiology may be included in the facility's training program.
Commentary Summary #29: Several commenters requested clarification on whether proficiency in the core competencies must be demonstrated initially and every 12 months.
Response: Comment not incorporated. The introductory paragraph in *2. Personnel Training and Evaluation* clarifies that personnel must be trained initially and must undergo refresher training every 12 months. The training program includes proficiency in the core competencies listed in the section.
Commentary Summary #30: Commenter requested providing a sample form to assess hand hygiene and garbing-related practices for compounding personnel.
Response: Comment not incorporated. General Chapter <795> is intended to be a minimum standard. Facilities may choose to create training and assessment materials

based on their individual training programs. USP may consider developing training tools in the future.

Commentary Summary #31: Commenter requested incorporating requirements for cognitive competencies, such as evaluating the appropriateness of the CNSP or developing Master Formulation Records.

Response: Comment not incorporated. General Chapter <795> is intended to be a minimum standard. Facilities may choose to incorporate additional requirements based on their individual training programs.

Commentary Summary #32: Multiple commenters suggested that not all compounders will bear responsibilities for evaluating certificates of analysis (COAs) and Safety Data Sheets (SDSs). Commenters requested that training be tailored to individual duties.

Response: Comment not incorporated. Understanding and interpreting COAs and SDSs is part of the training and knowledge that personnel must have in order to prepare CNSPs.

Commentary Summary #33: Several commenters suggested that all personnel in a compounding facility should not be required to read and understand procedures for all the functions listed for training and competencies.

Response: Comment partially incorporated. Training should be based on the type of compounding personnel will be performing and/or their duties. Compounding personnel must read and understand procedures related to their compounding duties.

Commentary Summary #34: Commenter requested consideration of reading level for pharmacy technician training.

Response: Comment not incorporated. Defining the reading level is out of scope of the chapter. Facilities may determine the appropriate reading level for their individual training programs.

Commentary Summary #35: Commenter noted that it is not necessary to read and understand <795> as part of the training procedure. Commenter suggested revising the language to “be familiar with this Chapter […]”.

Response: Comment not incorporated. Compounding personnel must read and understand <795> for nonsterile compounding.

Commentary Summary #36: Several commenters noted that it is not necessary to read and understand the entirety of <795> as part of the training procedure. Commenters noted that only critical and relevant pieces of the Chapter are necessary. Additionally, commenters are concerned that reading the entire Chapter would detract from time spent on more relevant compounding training.

Response: Comment not incorporated. General Chapter <795> is considered a minimum standard. Compounding personnel must read and understand <795> for nonsterile compounding. Other training requirements should be based on the type of compounding they will be performing and/or their duties.

Commentary Summary #37: Commenter noted concern that understanding COAs is an abstract concept that is difficult to enforce or measure.

Response: Comment not incorporated. Understanding and interpreting COAs is part of the training and knowledge that personnel must have in order to prepare CNSPs. Facilities may determine how to adequately assess the compounder’s knowledge on

reading and understanding the COA as part of the facility- and duty-specific training program.
Commentary Summary #38: Multiple commenters requested removing the need to access USP compounding monographs in order to come into compliance with training requirements.
Response: Comment incorporated. Revised to strike the requirement to have access to USP compounding monographs. Training must include reading and understanding <795>, other applicable standards, and other relevant literature.
Commentary Summary #39: Commenter requested clarification on whether obtaining the *Compounding Compendium* is adequate for compliance with having access to USP compounding monographs, other applicable General Chapters, and other relevant literature.
Response: Comment not incorporated. The *Compounding Compendium* is considered a resource; however, other references may be necessary to come into compliance, and may vary by compounded preparation.
Commentary Summary #40: Commenter requested defining “other applicable general chapters”.
Response: Comment not incorporated. Other applicable general chapters and standards are based on the specific CNSP and those cross-referenced in the chapter.
Commentary Summary #41: Commenter requested an indication that General Chapters or relevant literature required for the training program would be those necessary to make the required decisions about compounds at the facility.
Response: Comment incorporated. Revised to strike the requirement to have access to USP compounding monographs, other applicable general chapters, and other relevant literature. Training must include reading and understanding <795>, other applicable standards, and other relevant literature.
Commentary Summary #42: Several commenters noted that not all medications come with COAs. Commenters requested clarification on whether reading and understanding COAs is required for medications and chemicals.
Response: Comment incorporated. Revised section to indicate that the training program must include understanding and interpreting COAs, if applicable.
Commentary Summary #43: Commenter requested limiting the requirement to understanding and interpreting COAs, as part of the training program, to exclude simple nonsterile compounded preparations.
Response: Comment not incorporated. Understanding and interpreting COAs is part of the training and knowledge that personnel must have in order to prepare CNSPs.
Commentary Summary #44: Commenter requested replacing “procedures” with “SOPs and policies”.
Response: Comment not incorporated. Procedures may be outlined within SOPs or other documents.
Commentary Summary #45: Commenter requested replacing “including” with “such as” when describing examples of procedures related to compounding duties.
Response: Comment partially incorporated. Revised section to remove qualifying examples of procedures related to compounding duties. Training should be based on the type of compounding that personnel will be performing and/or their duties, including specific procedures that the compounder must read and understand.

Commentary Summary #46: Commenter suggested removing examples of procedures related to compounding duties.
Response: Comment incorporated. Revised section to remove qualifying examples of procedures related to compounding duties. Training should be based on the type of compounding that personnel will be performing and/or their duties, including specific procedures that the compounder must read and understand.
Commentary Summary #47: Commenter requested clarifying that, as part of the training program, compounders must read and understand procedures related to completed competency evaluation.
Response: Comment partially incorporated. Revised section to remove qualifying examples of procedures related to compounding duties. Training should be based on the type of compounding that personnel will be performing and/or their duties, including specific procedures (e.g., competency evaluations) that the compounder must read and understand.
Commentary Summary #48: Commenter recommended changing “the designated person must demonstrate the procedures” to “must ensure demonstration”.
Response: Comment not incorporated. Revised section to state that a designated person must oversee the training of personnel. Training and observation may be performed by the designated person(s) or an assigned trainer.
Commentary Summary #49: Commenter suggested that it should not be required for a designated person to demonstrate the procedures for training.
Response: Comment partially incorporated. Revised section to state that a designated person must oversee the training of personnel. Training and observation may be performed by the designated person(s) or an assigned trainer.
Commentary Summary #50: Several commenters requested allowing another identified person to demonstrate procedures for personnel, and observe and guide training. Commenters also requested allowing a designated person or another identified trainer to supervise the competency and independence of personnel.
Response: Comment partially incorporated. The designated person(s) may be one or more persons. Revised section to state that a designated person must oversee the training of personnel. Training and observation may be performed by the designated person(s) or an assigned trainer.
Commentary Summary #51: Commenter requested the definition of “direct supervision”.
Response: Comment not incorporated. Personnel are expected to repeat training procedures independently under the direct supervision of the designated person(s) and/or trainer. The term “direct supervision” is commonly used to indicate that the observer is physically present or within the immediate vicinity.
Commentary Summary #52: Commenter recommended not requiring documentation of training or demonstration of competency for facilities with only one person in the compounding operation.
Response: Comment not incorporated. Training must be documented.
Commentary Summary #53: Commenter requested clarification on whether training at a single semester of pharmacy school, training at a former job site, or in-house training from an independent consultant would satisfy training requirements.

Response: Comment not incorporated. The training program must be facility-specific based on the facility's design, procedures, and the types of CNSPs prepared.
Commentary Summary #54: Several commenters requested clarifying whether training outside the facility can be with an appropriate external training program.
Response: Comment partially incorporated. Section revised to indicate that when a facility only has one person in the compounding operation, that person must document that they have obtained training and demonstrated competency. This does not have to be off-site. Additionally, although the chapter does not prohibit incorporating off-site training resources into the training program, the training program should be facility-specific.
Commentary Summary #55: Commenter recommended removing the statement requiring external training to be performed when a facility only has one person in the compounding operation. Commenter noted that the statement implies facilities with two compounders can allow either compounder to train the other.
Response: Comment not incorporated. The statement pertains to facilities that specifically have one person in the compounding operation. Facilities with more than one person are subject to the other training requirements in the section.
Commentary Summary #56: Several commenters noted that requiring "appropriate training" for facilities with only one person in the compounding operation is unclear. Commenters recommended that facilities with only one person in the compounding operation must document compliance with the requirements in the chapter and be prepared to demonstrate competency if required by the regulatory body.
Response: Comment partially incorporated. Revised section to strike the word "appropriate". Training must be documented and competency must be demonstrated in compliance with the requirements of the chapter.
Commentary Summary #57: Commenter noted that requiring "appropriate training" for facilities with only one person in the compounding operation is unclear. Commenter noted that facilities engaged in simple/moderate compounding would not require training outside of the facility.
Response: Comment partially incorporated. Revised section to strike the word "appropriate" and to remove the requirement for external training. Training must be documented and competency must be demonstrated in compliance with the requirements of the chapter. The Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP.
Commentary Summary #58: Commenter requested clarification on whether the statement requiring appropriate and external training when a facility has only one person in the compounding operation also applies to all designated persons, if a site elects to have more than one designated person.
Response: Comment not incorporated. The statement is intended to apply when only one compounder is in the operation. Facilities may have one or more designated person(s). Additionally, the criteria for how to assign designated person(s) are at the discretion of the facility and/or regulatory body.
Commentary Summary #59: Multiple commenters requested removing the requirement to obtain training outside of the facility for facilities with only one person in the compounding operation.

Response: Comment incorporated. Revised section to strike the requirement for training to be outside of the facility.
Commentary Summary #60: Commenter requested revising the language, "if the facility has only one person in the compounding operation […]" to match *1. Introduction and Scope*, which states "If the compounding facility has only one person responsible for all the compounding in the facility, then that person will become the designated person."
Response: Comment not incorporated. The statement in *1. Introduction and Scope* refers to assigning the designated person whereas *2. Personnel Training and Evaluation* refers to training requirements for a single person in the compounding facility.

3. Personal Hygiene and Garbing

Commentary Summary #1: Multiple commenters requested clarification on the types of rashes that should exclude personnel from preparing CNSPs. Alternatively, commenters requested that conditions that should be considered be limited to rashes in exposed areas, weeping rashes, and those that may be contagious.
Response: Comment partially incorporated. The section was revised to indicate that personnel with a risk of potentially contaminating the environment or CNSP should be excluded from the compounding area. "Rashes" is only an example of a condition that may potentially contaminate the CNSP and/or environment.
Commentary Summary #2: Multiple commenters requested that personnel with rashes only in exposed areas or weeping rashes that may be contagious be excluded from compounding. Commenter noted that dry rashes on the trunk, back, and/or legs would not be problematic in a nonsterile compounding environment.
Response: Comment partially incorporated. The section was revised to indicate that personnel with a risk of potentially contaminating the environment or CNSP should be excluded from the compounding area. "Rashes" is only an example of a condition that may potentially contaminate the CNSP and/or environment.
Commentary Summary #3: Commenter noted that there is no evidence to show that personnel with a rash, respiratory infection, or other contagious medical condition can transmit a virus/contagious medical condition to any patient through a CNSP.
Response: Comment partially incorporated. The section was revised to indicate that personnel with a risk of potentially contaminating the environment or CNSP should be excluded from the compounding area. Several conditions are listed, only as examples of conditions that may potentially contaminate the CNSP and/or environment.
Commentary Summary #4: Commenter noted that when discussing certain conditions that may preclude a worker from compounding, the chapter should highlight possible contamination risks and not necessarily pre-existing conditions. Rash is potentially a bad example as this is too generic to serve as a clear case.
Response: Comment incorporated.
Commentary Summary #5: Commenter suggested that only personnel with communicable conditions that cannot be contained by garbing and engineering controls should be precluded from the compounding area.

Response: Comment not incorporated. The section was revised to indicate that personnel with a risk of potentially contaminating the environment or CNSP should be excluded from the compounding area. Several conditions are listed, only as examples of conditions that may potentially contaminate the CNSP and/or environment.

Commentary Summary #6: Multiple commenters suggested eliminating the requirement to exclude personnel with certain conditions that carry the risk of contaminating the environment and CNSP since this is common knowledge and should not be applied to small operations.

Response: Comment not incorporated. Personnel with a risk of potentially contaminating the environment or CNSP should be excluded from the compounding area. The chapter is intended to ensure the quality of the CNSP, regardless of whether the CNSP is prepared in a large facility or small facility.

Commentary Summary #7: Several commenters noted that veterinary practitioners will have difficulty adhering to the requirements for hand hygiene and garbing.

Response: Comment partially incorporated. The section was revised to require gloves for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Hand hygiene must be performed when entering the compounding area to compound. However, if the specific practice falls under “administration,” it is out of the scope of the chapter. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary compounding.

Commentary Summary #8: Commenter noted that garbing is not necessary for adding water to pre-packaged powders for reconstitution, or compounding a topical preparation.

Response: Comment partially incorporated. Reconstitution is out of scope of the chapter. Revised chapter to require gloves for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination.

Commentary Summary #9: Commenter noted that the list of minimum garb to remove before entering the compounding area is overly specific.

Response: Comment partially incorporated. General Chapter <795> is intended to be a minimum standard; therefore, facilities may choose to implement additional garb restrictions in practice. Additionally, revised section to allow the designated person(s) to permit accommodations as long as the quality of the environment and CNSP will not be affected.

Commentary Summary #10: Commenter expressed concern that requiring the designated person(s) to evaluate whether individuals will be allowed to work in compounding areas due to potentially contaminating conditions could subject employees to fitness testing and quarantine efforts.

Response: Comment partially incorporated. Revised section to place onus on individuals, who must evaluate whether they have a personal risk of potentially contaminating the compounding environment and CNSP and must report these conditions to the designated person(s).

Commentary Summary #11: Several commenters expressed concern that the designated person(s) may not be qualified or trained to evaluate whether individuals will be allowed to work in compounding areas due to potentially contaminating conditions.
Response: Comment partially incorporated. Revised section to place onus on individuals, who must evaluate whether they have a personal risk of potentially contaminating the compounding environment and CNSP and must report these conditions to the designated person(s).
Commentary Summary #12: Commenter requested that reports regarding personal hygiene must be documented to facilitate root cause analysis for determining effective hygiene and garbing procedures.
Response: Comment not incorporated. Specific monitoring requirements should be facility-specific. *12. Quality Assurance and Quality Control* allows each facility to develop its own QA and QC program.
Commentary Summary #13: Commenter requested a definition for “personal hygiene”.
Response: Comment not incorporated. The intent of personal hygiene requirements is to minimize the risk of contamination to the compounding environment and CNSPs. The chapter describes the minimum requirements for personal hygiene; however, the facility and/or regulatory bodies may enforce additional restrictions based on their personal hygiene requirements.
Commentary Summary #14: Commenter noted that tattoos that are located in an unexposed area will not be exposed to medications. Commenter requested additional guidance on rash condition and location of recent tattoos.
Response: Comment partially incorporated. Revised section to place onus on individuals, who must evaluate whether they have a personal risk of potentially contaminating the compounding environment and CNSP and must report these conditions to the designated person(s). Additionally, tattoos and rashes are listed as examples and are not intended to be all-inclusive.
Commentary Summary #15: Several commenters noted that organizations should have infection control policies to restrict employees with communicable diseases from working.
Response: Comment partially incorporated. Revised section to place onus on individuals, who must evaluate whether they have a personal risk of potentially contaminating the compounding environment and CNSP and must report these conditions to the designated person(s). Facilities may develop policies to further elaborate on personal hygiene restrictions.
Commentary Summary #16: Commenter requested additional guidance on when the designated person(s) should exclude compounding personnel from working due to possible contamination of the compounding environment.
Response: Comment partially incorporated. Revised section to place onus on individuals, who must evaluate whether they have a personal risk of potentially contaminating the compounding environment and CNSP and must report these conditions to the designated person(s). The chapter is intended to be a minimum standard; facilities may develop policies to further elaborate on personal hygiene restrictions and procedures for the designated person(s).

Commentary Summary #17: Commenter requested allowance for protective measures in order to prevent contamination due to personal hygiene conditions.
Response: Comment partially incorporated. Revised section to allow the designated person(s) to evaluate whether individuals should be excluded from working in the compounding area. Facilities may develop policies to further elaborate on personal hygiene restrictions and procedures for the designated person(s).
Commentary Summary #18: Commenter noted that the language in *3. Personal Hygiene and Garbing* is not standardized with other language in the chapter for restricting individuals from compounding due to risk of contamination.
Response: Comment incorporated. Revised *Personnel and Settings Affected* to strike the duplicative statement requiring the designated person(s) to evaluate whether individuals with certain conditions will be allowed to work in compounding area(s).
Commentary Summary #19: Several commenters requested a definition of the time span for compounding personnel with “recent tattoos” to be excluded from working in the compounding area.
Response: Comment partially incorporated. Revised section to place onus on individuals, who must evaluate whether they have a personal risk of potentially contaminating the compounding environment and CNSP and must report these conditions to the designated person(s). Additionally, tattoos are listed as an example and are not intended to be all-inclusive.
Commentary Summary #20: Commenter suggested that when individuals have a personal risk of potentially contaminating the compounding environment and CNSP, attire may be worn.
Response: Comment partially incorporated. Revised section to allow the designated person(s) to evaluate whether individuals should be excluded from working in the compounding area. Facilities may develop policies to further elaborate on personal hygiene restrictions and procedures for the designated person(s).
Commentary Summary #21: Commenter noted that veterinarians work outside frequently and cannot take off for two weeks while they recover from a respiratory infection, bite wounds, cuts, sunburns, or kick wounds.
Response: Comment partially incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians. Revised section to allow the designated person(s) to evaluate whether individuals should be excluded from working in the compounding area. Facilities may develop policies to further elaborate on personal hygiene restrictions and procedures for the designated person(s). Additionally, veterinarians may fall under the definition of “administration” which is out of scope of the chapter.
Commentary Summary #22: Commenter requested delegating the responsibility of evaluating whether individuals with potentially contaminating conditions will be allowed to work in compounding areas to individuals with supervisory authority.
Response: Comment not incorporated. The designated person(s) may be one or more person(s), and may be someone with supervisory authority.

Commentary Summary #23: Commenter suggested requiring periodic check-ups for individuals that may have a higher risk of potentially contaminating the CNSP and the compounding environment.
Response: Comment not incorporated. Specific monitoring requirements should depend on the facility. *11. Quality Assurance and Quality Control* allows each facility to develop its own QA/QC program.
Commentary Summary #24: Commenter requested delegating to supervisors the responsibility of evaluating whether individuals with potentially contaminating conditions will be allowed to work in compounding areas. Commenter noted that the person should not be the same one who does the training on a daily basis.
Response: Comment not incorporated. The designated person(s) may be one or more person(s), and may be someone with supervisory authority. Additionally, more than one person can be the designated person(s).
Commentary Summary #25: Several commenters noted that not all minimum requirements listed in *3.1 Personnel Preparation* are necessary for facilities that compound low volumes of simple nonsterile compounded preparations. Commenters noted excessive cost with no reasonable benefit.
Response: Comment not incorporated. The chapter is intended to be a minimum standard, and standards cannot be stratified based on the volume of the compounding facility.
Commentary Summary #26: Commenter noted that nonsterile compounding activities do not warrant the minimum requirements listed in *3.1 Personnel Preparation* since meeting these requirements would not affect the preparation.
Response: Comment partially incorporated. Revised section to allow the designated person(s) to permit accommodations as long as the quality of the environment and CNSP will not be affected.
Commentary Summary #27: Commenter requested removal of the stipulation that personnel engaged in compounding must wear clean clothing. Commenter noted that it would be difficult to ascertain whether an employee's clothing has been cleaned.
Response: Comment partially incorporated. Revised section to require that personnel engaged in compounding must maintain hand hygiene and maintain the cleanliness required for the type of compounding performed.
Commentary Summary #28: Several commenters requested adding language to *3.1 Personnel Preparation* stating that personnel must remove items that are not easily cleanable, may interfere with garbing or compounding, or might compromise the cleanliness of the compounded product. Commenters suggested that the bulleted list of minimum requirements should be examples.
Response: Comment partially incorporated. The chapter is intended to be a minimum standard, and the Expert Committee decided that personnel must adhere to the bulleted requirements at a minimum. Revised section to indicate that the designated person(s) may permit accommodations as long as the quality of the environment and CNSP will not be affected.
Commentary Summary #29: Multiple commenters suggested rewording "designated compounding area" to allow more flexibility in veterinary practice. Commenters were concerned that veterinary practices will not have the space to devote solely to compounding, or will not have access to this space (e.g., ambulatory practitioners).

Response: Comment partially incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary practices. Revised section to strike “designated”. Additionally, veterinarians may fall under the definition of “administration,” which is out of scope of the chapter.
Commentary Summary #30: Multiple commenters suggested striking “designated” as a qualifier for the compounding area.
Response: Comment incorporated. Revised section to strike “designated”.
Commentary Summary #31: Commenter noted that removing personal outer garments for the purposes of reconstitution is not a good use of time.
Response: Comment incorporated. Reconstitution of conventionally manufactured products is not subject to the requirements of the chapter.
Commentary Summary #32: Commenter requested the rationale for the garbing requirements. Commenter requested clarification of the appropriate attire for nonsterile compounding.
Response: Comment partially incorporated. Revised chapter to require gloves for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Garb must be appropriate for the type of compounding performed.
Commentary Summary #33: A couple of commenters asked if a lab coat or smock would be considered an outer garment to be removed for nonsterile compounding.
Response: Comment not incorporated. Personal outer garments refer to items that are personal and not compounding garb.
Commentary Summary #34: Commenter asked if scrubs may be worn by compounding personnel.
Response: Comment partially incorporated. Scrubs do not constitute a personal outer garment. Revised section to strike sweaters and vests from the list of examples of outer garments. Additionally, the designated person(s) may permit accommodations, such as scrubs, as long as the quality of the environment and CNSP will not be affected.
Commentary Summary #35: Several commenters requested that personal outer garments (e.g., scarves) may be retained for warmth or religious observations.
Response: Comment incorporated. Revised the section to remove scarves from the list of examples of outer garments. The designated person(s) may permit accommodations as long as the quality of the environment and CNSP will not be affected.
Commentary Summary #36: Commenter suggested allowing a gown or frock to be donned over outer garments. Commenter requested that personal outer garments may be retained for warmth or religious observations.
Response: Comment partially incorporated. Revised the section to remove sweaters and vests from the list of examples of outer garments. The designated person(s) may permit accommodations as long as the quality of the environment and CNSP will not be affected.

Commentary Summary #37: Several commenters suggested that since veterinarians often work outdoors, removing coats, jackets, hats, scarves, sweaters, and vests is not acceptable.
Response: Comment partially incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians. Veterinarians may fall under the definition of "administration," which is out of scope of the chapter.
Commentary Summary #38: Commenter requested a definition of "personal outer garment" since sweaters may not be considered outer wear.
Response: Comment partially incorporated. Revised to strike sweaters and vests from the list of examples of outer garments. Additionally, the designated person(s) may permit accommodations as long as the quality of the environment and CNSP will not be affected.
Commentary Summary #39: A couple of commenters recommended striking sweaters and vests from the list of examples of outer garments.
Response: Comment incorporated.
Commentary Summary #40: Commenter recommended removing jewelry from the list of minimum requirements for personnel preparation.
Response: Comment not incorporated. Jewelry must not interfere with the effectiveness of garbing or hand hygiene.
Commentary Summary #41: Multiple commenters suggested that headphones and earphones will not interfere with garbing and should be struck from the list of minimum requirements for personnel preparation.
Response: Comment not incorporated. Personnel must be able to hear and be alert to their surroundings (i.e., emergencies, audible alarms). Earphones and headphones are for personal entertainment and must not be worn while compounding.
Commentary Summary #42: Commenter suggested that earrings that are exposed from hair covers may interfere with a clean environment. Commenter recommended specifying that earrings must be removed.
Response: Comment partially incorporated. The chapter requires that exposed jewelry that can interfere with the effectiveness of garbing or hand hygiene must be removed. Additionally, the designated person(s) may permit accommodations as long as the quality of the environment and CNSP will not be affected. The chapter is intended to be a minimum standard; however, facilities and regulatory bodies may enforce stricter and more specific requirements.
Commentary Summary #43: Multiple commenters requested prohibition of artificial nails.
Response: Comment not incorporated. Any items that are not easily cleanable and might interfere with garbing must be removed. Prohibiting artificial nails specifically is too stringent for nonsterile compounding. The facility may choose to incorporate more specific restrictions into their policies.
Commentary Summary #44: Commenter noted that removing all hand, wrist, and other exposed jewelry is too restrictive for nonsterile compounding. Commenter

suggested that hand hygiene will already require cleaning underneath nails, and protocol for punctured gloves is addressed in *3.3 Garb and Glove Requirements*.
Response: Comment incorporated. Revised section to move concepts of glove punctures to *3.2 Hand Hygiene*.
Commentary Summary #45: Commenter suggested adding restrictions on artificial nails, nail polish, and makeup.
Response: Comment not incorporated. Prohibiting artificial nails, nail polish, and makeup specifically is too stringent for nonsterile compounding. The chapter is intended to be a minimum standard; however, facilities and regulatory bodies may enforce stricter and more specific requirements.
Commentary Summary #46: Commenter recommended striking the requirement to wash hands with donned gloves.
Response: Comment incorporated.
Commentary Summary #47: Multiple commenters suggested adding the option of replacing gloves in addition to the requirement to wash hands with donned gloves.
Response: Comment partially incorporated. Revised section to strike the requirement to wash hands with donned gloves and added a provision to allow gloves to be either wiped or replaced before beginning a CNSP with different components.
Commentary Summary #48: A couple of commenters requested the rationale for hand hygiene beyond washing hands before and after nonsterile compounding.
Response: Comment not incorporated. The chapter expands on hand hygiene minimum requirements to ensure the quality of the CNSP. Hand hygiene reduces potential contamination of the preparation, whether it is a nonsterile preparation or not.
Commentary Summary #49: Commenter requested clarification on the type of garbing that will be required for nonhazardous nonsterile compounding.
Response: Comment partially incorporated. Revised chapter to require gloves for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination.
Commentary Summary #50: Commenter noted that requiring hand hygiene when entering the compounding area may not be applicable when no compounding will occur. Commenter also noted that the designated area may be within a general area of the pharmacy.
Response: Comment incorporated. Revised glossary definition of compounding area to include a visible perimeter.
Commentary Summary #51: Commenter requested to clarify that *Box 3-1 Hand Hygiene Procedures* refers to washing hands when gloves are not donned, and also requested to stipulate requirements for hand hygiene when gloves are donned. Commenter also requested clarifying that hand hygiene must be performed whenever entering the compounding area and before initiating any activity related to a new CNSP.
Response: Comment partially incorporated. Revised glossary definition of compounding area to include a visible perimeter, so that hand hygiene must be performed whenever entering this perimeter. Revised section to strike the requirement to wash hands with donned gloves and allow gloves to be either wiped or replaced before beginning a CNSP with different components.
Commentary Summary #52: Several commenters suggested adding the option of replacing gloves in between compounds and/or when gloves are compromised (e.g.,

punctured) instead of washing hands with donned gloves. Commenters were concerned that washing gloves could introduce soap into the CNSP.
Response: Comment incorporated. Revised section to strike the requirement to wash hands with donned gloves and to allow gloves to be either wiped or replaced before beginning a CNSP with different components.
Commentary Summary #53: Multiple commenters suggested it would be difficult to wash hands up to the elbows when wearing a gown that covers the forearms.
Response: Comment not incorporated. The facility will determine what garb is necessary to wear, and in what order to don garb in relation to hand hygiene. Hand hygiene may be performed before donning gowns.
Commentary Summary #54: Commenter suggested that when conditions necessitate protection beyond the wrist, gowns can be worn instead of washing hands up to the elbows. Commenter was concerned that washing gloves could introduce soap into the CNSP. Commenter disagreed with requiring hand hygiene whenever entering the compounding area, and after a break.
Response: Comment partially incorporated. Revised section to strike the requirement to wash hands with donned gloves and to allow gloves to be either wiped or replaced before beginning a CNSP with different components. The facility will determine what garb is necessary to wear, and in what order to don garb in relation to hand hygiene. Hand hygiene may be performed before donning gowns, but gowns cannot replace adequate hand hygiene. Revised section to strike requiring hand hygiene after a break; hand hygiene is required whenever personnel enter the compounding area to compound.
Commentary Summary #55: Multiple commenters noted that washing hands while wearing gloves will not effectively remove contaminants from gloves and may cause water to be trapped inside the glove or compromise glove integrity. Commenters suggested requiring hand hygiene before initiating compounding and changing gloves when soiled or exiting the compounding area.
Response: Comment partially incorporated. Hand hygiene is required whenever personnel enter the compounding area to compound. Revised section to require gloves to be wiped or replaced before beginning a CNSP with different components. Gloves may not be re-used.
Commentary Summary #56: Multiple commenters noted that gloves should be kept clean and free from debris and contaminants before each compounding activity. Commenters noted that gloves and gowns should not be removed within the compounding area to perform hand hygiene before each new CNSP to avoid compounder exposure.
Response: Comment partially incorporated. Revised section to allow gloves to be either wiped or replaced before beginning a CNSP with different components. Hand hygiene is required whenever personnel enter the compounding area to compound. Gloves may not be re-used. The chapter is intended to be a minimum standard; therefore doffing requirements are too stringent for nonsterile compounding. Facilities may choose to describe doffing restrictions in their policies.
Commentary Summary #57: A couple of commenters noted that if the active ingredient of the CNSP remains the same, hand hygiene on donned gloves would not be necessary.

Response: Comment partially incorporated. Revised section to specify that gloves should be wiped or replaced before beginning a CNSP with different components.
Commentary Summary #58: Commenter noted that hand hygiene before initiating any new CNSP is time consuming, and changing gloves should be adequate.
Response: Comment partially incorporated. Revised section to allow gloves to be either wiped or replaced before beginning a CNSP with different components. Hand hygiene is required whenever personnel enter the compounding area to compound.
Commentary Summary #59: Commenter suggested striking the need to perform hand hygiene when re-entering the compounding area following a break.
Response: Comment incorporated. Revised section to strike requiring hand hygiene after a break; hand hygiene is required whenever personnel enter the compounding area to compound.
Commentary Summary #60: Commenter suggested striking the need to perform hand hygiene when re-entering the compounding area following a break and before initiating any compounding activity related to a new CNSP.
Response: Comment partially incorporated. Revised section to allow gloves to be either wiped or replaced before beginning a CNSP with different components. Hand hygiene is required whenever personnel enter the compounding area to compound.
Commentary Summary #61: Commenter suggested adding that gloves should be visibly clean and free of residue or contamination before initiating any compounding activity related to a new CNSP.
Response: Comment partially incorporated. Revised section to state that gloves should be wiped or replaced before beginning a CNSP with different components. Visibly soiled garb must be changed immediately.
Commentary Summary #62: Commenter requested defining “new CNSP” to clarify when hand hygiene must be performed.
Response: Comment partially incorporated. Revised language to indicate that gloves should be wiped or replaced before beginning a CNSP with different components.
Commentary Summary #63: Commenter requested allowing gloves to be changed between compounds as an appropriate way to manage hand hygiene.
Response: Comment partially incorporated. Revised section to state that gloves should be wiped or replaced before beginning a CNSP with different components. Visibly soiled garb must be changed immediately. Hand hygiene is required whenever personnel enter the compounding area to compound.
Commentary Summary #64: Commenter noted that replacing gloves before compounding new CNSPs is adequate for hand hygiene.
Response: Comment partially incorporated. Revised section to specify that gloves should be wiped or replaced before beginning a CNSP with different components.
Commentary Summary #65: Commenter suggested requiring two pairs of gloves to reduce the need to wash donned gloves.
Response: Comment partially incorporated. Revised section to specify that gloves should be wiped or replaced before beginning a CNSP with different components.
Commentary Summary #66: Commenter noted that alcohol-based hand sanitizers have the potential to degrade glove integrity.
Response: Comment partially incorporated. Revised section to specify that gloves should be wiped or replaced before beginning a CNSP with different components.

Commentary Summary #67: Commenter disagrees that hand hygiene with alcohol-based hand sanitizers is inadequate.
Response: Comment not incorporated. Alcohol-based hand sanitizers alone are not sufficient to remove dirt and debris.
Commentary Summary #68: Commenter suggested that hand hygiene should be performed prior to donning gloves, and suggested removing the requirement to wash hands with donned gloves.
Response: Comment partially incorporated. Revised section to specify that gloves should be wiped or replaced before beginning a CNSP with different components. Hand hygiene must be performed whenever entering the compounding area to compound. *Box 3-1* states that hands and forearms must be allowed to dry following hand hygiene and before donning gloves.
Commentary Summary #69: Commenter suggested that when hand hygiene is required, a change of gloves should occur instead of washing hands and forearms with donned gloves.
Response: Comment partially incorporated. Revised section to specify that gloves should be wiped or replaced before beginning a CNSP with different components. Hand hygiene must be performed whenever entering the compounding area to compound. Gloves must not be re-used; therefore a change in gloves is required.
Commentary Summary #70: Several commenters suggested that donned gloves may be sanitized with alcohol instead of requiring full hand hygiene.
Response: Comment incorporated. Revised section to specify that gloves should be wiped or replaced before beginning a CNSP with different components.
Commentary Summary #71: Commenter suggested that washing hands up to the elbows is not necessary when the forearms are dry. Commenter noted that hand hygiene may require removing other garb.
Response: Comment partially incorporated. Revised section to strike the requirement to wash hands with donned gloves and allow gloves to be either wiped or replaced before beginning a CNSP with different components. The facility will determine what garb is necessary to wear, and in what order to don garb in relation to hand hygiene. Hand hygiene may be performed before donning gowns, but gowns cannot replace adequate hand hygiene. Hand hygiene procedures are consistent with current General Chapter <797> and WHO recommendations for hand hygiene.
Commentary Summary #72: Commenter requested clarification on whether hand hygiene must be performed before donning gloves or after.
Response: Comment partially incorporated. Revised to strike the requirement to wash hands with donned gloves. *Box 3-1 Hand Hygiene Procedures* clarifies that hands and forearms must be allowed to dry after hand hygiene, and before donning gloves.
Commentary Summary #73: Commenter suggested that gloves must be changed between preparations and sleeve covers should be used.
Response: Comment partially incorporated. Revised section to specify that gloves should be wiped or replaced before beginning a CNSP with different components. Other garb should be worn as needed for the protection of personnel and must be appropriate the type of compounding performed. Facilities may choose to require the use of sleeve covers.

Commentary Summary #74: Commenter expressed concern that allowing gloves to be washed would permit the re-use of gloves and negate the need to wash hands.
Response: Comment partially incorporated. Revised section to strike the requirement to wash hands with donned gloves and allow gloves to be either wiped or replaced before beginning a CNSP with different components. Hand hygiene is required whenever personnel enter the compounding area to compound. Revised section to clarify that gloves may not be re-used, and visibly soiled or compromised gloves must be changed immediately. Additionally, the garbing requirements and frequency of changing the garb must be determined by the facility and documented in the facility's SOPs.
Commentary Summary #75: Commenter recommended writing out "30 seconds" to avoid confusion.
Response: Comment incorporated.
Commentary Summary #76: Commenter suggested moving the statement that gloves must be changed when they are compromised to *3.3 Garb and Glove Requirements*.
Response: Comment not incorporated. Hand hygiene and gloving requirements should be placed together.
Commentary Summary #77: A couple of commenters suggested that the procedures described in *Box 3-1 Hand Hygiene Procedures* are appropriate for sterile techniques, but not for nonsterile compounding.
Response: Comment not incorporated. Hand hygiene is required for both sterile and nonsterile compounding. The hand hygiene procedures are consistent with current <797> and the WHO recommendations for hand hygiene.
Commentary Summary #78: Commenter noted that lab coats should be replaced when soiled or weekly.
Response: Comment partially incorporated. If soiled, the gown may not be re-used. The facility should specify how often gowns are required to be changed and/or laundered.
Commentary Summary #79: Commenter suggested specifying the use of antimicrobial soap and the use of low-particle releasing paper for drying hands and forearms.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; requiring specific soap and wipe properties is too prescriptive for nonsterile compounding.
Commentary Summary #80: Commenter suggested specifying the use of soap with persistent activity.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; requiring specific soap properties is too prescriptive for nonsterile compounding.
Commentary Summary #81: Several commenters suggested that washing hands up to the elbows is not necessary for nonsterile compounding.
Response: Comment not incorporated. Hand hygiene procedures are consistent with current <797> and WHO recommendations for hand hygiene.
Commentary Summary #82: Commenter suggested clarifying that *Box 3-2 Hand Hygiene* pertains to washing hands that are already gloved.

Response: Comment not incorporated. *Box 3-2 Hand Hygiene* is not intended to be limited to washing donned gloves. Revised section to strike the requirement to wash hands with donned gloves and allow gloves to be either wiped or replaced before beginning a CNSP with different components.
Commentary Summary #83: Commenter suggested requiring that hands be washed at the beginning of the compounding period and after returning from a break when the compounder leaves the area.
Response: Comment partially incorporated. Revised section to strike the requirement for hand hygiene after a break; hand hygiene is required whenever personnel enter the compounding area to compound.
Commentary Summary #84: Commenter suggested that hair covers and masks should be required in addition to gloves.
Response: Comment not incorporated. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination, and must be appropriate for the type of compounding performed. The facility may specify the need for additional garbing, such as hair covers and masks, in its SOPs.
Commentary Summary #85: Commenter requests clarification on whether gowns are required.
Response: Comment partially incorporated. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Revised section to clarify that other garb must be appropriate for the type of compounding performed. The facility may require additional garbing, such as gowns, in its SOPs.
Commentary Summary #86: Commenter requested changing “gloves are required” to a “must” statement for clarity.
Response: Comment incorporated.
Commentary Summary #87: Commenter noted that the amount of garb required by the chapter poses a great financial burden for facilities in isolated rural areas.
Response: Comment partially incorporated. Revised chapter to require gloves for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination.
Commentary Summary #88: A couple of commenters requested to strike requiring gloves for nonsterile compounding. Commenters stated that gloves are not necessary for nonsterile compounding of simple preparations.
Response: Comment not incorporated. Gloves must be worn for all compounding activities to protect personnel from chemical exposures and for prevention of preparation contamination.
Commentary Summary #89: Commenter requested specifying the use of nitrile or neoprene gloves to reduce latex allergic reactions.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; therefore specifying glove materials is too prescriptive. Facilities may determine specific garbing and gloving materials for their own practices.
Commentary Summary #90: Commenter suggested that bonnets or head covers should be required, whereas shoe covers should not be required. Commenter suggested striking that garb must be appropriate for the type of compounding.
Response: Comment partially incorporated. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Revised

section to stipulate that facilities must describe garbing requirements in their SOPs. The type of compounding performed must be considered for garbing requirements. The chapter is intended to be a minimum standard; facilities may choose to incorporate specific garbing requirements in their policies.

Commentary Summary #91: Commenter requested clarification on what is required for "other garb" in *3.3 Garb and Glove Requirements*.

Response: Comment incorporated. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Revised section to stipulate that facilities must determine the garbing requirements and describe them in their SOPs. The type of compounding performed must be considered for garbing requirements.

Commentary Summary #92: Commenter noted that covers for the head, face, and shoes are required for all compounding activities.

Response: Comment partially incorporated. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Revised section to stipulate that facilities must determine the garbing requirements and describe them in their SOPs. The type of compounding performed must be considered for garbing requirements. The chapter is intended to be a minimum standard; facilities may choose to incorporate specific garbing requirements in their policies.

Commentary Summary #93: Several commenters requested a reference, guideline, or definition for "other garb" that should be worn.

Response: Comment partially incorporated. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Revised section to stipulate that facilities must determine the garbing requirements and describe them in their SOPs. The type of compounding performed must be considered for garbing requirements.

Commentary Summary #94: Commenter noted that head and beard covers should be required.

Response: Comment partially incorporated. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Revised section to stipulate that facilities must determine the garbing requirements and describe them in their SOPs. The type of compounding performed must be considered for garbing requirements.

Commentary Summary #95: Commenter noted that eye protection is also garb that must be appropriate for the type of compounding performed.

Response: Comment partially incorporated. The parenthetic garb in the statement is intended to denote examples of garb, and is not all-inclusive. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Revised section to stipulate that facilities must determine the garbing requirements and describe them in their SOPs. The type of compounding performed must be considered for garbing requirements.

Commentary Summary #96: Commenter suggested defining garbing requirements in the Master Formulation Record and/or SOP.

Response: Comment partially incorporated. Revised section to state that garbing requirements must be determined by the facility and documented in the facility's SOPs.

Commentary Summary #97: Several commenters proposed allowing gowns to be re-used when exiting the compounding area during a work shift if not soiled and retained in the compounding area, and re-donned during the same 7-day work week.
Response: Comment partially incorporated. Revised section to state that if gowns are worn, they may be re-used if not soiled. Please note that soiling may not always be visible, therefore gowns may need to be replaced at the end of each shift.
Commentary Summary #98: Commenter suggested that a differentiated process for simple compounds and procedures should be described for garbing.
Response: Comment partially incorporated. Revised section to state that gloves must be worn for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Facilities must describe garbing requirements in their SOPs. The type of compounding performed must be considered for garbing requirements. Additionally, the Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP.
Commentary Summary #99: A couple of commenters noted that gloves and gowns are required for all compounding activities. Other garb must be appropriate for the type of compounding performed.
Response: Comment partially incorporated. Revised section to state that gloves must be worn for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Facilities must describe garbing requirements in their SOPs. The type of compounding performed must be considered for garbing requirements.
Commentary Summary #100: Commenter suggested that garbing requirements should be differentiated between pharmacies and dedicated compounding facilities where gowning may be appropriate versus community retail pharmacies where only simple and moderate compounding is performed.
Response: Comment partially incorporated. Revised section to state that gloves must be worn for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Facilities must describe garbing requirements in their SOPs. The type of compounding performed must be considered for garbing requirements. Additionally, the Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP.
Commentary Summary #101: Several commenters suggested that gowns cannot be re-used (e.g., soiled with sweat). However, head and hair covers, goggles, and facial hair covers may be re-used.
Response: Comment not incorporated. Gowns may be re-used if not soiled. Please note that soiling may not always be visible, therefore gowns may need to be replaced at the end of each shift. Head and hair covers and facial hair covers cannot be re-used. Non-disposable garb should be cleaned and sanitized before re-use.
Commentary Summary #102: Commenter suggested that eyeglasses should be cleaned and sanitized with 70% isopropyl alcohol before re-use.

Response: Comment not incorporated. The chapter is intended to be a minimum standard; therefore, requiring eyeglasses to be wiped is too stringent for nonsterile compounding. Additionally, isopropyl alcohol can strip off the protective film on some types of lenses. The chapter is intended to be a minimum standard; facilities may choose to incorporate wiping glasses into their SOPs.
Commentary Summary #103: Multiple commenters suggested that garbing should be based on the type of compounding performed.
Response: Comment partially incorporated. Revised section to state that gloves must be worn for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Facilities must describe garbing requirements in their SOPs. The type of compounding performed must be considered for garbing requirements.
Commentary Summary #104: Commenter suggested that gowns will be soiled if re-used over the course of multiple occasions, especially if there is not a physical barrier between compounding spaces.
Response: Comment not incorporated. Gowns may be re-used if not soiled, and retained in a manner that minimizes contamination.
Commentary Summary #105: Commenter noted that gowns can only be re-used if not soiled and used for nonhazardous compounding.
Response: Comment partially incorporated. If preparing HDs, users should refer to <800>. Additionally, <800> allows for an assessment of risk for certain HDs.
Commentary Summary #106: Commenter suggested removing the option to retain and re-use gowns.
Response: Comment not incorporated. Gowns may be re-used if not soiled, and retained in a manner that minimizes contamination.
Commentary Summary #107: Commenter suggested that gowns worn outside of the compounding area should not be re-used.
Response: Comment not incorporated. The compounding area may be a space, such as on a counter, which would not be adequate for garb storage. Revised to state that garb must be stored in a manner that minimizes contamination.
Commentary Summary #108: Commenter suggested that gowns may be re-donned in the same work shift only, except for pharmacies that compound in low volumes at less than 5 products per week, in which case gowns must be replaced at least weekly.
Response: Comment partially incorporated. The chapter is intended to be a minimum standard, regardless of the volume of compounding. Revised section to state that if gowns are worn, they may be re-used if not soiled. Please note that soiling may not always be visible, therefore gowns may need to be replaced at the end of each shift.
Commentary Summary #109: Commenter noted that all re-usable garb should be allowed for re-use within the same shift unless damage or contamination occurred.
Response: Comment not incorporated. Garb should not be re-used because of the risk of cross contamination.
Commentary Summary #110: Commenter requested clarifying if the compounding area needs a line of demarcation.
Response: Comment incorporated. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to require that a method of designation must be described in the SOPs.

Commentary Summary #111: Commenter suggested that only high-volume compounding facilities should not re-use garb.
Response: Comment not incorporated. Garb should not be re-used because of the risk of cross contamination. The chapter is intended to be a minimum standard; therefore, requirements cannot be stratified by volume of compounding.
Commentary Summary #112: Commenter suggested that unwashed or torn gloves may not be re-used.
Response: Comment not incorporated. Gloves should be wiped or replaced before beginning a CNSP with different components.
Commentary Summary #113: Commenter suggested removing verbiage "if used" for non-reusable garb.
Response: Comment not incorporated. Facilities may determine what garb are required, therefore the language clarifies that the statement is applicable if these garb are used.
Commentary Summary #114: Commenter requested clarifying if all garb must be changed in the same work shift.
Response: Comment not incorporated. If gowns are worn, they may be re-used if not soiled. If used, gloves, shoe covers, hair covers, facial hair covers, face masks, or head coverings may not be re-used and must be replaced with new ones. If used, non-disposable garb, such as goggles or respirators, should be cleaned and sanitized with 70% isopropyl alcohol before re-use.
Commentary Summary #115: Commenter suggested that hair covers and facial hair covers are not necessary for veterinarians. Commenter noted face masks, goggles, and respirators can easily scare animals, resulting in increased safety hazards for the veterinarian.
Response: Comment partially incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians. Revised chapter to require gloves for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Additionally, veterinarians may fall under the definition of "administration," which is out of scope.
Commentary Summary #116: Commenter noted that non-disposable garb must be cleaned and sanitized before re-use.
Response: Comment incorporated. If used, non-disposable garb should be cleaned and sanitized. The chapter is intended to be a minimum standard; however, regulatory bodies and facilities may choose to enforce more stringent requirements.
Commentary Summary #117: Several commenters noted that isopropyl alcohol may not be compatible with maintaining garb integrity, and should not be recommended for re-using garb.
Response: Comment partially incorporated. Isopropyl alcohol is an example of an agent that can be used, however, facilities may determine which cleaning and disinfecting agents to use. Additionally, the statement is a recommendation.

Commentary Summary #118: Commenter noted that garbing requirements are not necessary for nonsterile compounding.
Response: Comment not incorporated. Garbing is required to prevent cross contamination.
Commentary Summary #119: Commenter requested specifying what gowns are appropriate.
Response: Comment not incorporated. The facility must determine appropriate garb to wear. Additionally, the chapter is intended to be a minimum standard; specifying garment characteristics is too prescriptive for the purposes of the chapter.
Commentary Summary #120: Commenter suggested that isopropyl alcohol is not appropriate for cleaning re-usable garb.
Response: Comment partially incorporated. Isopropyl alcohol is an example of an agent that can be used, however, facilities may determine which cleaning and disinfecting agents to use. Additionally, the statement is a recommendation.
Commentary Summary #121: Commenter suggested that garb cleaning procedures should be consistent with manufacturer recommendations.
Response: Comment not incorporated. Cleaning procedures are not usually included for goggles and respirators.
Commentary Summary #122: Commenter requested allowing other sanitizing agents for wiping down re-usable garb. Additionally, commenter noted that the ability to wash gloves contradicts the statement that gloves cannot be re-used.
Response: Comment partially incorporated. Isopropyl alcohol is an example of an agent that can be used, however, facilities may determine which cleaning and disinfecting agents to use. The chapter was revised to state that gloves should be wiped or replaced before beginning a CNSP with different components. Gloves are not permitted to be re-used after they have been removed from hands.

4. Buildings and Facilities

Commentary Summary #1: Commenter noted that many small compounding pharmacies utilize the same space for multiple activities. Commenter suggested that the compounding area should be one that is not accessible by patients or those not properly garbed.
Response: Comment not incorporated. A designated space for compounding is required to prevent potential contamination of other work areas, and thus personnel and patients. Other activities must not be occurring in the space at the same time as compounding.
Commentary Summary #2: Multiple commenters noted that it is unclear what level of separation is required for the compounding area.
Response: Comment partially incorporated. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to state that a method of designation must be described in the SOPs.
Commentary Summary #3: Multiple commenters suggested that an adequately cleaned, deactivated, and decontaminated compounding area should be able to serve for compounding HDs.

Response: Comment not incorporated. HD compounding is out of scope of the chapter (see <800>). Compounding HDs in the same area could cause cross contamination. An assessment of risk may be performed.
Commentary Summary #4: Multiple commenters suggested that a designated compounding area is only necessary for high-volume compounding facilities, and not facilities that perform limited compounding or have limited space.
Response: Comment not incorporated. A designated space for compounding is required to prevent potential contamination of other work areas, and thus personnel and patients. The chapter is intended to be a minimum standard, therefore requirements cannot be stratified based on volume of compounding.
Commentary Summary #5: Commenter suggested that requirements for a compounding area do not apply to veterinarians.
Response: Comment not incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.
Commentary Summary #6: Several commenters suggested that compounding areas may be carpeted.
Response: Comment not incorporated. Carpeting can harbor bacteria, and carpeting cannot be thoroughly cleaned or sanitized.
Commentary Summary #7: Multiple commenters requested clarification regarding the designated compounding space, and its separation. Defining “separated” was suggested.
Response: Comment partially incorporated. The area must be designated, but does not have to be a separate room. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to state that a method of designation must be described in the SOPs.
Commentary Summary #8: Commenter requested adding requirements for repackaging.
Response: Comment incorporated. A provision was added to *1.1 Scope* to clarify that the chapter does not apply to repackaging of nonsterile conventionally manufactured products.
Commentary Summary #9: Multiple commenters suggested that compounding areas do not need heating and ventilation control, separation from other areas, or temperature and humidity control.
Response: Comment partially incorporated. The compounding space must be separate to prevent cross contamination. Revised to clarify that temperature, heating, ventilation, and humidity controls pertain to the storage area to ensure the quality of components and CNSPs.
Commentary Summary #10: Commenter suggested that veterinarians may not always be able to access a CVE for compounding.
Response: Comment partially incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal*

Recognition, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians. Revised section such that CVEs are an example of a closed system processing device, allowing BSCs and single-use glove bags to also be examples. A process evaluation must be performed to determine whether these devices are necessary. Additionally, veterinarians may fall under the definition of "administration," which is out of scope.

Commentary Summary #11: Commenter suggested that a separate room is not necessary for nonsterile compounding. Defining "separated" was suggested.

Response: Comment partially incorporated. The area must be designated, but does not have to be a separate room. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to state that a method of designation must be described in the SOPs.

Commentary Summary #12: Several commenters suggested that simple processes do not need the facility requirements outlined in the chapter.

Response: Comment partially incorporated. Revised *1.1 Scope* to note that administration and reconstitution of a conventionally manufactured nonsterile product in accordance with the directions contained in the manufacturer-approved labeling are not required to meet the standards in this chapter. For other compounding, facility requirements are necessary to minimize cross contamination.

Commentary Summary #13: Commenter inquired whether certification of plumbing is necessary.

Response: Comment not incorporated. Certification of plumbing is not required.

Commentary Summary #14: Commenter suggested adding minimum requirements for a primary engineering control (PEC), including CVEs to be used for nonsterile compounding.

Response: Comment not incorporated. Other commenters noted that requiring a PEC for all nonsterile compounding is overly restrictive. The chapter allows for a process assessment to determine whether activity-generating activities should be done in a closed system processing device. Closed system processing devices include CVEs, BSCs, and single-use containment glove bags.

Commentary Summary #15: Commenter suggested requiring the nonsterile compounding facility to have seamless vinyl flooring and laminate countertops and cupboard finishes.

Response: Comment not incorporated. Facilities should determine the appropriate surfaces for the nonsterile compounding area. However, the surfaces should be resistant to damage by cleaning and sanitizing agents.

Commentary Summary #16: Commenter requested prohibition of carpets from the nonsterile compounding area.

Response: Comment incorporated.

Commentary Summary #17: Commenter noted that the requirement for a CVE for compounding of all nonsterile powders is too onerous.

Response: Comment incorporated. The chapter allows for a process assessment to determine whether activity-generating activities should be done in a closed system processing device. Closed system processing devices include CVEs, BSCs, and single-use containment glove bags.

Commentary Summary #18: Commenter noted that small operations that prepare a low volume of CNSPs and only prepare oral suspensions or mixing of two creams should be exempt from the chapter and should not be required to invest in a compounding area.
Response: Comment partially incorporated. The chapter is intended to provide standards for quality CNSPs regardless of where the CNSP is prepared. The chapter should not stratify different quality requirements based on the volume or location of compounding. The chapter does not require a separate *dedicated* compounding area. However, a space must be *designated* when nonsterile compounding is occurring. The space is not required to be a separate room and may be designated as described by the facility's SOP (e.g., visible perimeter).
Commentary Summary #19: Several commenters requested information on patient harm events that would warrant a requirement for defined staff competency for nonsterile, nonhazardous compounding. The commenters noted that pharmacists must take professional and legal responsibility for a final CNSP, and the chapter standards are too onerous.
Response: Comment not incorporated. The standards in the chapter are based on evidence when available, as well as expertise of the Compounding Expert Committee, and input from stakeholders. Compounding personnel must demonstrate proficiency and competency in nonsterile compounding for the type of compounding they perform to help ensure the quality of the preparation.
Commentary Summary #20: Commenter suggested requiring waste containers of suitable size, made of material that is resistant to damage from cleaning, and specifying that waste should be collected in plastic bags to be removed with minimal agitation when no compounding is occurring.
Response: Comment partially incorporated. Disposal must comply with applicable laws and regulations. The chapter is intended to be a minimum standard; therefore, specifying the size and type of container would be too prescriptive.
Commentary Summary #21: Multiple commenters noted that veterinarians may not be able to adhere to facility requirements.
Response: Comment partially incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians. The area must be designated, but does not have to be a separate room. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to state that a method of designation must be described in the SOPs. Additionally, veterinarians may fall under the definition of "administration," which is out of scope.
Commentary Summary #22: Commenter suggested allowing reconstitution to be performed in the compounding space.
Response: Comment partially incorporated. Revised *1.1 Scope* to note that reconstitution of a conventionally manufactured nonsterile product in accordance with the directions contained in the manufacturer-approved labeling is not required to meet the standards in this chapter. The compounding space must be designated for

nonsterile compounding; however other activities may be performed in the space as long as compounding is not occurring at the same time.
Commentary Summary #23: Commenter suggested that a separate area should not be required for nonsterile compounding.
Response: Comment partially incorporated. A separate space for compounding minimizes cross contamination. The area must be designated space, but does not have to be a separate room. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to state that a method of designation must be described in the SOPs.
Commentary Summary #24: Commenter noted that ceilings and walls are not accessible and would not need to be cleaned.
Response: Comment not incorporated. Ceilings and walls must be cleaned at the frequency noted in *Table 1* to minimize contamination of CNSPs.
Commentary Summary #25: Several commenters suggested requiring a dedicated room for complex-level compounding.
Response: Comment not incorporated. The area must be a designated space, but does not have to be a separate room. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to state that a method of designation must be described in the SOPs. The Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP. The chapter is intended to be a minimum standard; however, facilities and regulatory bodies may choose to enforce stricter requirements. USP has no role in enforcement.
Commentary Summary #26: Several commenters noted that nonsterile compounding components can be stored with medications not used for compounding.
Response: Comment partially incorporated. The chapter does not explicitly require storing nonsterile compounding components separately from medications not used in compounding. However, the compounding space must provide for the orderly placement of equipment and materials to prevent mix-ups among components, containers, labels, in-process materials, and finished CNSPs.
Commentary Summary #27: Several commenters suggested that purified water is not required for rinsing equipment.
Response: Comment incorporated. *Purified Water*, distilled water, or reverse osmosis water should be used for rinsing equipment and utensils. General Chapter <1231> *Water for Pharmaceutical Purposes* is referenced.
Commentary Summary #28: Multiple commenters suggested that storage areas do not need heating and ventilation control, separation from other areas, or temperature and humidity control.
Response: Comment partially incorporated. Controlled storage areas ensure the quality of the components and CNSPs. Revised to strike humidity requirements.
Commentary Summary #29: Several commenters requested clarifying how soon to empty the sink “before” being used to clean any equipment used in nonsterile compounding.

Response: Comment not incorporated. The chapter is intended to be a minimum requirement; therefore, requiring a timeframe for emptying out the sink would be too prescriptive. This may be described in the facility SOPs.
Commentary Summary #30: Commenter suggested striking, "Areas related to nonsterile compounding must be separated from areas not directly related to compounding."
Response: Comment incorporated.
Commentary Summary #31: Multiple commenters suggested that the compounding space must be designated but does not have to be separated.
Response: Comment partially incorporated. The compounding space must be designated and separated, but this does not have to be a separate room. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to state that a method of designation must be described in the SOPs.
Commentary Summary #32: Multiple commenters requested that the compounding space may be used for other activities when not compounding.
Response: Comment incorporated. Other activities must not be occurring in the space at the same time as compounding.
Commentary Summary #33: Multiple commenters requested clarification on whether the separation for compounding spaces must be a physical barrier, or if a designated counter is sufficient.
Response: Comment partially incorporated. The compounding space must be designated and separated, but this does not have to be a separate room. A visible perimeter should establish the boundaries of the compounding area. Revised *4.1 Compounding Space* to state that a method of designation must be described in the SOPs.
Commentary Summary #34: Commenter suggested changing the verbiage to read “Except when permitted as described by <800>, areas intended for nonsterile compounding must be separated […]”
Response: Comment not incorporated. Suggested change may cause confusion.
Commentary Summary #35: Commenter suggested that *Purified Water* may not be available for veterinary practices.
Response: Comment incorporated. The chapter was revised to allow for the use of *Purified Water*, distilled water, or reverse osmosis water for rinsing equipment and utensils. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary practices.
Commentary Summary #36: Multiple commenters suggested that HDs may be stored in the same area as non-HDs.
Response: Comment partially incorporated. HD storage is out of scope of the chapter (see <800>). Storing HDs in the same area could cause cross contamination. An assessment of risk may be performed.
Commentary Summary #37: Multiple commenters suggested that a nonsterile compounding area should be able to serve for compounding of HDs and non-HDs.

Response: Comment not incorporated. HD compounding is out of scope of the chapter (see <800>). Compounding HDs in the same area could cause cross contamination. An assessment of risk may be performed.
Commentary Summary #38: Several commenters requested clarifying the need for controlled temperature and humidity.
Response: Comment partially incorporated. Controlled storage areas are required to maintain the quality of components and preparations. Revised to strike the requirement for humidity control.
Commentary Summary #39: Multiple commenters suggest that the 60% humidity requirement is not practical.
Response: Comment incorporated. Revised to strike the requirement for humidity control.
Commentary Summary #40: Multiple commenters suggested that heating, ventilation, and air conditioning (HVAC) systems must be designed and controlled to minimize decomposition and contamination of chemicals, components, and CNSPs, but cannot prevent it.
Response: Comment partially incorporated. Revised to remove the statement that HVAC systems must be designed and controlled to prevent decomposition and contamination of chemicals, components, and CNSPs.
Commentary Summary #41: Commenter noted that since the chapter does not describe specific garbing requirements, temperature and humidity controls are also difficult to ascertain.
Response: Comment incorporated. Revised to remove statement.
Commentary Summary #42: Several commenters recommended striking the requirement for humidity controls since containers are tightly closed.
Response: Comment incorporated.
Commentary Summary #43: Several commenters recommended striking the requirement for humidity controls because it depends on the climate.
Response: Comment incorporated.
Commentary Summary #44: Several commenters suggested that humidity requirements cannot be reasonably maintained in a refrigerated setting.
Response: Comment incorporated. Revised to strike humidity requirements.
Commentary Summary #45: Commenter suggested adding temperature and humidity monitoring requirements.
Response: Comment partially incorporated. Revised to strike humidity requirements due to many public comments noting that they are impractical to maintain. Added temperature monitoring requirements for storage areas.
Commentary Summary #46: Commenter noted that packages and cardboard boxes are not allowed in the compounding space due to dust and particle contamination.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; therefore, requiring particle-free space is too stringent. Facilities and regulatory bodies may choose to implement and enforce additional restrictions on the compounding space.
Commentary Summary #47: Commenter noted it is difficult to enforce a compounding space to be designed, arranged, and used in a way that minimizes cross contamination from non-compounding areas.

Response: Comment incorporated. Revised statement to be a recommendation.
Commentary Summary #48: Commenter suggested that the compounding area must have limited foot traffic.
Response: Comment partially incorporated. Revised section to recommend that the compounding space is designed, arranged, and used in a way that minimizes cross contamination from non-compounding areas.
Commentary Summary #49: Several commenters suggested that facility requirements are too costly for veterinary compounders to adhere to.
Response: Comment not incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.
Commentary Summary #50: Commenter suggested guidance on cleaning and sanitizing agents, and surface requirements.
Response: Comment not incorporated. The types of agents and surface materials depend on the facility design. The chapter is intended to be a minimum standard; it would be too stringent to require specific cleaning and sanitizing agents and surface materials.
Commentary Summary #51: Commenter recommended specifying the use of powder containment hoods, seamless vinyl flooring, and laminate countertops and cupboard finishes.
Response: Comment partially incorporated. Revised *6.1 Equipment* to further describe when to use a device for containing airborne chemical particles. The chapter is intended to be a minimum standard; surfaces should be resistant to damage from cleaning and sanitizing agents, but it is too prescriptive to specify surface materials.
Commentary Summary #52: Several commenters requested that facilities that perform minimal compounding be excluded from facility requirements due to cost.
Response: Comment not incorporated. The chapter is intended to be a minimum standard, and standards cannot be stratified based on the volume of the compounding facility.
Commentary Summary #53: A couple of commenters recommended removing the verbiage “see also” when referencing <800>.
Response: Comment incorporated.
Commentary Summary #54: A couple of commenters noted that ceilings and fixtures do not need to be cleanable and kept cleaned.
Response: Comment not incorporated. *Table 1* provides specific cleaning requirements for each surface.
Commentary Summary #55: Commenter suggested adding a stipulation that surfaces must not be made from material that will rust.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; surfaces should be resistant to damage from cleaning and sanitizing agents, but it is too prescriptive to specify surface materials.
Commentary Summary #56: Several commenters recommended adding language stating that floors and walls "should" be smooth and nonporous to be easily cleanable.

Response: Comment partially incorporated. Cleaning and sanitizing must be repeated when spills occur and when surfaces are visibly soiled. The chapter is intended to be a minimum standard; surfaces should be resistant to damage from cleaning and sanitizing agents, but it is too prescriptive to specify surface materials.
Commentary Summary #57: Several commenters suggested that ceilings should be kept free from dust, particulates, cracks, and stains, and they do not require cleaning with a liquid agent.
Response: Comment partially incorporated. Revised *Table 1* to require cleaning the ceiling when visibly soiled and when surface contamination is known or suspected. The facility must determine the cleaning agent that will be used.
Commentary Summary #58: Commenter noted that “cleanable” is not defined.
Response: Comment incorporated. Revised to strike the word “cleanable”.
Commentary Summary #59: Commenter recommended allowing ceiling tiles extending a certain number of feet out above the compounding area to be cleanable, unless the requirement is for a physically separate room.
Response: Comment partially incorporated. Revised to strike the word “cleanable” due to confusion about what is considered cleanable.
Commentary Summary #60: Commenter suggested revising the verbiage to state, “the surfaces used for nonsterile compounding must be cleanable and must be kept clean.”
Response: Comment partially incorporated. Revised to strike the word “cleanable” due to confusion about what is considered cleanable. Additionally, *Table 1* clarifies the frequency of cleaning surfaces.
Commentary Summary #61: Multiple commenters noted that ceilings are not designed with being cleanable in mind.
Response: Comment partially incorporated. Revised to remove statement. Additionally, *Table 1* clarifies the frequency of cleaning surfaces.
Commentary Summary #62: Multiple commenters noted that a large expenditure is required for coming into compliance with facility requirements to ensure that surfaces are cleanable and would withstand cleaning agents.
Response: Comment partially incorporated. Revised to remove the requirement to be “cleanable”. Cleaning and sanitizing agents must be selected and used with consideration of compatibilities, effectiveness, and minimizing the potential to leave residues.
Commentary Summary #63: Several commenters noted that not allowing carpeting is impractical in most pharmacy settings, where facilities may utilize “fatigue carpeting” to improve working conditions for pharmacy staff.
Response: Comment not incorporated. Carpeting can harbor bacteria, and carpeting cannot be thoroughly cleaned or sanitized.
Commentary Summary #64: Commenter requested an additional grace period for facilities with carpeting.
Response: Comment not incorporated. Carpeting can harbor bacteria, and carpeting cannot be thoroughly cleaned or sanitized. There is a 6-month implementation period from when the chapter is published to when it becomes official, and additional implementation time may be determined by the entities responsible for enforcement in the relevant jurisdiction.

Commentary Summary #65: Commenter suggested that ceilings may be wiped but cannot be wet.
Response: Comment partially incorporated. Revised *Table 1* to require cleaning the ceiling when visibly soiled and when surface contamination is known or suspected.
Commentary Summary #66: Commenter suggested that stainless steel and touchless features must be used for the sink. Commenter suggested that the sink must be cleaned with detergent before and after washing compounding equipment.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; requiring specific sink features is too prescriptive. The sink must be emptied of all items unrelated to compounding and cleaned when visibly soiled before being used to clean any equipment used in nonsterile compounding. Facilities and regulatory bodies may choose to enforce stricter requirements.
Commentary Summary #67: Commenter suggested that the sink should be cleaned weekly as it is time-consuming to clean it each time it is used.
Response: Comment partially incorporated. Revised section to state that the sink must be cleaned when visibly soiled before being used to clean any equipment used in nonsterile compounding.
Commentary Summary #68: Several commenters suggested that the sink should be emptied and cleaned daily at the start of compounding activities and at the end of compounding activities.
Response: Comment partially incorporated. Requiring emptying and cleaning of the sink may not apply to facilities that do not compound daily. Revised section to state that the sink must be emptied of all items unrelated to compounding and cleaned when visibly soiled before being used to clean any equipment used in nonsterile compounding.
Commentary Summary #69: Several commenters requested clarifying what constitutes a “good state of repair” and “free of defects” for water sources.
Response: Comment partially incorporated. Revised to remove statements.
Commentary Summary #70: Several commenters requested clarification on what is meant by “cleaned” for the sink.
Response: Comment not incorporated. The *Glossary* defines cleaning as “The process of removing soil (e.g., organic and inorganic material) from objects and surfaces, normally accomplished by manually or mechanically using water with detergents or enzymatic products.”
Commentary Summary #71: Several commenters suggested that potable water may be used to rinse equipment.
Response: Comment incorporated. *Purified Water*, distilled water, or reverse osmosis water should be used for rinsing equipment and utensils. General Chapter <1231> is referenced.
Commentary Summary #72: Commenter noted that asking sites to use *Purified Water* to wash/rinse equipment and utensils will cause significant burden and infrastructure changes to water systems for pharmacies.
Response: Comment not incorporated. *Purified Water*, distilled water, or reverse osmosis water should be used for rinsing equipment and utensils. General Chapter <1231> is referenced.

Commentary Summary #73: Commenter suggested that sterile water for irrigation may be used to rinse equipment.
Response: Comment partially incorporated. Use of *Purified Water* is a recommendation, and sterile water for irrigation meets the criteria for better or equivalent water. General Chapter <1231> is referenced.
Commentary Summary #74: Commenter requested defining *Purified Water*.
Response: Comment not incorporated. The *Purified Water* monograph is referenced. Use of *Purified Water* to rinse equipment and utensils is a recommendation and not a requirement.
Commentary Summary #75: Commenter suggested that *Purified Water* for rinsing equipment would need to be tested for compliance.
Response: Comment not incorporated. Use of *Purified Water* is a recommendation and not a requirement. *Purified Water*, distilled water, or reverse osmosis water should be used for rinsing equipment and utensils. General Chapter <1231> is referenced.
Commentary Summary #76: Commenter noted that drums are too heavy to store off the floor.
Response: Comment not incorporated. Items must be stored off the floor to prevent contamination.
Commentary Summary #77: Commenter requested a definition for “sanitary manner”.
Response: Comment incorporated. Revised to strike statement.

5. Cleaning and Sanitizing

Commentary Summary #1: Several commenters noted that veterinary practices are typically not designed with compounding in mind; therefore routine ceiling cleaning may not achieve disinfection.
Response: Comment partially incorporated. Revised section to require cleaning the ceilings when visibly soiled and when contamination is known or suspected. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary practices.
Commentary Summary #2: Multiple commenters suggested that sanitizing is not necessary for nonsterile compounding. Commenters requested to strike sanitizing from the chapter.
Response: Comment not incorporated. Surfaces must be cleaned and sanitized, which is less stringent than the need to disinfect for sterile compounding areas.
Commentary Summary #3: Multiple commenters suggested stratifying cleaning and sanitizing requirements for facilities that do not perform complex compounding processes. Commenters requested different requirements depending on the type of compounding.
Response: Comment not incorporated. All CNSPs must meet the minimum standards for nonsterile compounding. The Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP.

Commentary Summary #4: Several commenters expressed concern that cleaning, sanitizing, and disinfecting have different definitions, which could be confusing.
Response: Comment not incorporated. The *Glossary* contains the definitions for cleaning and sanitizing agent. Disinfecting is not included in <795>.
Commentary Summary #5: Commenter suggested adding a chart to clearly delineate cleaning and sanitizing agents.
Response: Comment not incorporated. Facilities must choose cleaning and sanitizing agents depending on their practices and facility design.
Commentary Summary #6: Multiple commenters requested a minimum frequency for cleaning a work surface.
Response: Comment incorporated. Revised *Table 1* to add frequency for work surfaces.
Commentary Summary #7: Multiple commenters requested clarification on what cleaning materials should be used.
Response: Comment not incorporated. Cleaning materials depend on the facility design and practices; therefore they will be facility-specific.
Commentary Summary #8: Commenter suggested removing “nonsterile” from the statement that cleaning and sanitizing of the surfaces in the nonsterile compounding areas must occur on a regular basis.
Response: Comment not incorporated. The “nonsterile” qualifier is necessary to distinguish it from other areas within the facility.
Commentary Summary #9: Several commenters requested clarification on how cleaning frequencies apply to facilities that do not compound on a daily basis.
Response: Comment incorporated. Revised section to note that if compounding is not performed daily, cleaning and sanitizing must be completed before initiating compounding.
Commentary Summary #10: Commenter suggested that cleaning and sanitizing do not need to occur on a regular basis.
Response: Comment not incorporated. Cleaning and sanitizing must occur on a regular basis per *Table 1* to reduce cross contamination.
Commentary Summary #11: Commenter suggested defining “cleaning”.
Response: Comment not incorporated. Cleaning is defined in the *Glossary*.
Commentary Summary #12: Multiple commenters noted that fixtures and ceilings are not explicitly noted for cleaning.
Response: Comment partially incorporated. Revised section to clarify that surfaces must be cleaned if visibly soiled. Cleaning and sanitizing frequency for ceilings is noted in *Table 1*.
Commentary Summary #13: Commenter suggested that cleaning and sanitizing must be repeated when spills and surface contamination occur (e.g., splashes) and when visibly soiled.
Response: Comment partially incorporated. Revised section to clarify that surfaces must be cleaned if visibly soiled.
Commentary Summary #14: Multiple commenters requested clarifying what cleaning and/or sanitizing agents must be used.

Response: Comment not incorporated. Cleaning and sanitizing agents must be selected and used with consideration of compatibilities, effectiveness, and the need to minimize the potential to leave residues.
Commentary Summary #15: Commenter suggested that cleaning and sanitizing agents must be selected to minimize the potential to leave residues.
Response: Comment incorporated.
Commentary Summary #16: Commenter suggested that cleaning and sanitizing agents must be selected with consideration of residues left behind.
Response: Comment partially incorporated. Revised section to consider minimizing the potential to leave residues.
Commentary Summary #17: Multiple commenters noted that ceilings and walls are not designed with cleaning in mind.
Response: Comment partially incorporated. Revised section to state that walls must be cleaned every 3 months, after spills, and when surface contamination is known or suspected. Ceilings must be cleaned when visibly soiled and when surface contamination is known or suspected.
Commentary Summary #18: Several commenters recommended removing the statement that ceilings must be cleaned every 3 months.
Response: Comment incorporated. Revised to strike the requirement for ceilings to be cleaned and sanitized every 3 months.
Commentary Summary #19: Commenter requested allowing the pharmacy to determine the frequency of cleaning ceilings, walls, and storage shelving.
Response: Comment partially incorporated. Revised to strike the requirement for ceilings to be cleaned and sanitized every 3 months. The chapter is intended to be a minimum standard; facilities may choose to incorporate more frequent cleaning. Additionally, if compounding is not performed daily, cleaning and sanitizing must be completed before initiating compounding.
Commentary Summary #20: Commenter suggested removing the cleaning schedule requirements for facilities that perform limited compounding.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; requirements cannot be stratified per volume compounded.
Commentary Summary #21: Several commenters expressed concern about whether daily cleaning applies to facilities that are not open on weekends.
Response: Comment partially incorporated. Revised section to state that if compounding is not performed daily, cleaning and sanitizing must be completed before initiating compounding.
Commentary Summary #22: Several commenters noted that “sanitizing” should be changed to “disinfecting”.
Response: Comment not incorporated. Sanitizing and disinfecting are different processes. Disinfection is not required for nonsterile compounding.
Commentary Summary #23: Several commenters recommended removing the requirement that ceilings and walls be cleaned every 3 months.
Response: Comment partially incorporated. Revised to strike the requirement for ceilings to be cleaned and sanitized every 3 months.
Commentary Summary #24: Commenter noted that the cleaning and sanitizing requirements would effectively require entire pharmacies to be cleaned every 3 months.

Response: Comment partially incorporated. Only the nonsterile compounding area(s) are required to be cleaned. Revised to strike the requirement for ceilings to be cleaned and sanitized every 3 months.
Commentary Summary #25: Several commenters expressed concern that compounding areas are considered separate from ceilings, walls, and floors.
Response: Comment not incorporated. The title of *Table 1* specifies that the cleaning frequencies pertain to the compounding area.
Commentary Summary #26: Commenter recommended including a frequency for compounding surfaces outside of a CVE.
Response: Comment partially incorporated. Revised *Table 1* to add frequency for work surfaces. The title of *Table 1* specifies that the cleaning frequencies pertain to the compounding area.
Commentary Summary #27: Commenter noted that storage shelving may apply to storage areas.
Response: Comment not incorporated. The title of *Table 1* specifies that the cleaning frequencies pertain to the compounding area; therefore it only applies to shelving within the compounding area. Additionally, the section was revised to note that if compounding is not performed daily, cleaning and sanitizing must be completed before initiating compounding.
Commentary Summary #28: Commenter suggested that floors only need to be cleaned weekly, after spills, and when surface contamination is known or suspected.
Response: Comment partially incorporated. The *Table 1* title specifies that the cleaning frequencies pertain to the compounding area; therefore it only applies to floors within the compounding area. Additionally, the section was revised to note that if compounding is not performed daily, cleaning and sanitizing must be completed before initiating compounding.
Commentary Summary #29: Several commenters suggested that cleaning and sanitizing requirements should only apply to facilities that perform complex compounding operations.
Response: Comment not incorporated. The Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP. Additionally, the chapter is intended to be a minimum standard; requirements cannot be stratified based on level of compounding complexity.
Commentary Summary #30: Several commenters suggested that ceilings and walls do not need to be cleaned every 3 months and suggested that 6 months would suffice.
Response: Comment partially incorporated. Revised to strike the requirement for ceilings to be cleaned and sanitized every 3 months.
Commentary Summary #31: Several commenters noted that work surfaces should be cleaned when spills occur or are visible soiled.
Response: Comment incorporated. Revised *Table 1* to add requirement for cleaning and sanitizing work surfaces.
Commentary Summary #32: A couple of commenters suggested that if powders are handled appropriately in hoods, there is no reason for walls or ceilings to be contaminated. Commenters suggested that ceilings and walls only need to be cleaned and sanitized annually.

Response: Comment partially incorporated. In addition to powders and splashes, obvious contamination may occur. Revised to strike the requirement for ceilings to be cleaned and sanitized every 3 months. Additionally, if compounding is not performed daily, cleaning and sanitizing must be completed before initiating compounding.
Commentary Summary #33: Several commenters suggested that ceilings, walls, and storage shelves do not need to be cleaned every 3 months.
Response: Comment partially incorporated. Revised to strike the requirement for ceilings to be cleaned and sanitized every 3 months.
Commentary Summary #34: Commenter suggested that only bordering walls and ceiling directly above the designated area should be cleaned and sanitized.
Response: Comment partially incorporated. The *Table 1* title specifies that the cleaning frequencies pertain to the compounding area; therefore it only applies to walls and ceilings within the compounding area.
Commentary Summary #35: Commenter suggested that floors do not need to be cleaned daily if no compounding is taking place.
Response: Comment incorporated. Revised section to note that if compounding is not performed daily, cleaning and sanitizing must be completed before initiating compounding.
Commentary Summary #36: Commenter suggested that there is no need to clean ceilings when compounding occurs in a powder-fume hood.
Response: Comment partially incorporated. Revised to strike the requirement for ceilings to be cleaned and sanitized every 3 months; ceilings must be cleaned when visibly soiled and when surface contamination is known or suspected.
Commentary Summary #37: Commenter suggested increasing the frequency of cleaning and sanitizing storage shelving to monthly.
Response: Comment not incorporated. Shelves must be cleaned every 3 months, after spills, and when surface contamination is known or suspected. The chapter is intended to be a minimum standard. Facilities and regulatory bodies may enforce more stringent requirements.
Commentary Summary #38: Commenter suggested adding rationale to *Table 1* for cleaning and sanitizing frequencies.
Response: Comment not incorporated. Cleaning and sanitizing are required to minimize the risk of contamination of CNSPs.
Commentary Summary #39: Commenter suggested changing the title of *Table 1* to *Recommended Frequency*.
Response: Comment not incorporated. *Table 1* is intended to refer specifically to compounding areas and surfaces. Additionally, the chapter is intended to be a minimum standard; cleaning frequencies must be followed to minimize risk of CNSP contamination.
Commentary Summary #40: Commenter suggested that walls and ceilings only need to be sanitized annually.
Response: Comment partially incorporated. Revised to strike the requirement for ceilings to be sanitized every 3 months; ceilings must be sanitized when visibly soiled and when surface contamination is known or suspected.

6. Equipment and Components

Commentary Summary #1: Several commenters noted that using CVEs is not always possible for veterinarians.
Response: Comment partially incorporated. Revised section such that CVEs are an example of a closed system processing device, allowing BSCs and single-use glove bags to also be examples. Additionally, veterinarians may fall under the definition of "administration," which is out of scope. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.
Response:
Commentary Summary #2: Commenter requested clarification of where to store components when awaiting disposal.
Response: Comment not incorporated. The disposal of components must comply with laws and regulations of the applicable regulatory jurisdiction.
Commentary Summary #3: Commenter suggested striking the requirement for disposal procedures to comply with applicable laws and regulations.
Response: Comment not incorporated.
Commentary Summary #4: Commenter suggested that a CVE is not practical for community retail pharmacies engaging in occasional, simple/moderate compounding utilizing active pharmaceutical ingredients (APIs).
Response: Comment partially incorporated. The Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP. Revised section such that CVEs are an example of a closed system processing device, allowing BSCs and single-use glove bags to also be examples.
Commentary Summary #5: Commenter suggested that a refrigerator or freezer used to store components should only be used for that purpose.
Response: Comment not incorporated. A dedicated refrigerator is typically required by state laws and regulations.
Commentary Summary #6: Commenter suggested that hot plates and stirrers do not usually need inspection unless they stop working.
Response: Comment incorporated. Revised section to state that equipment and devices used in compounding must be inspected prior to use as recommended by the manufacturer.
Commentary Summary #7: Commenter requested a list of specific equipment that must meet requirements.
Response: Comment not incorporated. The types of equipment would depend on the facility and the types of CNSPs prepared.
Commentary Summary #8: Commenter noted that the requirement for calibration of equipment is vague. Commenter suggested listing which pieces of equipment must be calibrated.

Response: Comment partially incorporated. The types of equipment would depend on the facility and the types of CNSPs prepared. Revised section to state that equipment and device inspection and accuracy testing, if appropriate, must be done as recommended by the manufacturer.
Commentary Summary #9: Commenter noted that one cannot verify the accuracy of a spatula and other small equipment.
Response: Comment partially incorporated. Spatulas are considered utensils.
Commentary Summary #10: A couple of commenters noted that “other equipment and devices” is vague.
Response: Comment incorporated. Revised section to state “equipment and devices”.
Commentary Summary #11: Several commenters noted that it is confusing as to what equipment must be verified for accuracy, and with what frequency.
Response: Comment incorporated. Revised section to state that equipment and devices must be verified for accuracy, if appropriate, as recommended by the manufacturer or at least every 12 months, whichever is more frequent.
Commentary Summary #12: Several commenters noted confusion about which equipment must be verified for accuracy.
Response: Comment partially incorporated. Revised section to state that equipment and devices must be verified for accuracy, if appropriate, as recommended by the manufacturer.
Commentary Summary #13: Commenter noted that “other equipment and devices” is vague.
Response: Comment incorporated. Revised section to state “equipment and devices”.
Commentary Summary #14: Several commenters recommended that verification and inspection should only occur when equipment is not functioning properly and should be replaced.
Response: Comment not incorporated. Facilities should determine when to remove and replace equipment.
Commentary Summary #15: Several commenters recommended deleting the requirement to verify for accuracy and inspect annually.
Response: Comment partially incorporated. Revised section to state that equipment and devices must be inspected and, if appropriate, verified for accuracy as recommended by the manufacturer or at least every 12 months, whichever is more frequent.
Commentary Summary #16: Commenter suggested that inspection and verification of equipment and devices must occur annually or more frequently, as appropriate.
Response: Comment partially incorporated. Revised section to state that equipment and devices must be inspected and, if appropriate, verified for accuracy as recommended by the manufacturer or at least every 12 months, whichever is more frequent.
Commentary Summary #17: Several commenters recommended that verification for accuracy is not applicable to all equipment.
Response: Comment incorporated. Revised section to state that equipment must be verified for accuracy, if appropriate, as recommended by the manufacturer.
Commentary Summary #18: Commenter suggested that CVEs must be certified annually.

Response: Comment incorporated.
Commentary Summary #19: Commenter noted that mortar and pestles do not have calibration or maintenance requirements.
Response: Comment not incorporated. Mortar and pestles are considered utensils.
Commentary Summary #20: Multiple commenters recommended that equipment must be verified for accuracy only if appropriate.
Response: Comment incorporated. Revised section to state that equipment and devices must be verified for accuracy, if appropriate, as recommended by the manufacturer.
Commentary Summary #21: Commenter suggested that equipment and components should be left up to the discretion of the facility in ensuring a procedure and process to protect the operator and integrity of the final product.
Response: Comment not incorporated. The chapter is intended to be a minimum standard, and the requirements apply; however, facilities and regulatory bodies may choose to enforce additional requirements. USP has no role in enforcement.
Commentary Summary #22: Commenter suggested that inspection and verification of equipment and devices must occur annually or more frequently per manufacturer recommendations, whichever is more frequent.
Response: Comment incorporated. Revised section to state that equipment and devices must be inspected and, if appropriate, verified for accuracy as recommended by the manufacturer or at least every 12 months, whichever is more frequent.
Commentary Summary #23: Commenter requested specifying what should be used to clean equipment and how to clean appropriately.
Response: Comment not incorporated. Specific cleaning procedures and agents should be determined by the facility. Equipment and devices may have specific cleaning recommendations, such as those in the manufacturer instructions.
Commentary Summary #24: Multiple commenters suggested that a CVE is not necessary unless handling a HD.
Response: Comment not incorporated. General Chapter <800> addresses hazardous drugs and incorporates an assessment of risk to determine eligibility for alternative containment methods. Closed system processing devices are needed to protect personnel from inhalation of aerosolized powders, which has been measurable in blood levels. Revised section to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in a closed-system processing device (i.e., a process evaluation).
Commentary Summary #25: Multiple commenters requested information specifying what activities qualify as having a high risk of airborne contamination.
Response: Comment partially incorporated. Section revised to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in a closed-system processing device (i.e., a process evaluation).
Commentary Summary #26: Multiple commenters requested removal of the requirement for a CVE.
Response: Comment partially incorporated. Closed system processing devices are needed to protect personnel from inhalation of aerosolized powders, which has been measurable in blood levels. Revised section to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in

a closed-system processing device (i.e., a process evaluation). Closed system processing devices include CVEs, BSCs, and single-use containment glove bags.
Commentary Summary #27: Several commenters recommended that face masks could be adequate for protecting against inhaling powders.
Response: Comment not incorporated. Face masks will not prevent contamination of the facility or CNSPs.
Commentary Summary #28: Multiple commenters recommended removing the requirement for CVEs. Multiple commenters noted that veterinarians compound outside of a facility or do not have a designated area for compounding. Multiple commenters suggested that a CVE should not be required.
Response: Comment partially incorporated. Closed-system processing devices are needed to protect personnel from inhalation of aerosolized powders, which has been measurable in blood levels. Revised section to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in a closed-system processing device (i.e., a process evaluation). Closed system processing devices include CVEs, BSCs or single-use containment glove bags. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.
Commentary Summary #29: Several commenters recommended that crushing tablets or opening capsules would not need to be done in a CVE.
Response: Comment partially incorporated. Closed system processing devices are needed to protect personnel from inhalation of aerosolized powders, which has been measurable in blood levels. Revised section to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in a closed-system processing device (i.e., a process evaluation). Closed-system processing devices include CVEs, BSCs, and single-use containment glove bags.
Commentary Summary #30: Commenter suggested that requiring a CVE for manipulating nonhazardous powders would prevent many facilities from compounding.
Response: Comment partially incorporated. Closed system processing devices are needed to protect personnel from inhalation of aerosolized powders, which has been measurable in blood levels. Revised section to indicate that closed-system processing devices include CVEs, BSCs, and single-use containment glove bags.
Commentary Summary #31: Multiple commenters noted that the term “containment ventilated enclosure” is a proprietary brand name.
Response: Comment not incorporated. The term CVE is intended to be a generic term and it has been used in <800>.
Commentary Summary #32: Several commenters suggested that a CVE may be used for both hazardous and nonhazardous substances.
Response: Comment not incorporated. HD compounding is out of scope of the chapter (see <800>). Compounding HDs in the same CVE could cause cross contamination. An assessment of risk should be performed.
Commentary Summary #33: Several commenters suggested that a CVE may be used for both hazardous and nonhazardous substances, if decontaminated appropriately.

Response: Comment not incorporated. HD compounding is out of scope of the chapter (see <800>). Compounding HDs in the same CVE could cause cross contamination. An assessment of risk should be performed.
Commentary Summary #34: Several commenters requested information specifying what powders must be handled in a CVE.
Response: Comment partially incorporated. Revised section to state that a process evaluation must be performed to determine whether a closed system processing device is necessary.
Commentary Summary #35: Commenter suggested replacing the words “drug particles” with “chemical particles”.
Response: Comment incorporated.
Commentary Summary #36: Several commenters requested clarification that crushing tablets is considered a particle-generating activity.
Response: Comment partially incorporated. Revised section to state that manipulating components that could generate chemical particles must be assessed to determine if these activities must be performed in a closed system processing device.
Commentary Summary #37: Commenter suggested that preparation of a single dose of nonhazardous CNSP be exempted from using CVEs if allowed by the facility SOPs. If the tablet or capsule available to compound the dose contains more drug than needed for a single dose, the compounder may prepare a quantity that uses the entire tablet or capsule to help ensure the accuracy of what is compounded. The compounder will appropriately dispose of any amount beyond the single dose needed for the patient at that time.
Response: Comment partially incorporated. Revised to add that administration is out of scope of the chapter.
Commentary Summary #38: Commenter noted that many activities could generate airborne contamination. Commenter proposed that it is more reasonable to address activities that could "cause cross contamination of other compounded preparations or harm to personnel due to the airborne contamination,” which “must occur inside a containment device such as a CVE (i.e., powder containment hood)."
Response: Comment partially incorporated. Closed system processing devices are needed to protect personnel from inhalation of aerosolized powders, which has been measurable in blood levels. Revised section to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in a closed-system processing device (i.e., a process evaluation). Closed system processing devices include CVEs, BSCs, and single-use containment glove bags.
Commentary Summary #39: Commenter noted that using appropriate techniques in some manipulations would not generate a significant amount of dust or airborne contamination.
Response: Comment partially incorporated. Revised section to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in a closed-system processing device (i.e., a process evaluation).
Commentary Summary #40: Several commenters recommended requiring facilities to specify a list of ingredients that require a CVE and requiring a designated person to create this list.

Response: Comment partially incorporated. Revised section to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in a closed-system processing device (i.e., a process evaluation). The process evaluation must be carried out in accordance with the facility SOP, and the assessment must be documented.
Commentary Summary #41: Commenter suggested that alternative containment enclosures other than CVEs should be allowed.
Response: Comment incorporated. Revised to note that closed system processing devices include CVEs, BSCs, and single-use containment glove bags.
Commentary Summary #42: Commenter suggested that mixing powders with liquid should not be required to be performed in a CVE.
Response: Comment partially incorporated. Revised section to add that activities that could generate airborne chemical particles must be assessed to determine if they must be performed in a closed-system processing device (i.e., a process evaluation). However, there are certain practices (e.g., reconstitution in accordance with manufactured-approved labeling) that are not required to meet the requirements of the chapter.
Commentary Summary #43: Several commenters requested additional guidance on when to use a CVE.
Response: Comment incorporated. Revised section to clarify that weighing, measuring, or otherwise manipulating components that could generate airborne chemical particles must be assessed to determine if these activities must be performed in closed system processing device to reduce the potential for exposure of personnel or contamination of the facility or CNSPs.
Commentary Summary #44: Several commenters requested a definition of powders that have the potential to generate airborne contamination.
Response: Comment not incorporated. Aerosolization can be perceived by the compounder based on many factors (e.g., smell, taste, visualization), which would be too prescriptive to describe in the chapter.
Commentary Summary #45: Commenter suggested that CVEs should only be required for facilities that perform large-volume compounding.
Response: Comment not incorporated. Closed system processing devices are needed to protect personnel from inhalation of aerosolized powders, which has been measurable in blood levels. The chapter is intended to be a minimum standard, and requirements cannot be stratified per volume of compounding.
Commentary Summary #46: Commenter suggested referencing *Table 2* in-line for cleaning and sanitizing CVEs.
Response: Comment incorporated.
Commentary Summary #47: Several commenters suggested that CVEs must be equipped with an exhaust alarm.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; requiring an exhaust alarm is too prescriptive.
Commentary Summary #48: Commenter suggested that CVEs must be certified annually.
Response: Comment incorporated.

Commentary Summary #49: Several commenters requested clarification on which specific guidelines must be used to certify CVEs.
Response: Comment not incorporated. CVEs must be certified according to requirements such as Controlled Environment Testing Association (CETA), NSF International, or American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) guidelines, or other laws and regulations of the applicable regulatory jurisdiction.
Commentary Summary #50: Commenter requested additional examples of jurisdictional standards.
Response: Comment partially incorporated. Jurisdictional standards depend on the regulatory bodies within a jurisdiction. CVEs must be certified according to requirements such as CETA, NSF International, or ASHRAE guidelines, or other laws and regulations of the applicable regulatory jurisdiction.
Commentary Summary #51: Several commenters suggested that CVEs equipped with an exhaust alarm may be certified annually, but otherwise they must be certified every 6 months.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; requiring an exhaust alarm is too prescriptive. CVEs must be certified every 12 months.
Commentary Summary #52: Commenter recommended that all CVEs must be certified annually, regardless of whether they have an alarm.
Response: Comment incorporated.
Commentary Summary #53: Several commenters expressed uncertainty about what standard to use to certify a CVE, as the chapter is not specific.
Response: Comment not incorporated. Several guidelines have been named as examples of what to use to certify CVEs. CVEs must be certified according to requirements such as CETA, NSF International, or ASHRAE guidelines, or other laws and regulations of the applicable regulatory jurisdiction.
Commentary Summary #54: Commenter noted confusion as to whether an exhaust alarm may be an airflow sensor.
Response: Comment incorporated. Revised to strike the need for an exhaust alarm.
Commentary Summary #55: Commenter requested elaboration on the type of exhaust alarm needed, and what features are required of the alarm (e.g., audible alerts, visual alerts).
Response: Comment not incorporated. Revised to strike the need for an exhaust alarm.
Commentary Summary #56: Commenter suggested that ASHRAE guidelines should not be recommended since the language is not clear in the guidelines.
Response: Comment not incorporated. ASHRAE is named as an example guideline. CVEs must be certified according to requirements such as CETA, NSF International, or ASHRAE guidelines, or other laws and regulations of the applicable regulatory jurisdiction.
Commentary Summary #57: Commenter recommended stating that CVEs do not need to be cleaned at the beginning of each shift.
Response: Comment not incorporated. The CVE must be cleaned at the beginning and end of each shift.

Commentary Summary #58: Commenter suggested that equipment does not need to be sanitized.
Response: Comment not incorporated. Equipment must be sanitized to reduce the bioburden when compounding CNSPs.
Commentary Summary #59: Commenter requested removing the requirement to clean CVEs between preparations.
Response: Comment partially incorporated. Revised *Table 2* to clarify that CVEs must be cleaned between compounding CNSPs with different components.
Commentary Summary #60: Several commenters suggested that requirements for cleaning and sanitizing equipment should only apply to facilities that perform complex compounding operations.
Response: Comment not incorporated. Equipment must be sanitized to reduce the bioburden when compounding CNSPs. The Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP. Additionally, the chapter is intended to be a minimum standard; requirements cannot be stratified based on level of compounding complexity.
Commentary Summary #61: Commenter requested clarification of why CVEs must be cleaned between compounding different CNSPs, if appropriate.
Response: Comment partially incorporated. Revised *Table 2* to clarify that CVEs must be cleaned between compounding CNSPs with different components.
Commentary Summary #62: Commenter suggested that cleaning compounding equipment is only necessary before the first use each day, or each shift.
Response: Comment not incorporated. The CVE must be cleaned at the beginning and end of each shift.
Commentary Summary #63: Commenter suggested that equipment must be cleaned and sanitized before first use, in between compounding of each CNSP, and after each use.
Response: Comment not incorporated. Equipment must be cleaned before first use and thereafter in accordance with manufacturer recommendations. However, revised to note that if no recommendations are available, equipment must also be cleaned and sanitized after compounding CNSPs with different components.
Commentary Summary #64: Commenter noted that CVEs may not be used daily, especially when compounding does not occur daily. Therefore, cleaning frequencies may not apply.
Response: Comment incorporated. CVEs must be cleaned and sanitized at a minimum frequency as described in *Table 2*. However, if compounding is not performed daily, cleaning and sanitizing must be completed before initiating compounding.
Commentary Summary #65: Commenter noted that not requiring facial hair or head covers contradicts the need to clean frequently.
Response: Comment not incorporated. The revised chapter requires gloves for all compounding activities. Other garb should be worn as needed for the protection of personnel and for prevention of preparation contamination. Facilities may choose to require facial hair and head covers.
Commentary Summary #66: Several commenters recommended separating cleaning and sanitizing of CVEs from work surfaces outside of the CVE.

Response: Comment incorporated. Revised to strike work surfaces outside of the CVE from *Table 2*. Work surfaces are addressed in *Table 1*.
Commentary Summary #67: Commenter requested clarification on what must be used to clean equipment and CVEs.
Response: Comment not incorporated. The types of agents and cleaning supplies would depend on the facility and type of compounding performed. The chapter is intended to be a minimum standard; it would be too prescriptive to require specific cleaning agents and supplies for nonsterile compounding.
Commentary Summary #68: Commenter recommended that equipment must be cleaned before and after each use.
Response: Comment not incorporated. Revised *Table 2* to require that equipment be cleaned before first use and thereafter in accordance with manufacturer recommendations; when no manufacturer recommendations are available, clean and sanitize after compounding CNSPs with different components.
Commentary Summary #69: Commenter recommended that CVEs and work surfaces outside of the CVEs should be cleaned and sanitized prior to first use in each shift and between compounding different formulations. Commenter suggested that other compounding equipment also should be cleaned and sanitized at this frequency.
Response: Comment partially incorporated. Revised to strike work surfaces outside of the CVE from *Table 2* because work surfaces are addressed in *Table 1*. CVEs must be cleaned and sanitized at the beginning and end of each shift, after spills, and when surface contamination is known or suspected; the CVE horizontal work surface must also be cleaned and sanitized between compounding CNSPs with different components. Other devices and equipment must be cleaned and sanitized before first use and thereafter in accordance with manufacturer recommendations, or otherwise after compounding CNSPs with different components.
Commentary Summary #70: Commenter suggested that equipment must be cleaned and sanitized prior to use, once per first use, and in accordance with manufacturer's recommendations.
Response: Comment partially incorporated. Equipment must be cleaned and sanitized before first use and thereafter in accordance with manufacturer recommendations, or otherwise after compounding CNSPs with different components.
Commentary Summary #71: Several commenters recommended stipulating that equipment should be cleaned between compounding different drugs, and before first use each day or shift.
Response: Comment partially incorporated. Equipment must be cleaned and sanitized before first use and thereafter in accordance with manufacturer recommendations, or otherwise after compounding CNSPs with different components.
Commentary Summary #72: Commenter suggested that CVEs and equipment should be cleaned before and after each use.
Response: Comment not incorporated. CVEs and equipment must be cleaned between compounding CNSPs with different components.
Commentary Summary #73: Commenter recommended that it is not necessary to clean or sanitize work surfaces outside of the CVE if the CVE is operational and there are no spills.

Response: Comment not incorporated. Surfaces outside of the CVE have been moved to *Table 1*. Regardless of spills, work surfaces must be cleaned and sanitized between compounding CNSPs with different components.
Commentary Summary #74: Commenter suggested that CVEs and work surfaces outside of the CVE must be cleaned at the end of each shift and between compounding different drugs.
Response: Comment partially incorporated. Surfaces outside of the CVE have been moved to *Table 1*. Regardless of spills, CVEs and work surfaces must be cleaned and sanitized between compounding CNSPs with different components, at the beginning and end of each shift, after spills, and when surface contamination is known or suspected.
Commentary Summary #75: Several commenters recommended stipulating that equipment should be cleaned between compounding different drugs.
Response: Comment incorporated.
Commentary Summary #76: Commenter proposed that equipment should be documented to be adequate for the job intended.
Response: Comment partially incorporated. Maintenance must be performed in accordance with manufacturer recommendations.
Commentary Summary #77: Multiple commenters recommended that it is not necessary to maintain an inventory of inactive ingredients, containers, and closures.
Response: Comment partially incorporated. Revised to strike the requirement to inventory containers and closures. Inventory control is required for certain situations (e.g., maintenance, fire hazards). Electronic systems can be used to manage inventory.
Commentary Summary #78: Commenter proposed establishing, maintaining, and following SOPs for the selection of APIs and inactive ingredients.
Response: Comment partially incorporated. Revised to state that a designated person must be responsible for selecting components.
Commentary Summary #79: Several commenters noted that compounding personnel do not always establish or maintain SOPs for selecting and controlling inventory.
Response: Comment incorporated. Revised to state that the compounding facility must have written SOPs for inventory selection and control.
Commentary Summary #80: Several commenters suggested that it is unnecessary to track ingredients, containers, and closures from receipt to use.
Response: Comment partially incorporated. Revised to strike the requirement to inventory containers and closures. Inventory control is required for certain situations (e.g., maintenance, fire hazards). Electronic systems can be used to manage inventory.
Commentary Summary #81: Several commenters recommended striking the requirement to do inventory control for containers and closures.
Response: Comment incorporated.
Commentary Summary #82: Several commenters expressed concern that the term “inventory control” is unclear. Several commenters requested deletion of the term “inventory control”.
Response: Comment not incorporated. The term is normally used across healthcare facilities and refers to maintaining control over the inventory.
Commentary Summary #83: Multiple commenters suggested replacing “inventory control” with “proper storage”.

Response: Comment partially incorporated. Revised to strike the requirement to inventory containers and closures. Inventory control is required for certain situations (e.g., maintenance, fire hazards). Electronic systems can be used to manage inventory.
Commentary Summary #84: Commenter suggested that inventory control is only necessary for controlled substances. Several commenters recommended limiting the requirement for inventory control to controlled substances only.
Response: Comment not incorporated. Facilities must maintain an inventory of all components.
Commentary Summary #85: Commenter suggested that component receipt information is documented in the COA, which is sufficient for record keeping.
Response: Comment partially incorporated. Facilities may choose how to manage documentation of inventory (e.g., receipts, COAs, etc.). Inventory control is required for certain situations (e.g., maintenance, fire hazards). Electronic systems can be used to manage inventory.
Commentary Summary #86: Commenter suggested that “inventory” is clearer than “inventory control”.
Response: Comment not incorporated. Inventory control is required for certain situations (e.g., fire hazards). Electronic systems can be used to manage inventory.
Commentary Summary #87: Commenter suggested that it is not realistic to control substances such as microcrystalline cellulose, and controlled substances are covered by state laws.
Response: Comment not incorporated. Facilities must maintain an inventory of components.
Commentary Summary #88: Multiple commenters suggested that an electronic SDS is acceptable to have on file at a pharmacy.
Response: Comment not incorporated. The chapter does not prohibit the use of electronic SDSs. SDSs are required to be easily accessible which may be through hard copies or by electronic means.
Commentary Summary #89: Commenter requested replacing “compounding facility” with “designated compounding area” for storage of SDSs.
Response: Comment not incorporated. Documentation may be stored in other areas within the facility and may not necessarily be kept in the designated compounding area.
Commentary Summary #90: Commenter recommended that a spill kit should be readily accessible.
Response: Comment incorporated. Revised *Component Spill and Disposal* to incorporate that the facility must have a readily accessible spill kit in the compounding area.
Commentary Summary #91: Commenter suggested that establishing the strength of all components other than APIs must be done by reasonable means, if applicable. These means would include visual inspections, evaluation of COAs, and/or verification by analytical testing to determine conformance with the COA.
Response: Comment partially incorporated. Several commenters have noted ambiguity in what is considered “reasonable means,” and also noted a lack of ability to test every component to ensure that manufacturers are labeling ingredients accurately. Visual inspection and evaluation of COAs are required in the chapter. Compounders are

required to obtain components from FDA-registered facilities as described in *Component Selection*.

Commentary Summary #92: Commenter recommended that herbal, homeopathic, or alternative medicine should be exempted from the requirements. Commenter suggested that the chapter prohibit these practices.

Response: Comment not incorporated. All CNSPs, whether traditional medicine or not, must follow the requirements in the chapter to ensure a quality CNSP. Additionally, enforcement of the standard is the responsibility of regulatory bodies. USP has no role in enforcement.

Commentary Summary #93: Commenter recommended deleting *6.2 Components* because most compounders are not qualified to evaluate components as described.

Response: Comment not incorporated. Compounders must verify that components meet monograph requirements.

Commentary Summary #94: Several commenters recommended changing "the" designated person to "a" designated person since more than one person can be designated.

Response: Comment partially incorporated. Revised to state "the designated person(s)". Additionally, the *Glossary* clarifies that more than one person may be designated.

Commentary Summary #95: Multiple commenters recommended that requiring one person to be responsible for component selection is too restrictive.

Response: Comment partially incorporated. Revised to state "the designated person(s)". Additionally, the *Glossary* clarifies that more than one person may be designated.

Commentary Summary #96: Commenter recommended clarifying whether the designated person(s) would be responsible for component selection when purchasing components or when the final CNSP is prepared.

Response: Comment not incorporated. The designated person(s) is responsible for component selection regardless of when the selection is made (e.g., acquisition or compounding).

Commentary Summary #97: Commenter suggested defining "component selection".

Response: Comment not incorporated. Component selection is intended to refer to purchase and selection of ingredients (i.e., components) to be used by the facility.

Commentary Summary #98: Commenter requested clarifying if paperwork will be required for product selection.

Response: Comment not incorporated. Documentation requirements are determined by the facility. For additional information, refer to *15. Documentation*.

Commentary Summary #99: Commenter indicated that component selection is not within the duties of a designated person, per *1.1 Scope*.

Response: Comment incorporated. Revised to add component selection to *1.1 Scope, Personnel and Settings Affected*.

Commentary Summary #100: Commenter suggested that a designated person should be made responsible for component selection. Commenter indicated that it is too restrictive to require one person to select components.

Response: Comment not incorporated. A designated person must be responsible for component selection.

Commentary Summary #101: Commenter suggested that users should establish their own quantitative microbial specifications suited to their water uses. These values should not be greater than 100 cfu/mL for *Purified Water*.
Response: Comment partially incorporated. Revised to strike the statement requiring purified water or an equivalent quality of water to be used for reconstitution.
Commentary Summary #102: Commenter recommended specifying if the designated person is responsible for determining the quality of the wholesaler and the vendor.
Response: Comment not incorporated. Pedigree is out of scope of the chapter. If ingredients other than APIs in the United States cannot be obtained from an FDA-registered facility, the designated person(s) must select a component that is suitable for the intended use.
Commentary Summary #103: Commenter suggested that a reputable vendor should be selected instead of determining if the vendor is qualified.
Response: Comment partially incorporated. Revised to strike the requirement for a qualified vendor.
Commentary Summary #104: Several commenters suggested that qualification is not necessary for an FDA-approved vendor, since FDA has already qualified the vendor.
Response: Comment incorporated. Revised to strike the requirement for a qualified vendor.
Commentary Summary #105: Commenter requested to strike the requirement to qualify vendors.
Response: Comment incorporated.
Commentary Summary #106: Commenter suggested that qualifying vendors should be a recommendation instead of a requirement as it would entail the use of a quality team.
Response: Comment partially incorporated. Revised to strike the requirement for a qualified vendor.
Commentary Summary #107: Commenter suggested that qualifying vendors should be a recommendation instead of a requirement as it is not well defined.
Response: Comment partially incorporated. Revised to strike the requirement for a qualified vendor.
Commentary Summary #108: Multiple commenters recommended striking the statement, “A vendor is qualified when there is evidence to support its ability […]” as it is not well defined.
Response: Comment incorporated.
Commentary Summary #109: Commenter indicated that requiring APIs to be supplied by an FDA-registered facility in the US would prohibit the use of certain USP-grade chemicals. Commenter noted that many substances, such as veterinary components, are not available from FDA-registered facilities.
Response: Comment not incorporated. The requirement to obtain APIs from FDA-registered facilities is in alignment with statutory requirements. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary compounding.

Commentary Summary #110: Commenter requested defining “specifications”.
Response: Comment not incorporated. Specifications are evident on a COA.
Commentary Summary #111: Commenter requested clarification on how to obtain components that are in the US, but are not USP grade.
Response: Comment not incorporated. The chapter is intended to be a minimum standard; the requirements for component selection continue to apply.
Commentary Summary #112: Multiple commenters recommended that APIs must be purchased from an FDA-registered facility, but noted that it is not possible to obtain a pedigree regarding a manufacturer’s FDA-registration status.
Response: Comment not incorporated. Pedigrees are out of scope of the chapter.
Commentary Summary #113: Commenter suggested that APIs must be purchased from an FDA-registered facility. Commenter recommended that most pharmacies purchase APIs from vendors who are registered with the FDA, as opposed to the manufacturer itself.
Response: Comment incorporated. Revised section to note that in the United States, APIs must be obtained from an FDA-registered facility.
Commentary Summary #114: Commenter suggested that APIs must be purchased from an FDA-registered facility since it is the responsibility of the vendor to assure that the APIs are manufactured in an FDA-registered facility.
Response: Comment incorporated. Revised section to note that in the United States, APIs must be obtained from an FDA-registered facility.
Commentary Summary #115: Commenter recommended that it is not necessary to specify United States in component-selection requirements.
Response: Comment not incorporated. Requirements in the US are specified by FDA guidance, which requires that APIs are received from FDA-registered facilities.
Commentary Summary #116: Commenter recommended adding the statement from General Notices 4.1, “Because monographs may not provide standards for all relevant characteristics, some official substances may conform to the USP or NF standard but differ with regard to non-standardized properties that are relevant to their use in specific preparations. To assure substitutability in such instances, users may wish to ascertain functional equivalence or determine such characteristics before use.”
Response: Comment not incorporated. Monograph requirements supersede those in General Chapters. Facilities may determine alternative approaches to meet USP standards for individual components.
Commentary Summary #117: Commenter recommended that each API would require a COA, but noted that it may not apply to items not manufactured by an FDA-registered facility.
Response: Comment not incorporated. Each API must be accompanied by a valid COA, regardless of where it is obtained.
Commentary Summary #118: Commenter recommended that COA is not defined until the end of the chapter.
Response: Comment partially incorporated. COA is defined in the *Glossary*.
Commentary Summary #119: Multiple commenters noted that there is no guidance on how a COA is deemed to be “valid”.
Response: Comment incorporated. Revised to strike the word “valid”.

Commentary Summary #120: Commenter requested removal of “and any additional specifications required to appropriately use the API in preparing the CNSP” as specifications beyond USP standards are not always provided in a COA.
Response: Comment partially incorporated. Revised to strike “required to appropriately use the API in preparing the CNSP”.
Commentary Summary #121: Commenter suggested that all added substances should be obtained from an FDA-registered facility.
Response: Comment partially incorporated. Revised to state “all components other than APIs.” Added a *Glossary* definition for added substances.
Commentary Summary #122: Commenter recommended striking “all ingredients other than APIs should be obtained from an FDA-registered facility”. Commenter suggested that some components are considered dietary supplements or cosmetic components.
Response: Comment not incorporated. Components other than APIs should be obtained from FDA-registered facilities, however if they cannot be, the designated person(s) must select a component that is suitable for the intended use.
Commentary Summary #123: Commenter indicated that outside of the US, it is unclear what method and tools would ensure that the facility outside of the US is in compliance.
Response: Comment not incorporated. USP standards are used internationally. Compounders must determine what laws and regulations are applicable to them. USP has no role in enforcement.
Commentary Summary #124: Commenter suggested that there is a contradiction between where components must be obtained from in the US and outside the US.
Response: Comment not incorporated. USP standards are used internationally. The chapter is aligned with US requirements under the Federal Food, Drug, and Cosmetic Act and associated FDA Guidance. Compounders must determine what laws and regulations are applicable to them. USP has no role in enforcement.
Commentary Summary #125: Commenter recommended that excipient properties are described as critical quality attributes (CQAs) and are unique for each formulation, not evaluated in USP or NF monographs.
Response: Comment not incorporated. Level of information is out of scope for the purposes of the chapter. Users may refer to <1059> *Excipient Performance*.
Commentary Summary #126: Commenter recommended removing the statement that outside of the US, component selection must comply with laws and regulations of the applicable regulatory jurisdiction.
Response: Comment not incorporated. USP standards are used internationally. Compounders must determine what laws and regulations are applicable to them. USP has no role in enforcement.
Commentary Summary #127: Commenter noted that analytical testing of excipients can be costly, and reconstitution of conventionally manufactured nonsterile products is not considered compounding.
Response: Comment incorporated. Revised to strike the statement.
Commentary Summary #128: Commenter recommended that ingredients other than APIs must be evaluated to determine suitability for intended use.

Response: Comment partially incorporated. The designated person(s) must select a component that is suitable for the intended use. Component evaluation is described under *Component Evaluation*.

Commentary Summary #129: Several commenters recommended adding that the identity, strength, purity, and quality of the API must be established by reasonable means.

Response: Comment partially incorporated. Several commenters have noted ambiguity in what is considered “reasonable means” and lack of ability to test every component to ensure that manufacturers are labeling ingredients accurately. Revised to strike statement.

Commentary Summary #130: Several commenters suggested removing the requirement to verify components by analytical testing.

Response: Comment not incorporated. Compounders must verify that the COA results and monograph requirements are met.

Commentary Summary #131: Commenter recommended removing the need for purified water.

Response: Comment incorporated. Revised to strike the statement requiring purified water or an equivalent quality of water to be used for reconstitution.

Commentary Summary #132: Several commenters requested clarifying what type of water is equivalent to purified water.

Response: Comment partially incorporated. General Chapter <1231> and the *Purified Water* monograph provide information on purified water. Additionally, revised to add a definition for purified water in the *Glossary*.

Commentary Summary #133: Several commenters recommended allowing use of other water, such as potable water and high-quality water for reconstitution.

Response: Comment partially incorporated. Revised to strike the statement requiring *Purified Water* or an equivalent quality of water to be used for reconstitution.

Commentary Summary #134: Commenter noted that purified water is not defined.

Response: Comment incorporated. General Chapter <1231> and the *Purified Water* monograph provide information on purified water. Additionally, revised to add a definition for purified water in the *Glossary*.

Commentary Summary #135: Commenter suggested that it should not be solely the compounder’s responsibility to ensure that components meet COA specifications.

Response: Comment not incorporated. Compounders must verify that the COA results meet the monograph requirements.

Commentary Summary #136: Several commenters suggested striking the requirement for purified water to be used in reconstitution of conventionally manufactured products as this is not considered compounding.

Response: Comment incorporated.

Commentary Summary #137: Commenter recommended deferring to the manufacturer labeling if purified water is required.

Response: Comment partially incorporated. Removed the requirement that *Purified Water* or an equivalent is required for reconstitution.

Commentary Summary #138: Commenter suggested that the COA may be used to reference specifications, and a visual inspection may be performed. Commenter suggested that no further steps are necessary.

Response: Comment not incorporated. Compounders must verify that the component meets COA and monograph specifications.
Commentary Summary #139: Commenter suggested removing *Component Receipt* because the components received that display evidence of deterioration or unacceptable quality should be deemed adulterated.
Response: Comment partially incorporated. Revised to remove a requirement for visual inspection of component deterioration upon receipt.
Commentary Summary #140: Multiple commenters recommended that requiring well-closed containers may imply repackaging the component.
Response: Comment incorporated. Revised to strike the requirement for a well-closed container.
Commentary Summary #141: Several commenters recommended that components should be inspected upon opening the component, but not upon receipt.
Response: Comment incorporated.
Commentary Summary #142: Multiple commenters noted that a visual inspection is not possible for sealed products without opening the component first.
Response: Comment incorporated. Revised to strike the requirement to visually inspect the component upon receipt. Components must be visually inspected before use.
Commentary Summary #143: Several commenters suggested that a visual inspection is not possible for sealed products without opening the component first, which could introduce contaminants.
Response: Comment incorporated. Revised to strike the requirement to visually inspect the component upon receipt. Components must be visually inspected before use.
Commentary Summary #144: Commenter suggested that analytical testing is required to ensure that the component labeling correctly identifies the component.
Response: Comment partially incorporated. Revised to expand *Component Receipt* to utilize the COA, monograph, evidence of deterioration, and expiration dates as part of the receipt process. Components must also be evaluated before use.
Commentary Summary #145: Commenter requested information on what would be considered a sign of deterioration.
Response: Comment not incorporated. Evidence of deterioration will depend on the component. It may include changes in appearance, odor, and other characteristics that are too prescriptive to include in the chapter.
Commentary Summary #146: Commenter proposed adding “if applicable” to the statement that upon receipt, each lot of the component must be visually inspected to ensure that the labeling correctly identifies the component, and that the component meets the expected appearance.
Response: Comment partially incorporated. Revised to strike the requirement for a visual inspection upon receipt. Components must be visually inspected before use.
Commentary Summary #147: Commenter recommended excluding component receipt requirements for FDA-approved products since manufacturers are already required to meet FDA and statutory requirements.
Response: Comment partially incorporated. Revised to state that upon receipt of components other than conventionally manufactured products, the COA must be

reviewed. For components other than conventionally manufactured products, component receipt requirements apply.
Commentary Summary #148: Commenter recommended clarifying that visual inspection for issues of quality must be performed when the product is used. The Commenter recommends that the contents inside the container be visually inspected for correctness and appearance when used.
Response: Comment incorporated. Revised to strike the requirement for a visual inspection upon receipt. Components must be visually inspected before use.
Commentary Summary #149: Commenter suggested that visual inspections should be performed before first use.
Response: Comment partially incorporated. Revised to strike the requirement for a visual inspection upon receipt. Components must be visually inspected before use.
Commentary Summary #150: Commenter recommended that temperature-sensing indicators are only necessary for temperature-sensitive items.
Response: Comment partially incorporated. Revised to strike the example of temperature-sensing indicators from how to examine for evidence of deterioration.
Commentary Summary #151: Commenter requested clarification of whether temperature-sensing indicators are required for all shipped products.
Response: Comment partially incorporated. Revised to strike the example of temperature-sensing indicators from how to examine for evidence of deterioration.
Commentary Summary #152: Several commenters recommended removing the requirement to compare each COA to a monograph.
Response: Comment not incorporated. Compounders must verify that the COA results meet monograph requirements.
Commentary Summary #153: Several commenters recommended that FDA-approved vendors must generate a COA that is compared to a USP standard.
Response: Comment not incorporated. Compounders must verify that the COA results meet monograph requirements.
Commentary Summary #154: Multiple commenters suggested that the requirement to verify the COA for the ingredient could lead to different interpretations, such as testing.
Response: Comment incorporated. Revised section to state that the COA must be reviewed.
Commentary Summary #155: Several commenters recommended that verifying the COA should be the responsibility of the provider of the component. Several commenters noted that “verifying” the COA is vague. Multiple commenters suggested that the COA for the ingredient must be checked, not verified. Multiple commenters suggested that the COA for the ingredient must be reviewed, not verified.
Response: Comment incorporated. Revised section to state that the COA must be reviewed.
Commentary Summary #156: Several commenters recommended removing the requirement to verify a COA if the Master Formulation Record specifies the component characteristics required for the CNSP.
Response: Comment incorporated. Revised to strike the statement. The intent of the section is about component receipt and not verification of compounding through the Master Formulation Record.

Commentary Summary #157: Commenter suggested that if one lot of an ingredient has unacceptable quality, all lots of an ingredient from the vendor must be examined to determine whether the other lots demonstrate the same unacceptable quality.
Response: Comment incorporated. If a component is found to be of unacceptable quality, any other lots of that component from that vendor must also be examined.
Commentary Summary #158: Commenter noted that having to record the supplier name, lot number, expiration date, and a written record of each shipment of components is excessive.
Response: Comment partially incorporated. Revised to remove the requirement for a written record of each shipment of components.
Commentary Summary #159: Commenter recommended that the date of receipt must be marked on each ingredient except conventionally manufactured products, and in the same section, it is also recommended that a date of receipt must be marked for each ingredient.
Response: Comment incorporated. Revised to specify that the date of receipt must be recorded for components other than conventionally manufactured products, and on any component package that lacks a vendor expiration date.
Commentary Summary #160: Commenter suggested that the date of receipt is not helpful for indicating stability.
Response: Comment not incorporated. A date of receipt is necessary for record keeping and inventory control.
Commentary Summary #161: Commenter recommended that the date of receipt must be marked on every container.
Response: Comment partially incorporated. Revised to specify that the date of receipt must be recorded for components other than conventionally manufactured products, and on any component package that lacks a vendor expiration date.
Commentary Summary #162: Commenter recommended that the date of receipt of containers of components that do not have an expiration date must be recorded.
Response: Comment incorporated.
Commentary Summary #163: Commenter suggested retaining the need to mark an expiration date on APIs that lack one.
Response: Comment partially incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.
Commentary Summary #164: Commenter recommended changing "ingredient" to "component".
Response: Comment incorporated.
Commentary Summary #165: Several commenters noted that electronic documentation is becoming increasingly common.
Response: Comment incorporated. Revised to strike the need for written documentation.
Commentary Summary #166: Multiple commenters suggested that invoices or packing slips may serve as documentation.

Response: Comment partially incorporated. The chapter does not prohibit the use of invoices to fulfill component documentation requirements. The method of documentation is not specified in the chapter.
Commentary Summary #167: Commenter recommended that packages of ingredients that do not have an expiration date must be dated with a BUD of 1 year from receipt.
Response: Comment partially incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.
Commentary Summary #168: Commenter recommended that an assigned expiration date must not exceed 3 years from the date the pharmacy received the stock container or 1 year from the date the container was opened, whichever period is shorter.
Response: Comment partially incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.
Commentary Summary #169: Several commenters requested clarification of whether documentation of receipt applies to non-conventionally manufactured products.
Response: Comment not incorporated. Provisions for receipt do not apply to conventionally manufactured products.
Commentary Summary #170: Commenter noted that the method of documenting receipt is unclear.
Response: Comment not incorporated. The method of documentation is not specified in the chapter. Facilities may determine how to document component receipt.
Commentary Summary #171: Commenter suggested that containers must be opened for inspection, which means that HDs must be opened in a controlled environment.
Response: Comment not incorporated. *Component Evaluation Before Use* states that components must be opened, evaluated, and then used in compounding. Additionally, an assessment of risk may be performed for some HDs.
Commentary Summary #172: Multiple commenters indicated that aroma is not always applicable when inspecting the component before use. Commenters noted that respiratory exposure may occur.
Response: Comment incorporated. Revised to strike "aroma".
Commentary Summary #173: Multiple commenters suggested striking "aroma" when inspecting the component before use.
Response: Comment incorporated. Revised to strike "aroma".
Commentary Summary #174: Commenter suggested that aroma should never be checked because it requires removal of garb, posing a risk to compounding personnel.
Response: Comment incorporated. Revised to strike "aroma".
Commentary Summary #175: Commenter suggested that identity must be checked before use of components.
Response: Comment not incorporated. Chapter states that compounding personnel must ascertain before use that components are of the correct identity based on labeling.

Commentary Summary #176: Commenter suggested that compounding personnel should ascertain component identity upon receipt for storage. Commenter noted that it is not possible to ensure that ingredients were stored properly outside of the facility.
Response: Comment incorporated. Revised to qualify that compounding personnel must ascertain that the component has been stored under required conditions in the facility.
Commentary Summary #177: Several commenters indicated that it is not possible to ensure that ingredients were stored properly outside of the facility.
Response: Comment incorporated. Revised to qualify that compounding personnel must ascertain that the component has been stored under required conditions in the facility.
Commentary Summary #178: Commenter suggested that compounders do not have to ascertain that components are of the appropriate identity if they have already inspected all components.
Response: Comment partially incorporated. Before use, compounding personnel must inspect components for deterioration or issues with packaging integrity. Compounding personnel must also ascertain that components are of the correct identity based on labeling.
Commentary Summary #179: Commenter suggested changing “ingredients and other components” to “components”.
Response: Comment incorporated.
Commentary Summary #180: Several commenters suggested that humidity control is not necessary except where the labeling states to store in a dry place.
Response: Comment incorporated. Revised the requirement for humidity control.
Commentary Summary #181: Several commenters noted that “handling” was misspelled.
Response: Comment incorporated.
Commentary Summary #182: Several commenters suggested that a tight, well-closed container is not necessary.
Response: Comment incorporated. Revised to strike the statement. Please note that the verbiage “well-closed” originates from General Chapter <659> *Packaging and Storage Requirements*.
Commentary Summary #183: Commenter suggested that nonhazardous medication spills do not result in employee harm and a spill kit is not necessary for clean-up.
Response: Comment not incorporated. Some chemical spills may not be hazardous but would still need to be cleaned appropriately.
Commentary Summary #184: Commenter suggested that a controlled, designated storage area is not necessary for non-HDs.
Response: Comment not incorporated. The chapter does not require a controlled storage area (e.g., secondary engineering controls). A storage area must be designated to minimize the risk of contamination, mix-ups, and deterioration.
Commentary Summary #185: Commenter noted that there are no references for lighting recommendations.
Response: Comment incorporated. Revised to strike lighting conditions.
Commentary Summary #186: Commenter suggested that components should be evaluated to ensure that they possess characteristics per the COA.

Response: Comment not incorporated. Compounders must verify that the COA results meet monograph requirements.

Commentary Summary #187: Multiple commenters suggested extending the expiration date for components without an expiration date to 3 years from the date of receipt. Commenters noted that many studies confirm that products are safe for a period of time past the expiration date.

Response: Comment incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.

Commentary Summary #188: Several commenters suggested extending the expiration date for components without an expiration date to 3 years from the date of receipt. Commenters recommended that substances lacking an expiration date are usually stable for a period of time, and are not prone to microbial proliferation.

Response: Comment incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.

Commentary Summary #189: Multiple commenters suggested extending the expiration date for components without an expiration date to 3 years from the date of receipt. The large majority of ingredients have expiration dates that are greater than 2-3 years.

Response: Comment incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.

Commentary Summary #190: Multiple commenters suggested extending the expiration date for components without an expiration date to 3 years from the date of receipt. Commenters indicated that shorter expiration dates have created waste and problems and expense with disposal, especially of HDs.

Response: Comment incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.

Commentary Summary #191: Several commenters suggested extending the expiration date for components without an expiration date to 3 years from the date of receipt. Commenters indicated that components are still safe and effective.

Response: Comment incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.

Commentary Summary #192: Several commenters suggested that the chapter implies that containers for non-moisture-sensitive components do not need to be tight.
Response: Comment incorporated.
Commentary Summary #193: Commenter recommended to strike, “Moisture-sensitive ingredients must be stored in tight, well-closed containers” as it is duplicative.
Response: Comment incorporated.
Commentary Summary #194: Commenter suggested that even if ingredients are not moisture-sensitive, a tight, well-closed container should prevent cross contamination with other ingredients.
Response: Comment partially incorporated. Revised to strike the statement due to other comments noting that it is duplicative.
Commentary Summary #195: Commenter suggested that the expiration date of a component could be assigned from the date of opening when a manufacturer’s expiration date is not specified.
Response: Comment partially incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor’s expiration date must not be used by the compounding facility after 3 years from the date of receipt.
Commentary Summary #196: Commenter recommended basing the expiration date on the date the container was opened, not when it was received.
Response: Comment not incorporated. Expiration date should be determined conservatively from the date of receipt. The time period from when a component is received to when it was opened may vary greatly.
Commentary Summary #197: Commenter suggested extending the expiration date for components without an expiration date to 3 years from the date of receipt. Commenter suggested that if stored appropriately, there should not be significant degradation.
Response: Comment incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor’s expiration date must not be used by the compounding facility after 3 years from the date of receipt.
Commentary Summary #198: Commenter suggested extending the expiration date for components without an expiration date. Commenter recommended that when nonsterile raw materials are received from an FDA-registered supplier without an expiration date, it is appropriate to assign an expiration date utilizing documented evidence that the raw material is not subject to chemical or physical degradation or microbial contamination. When this method is used, the expiration date assigned can actually be up to 5 years from the date of receipt.
Response: Comment partially incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor’s expiration date must not be used by the compounding facility after 3 years from the date of receipt.

Commentary Summary #199: Commenter recommended that a separate log be maintained for ingredients procured from vendors.
Response: Comment not incorporated. The chapter does not require this type of documentation.
Commentary Summary #200: Multiple commenters suggested that there is not enough evidence to reduce the expiration date of components lacking an expiration date from the vendor from 3 years to 1 year.
Response: Comment incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.
Commentary Summary #201: Multiple commenters suggested that there is not enough evidence to reduce the expiration date of components lacking an expiration date from the vendor from 3 years to 1 year. Commenters noted that this will lead to increased turnover with no increase in safety.
Response: Comment incorporated. Revised section to state that the date of receipt by the compounding facility must be clearly and indelibly marked on each component package that lacks a vendor expiration date. Packages of components that lack a vendor's expiration date must not be used by the compounding facility after 3 years from the date of receipt.
Commentary Summary #202: Multiple commenters suggested that it is not possible to weigh powders to the exact weight, and leftover product would generate waste if not returned to the container. Several commenters suggested that leftover product may be returned into the originating container if utensils are clean and sanitary. Several commenters suggested that disposing of leftover products could be a problem for diversion of controlled substances. Multiple commenters suggested that disposing of leftover products would be wasteful.
Response: Comment incorporated. Revised to state that once the product is removed from the original container, components *should* not be returned to the original container. The statement was revised to be a recommendation.
Commentary Summary #203: Several commenters suggested that leftover product may be returned into the originating container if a CVE was used.
Response: Comment incorporated. Revised to state that once removed from the original container, components should not be returned to the original container.
Commentary Summary #204: Several commenters recommended that some pharmacies repackage their components into smaller containers for easier manipulation. Commenters were referring to the statement that components cannot be returned to the originating container, once removed.
Response: Comment partially incorporated. The statement does not prohibit transfer into a subsequent container. Revised to state that once removed from the original container, components should not be returned to the original container.
Commentary Summary #205: Several commenters suggested that ingredients removed from the originating container can be returned if described in an SOP in a way that is reproducible and will eliminate waste. Commenters suggested that proper training and supervision would be necessary.

Response: Comment partially incorporated. Revised to state that once removed from the original container, components should not be returned to the original container.
Commentary Summary #206: Commenter suggested that leftover product should not be returned into the originating container.
Response: Comment incorporated. Revised to state that once removed from the original container, components should not be returned to the original container.
Commentary Summary #207: Commenter suggested that the statement requiring that containers and closures used to package CNSPs must be stored off the floor is duplicative.
Response: Comment incorporated. Please note, the statement in *6.2 Components* was related to components while the statement in *4. Buildings and Facilities* includes components, equipment, and containers.
Commentary Summary #208: Several commenters indicated that “oldest stock” is unclear.
Response: Comment incorporated. Revised to strike statement.
Commentary Summary #209: Commenter suggested that the paragraph regarding storage of containers should be in its own section.
Response: Comment partially incorporated. Revised to move the statement under *4.2 Storage Area*.
Commentary Summary #210: A couple of commenters suggested that rotating stock is not mandatory.
Response: Comment incorporated. Revised to strike statement.
Commentary Summary #211: Several commenters suggested that oldest stock does not always have to be used first. Stock with earliest expiration should be used first.
Response: Comment partially incorporated. Revised to strike statement.
Commentary Summary #212: Commenter recommended adding guidance on how to obtain SDSs. Commenter stated that the Occupational Safety and Health Administration (OSHA) does not require or encourage employers to maintain SDSs for nonhazardous chemicals.
Response: Comment not incorporated. SDSs are required to be easily accessible, which may be done through hard copy or electronic means.
Commentary Summary #213: Commenter suggested that all personnel who handle hazardous and nonhazardous chemicals should be trained to clean spills annually.
Response: Comment incorporated. All personnel who may be required to remediate a spill must receive training in spill management of chemicals used and stored at the compounding facility. Refresher training must be conducted every 12 months.
Commentary Summary #214: Commenter requested a definition of when SDSs are required.
Response: Comment not incorporated. SDSs are required for all drug substances and must be accessible.
Commentary Summary #215: Commenter suggested that it is unnecessary to review chemical hazard and disposal information every 12 months.
Response: Comment not incorporated. SDSs must be reviewed every 12 months.
Commentary Summary #216: Commenter suggested that it is necessary to review chemical hazard and disposal information more than every 12 months.

Response: Comment partially incorporated. SDSs must be reviewed every 12 months. The chapter is intended to be a minimum standard; compounding facilities can choose to review SDSs more often.

Commentary Summary #217: Commenter suggested that information (such as an SDS) on any new chemical must be made accessible to workers prior to the initial use of the chemical.

Response: Comment partially incorporated. The facility must maintain chemical hazard and disposal information, which must be updated and reviewed every 12 months. The chapter is intended to be a minimum standard; compounding facilities can choose to update SDSs more often.

Commentary Summary #218: Commenter suggested changing “chemical” hazard and disposal information to “component”.

Response: Comment not incorporated. Use of “chemical” is aligned with how SDS information is presented.

Commentary Summary #219: Commenter suggested that chemical hazard and disposal information must be made accessible to compounding personnel if it is for a compounded nonsterile product, not when it is at the compounding facility.

Response: Comment partially incorporated. Revised to strike the statement, however, SDSs must be accessible to compounding personnel.

Commentary Summary #220: Several commenters noted that veterinarians compound with nonhazardous chemicals often, therefore having to maintain a spill kit may not be applicable.

Response: Comment partially incorporated. Revised to strike the requirement to verify and maintain spill kits. Facilities must determine their own policies for maintaining spill kits; however, they must be readily accessible in the compounding area. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.

Commentary Summary #221: Several commenters requested clarification on the contents of the spill kit.

Response: Comment partially incorporated. Revised to indicate that the contents of the spill kit should be affixed to the packaging of the spill kit if not readily visible on the manufacturer’s label. The contents of the spill kit may be determined by the facility.

Commentary Summary #222: Commenter recommended that at least one spill kit must be available in the compounding area, and must be inspected at least annually for suitability and expiration date. Additionally, employees who handle spills must be trained annually, which is documented.

Response: Comment partially incorporated. Revised to add that spill kits must be readily accessible, and spill kit refresher training must be conducted annually, which is documented.

Commentary Summary #223: Commenter suggested that spill kits must be readily accessible to an area where compounding activities are occurring.

Response: Comment incorporated. Revised to indicate that the spill kit must be readily accessible in the compounding area.
Commentary Summary #224: A couple of commenters recommended striking "designated" from the compounding area.
Response: Comment incorporated.
Commentary Summary #225: Multiple commenters suggested that a nonhazardous medication spill does not result in personnel harm.
Response: Comment not incorporated. Some chemical spills may not be hazardous to personnel but would need to be cleaned appropriately. Additionally, spills can increase the risk of cross contamination.
Commentary Summary #226: Commenter requested clarification on whether HD spill kits may be used.
Response: Comment not incorporated. The facility may determine the contents of the spill kit.
Commentary Summary #227: Commenter suggested that spill kits are not practical for nonhazardous materials, and that the OSHA and state medical veterinary medical associations manually identify what would be included in a spill kit and how an incident should be controlled.
Response: Comment not incorporated. Some chemical spills may not be hazardous but would need to be cleaned appropriately. Additionally, spills can increase the risk of cross contamination. Facilities may determine the contents of their spill kits, and can follow other resources in making this decision. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary compounding.
Commentary Summary #228: Commenter suggested removing "chemical" from spill kit.
Response: Comment incorporated. Revised to strike the statement.
Commentary Summary #229: Commenter suggested that the capacity of the spill kit should be struck and replaced with the contents of the spill kit.
Response: Comment incorporated.
Commentary Summary #230: Commenter suggested that if there is no hazard or other negative repercussions associated with a spill, personnel should be allowed to clean up the spill after the work is complete.
Response: Comment incorporated. Revised to remove the requirement to remediate spills immediately.
Commentary Summary #231: Commenter noted that a few drops of a substance may be considered a spill.
Response: Comment not incorporated. Remediation of small spills may include wiping up the drops of substance.
Commentary Summary #232: Commenter recommended striking the need for a facility to have an SOP for managing nonhazardous spills and for documentation of the corrective action.

Response: Comment not incorporated. Some chemical spills may not be hazardous but would need to be cleaned appropriately. Additionally, spills can increase the risk of cross contamination. Facilities must have a procedure in place for managing nonhazardous component spills. If required, these activities must be documented and corrective action taken.
Commentary Summary #233: Several commenters recommended indicating that spilling water does not need to be remediated.
Response: Comment partially incorporated. Revised to indicate that the facility must have an SOP for managing nonhazardous component spills and disposal. If necessary, the facility can specifically address water. If required, these activities must be documented and corrective action taken.
Commentary Summary #234: Commenter recommended striking the section that mandates documentation and corrective action for nonhazardous spills, or changing it to be a recommendation.
Response: Comment partially incorporated. Revised to indicate that the facility must have an SOP for managing nonhazardous component spills and disposal.
Commentary Summary #235: Commenter suggested that provisions on spill management do not apply to powder spills.
Response: Comment partially incorporated. Revised to indicate that the facility must have an SOP for managing nonhazardous component spills and disposal. Facilities may specifically address how to handle powder spills. If necessary, the facility can specifically address water. If required, these activities must be documented and corrective action taken.
Commentary Summary #236: Commenter suggested that refresher training for spill management should be replaced with competency assessment.
Response: Comment not incorporated. Competency may indicate a demonstration. Training must be conducted annually but competency evaluations are not required. Facilities may determine the most appropriate way to conduct annual training on spill management.

7. Master Formulation and Compounding Records

Commentary Summary #1: Commenter indicated that some state regulations set forth a simplified version of the requirements in *7. Master Formulation and Compounding Records*.
Response: Comment not incorporated. Facilities must follow state requirements and USP standards. USP has no role in enforcement.
Commentary Summary #2: Multiple commenters recommended that persons other than the designated person(s) may make changes to the Master Formulation Record if they have the required competencies.
Response: Comment incorporated. Revised to state that any changes or alterations to the Master Formulation Record must be approved and documented according to the facility's SOP.
Commentary Summary #3: Commenter recommended making an exception for powders for reconstitution with water and simple topical compounding of over-the-counter medications.

Response: Comment not incorporated. Reconstitution is out of scope of the chapter, therefore Master Formulation Records are not required. All other CNSPs, including topical compounded preparations, are required to have a Master Formulation Record.
Commentary Summary #4: Commenter suggested that maintaining a Master Formulation Record is optional, since it is burdensome and should only be necessary for complex formulations.
Response: Comment not incorporated. A Master Formulation Record is required for each unique formulation of CNSP to ensure that the CNSP is consistently prepared and meets expected quality attributes. Further, the Compounding Expert Committee decided that categories of compounding are difficult to assign and arbitrary to define. Requiring a Master Formulation Record only for complex formulation may be subject to different interpretations on what consistutes a complex CNSP.
Commentary Summary #5: Several commenters suggested that maintaining a Master Formulation Record is too burdensome for pharmacies that do not compound regularly.
Response: Comment not incorporated. The chapter is intended to be a minimum standard. Requirements cannot be stratified based on the volume compounded.
Commentary Summary #6: Several commenters suggested that maintaining a Master Formulation Record is optional, since it is burdensome and should only be necessary for complex formulations.
Response: Comment not incorporated. The Compounding Expert Committee determined that categories of compounding are difficult to assign and arbitrary to define. Further, the chapter does not describe different requirements based on the category of CNSP. The chapter is intended to be a minimum standard, therefore requirements cannot be stratified by complexity of compounding.
Commentary Summary #7: Commenter recommended that notes on a prescription may suffice for an extemporaneous preparation made once.
Response: Comment not incorporated. Master Formulation Records are required for each unique formulation, whereas a Compounding Record must be made for each preparation.
Commentary Summary #8: Commenter recommended adding a date to any changes or alterations for accurate record-keeping or retrospective review of the Master Formulation Record.
Response: Comment partially incorporated. Revised to add that changes or alterations must be documented according to the facility SOPs.
Commentary Summary #9: Commenter recommended that “designated person(s)” should be changed to “authorized personnel”.
Response: Comment not incorporated. A designated person is the facility’s authorized personnel. This can also be multiple designated person(s).
Commentary Summary #10: Several commenters suggested that calculations, as needed, should be added as part of the Compounding Record.
Response: Comment incorporated.
Commentary Summary #11: Several commenters suggested that “expected results” should be added as part of the Compounding Record.
Response: Comment incorporated.
Commentary Summary #12: Commenter suggested removing the characteristics of components from the Master Formulation Record.

Response: Comment partially incorporated. Revised to state “if applicable”, and provided parenthetical examples.
Commentary Summary #13: Commenter requested information on when particle size is required.
Response: Comment partially incorporated. Revised to state “if applicable”.
Commentary Summary #14: Commenter suggested that not all component characteristics are known or specified in the COA.
Response: Comment incorporated. Revised to state “if applicable”.
Commentary Summary #15: Commenter suggested adding complete instructions for completing the preparation, including equipment, supplies, and a description of compounding steps for the Compounding Record.
Response: Comment incorporated.
Commentary Summary #16: Commenter suggested retaining calculations as needed, sample labeling information, and appropriate safety precautions in the Master Formulation Record.
Response: Comment partially incorporated. Revised to add requirements for calculations, if applicable. Labeling information is provided in *Box 7-2 Compounding Records,* and safety precautions would not always be applicable.
Commentary Summary #17: Commenter suggested noting the expected yield, compatibility and stability data, special precautions, and the source or origin of the formula as part of the Master Formulation Record.
Response: Comment partially incorporated. Revised to include a reference source to support the assigned BUD and storage requirements. Compatibility and stability information are not always available. The designated person(s) must determine suitability of the formulation prior to making the Master Formulation Record.
Commentary Summary #18: Several commenters recommended adding particle size as necessary and appropriate, calculations as needed, and expected results into the Master Formulation Record.
Response: Comment partially incorporated. Particle size is provided as an example. Revised to add calculations and expected results.
Commentary Summary #19: Commenter noted that characteristics of components are not always available or necessary information.
Response: Comment incorporated. Revised to note that calculations and characteristics are added, if applicable.
Commentary Summary #20: Multiple commenters recommended that a Master Formulation Record must include ingredient identities and amounts, container-closure systems, and characteristics of components if necessary.
Response: Comment partially incorporated. Revised to add identities and amounts of all components, container-closure system(s), and applicable characteristics.
Commentary Summary #21: Commenter requested removal of the requirement to add particle size, purity grade, and solubility to the Master Formulation Records.
Response: Comment partially incorporated. Revised to note that characteristics are added, if applicable, and added parenthetical examples.
Commentary Summary #22: Commenter recommended striking particle size.
Response: Comment partially incorporated. Revised particle size to be a parenthetical example.

Commentary Summary #23: Commenter suggested that requiring particle size is not always appropriate or necessary.
Response: Comment incorporated. Revised particle size to be a parenthetical example.
Commentary Summary #24: Several commenters suggested that particle size is not always available in the COA.
Response: Comment incorporated. Revised particle size to be a parenthetical example.
Commentary Summary #25: Commenter recommended adding any formulation-specific CNSP labeling requirements to the Master Formulation Record.
Response: Comment incorporated.
Commentary Summary #26: Commenter suggested that the Master Formulation Record should contain information specific to the compounded product instead of general compounding processes or procedures. Commenter recommended that QC procedures that are unique to that product should be added. Commenter recommended that reference for BUD assignment should be removed since this information can be produced by the pharmacy. Additionally, commenter requested that Master Formulation Records and Compounding Records can be stored electronically.
Response: Comment partially incorporated. QC procedures in each record should be specific to the preparation. Reference sources must be specified in the Master Formulation Record. Revised to remove the need for “written” documentation.
Commentary Summary #27: Commenter recommended changing “ingredient” to “component”.
Response: Comment incorporated.
Commentary Summary #28: Commenter recommended moving “container-closure systems” to a separate bullet.
Response: Comment incorporated.
Commentary Summary #29: Commenter suggested removing the physical description of the final preparation from the Master Formulation Record because the pharmacy may need to purchase different components due to drug shortages and recalls, and the physical appearance may change.
Response: Comment not incorporated. Description of the final appearance of the preparation is important for identifying quality issues. If a new product or process is used in the preparation, the Master Formulation Record must be revised or a new one created.
Commentary Summary #30: Commenter suggested that particle size, salt form, purity grade, solubility, and pH can be found in a COA.
Response: Comment not incorporated. A Master Formulation Record must contain this information when possible for record-keeping purposes.
Commentary Summary #31: Commenter suggested adding calculations as needed, storage requirements, and expected results to the Master Formulation Record.
Response: Comment incorporated.
Commentary Summary #32: Commenter recommended striking the requirement for the Compounding Record to contain deviations from the Master Formulation Record since it would require creating a new Master Formulation Record.
Response: Comment incorporated.

Commentary Summary #33: Commenter recommended signing, initialing, and dating each step of compounding in the Compounding Record if not documented by electronic means. Commenter recommended that review by the pharmacist for quality should be documented on the Compounding Record.
Response: Comment partially incorporated. Revised to add a method to identify the individuals involved in the compounding process and to verify that the final preparation must be in the Compounding Record.
Commentary Summary #34: Multiple commenters recommended that electronic approval should satisfy requirements for signature or initials in the Compounding Record.
Response: Comment incorporated. Revised to state that a method to identify the individuals should be documented.
Commentary Summary #35: Commenter suggested that the name, vendor or manufacturer, lot number, and expiration date of each ingredient and container-closure system do not need to be separately documented since this information is readily available in electronic databases.
Response: Comment partially incorporated. Revised to remove the requirement to document the container-closure system in the Compounding Record. The name, vendor or manufacturer, lot number, and expiration date of each component must be documented.
Commentary Summary #36: Commenter recommended removing the requirement for providing the expiration date of the container-closure system in the Compounding Record. Several commenters suggested removing the expiration date of each container-closure system since they usually do not have expiration dates.
Response: Comment incorporated. Revised to remove the requirement to document the container closure system.
Commentary Summary #37: Commenter recommended removing the requirement to document the reference for the Master Formulation Record and for BUD assignment since a Compounding Record needs to be made for every preparation.
Response: Comment partially incorporated. Revised to remove the requirement for a reference for a BUD.
Commentary Summary #38: Commenter suggested removing the lot number of each container-closure system since they usually do not have lot numbers.
Response: Comment incorporated. Revised to remove the requirement to document the container-closure system in the Compounding Record.
Commentary Summary #39: Commenter suggested that the expiration date of each container-closure system should be at least 3 years.
Response: Comment partially incorporated. Revised to remove the requirement to document the container-closure system in the Compounding Record.
Commentary Summary #40: Commenter recommended that a copy of the label should be part of the Compounding Record.
Response: Comment partially incorporated. The label can be a basis for a Compounding Record, but it is not required.
Commentary Summary #41: Several commenters suggested that the name, vendor or manufacturer, lot number, and expiration date of each container-closure system should be removed since they often do not contain lot numbers or expiration dates.

Response: Comment incorporated. Revised to remove the requirement to document the container-closure system in the Compounding Record.
Commentary Summary #42: Commenter suggested that the signatures or initials of individuals involved in compounding or checking the preparation must be clear as to which actions each individual performed.
Response: Comment partially incorporated. Revised to allow a method of identifying the individuals involved in the compounding process and to verify that the final preparation must be documented in the Compounding Record.
Commentary Summary #43: Several commenters suggested removing or changing the provision that the total quantity compounded must be documented in the Compounding Record.
Response: Comment not incorporated. Total quantity compounded must be recorded in the Compounding Record. The units of measure would be specific to the preparation.
Commentary Summary #44: Several commenters recommended that residual amounts should be recorded for controlled substances.
Response: Comment not incorporated. Applicable laws and regulations will describe how to handle and document excess controlled substances.
Commentary Summary #45: Multiple commenters suggested that the reference source of the BUD assignment should be removed from the Compounding Record since it is not needed during the compounding process and is readily available in the Master Formulation Record.
Response: Comment incorporated.
Commentary Summary #46: Commenter recommended retaining the requirement for a duplicate label or label elements as described in the Master Formulation Record, and adding the identity of any automated compounding device into the Compounding Record.
Response: Comment not incorporated. A duplicate label may be maintained and retrieved electronically. The chapter is intended to be a minimum standard; not all compounders will use an automated compounding device, however facilities may choose to incorporate it into their record-keeping requirements.
Commentary Summary #47: Several commenters recommended that Compounding Records should only include a time if it is less than or equal to 24 hours for when the preparation is prepared.
Response: Comment not incorporated. Date and time should be recorded.
Commentary Summary #48: Commenter requested clarifying whether internal references may be used as a source for the BUD.
Response: Comment not incorporated. Reference sources may include the default BUD per the chapter, or literature sources.
Commentary Summary #49: Commenter recommended that signatures or initials and date of each step of compounding should be included in the Compounding Record. The individual who performs the review should also be identified.
Response: Comment partially incorporated. Revised to add documenting a method to identify the individuals involved in the compounding process and verifying the final preparation in the Compounding Record. Additionally, the date and time of preparation are recorded.

Commentary Summary #50: Commenter expressed concern that adding the time of preparing the preparation is confusing, as it may refer to when compounding started or when it was reviewed.
Response: Comment not incorporated. The date and time of preparation refers to when compounding started.
Commentary Summary #51: Commenter recommended that paperless records would require an identifier for each individual as part of the Compounding Record.
Response: Comment incorporated. Revised to add documenting a method to identify the individuals involved in the compounding process and verifying the final preparation in the Compounding Record.
Commentary Summary #52: Commenter noted that paperless records would require a “digital capture” for each individual as part of the Compounding Record.
Response: Comment incorporated. Revised to add documenting a method to identify the individuals involved in the compounding process and verifying the final preparation in the Compounding Record.
Commentary Summary #53: Commenter suggested that the national drug code should also be included for each component in the Compounding Record.
Response: Comment not incorporated. A national drug code may be incorporated by the facility but may not be present for every substance used.
Commentary Summary #54: Commenter recommended that no review is needed if the person compounding is a licensed pharmacist or other practitioner authorized to compound without supervision.
Response: Comment incorporated. The Compounding Record does not specify who must perform the verification, but all individuals involved in compounding the preparation must be identified.
Commentary Summary #55: Commenter suggested that the outcomes of QC procedures unique to that product be included in any documentation requirements, and not general QC procedures.
Response: Comment incorporated. QC procedures are intended to be specific to the preparation.
Commentary Summary #56: Commenter suggested that calculations are only necessary for complex preparations in the Compounding Record.
Response: Comment partially incorporated. Revised to state that calculations must be included, if applicable. The chapter is intended to be a minimum standard; requirements cannot be stratified based on the complexity of the compounding process.
Commentary Summary #57: Commenter suggested that signatures of each individual involved in the compounding process must be documented.
Response: Comment not incorporated. Many record-keeping methods are electronic, and may not support a signature.
Commentary Summary #58: Commenter suggested that the expiration date of container-closure systems should only be documented when applicable.
Response: Comment partially incorporated. Revised to strike the requirement to document an expiration date for container-closure systems.

8. Release Inspections

Commentary Summary #1: Commenter suggested changing the section title from “Release Testing” to “Release Inspections” because the section did not describe or list any actual required or recommended tests.
Response: Comment incorporated. The section title was changed to “Release Inspections”.
Commentary Summary #2: Commenter suggested deleting the requirement that CNSPs are checked and inspected before being released or dispensed and that follow-up occurs if assay results are out of scope.
Response: Comment not incorporated. The chapter requires checks and inspections before release and dispensing. CNSPs with defects must be discarded.
Commentary Summary #3: Commenter suggested defining the term “release testing” early in this section to provide clarity for readers. In addition, a hyperlink to the glossary term may be helpful.
Response: Comment partially incorporated. Changed subsection title to Release Inspections.
Commentary Summary #4: Commenter suggested adding more clarification for when checking the CNSP should be completed because if a compounded preparation is sent out for assay, the results may not be back before the patient needs the medication and the BUD is being used up during the test. The loss of a few days of therapy is potentially more problematic than any clinical significance of a compounded preparation being outside required limits.
Response: Comment not incorporated. The chapter states that inspection occurs after "completion of compounding and before release and dispensing."
Commentary Summary #5: Commenter suggested modifying the section to clarify that release inspections are only necessary when the CNSP is not prepared by a pharmacist or other compounder who does not require supervision. The commenter added that this section, if not appropriately applied, could amount to a duplicative and unnecessary check. The commenter did not believe that release testing is necessary when a licensed pharmacist or other authorized practitioner prepares a compounded product, as the individual doing the release test would likely be the same practitioner who compounded the product.
Response: Comment not incorporated. All CNSPs must be inspected before release or dispensing regardless of the qualifications of the compounder.
Commentary Summary #6: Commenter suggested adding that the results of release inspections need to be documented.
Response: Comment incorporated. The requirement for documentation was added.
Commentary Summary #7: Commenter suggested adding clarification about whether assays need to be carried out for all CNSPs before release testing.
Response: Comment partially incorporated. Revised to state that checks and inspections are performed if required. Examples of assays and pH testing were removed.
Commentary Summary #8: Several commenters suggested adding a requirement for random potency testing of CNSPs of individual compounders to assess technique drift. Requiring all testing to be completed pre-release places such global testing in an

unclear area which could be interpreted as negligent by adopting bodies and enforcement entities.
Response: Comment partially incorporated. Examples of pH and assay removed. Requirement for testing before release is removed. However, checks and inspections must be documented.
Commentary Summary #9: Several commenters suggested adding clarification that CNSPs do not need to be sent for potency testing each time they are compounded because this is not practical or feasible.
Response: Comment partially incorporated. Examples of pH and assay removed. Requirement for testing before release is removed. However, checks and inspections must be documented.
Commentary Summary #10: Commenter suggested removing the requirement for SOPs for topical CNSPs and manufactured powders for reconstitution with water because SOPs are excessively labor intensive for the hazard that simple topical compounds and pre-packaged powders for reconstitution with water pose.
Response: Comment not incorporated. Reconstitution is out of the scope of the chapter.
Commentary Summary #11: Commenter requested the addition of clarification on whether CNSPs can be released by other practitioners since only pharmacists or physicians are allowed to dispense CNSPs.
Response: Comment not incorporated. Release may refer to sending medication to the floors or other facilities.
Commentary Summary #12: Commenter suggested clarifying whether it is necessary to record inspections of CNSPs prepared in a batch, because this occurs often in the hospital setting where unit doses are prepared in advance of prescriptions.
Response: Comment not incorporated. Facilities must determine and implement their own documentation practices.
Commentary Summary #13: Several commenters suggested defining the period from when a CNSP is compounded to when it is promptly dispensed because this period may vary based on several factors such as the dosage form.
Response: Comment partially incorporated. The requirement for re-inspection of CNSPs that are not promptly dispensed was removed.

9. Labeling

Commentary Summary #1: Commenter recommended that the list of items to be added to the label of a CNSP is in conflict with existing regulations in their state, which do not require lot number, storage conditions, dosage form, indication that the preparation is compounded, special handling instructions, or warning statements.
Response: Comment not incorporated. Facilities must follow requirements of the entities with regulatory and enforcement responsibilities in their regulatory jurisdiction, as well as USP standards. Questions about conflicting requirements should be directed to the relevant regulatory body in the jurisdiction(s) at issue. USP has no role in enforcement.
Commentary Summary #2: Several commenters noted that veterinary practices have software systems and labeling equipment specifically designed to meet state legal

requirements. Implementing the additional requirements would be costly, labor intensive, and time intensive, and they proposed that these requirements be omitted.
Response: Comment partially incorporated. Changes were made to clarify the labeling requirements. Items specifying minimum requirements for labeling were included in the section. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary practices.
Commentary Summary #3: Commenter suggested limiting the labeling requirements to the immediate container holding the compounded dosage form.
Response: Comment Incorporated. Labeling on the external container should be determined by the facility.
Commentary Summary #4: Commenter suggested clarifying the definition of the label versus labeling, because some products have an outer shell to fit over them, which is where the label is fixed, since in such circumstances the label cannot stick to the immediate container.
Response: Comment incorporated. A reference to <7> *Labeling* was added.
Commentary Summary #5: Commenter suggested adding a sentence stating that labeling does not need to be included if the compound is used by the compounding facility itself and only needs to be included if the compound is distributed to a third party (patient or other facility).
Response: Comment not incorporated. Labeling is required for all CNSPs whether or not they are dispensed to the patient.
Commentary Summary #6: Several commenters suggested use of “expiration date” on labels. The commenter expressed concern that use of the term BUD on labels in lieu of expiration date could cause confusion for patients.
Response: Comment not incorporated. The term BUD is not the same as expiration date. An expiration date identifies the time during which a conventionally manufactured drug product, active ingredient, or added substance can be expected to meet the requirements of a compendial monograph, if one exists, or maintain expected quality provided it is kept under the specified storage conditions. A BUD is a date after the CNSP is prepared and beyond which the CNSP must not be used.
Commentary Summary #7: Commenter suggested using the terms label and supplementary label, instead of label and labeling.
Response: Comment not incorporated. The definitions used in <795> are consistent with the definitions in <7>.
Commentary Summary #8: Commenter requested that the term “article” be added to the glossary.
Response: Comment partially incorporated. The term “article” was eliminated from the section.
Commentary Summary #9: Several commenters proposed removal of the section on labeling or limiting the requirements of labeling to regulatory bodies, since regulatory bodies might have widely varying requirements for labeling.
Response: Comment incorporated. Compounders must follow the requirements set forth in their regulatory jurisdiction.

Commentary Summary #10: Commenter suggested removal of storage requirements from the list of items required on the label because storage conditions may be more adequately provided in the accompanying literature (i.e., labeling) than on the label attached to the immediate container.
Response: Comment incorporated. Additional clarification was added to state that if other than controlled room temperature, storage instructions should be specified on the label.
Commentary Summary #11: Several commenters suggested adding a requirement that directions for use appear on the label.
Response: Comment not incorporated. Labeling is intended to be for specific CNSPs. Additional requirements may be determined in applicable laws and regulations, or facility SOPs.
Commentary Summary #12: Several commenters noted that the term CNSP was misspelled.
Response: Comment incorporated.
Commentary Summary #13: Commenter suggested removal of lot numbers from the list of items required on the label, especially since lot numbers are not readily available and are not always provided on conventionally manufactured products.
Response: Comment not incorporated. The assigned internal identification number may be either a prescription number or an internal lot number. Patients receiving the medication would receive a prescription number.
Commentary Summary #14: Commenter noted that the amount of space on a label is limited and all states have minimum requirements of what information is required on the label. In addition, some states also impose minimum font sizes for information on the label.
Response: Comment partially incorporated. Labeling requirements were further clarified and a reference to <17> *Prescription Container Labeling* was added.
Commentary Summary #15: Several commenters recommended that explicit language be added stating that "the full names and quantities or concentrations of all active ingredients must be present on the label of any CNSP".
Response: Comment not incorporated. This is out of the scope of the chapter. Additional requirements for labeling can be found in <17>.
Commentary Summary #16: Commenter suggested allowing pharmacies to abbreviate ingredient names and strengths. Listing each ingredient name may not be possible or may clutter a label if the number of characters in the drug name field is limited.
Response: Comment not incorporated. This is out of the scope of the chapter. Additional requirements for labeling can be found in <17>.
Commentary Summary #17: Several commenters suggested changing the requirement that storage conditions must be included on the label to "storage conditions if not controlled room temperature". The large amount of required information on prescription labels is making font sizes so small that patients cannot read them.
Response: Comment incorporated. The chapter requires labeling of storage conditions if not at room temperature.
Commentary Summary #18: Several commenters suggested adding clarification on how to indicate that the preparation is compounded.

Response: Comment not incorporated. Facilities should determine their own labeling formats. Labeling must include a statement that it is a compounded preparation.
Commentary Summary #19: Commenter suggested moving to labeling requirements rather than specifying items to be added to the label.
Response: Comment not incorporated. Allowance for labeling provides flexibility where label space may be limited.
Commentary Summary #20: Commenter suggested creating a unified list of items required on a label and items required on labeling for CNSPs.
Response: Comment not incorporated. There are different requirements for labels and labeling.
Commentary Summary #21: Commenter suggested changing labeling requirements to apply only after the CNSP is dispensed to a patient.
Response: Comment not incorporated. Labeling must be placed on the CNSP before it is dispensed to a patient.
Commentary Summary #22: Several commenters suggested adding directions for use to the list of items required on a label for a CNSP.
Response: Comment not incorporated. Labeling is intended to be specific for CNSPs. Additional requirements may be dictated by applicable laws and regulations and facility SOPs.
Commentary Summary #23: Commenter suggested removing route of administration from the list of items required in the labeling of CNSPs, since there are instances when a CNSP might have multiple routes of administration.
Response: Comment partially incorporated. Route of administration is recommended to be included, but not required.
Commentary Summary #24: Several commenters suggested that route of administration be included on dispensed label to patient.
Response: Comment not incorporated. Labeling is intended to be specific for CNSPs. Route of administration may not be known. Additional requirements may be dictated by applicable laws and regulations and facility SOPs.
Commentary Summary #25: Commenter suggested adding a requirement that labeling should be checked as appropriate prior to final dispensing or release, and this should be documented.
Response: Comment partially incorporated. The labeling check may be a part of the QA and QC system designed and implemented by the facility.
Commentary Summary #26: Commenter suggested tying the labeling process to the compounding and checking process.
Response: Comment partially incorporated. The labeling check may be a part of the QA and QC system designed and implemented by the facility.

10. Establishing Beyond-Use Dates

Expert Committee-initiated Change #1: The Compounding Expert Committee discussed the default BUDs in *Table 3* and decided to increase the maximum default BUD for preserved aqueous dosage forms to 35 days. This would allow for patients to obtain a 30-day supply and allow sufficient time for the compounder to compound a refill CNSP.

Commentary Summary #1: Several commenters suggested inserting the word “appropriately” prior to “discarded”.
Response: Comment not incorporated because “appropriately” cannot be defined.
Commentary Summary #2: Several commenters indicated that there is no basis for reducing the maximum default BUD for non-aqueous dosage forms (*Table 3)* from 180 to 90 days.
Response: Comment not incorporated. There is evidence that non-aqueous liquid dosage forms may be susceptible to degradation and may become unstable due to storage over prolonged periods of time.
Commentary Summary #3: Several commenters suggested reducing the description of terms in *10.1 Terminology* because it is too long and difficult to follow.
Response: Comment partially incorporated. Removed terms that were not used in the chapter.
Commentary Summary #4: Several commenters suggested adding a statement that "A BUD may be assigned past the expiration of any component in the CNSP when supporting data is available." Some pharmacies, in particular those associated with clinical study centers, are beginning to operate under GMPs where it is common practice to assign the dating from the beginning of drug product manufacturing.
Response: Comment not incorporated. Components that are expired must not be used for subsequent CNSPs.
Commentary Summary #5: Commenter noted that the BUD definition is different from the BUD definition provided in <797>. The commenter suggested that perhaps a different term should be utilized.
Response: Comment not incorporated. BUD is different in <795> and <797>. The <795>, BUDs apply even after administration begins, whereas in <797>, the BUD no longer applies once administration begins.
Commentary Summary #6: Commenter suggested exempting solutions used to adjust pH from the requirement that the BUD of a CNSP cannot be extended past the expiration date of any component in the CNSP. Acids and bases used to adjust the pH typically have very short BUDs, but adjusting the pH is what extends the BUD of the compound.
Response: Comment not incorporated. Adjustment of pH with acids and bases does not necessarily extend BUDs.
Commentary Summary #7: Commenter suggested adding a requirement that qualified personnel establish the BUDs for CNSPs.
Response: Comment not incorporated. All personnel must be qualified and trained in compounding as described in *2. Personnel Training and Evaluation.*
Commentary Summary #8: Several commenters suggested changing the parameters to be considered when establishing BUDs for CNSPs from requirements to recommendations.
Response: Change not incorporated. All of the factors related to stability, compatibility, degradation, and potential for microbial proliferation must be considered.
Commentary Summary #9: Several commenters suggested removing compatibility of the container-closure system with the finished preparation from the list of items to be considered when establishing a BUD for a CNSP.

Response: Comment partially incorporated. It is included only as a consideration, as some CNSPs may not be compatible with certain containers.

Commentary Summary #10: Several commenters suggested that the day on which the preparation is compounded should be Day 0 (zero), not Day 1.

Response: Comment not incorporated. The day of compounding should be considered Day 1. Once the components are mixed together, there is a potential for a reaction and degradation.

Commentary Summary #11: Several commenters suggested removing the 180-day limit on the maximum BUD that can be assigned to a CNSP because they can carry out stability testing to justify a BUD longer than 180 days.

Response: Comment not incorporated. The 180-day limit also takes into consideration the risk of microbial proliferation in the CNSP. The defaults in *Table 3* are based on chemical and physical stability and the ability to suppress microbial growth.

Commentary Summary #12: Commenter proposed a reorganization of *10.3 Establishing a BUD for a CNSP* to improve readability and group similar statements together.

Response: Comment not incorporated. BUDs should be established based on *Table 3*. Some circumstances may allow for a longer BUD or may require a shorter BUD. Those provisions are subsequently described in the chapter.

Commentary Summary #13: Commenter proposed removal of the requirement for testing according to General Chapter <51> *Antimicrobial Effectiveness Testing* to extend the BUD for an aqueous CNSP beyond the defaults stated in *Table 3*. Testing is cost-prohibitive for most pharmacies, and pharmacies are going to cease offering compounding services, which will compromise patient care due to lack of access to these medications.

Response: Comment not incorporated. Aqueous solutions with water activity (Aw) > 0.6 are prone to microbial proliferation. General Chapter <51> testing is required for extending beyond the default. An adequate preservative system is needed.

Commentary Summary #14: Commenter suggested removal of the allowance for compounders to use a *USP-NF* compounded preparation monograph for a CNSP to extend BUDs beyond the defaults in *Table 3* because compounders may not always produce CNSPs using the same methods and conditions by which USP performed its studies.

Response: Comment not incorporated. *USP-NF* compounded preparation monographs have been developed and used for many years. Formulations described in the monographs have generally been studied for stability and eliminating the ability to use them would make the chapter more stringent.

Commentary Summary #15: Several commenters suggested that compounders should be allowed to use data from stability studies to extend BUDs for CNSPs even further than the BUDs stated in *USP-NF* compounded preparation monographs. It is also not known if the BUD in the *USP-NF* compounded preparation monograph is the maximum BUD for that preparation. Some commenters stated that USP monographs are not updated sufficiently to address new information, or specific testing that a facility can perform. Accordingly, the commenters recommended modifying the statement to allow for extending the BUD with proper testing or references.

Response: Comment not incorporated. *USP-NF* compounded preparation monographs data are critically evaluated and reviewed by the Compounding Expert Committee. Deviation from the requirements in the compounded preparation monographs would lead to a formulation that no longer meets compendial requirements, including the stability data.

Commentary Summary #16: Commenter requested a clarification of whether published or in-house stability-indicating studies can still be used to extend the BUD of a CNSP, instead of using a USP monograph.

Response: Comment partially incorporated. Published and unpublished studies may be used as described in *10.3 Establishing a BUD for a CNSP.*

Commentary Summary #17: Commenter suggested removing the wording "light-resistant" as this is not necessary for items that are not degraded by light.

Response: Comment not incorporated. Most containers are light-resistant. General Chapter <659> defines light-resistant container. A container can be made light resistant by use of an opaque covering or secondary packaging.

Commentary Summary #18: Commenter suggested allowing the extension of BUDs beyond 30 days without carrying out a stability study for aqueous CNSPs if the API in the CNSP is known to be stable in an aqueous environment. The commenter added that a similar FDA-approved product with a longer date may be used as a reference for aqueous stability (if an API is resistant to hydrolysis, a change in the formulation will not change this property of the API) as long as the preparation is adequately preserved or stored in a manner that prevents, reduces, or suppresses microbial growth.

Response: Comment not incorporated. The stability of the formulation may depend on the CNSP. Changes to excipients and other ingredients may impact the stability of a particular CNSP.

Commentary Summary #19: Several commenters requested the addition of an explanation as to why the BUD for any preparation other than solid dosage forms that have a reduced Aw of ≤ 0.6 (e.g., suppositories, ointments, fixed oils, or waxes) has been reduced to 90 days from 180 days. This is not explained or supported by evidence. Hydrolysis is the most common form of chemical degradation, and these formulations contain no water. This BUD should be 180 days.

Response: Comment not incorporated. The rationale for changing the BUD to 90 days took into consideration the risk of microbial proliferation in the CNSP. The defaults in *Table 3* are based on chemical and physical stability and ability to suppress microbial growth.

Commentary Summary #20: Commenter noted that the requirements in *Table 3* differ significantly from the requirements in their regulatory jurisdiction.

Response: Comment not incorporated. Regulatory bodies may require additional and more stringent requirements than USP standards.

Commentary Summary #21: Several commenters suggested allowing compounders to extend the BUD of CNSPs beyond 180 days if a facility has the means to test a product with stability-indicating methods and antimicrobial-effectiveness testing. The commenter suggested allowing compounders to analyze data generated from in-use testing and use their judgment to extend BUDs to a maximum of 18 months.

Response: Comment not incorporated. The 180 days is a conservative approach based on considerations of stability, microbial risk, and clinical need.

Commentary Summary #22: Several commenters suggested adding language to clarify how Aw is determined. Commenter suggested that the description of Aw should be written in plain language as most pharmacies and pharmacists would be unable to determine what the Aw of a compound would be without a reference lab available. This should be made clear based on route of administration, formulation, and preservative content. Commenter suggested adding a chart of manufactured bases and bases prepared by compounders.
Response: Comment not incorporated. Aw is described in <1112> *Application of Water Activity Determination to Nonsterile Pharmaceutical Products.*
Commentary Summary #23: Commenter suggested that the default BUDs in *Table 3* are too short and will be problematic for patients, especially those with insurance. The commenter suggested extending the default BUD for preserved aqueous dosage forms to 90 days at room temperature, and for non-preserved aqueous dosage forms to 30 days in a refrigerator.
Response: Comment not incorporated. An FAQ will be added to the USP website to clarify the differences between solid dosage forms and non-aqueous dosage forms. USP has data from several stability studies of non-aqueous dosage forms (e.g., fixed oils) showing a stability of less than 180 days.
Commentary Summary #24: Commenter suggested aligning the BUDs in the chapter with FDA repackaging guidances.
Response: Comment not incorporated. Repackaging is out of scope for this chapter.
Commentary Summary #25: Commenter suggested separating the category of aqueous formulations into topical route and oral route.
Response: Comment not incorporated. The intent is to clarify the types of dosage forms based on Aw. An aqueous formulation may be used for multiple dosage forms, but it should still have the same BUD.
Commentary Summary #26: Commenter suggested ordering the list of default BUDs in *Table 3* from lowest to highest BUD.
Response: Comment incorporated. The order of listing the default BUDs in *Table 3* was changed.
Commentary Summary #27: Commenter suggested limiting the allowance for compounders to extend BUDs to not more than 180 days because compounders may not have all the information about the testing that they would need to conduct to perform a meaningful stability study. The commenter added that the provision for extending BUDs using stability studies, without any guidance on what that entails, is open to interpretation and would likely be difficult to interpret and enforce uniformly. The commenter was concerned that the proposed chapter would allow compounders to rely on stability studies performed by another entity. A stability study conducted by one entity would provide minimal insight into whether the drug product will remain stable when produced by a different entity because the materials (e.g., purity of the bulk drug substances, inactive ingredients, and container) and processes may vary between compounders.
Response: Comment incorporated.
Commentary Summary #28: Commenter suggested adding a footnote to *Table 3* that requires the temperature within a refrigerator to be monitored and documented at a

minimum of once a day. A recording device would allow for continuous tracking and subsequent review during times when the facility may be closed.
Response: Comment partially incorporated. The definition of storage conditions was referenced in <659>. Temperature monitoring requirements are also discussed in detail in section 12. *Quality Assurance and Quality Control.*
Commentary Summary #29: Several commenters indicated that requiring expensive stability-indicating studies for aqueous compounds may mean that large compounding facilities can circumvent the requirements by placing everything in oil bases (that have no stability data at all) to apply the extended BUD of 90 days. Bacterial contamination, UV light, heat, and changes in pH may still result in drug decomposition in oil bases. Commenter recommended adding a caveat about pharmacists needing to determine that the drug is appropriate for oil. Current practice has shown that pharmacists often try putting everything into oil to avoid the short BUDs of aqueous CNSPs.
Response: Comment not incorporated. Appropriateness of the formulation must be determined by the compounder.
Commentary Summary #30: Commenter proposed a 30-day BUD for refrigerated CNSPs and a 7-day BUD for non-refrigerated, non-preserved aqueous solutions.
Response: Comment not incorporated. Default BUDs are intended to be a conservative approach to minimize the risk of decomposition and microbial proliferation. Longer BUDs may be assigned as described in 10.3 *Establishing a BUD for a CNSP*.
Commentary Summary #31: Several commenters proposed exempting some aqueous, preserved oral liquids from the requirement for <51> testing when the BUD of such CNSPs is extended beyond the defaults in *Table 3*, because this testing would cause unnecessary burden and restrict access to medications.
Response: Comment not incorporated. Extending BUDs of aqueous CNSPs will require preservatives. If patients are unable to tolerate certain preservative, the BUDs in *Table 3* should be applied.
Commentary Summary #32: Commenter suggested allowing facilities to still use the BUD in USP monographs and published studies if they make small changes to the formula, such as the addition of flavors, because of the significant expense compounders would have to incur to carry out a stability study to establish a BUD for the new formula.
Response: Comment not incorporated. Changes to flavoring or concentrations of other excipients may impact the stability of the preparation.
Commentary Summary #33: Commenter proposed clarifying the storage temperatures for *Table 3*. Items such as suppositories are typically stored refrigerated. Limiting storage temperatures to controlled room temperature may not be appropriate.
Response: Comment incorporated. *Table 3* revised to allow storage at controlled room temperature or in a refrigerator.
Commentary Summary #34: Commenter suggested removing *Table 3* and all associated limits to compounders' ability to extend the BUD of CNSPs because there are established recipe references used as guides for selecting a BUD that is representative of best practice for each individual compound prepared.
Response: Comment not incorporated. The limits were set on BUDs for CNSPs by taking into consideration the risk of microbial proliferation in the nonsterile preparation. The defaults in *Table 3* are based on chemical and physical stability and ability to

suppress microbial growth. Decisions about extending BUDs need to consider all those factors as well.

Commentary Summary #35: Commenter suggested the addition of a description of the process for assigning BUDs to CNSPs in unit dose packages of oral solids. The commenter recommended consideration of the differences in the requirements for repackaging in FDA guidance and <1178> *Good Repackaging Practices.*

Response: Comment partially incorporated. Clarification on repackaging is provided in 1.1 *Scope.* General Chapter <795> does not apply to repackaging.

Commentary Summary #36: Commenter suggested adding a reference to <1112>. The commenter also suggested that <1112> should be added to the *Compounding Compendium*.

Response: Comment incorporated. Cross-references will be updated in USP's *Compounding Compendium*.

Commentary Summary #37: Commenter suggested inclusion of more general guidance for practitioners that only perform simple to moderate-level compounding because assessing the Aw of a formulation to determine and establish a BUD may not be practical for community retail pharmacies engaging in simple to moderate-level compounding.

Response: Comment not incorporated. The chapter does not require Aw determination for all CNSPs. Example dosage forms with Aw values have been added to *Table 3*.

Commentary Summary #38: Commenter proposed the addition of a better description of the CNSPs that are susceptible to microbial contamination and proliferation and that therefore need an antimicrobial agent or need to be refrigerated.

Response: Comment incorporated. Examples of water activities for most commonly compounded CNSPs have been added to *Table 3*.

Commentary Summary #39: Several commenters proposed the addition of a statement to clarify that performing a chapter <51> test is not required to comply with *Table 3*.

Response: Comment not incorporated. To minimize the risk for microbial proliferation, <51> testing is only required if BUDs are extended beyond those in *Table 3*. Compounders should take into account dilutions and the literature on effective concentrations of the preservatives used.

Commentary Summary #40: Commenter suggested adding that antimicrobial preservatives should not be used in place of good compounding practices.

Response: Comment partially incorporated. The chapter specifies that susceptible CNSPs should include suitable antimicrobial agents when possible.

Commentary Summary #41: Commenter proposed adding a default BUD for all CNSPs for which antimicrobial preservatives systems cannot be added.

Response: Comment not incorporated. The BUD would be specific to the CNSP, and a shorter BUD may be required as described in 10.4 *CNSPs Requiring Shorter BUDs.*

Commentary Summary #42: Several commenters suggested removing the requirement for <51> testing if compounders want to assign a BUD for CNSPs greater than the defaults in *Table 3*.

Response: Comment not incorporated. Aqueous solutions with an Aw > 0.6 are prone to microbial proliferation. Chapter <51> testing is required for extending beyond the default. An adequate preservative system is needed.

Commentary Summary #43: Commenter suggested adding clarification on whether a study addressing a different concentration than the one being compounded can be used to extend the BUD of a CNSP.
Response: Comment not incorporated. Bracketed studies are allowed and fit under published and unpublished studies as described in 10.5 *Extending BUDs for CNSPs.*
Commentary Summary #44: Commenter suggested that an allowance should be made if the compounded preparation is being used in a clinical study and can be assayed periodically to extend the BUD past 180 days. Some studies may go on for a year or more, and it is preferable to use the same lot of drug product throughout the study.
Response: Comment not incorporated. BUDs for CNSPs should not be longer than 180 days. Further considerations for investigational studies are described in <1168>.
Commentary Summary #45: Commenter suggested allowing extension of BUDs without a stability-indicating assay or *USP-NF* monograph because stability-indicating assay studies are expensive and will therefore hinder patient access if compounding pharmacies are unable to conduct these studies due to cost and increased burden. There are tests to prove potency, and processes can be validated without having to utilize a stability-indicating assay.
Response: Comment not incorporated. All factors in 10.5 *Extending BUDs for CNSPs* need to be considered.
Commentary Summary #46: Several commenters suggested clarifying the requirements for container-closure systems. As written, to extend a BUD requires specifying the exact container-closure that will be used. This seems overly restrictive, as many container-closures exhibit similar protective qualities to the product they are holding.
Response: Comment partially incorporated. Revised to "type of container-closure system".
Commentary Summary #47: Commenter requested addition of clarification for how many times <51> testing needs to be carried out for the same formulation.
Response: Comment incorporated. The chapter was revised to clarify that antimicrobial effectiveness testing only needs to be performed once per formulation. The chapter was also clarified to state that the testing must be repeated if there are changes to the components' concentrations and amounts.
Commentary Summary #48: Commenter recommended changing the reference to ingredients to components, in order to align with proposed <797>.
Response: Comment incorporated.
Commentary Summary #49: Commenter suggested the development of an algorithm to help explain the various choices of BUDs for CNSPs.
Response: Comment not incorporated. USP may develop FAQs, training materials, or other resources to educate compounders on the revised chapter.

11. SOPs

Expert Committee-initiated Change #1: Standards related to SOPs were moved to the SOP section. The section number was revised to align with the re-numbering of other sections.

Commentary Summary #1: Several commenters noted that the section no longer had the list of activities and processes that must be covered by SOPs. Commenters requested a list of recommended SOPs to be included in the chapter, following the precedent set in <800>. This would be a convenience for the compounder.
Response: Not incorporated. SOPs should be facility specific. Sections within the chapter describe aspects that must be addressed in SOPs.

12. Quality Assurance and Quality Control

Expert Committee-initiated Change #1: The section number was revised to align with the re-numbering of other sections.
Expert Committee-initiated Change #2: Several phrases and wordings were changed to match the style of and to ensure its alignment with the section on quality assurance and quality control in <797>.
Commentary Summary #1: Commenter proposed changing the provision that all facilities need to have a QA and QC program from a requirement to a recommendation.
Response: Comment not incorporated. All facilities must have a QA and QC program.
Commentary Summary #2: Commenter suggested referring to the chapter as the standard.
Response: Comment not incorporated. This language is consistent with this chapter and other compounding chapters.
Commentary Summary #3: Commenter proposed removal of reference to federal and state regulators because the chapter is enforced and implemented by other countries that have a different administrative structure, as well as entities such as accreditation bodies.
Response: Comment incorporated. Compounders need to comply with laws and regulations in their administrative jurisdiction.
Commentary Summary #4: Several commenters recommended that since QA and QC programs are a new requirement of the chapter, more detailed guidance and examples would be very helpful for those setting up such programs for the first time.
Response: Comment not incorporated. Such a requirement may be too prescriptive. The QA and QC programs should be determined by the designated person since they have a better perspective on, and insight into, the issues that pertain to their practice.
Commentary Summary #5: Several commenters suggested renaming the annual assessments of QA and QC programs to annual reviews.
Response: Comment not incorporated. QA and QC are assessments, not reviews.
Commentary Summary #6: Commenter suggested that the "designated person" should review the Compounding Records no less than quarterly to identify risks, opportunities, and trends within the documentation for QC. This will facilitate healthy review and action toward opportunities noted within the Compounding Record that may get documented by facility team members.
Response: Comment not incorporated. Such a requirement may be too prescriptive. The QA and QC programs should be determined by the designated person since they have a better perspective on, and insight into, the issues that pertain to their practice.
Commentary Summary #7: Commenter recommended the use of acronyms for the QA and QC verbiage.

Response: Comment incorporated.
Commentary Summary #8: Commenter suggested adding a requirement that QC programs need to be described in SOPs.
Response: Comment incorporated. A facility's QA and QC programs must be formally established and documented in SOPs.
Commentary Summary #9: Several commenters suggested removing the need for an annual assessment of the QA and QC procedures as those will occur while deficiencies are revealed during the continuous quality improvement (CQI) process, or as events occur. Commenters suggested not limiting the review to once annually since changes may be anticipated more frequently.
Response: Comment not incorporated. The QA and QC programs must be assessed at least annually. These assessments may be performed more frequently based on the CQI process. The chapter is intended to provide the minimum standard. Facilities may conduct more frequent reviews.
Commentary Summary #10: Commenter suggested removal of the requirement that assessment for the QA and QC programs be documented.
Response: Comment partially incorporated. Annual assessment of the QA and QC procedures must be documented. Procedures for identifying and correcting deficiencies must be described in SOPs.

13. CNSP Packaging and Transporting

Expert Committee-initiated Change #1: The section number was revised to align with the re-numbering of other sections.
Expert Committee-initiated Change #2: The section title was revised to align with the similar section in <797>.
Commentary Summary #1: Commenter suggested that the training on SOPs for handling of CNSPs should be limited to those specific personnel that carry out the tasks described in the SOPs, such as storage, packaging, and transportation. As written, the standard would require training for all individuals handling CNSPs, even when they do not carry out some of the tasks described in the SOPs.
Response: Comment incorporated. A clarification was added to limit the training requirement to those individuals who carry out the tasks described in the SOPs.
Commentary Summary #2: Commenter suggested removal of the requirement for limits on the amount of humidity in the storage room area, since CNSPs are stored in tightly closed containers.
Response: Comment incorporated. The humidity recommendation was removed.
Commentary Summary #3: Commenter suggested removal of the requirement for garb, spill kits, and SDSs to be accessible for pharmacies that only compound pre-packaged medications for reconstitution with water or simple topical CNSPs made of basic topical ingredients mixed together.
Response: Comment partially incorporated. Clarification was added to emphasize that reconstitution is out of the scope of the chapter. Also, stratifying requirements based on complexity of the CNSP would create significant potential for confusion and limit meaningful application of the standard.

Commentary Summary #4: Several commenters suggested a modification of the statement requiring hazard labels to state that this is required for bulk chemicals only. Requiring this for all chemicals used in compounding, including finished dosage forms, would be too onerous, especially since some of these may not actually be used in compounding.
Response: Comment incorporated. The statement was removed.
Commentary Summary #5: Commenter suggested replacing "packaging materials" with "containers" in order to clarify that the intent is to focus on the immediate container holding the product, not the shipping packaging.
Response: Comment not incorporated. Packaging materials may include immediate containers, boxes, or other packaging materials.
Commentary Summary #6: Commenter requested addition of clarification on how compounders would ensure that the packaging materials maintain the physical and chemical integrity and stability without performing analytical testing. Would an inspector expect data specific to the preparation, packaging, and BUD?
Response: Comment partially incorporated. The requirement was changed to a recommendation.
Commentary Summary #7: Commenter requested addition of clarification as to what is meant by suitable clean material when selecting containers and closures for packaging CNSPs.
Response: Comment partially incorporated. Suitability of packaging material is highly dependent on the physicochemical characteristics of the CNSP.
Commentary Summary #8: Several commenters suggested adding clarifications for refrigeration and frozen storage conditions similar to the detail added for controlled room temperature. Refrigerated and frozen storage requirements are not reviewed in this section, or elsewhere in the draft.
Response: Comment incorporated. Temperature monitoring is required for all storage areas.
Commentary Summary #9: Several commenters proposed removal of the requirement for temperature monitoring and recording because it is too stringent and places unnecessary financial burden on pharmacies.
Response: Comment not incorporated. Temperature monitoring is required for all storage areas. Storage within the facility must be monitored to minimize risks to stability.
Commentary Summary #10: Commenter requested changing verbiage regarding scheduling when manual temperature readings are performed because it is not clear if monitoring only on days compounding occurs is enough to determine temperature excursions. Low-volume sites may only compound one or two days a week, thus limiting temperature monitoring to this time frame as well. An exception for weekends or for a certain period of time if the pharmacy is closed may be a more appropriate recommendation.
Response: Comment partially incorporated. Compounding personnel must monitor temperature at least once daily on days that the facility is open.
Commentary Summary #11: Commenter recommended only permitting continuous temperature recording because the temperature for stored compounds should be monitored at all times.

Response: Comment not incorporated. Requiring a continuous temperature recording device may be prohibitive to some facilities.

Commentary Summary #12: Commenter suggested adding a requirement to monitor the temperature during extended periods without compounding because if compounding is only done a day or two per week but drugs are stored in the compounding area, temperature excursions on days when compounding does not occur could still have detrimental effects.

Response: Comment incorporated. Specified that monitoring occurs daily when open, or continuously. Cannot stratify standards based on compounding volume of the facility.

Commentary Summary #13: Commenter suggested adding a requirement for more frequent, twice daily temperature monitoring (versus once daily) unless using an integrated recording instrument.

Response: Comment not incorporated. The chapter is intended to be the minimum standard. Facilities may perform additional monitoring.

Commentary Summary #14: Commenter suggested removing the requirement for temperature monitoring and recording for CNSPs in storage and calibration of temperature monitoring at least annually because it may be inappropriate for the type of compounding carried out in veterinary practice.

Response: Comment not incorporated. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary practices.

Commentary Summary #15: Several commenters suggested that if devices are used for electronic monitoring of temperatures, such devices must include an automated out-of-range alert feature that is validated periodically, e.g., annually. Otherwise, out-of-range conditions might exist for an indefinite period without recognition. The commenter also suggested stating that the electronic monitoring of humidity be included, with an out-of-range alert system.

Response: Comment not incorporated. The chapter is intended to be the minimum requirement. Facilities may use temperature monitoring devices with out-of-range alerts.

Commentary Summary #16: Commenter suggested adding a requirement to document and continuously review results from temperature monitoring devices. If no regular review/documentation is required, any out-of-spec reading without an alert may go unnoticed for an unlimited amount of time.

Response: Comment incorporated. Results of temperature readings must be documented and reviewed.

Commentary Summary #17: Several commenters suggested editing the language about frequency of calibration of temperature monitoring devices to clarify whether every 12 months is a minimum frequency. In other words, if manufacturer recommendations state every three years, then compounders should be allowed to follow manufacturer recommendations.

Response: Comment partially incorporated. Devices must be calibrated every 12 months or as recommended by the manufacturer.

Commentary Summary #18: Several commenters suggested adding a rationale for the requirement to keep relative humidity at or below 60% because in high-humidity areas of the US, continual maintenance at 60% or lower is not feasible. Storms and seasonal conditions that can drastically influence spikes in relative humidity cannot always be predicted. The commenters added that while they recognize that this provision is not a mandate to monitor humidity, it's likely that some regulators and adopters would interpret the language in such a way that there is an expectation that compounding pharmacies must monitor the humidity.
Response: Comment partially incorporated. The recommendation to monitor relative humidity was removed.
Commentary Summary #19: Several commenters suggested removing the requirement for monitoring and recording relative humidity of the storage area for CNSPs. General Chapter <659> provides information on temperature control, but not humidity. General Chapter <1079> *Good Storage and Distribution Practices for Drug Products* does not recommend any upper limits for relative humidity for drug storage. General Chapter <1079> states: "While storage and distribution temperature ranges for drug products are labeled on the packaging, relative humidity effects occur over a much longer time frame." General Chapter <1118> *Monitoring Devices – Time, Temperature, and Humidity* states that "the effects of humidity are typically observed over longer time periods of exposure than are temperature effects due to the barrier to moisture ingress presented by the primary and secondary drug product packaging." Therefore, if CNSPs and components are stored in tightly closed containers as required within this proposed chapter, the relative humidity of the storage area should have no impact on the stability of the CNSP or components, especially given the relatively short time periods that these items would be stored by the compounder.
Response: Comment incorporated. The recommendation to monitor relative humidity was removed.
Commentary Summary #20: Commenter proposed a change to the requirement for compounders to develop and adhere to SOPs to detect and prevent temperature fluctuations for CNSPs stored under controlled room temperature because the definition of "Controlled Room Temperature" allows for excursions, reflecting real-life conditions.
Response: Comment not incorporated. Controlled room temperature allows for excursions as described in <659>.
Commentary Summary #21: Commenter suggested that the definition of "Controlled Room Temperature" should be mentioned and should include where excursions are allowed as per the definition because of the very few instances where the CNSP must be discarded.
Response: Comment not incorporated. Controlled room temperature allows for excursions as described in <659>.
Commentary Summary #22: Commenter suggested adding an allowance for temperature excursions to the description of storage temperatures for CNSPs because it is too difficult to have a room at one exact temperature for long time periods with moving bodies that emit heat. The section seemed to suggest that excursions are not allowed.
Response: Comment not incorporated. Controlled room temperature allows for excursions as described in <659>.

Commentary Summary #23: Commenter suggested a change in the requirement for monitoring temperature changes using manual readings in areas where CNSPs are stored because if monitoring is done only on days when compounding occurs, it may not be enough to determine temperature excursions that may occur on other days. Low-volume sites may only compound one or two days a week, thus limiting temperature monitoring to this time frame as well. The commenter suggested an exception for weekends or for a certain period of time if the pharmacy is closed.
Response: Comment not incorporated. The chapter is intended to be the minimum requirement. Facilities may use temperature monitoring devices with out-of-range alerts.
Commentary Summary #24: Several commenters proposed adding the steps that are to be taken to comply with the monitoring and detection of temperature excursions in areas where CNSPs are stored. The commenter requested clarification on whether simple visual inspection is considered an acceptable determination of CNSP integrity and whether the pharmacy needs to perform analytical testing under stressed conditions.
Response: Comment not incorporated. The SOPs for monitoring the integrity of CNSPs during storage should be determined by the facility and designated person. Evidence of deterioration would be CNSP specific.
Commentary Summary #25: Commenter suggested adding a definition to clarify what is meant by transporting, specifically whether this means the CNSP leaving the hospital setting as opposed to leaving the pharmacy because this would be open to various interpretations by implementers.
Response: Comment not incorporated. Transportation is intended to refer to movement of the CNSP outside of the facility. Specification beyond this would be difficult because of the different scenarios under which drugs are compounded.
Commentary Summary #26: Several commenters suggested limiting the requirement for SOPs that describe appropriate shipping materials to only facilities that ship CNSPs.
Response: Comment incorporated. Language was added to clarify that this SOP is required only for facilities for which it is applicable.
Commentary Summary #27: Commenter suggested adding a clarification as to whether temperature-sensing devices are required for shipping refrigerated medications because temperatures may get quite warm when shipping and the compounder has little control over how warm packages get during shipping.
Response: Comment partially incorporated. Requirement for temperature monitoring devices should be determined by the facility.
Commentary Summary #28: Several commenters proposed differentiating between requirements for shipping CNSPs from one campus to the next within the same network and shipping from a compounder to an outside facility.
Response: Comment not incorporated. Shipping and transport of the CNSP should not differ based on where the CNSP is delivered. The shipping container and transport method should be appropriate for the CNSP.
Commentary Summary #29: Commenter suggested adding a requirement for an SOP that describes the temperature ranges, packaging, and shipping requirements for each CNSP.
Response: Comment partially incorporated. Facility SOPs should describe requirements for transportation, whether within or outside a facility.

Commentary Summary #30: Commenter suggested allowing alternative placements for handling instructions on the exterior or packaging of the container.
Response: Comment not incorporated. Handling instructions should be on the exterior packaging so that transporters will be aware.
Commentary Summary #31: Commenter suggested removing the requirement for personnel to include specific handling instructions on the exterior of the shipping container because there are some instances when this is prohibited by certain carriers. The commenter recommended adding that "the entity must ensure that labels and accessory labeling include storage instructions and disposal instructions in a format that is consistent with the carrier's policy and applicable local and federal transport regulations".
Response: Comment incorporated. Removed requirement for handling instructions to be included on the exterior packaging of CNSPs. Labeling on exterior of container should be determined by carrier and compounder.

14. Complaint Handling and Adverse Event Reporting

Expert Committee-initiated Change #1: The section number was revised to align with the re-numbering of other sections.
Commentary Summary #1: Commenter recommended making reference to state regulations on complaint handling because it may be difficult to consistently distinguish what constitutes a complaint worth documenting. State regulations have rules on reporting complaints and those regulations must be followed for all prescriptions.
Response: Comment not incorporated. Chapter does not conflict with state law. The chapter states that personnel must have SOPs for handling complaints.
Commentary Summary #2: Several commenters suggested removing this entire section because the process of complaint handling should not be any different or separate from any other complaint the facility receives about any dispensed medication and should be addressed by the facility, not USP, as this is not specific to nonsterile compounding. Language may be adjusted to reflect that complaints should be addressed in the same manner that all complaints are handled by the facility, but any additional detail should be removed. The commenters added that complaint handling and adverse event reporting are not even mentioned in the existing version of USP <795>. There are established rules for complaint handling and adverse event reporting from the state Boards of Pharmacy.
Response: Comment not incorporated. Chapter does not conflict with state law. Chapter states that personnel must have SOPs for complaints.
Commentary Summary #3: Several commenters suggested aligning the section on complaint handling and adverse event reporting with the requirements set by the state veterinary medical associations, since these boards already have set rules around complaint handling and reporting.
Response: Comment not incorporated. Chapter does not conflict with state law. Chapter states that personnel must have SOPs for complaints. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of

regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinary compounding.
Commentary Summary #4: Commenter suggested adding a timeframe to resolve complaints or, if not a specific time, an SOP should include a timeframe for resolving complaints.
Response: Comment not incorporated. Time frame may be dependent on the extent of the problem and complaint. Facilities may have additional requirements in their SOPs.
Commentary Summary #5: Commenter suggested adding a clarification for when an investigation needs to be carried out on the quality of a CNSP following the receipt of complaints.
Response: Comment not incorporated. The designated person will determine when there is a potential quality problem and begin the process of investigation.
Commentary Summary #6: Several commenters suggested making the process of complaint handling and investigation of potential quality problems the responsibility of the designated person. While the designated person is accountable and responsible for ensuring that all complaints are reviewed, that individual is not the only individual assigned to completing the task of reviewing complaints. While the designated person should be accountable for the accurate and complete review of all complaints, there is no reason why another qualified person who is supervised by the designated person should not be permitted to perform the actual task of reviewing complaints.
Response: Comment incorporated. The designated person should ensure that complaints and adverse event reports are reviewed and documented and that recommended actions are implemented.
Commentary Summary #7: Commenter suggested adding a statement that complaints can be separated into "business" and "product" complaints. The separation between business complaints (i.e., the shipment was delayed by the delivery courier chosen) vs. product complaints (i.e., a cream burned when applied to the skin) is useful for determining if an item should be investigated for the possibility of a recall or if a general process and an SOP need to be reviewed.
Response: Comment not incorporated. This section is specific to quality problems. Business problems may be further described in facility SOPs and are out of the scope of the chapter.
Commentary Summary #8: Commenter requested the addition of clarifications that the intent of complaint handling is to investigate product quality or safety complaints only, because this requirement is otherwise particularly burdensome in hospitals. Quality/safety complaint mechanisms, however, are already utilized as part of existing risk management and quality/patient safety reporting infrastructure in hospitals.
Response: Comment not incorporated. Complaint handling is addressed in *14.1 Compliant Handling* and adverse events related to safety concerns is described in *14.2 Adverse Event Reporting.*
Commentary Summary #9: Commenter suggested several changes to the section in order to reduce the probability that the chapter will create a paper trail for the compounder to be disciplined and possible litigated. The commenter added that the intent of the section is to provide an incentive for the compounder to identify quality challenges and take corrective actions to mitigate them using the principles of continuous quality improvement.

Response: Comment not incorporated. The chapter provides a minimum standard for evaluating quality complaints. Maintaining complaint documentation in anticipation of litigation is out of the scope of the chapter.
Commentary Summary #10: Commenter suggested replacing names of the complainants with unique identifiers because having the name of the complainant could result in a HIPAA violation. Also, some pharmacies may not want patient-specific complaints linked to their name but may have an internal process that is able to link the complaint to a person via an identifier. The use of a prescription number or patient identification number should be preferred.
Response: Comment incorporated. The name or a unique identifier is acceptable.
Commentary Summary #11: Commenter suggested adding a requirement for the designated person to receive specific training on the review of adverse drug events.
Response: Comment not incorporated. The designated person must be trained and qualified as determined by the facility.
Commentary Summary #12: Commenter suggested not limiting the review of complaints to the designated person because the designated person may be responsible for the compounding department as a whole, but this person may not be the best person to review all adverse events, as this may be better handled by another qualified individual or group of individuals.
Response: Comment incorporated. Designated person should ensure that adverse event reports are reviewed.
Commentary Summary #13: Commenter suggested replacing reference to state and local laws with regulatory jurisdiction because the chapter is implemented by other entities as well.
Response: Comment not incorporated. The facility is subject to state and local laws with regulatory jurisdiction.

15. Documentation

Expert Committee-initiated Change #1: The section number was revised to align with the re-numbering of other sections.
Commentary Summary #1: Several commenters suggested adding COAs to the list of documents that must be maintained to demonstrate compliance with the requirements of the chapter. Also, COAs are useful to have in the event of a recall of any item.
Response: Comment incorporated. COAs added.
Commentary Summary #2: Commenter suggested adding a clarification that documents for qualification and requalification need to be maintained at the facility where compounding of CNSPs occurs.
Response: Comment incorporated. Clarification was added.
Commentary Summary #3: Commenter suggested a differentiated approach between simple nonsterile compounds and others because documentation requirements should vary based on the type of compounding taking place. Also, this approach would not be practical in the standard, traditional drug store.
Response: Comment not incorporated. Documentation is required regardless of the type of CNSP.

Commentary Summary #4: Commenter suggested removing the requirement to maintain documents. Commenter suggested documentation should not be required for receipt of components.
Response: Comment not incorporated. Component receipt must be documented for inventory control.
Commentary Summary #5: Commenter suggested adding a clarification about the need for release testing because it is a difficult operation, especially in large practices and in pharmacies that have clerks instead of technicians dispensing the drug to the client/patient. If the compounder has failures based on release testing, there should be an investigation to initiate corrective and preventive actions, which can affect more than the one failed batch or product. These investigations could uncover systemic problems at the compounding facility that could lead to serious risk.
Response: Comment incorporated. Clarified intent to refer to release inspection.
Commentary Summary #6: Commenter suggested removing the requirement for documentation to comply with all applicable laws and regulations of the regulatory jurisdiction because the documentation requirements in this section are far more stringent than what state law requires. In contrast to the USP draft, some state laws do not require: personnel competency assessment, equipment records, receipt of components, compounding records, or release testing. This will create confusion among veterinarians.
Response: Comment not incorporated. Compounders must abide by applicable laws and regulations of their regulatory bodies. The requirements of this chapter are equally relevant to compounding for human and animal patients. USP has no role in the enforcement of compounding chapters. Pursuant to *General Notices, 2.30 Legal Recognition*, ensuring compliance with USP standards is the responsibility of regulatory bodies. Regulators may choose to enforce the requirements of <795> with respect to veterinarians.
Commentary Summary #7: Several commenters suggested removing the requirement for records to be maintained for at least three years because many jurisdictions generally follow DEA record-keeping requirements of 2 years minimum.
Response: Comment not incorporated. Revised to require retention for 3 years or as required by the regulatory jurisdiction, whichever is longer.

Glossary

Commentary Summary #1: Commenter requested that the glossary definition for “CVE” be removed and replaced with a different term since it may appear as an endorsement of a particular brand of enclosure manufacturer.
Response: Comment not incorporated. CVE is intended to be a generic term to refer to a type of device. The term was first used and described in <800>.
Commentary Summary #2: Commenter suggested removing the definition for batch because the definition is not germane to compounding.
Response: Comment incorporated. The definition was removed.
Commentary Summary #3: Commenter suggested an enhancement to the component definition to include any ingredient used in the compounding of a drug

preparation, including any API, added substance, or conventionally manufactured product that is used in its preparation.
Response: Comment incorporated. The enhanced definition was used.
Commentary Summary #4: Commenter suggested adding more clarification of what is meant by altering a drug, because this might not be clear.
Response: Comment not incorporated. Altering should be clear.
Commentary Summary #5: Commenter suggested adding definitions for "primary packaging components" and "secondary packaging components" because this would improve clarity.
Response: Comment not incorporated. There are instances where secondary packaging is not used. Compounders may refer to <659> for more information.
Commentary Summary #6: Commenter requested adding a definition for minimum training and licensing requirements.
Response: Comment not incorporated. Qualifications should be determined by the facility. Licensing requirements may be different based on regulatory jurisdiction.
Commentary Summary #7: Commenter recommended adding a definition for designated person to the glossary.
Response: Comment not incorporated. There is already a definition in the main text of the chapter.

Appendix

Commentary Summary #1: Commenter requested that the acronym “CVE” be removed from the acronym table since it may appear as an endorsement of a particular brand of enclosure manufacturer.
Response: Comment not incorporated. CVE is intended to be a generic term to refer to a type of device. The term was first used and described in <800>.
Commentary Summary #2: Commenter suggested adding references to other sections or chapters in the appendix.
Response: Comment partially incorporated. Cross references are added in-line where relevant. However, where possible, information is not repeated to avoid confusion.