



U.S. PHARMACOPEIA
*The Standard of Quality*SM



USP 2010–2015 Council of Experts
Expert Committee Orientation

General Chapters Overview

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General Chapters can be

- ▶ Required (numbered below <1000>)
- ▶ Informational (numbered <1xxx>)
- ▶ Specific for dietary supplements (numbered <2XXX>)



Required Chapters (Below <1000>)

- ▶ When referenced in monographs, are procedures used by the FDA to demonstrate compliance to a specification
- ▶ Typically are procedures referenced in multiple monographs
 - Chapter status avoids duplication and simplifies updating
- ▶ Typically consist of method and procedure
 - Acceptance criteria – in the General Chapter or the monograph
- ▶ Can apply to monographs even if not specifically called out in the monograph
- ▶ Tests need to be verified by users for their applications



Informational Chapters (<1xxx>)

Quality Standards for Medicines, Dietary Supplements, and Food Ingredients

- ▶ Provide information or guidance
- ▶ Are not intended to be required by regulatory agencies
 - Some countries enforce the entire *USP–NF*
 - FDA reserves the right to require at their discretion
- ▶ Should be devoid of acceptance criteria to minimize misunderstandings
- ▶ May become required if referenced without disclaimer in a monograph or General Chapter numbered below <1000> (very rare)



- ▶ Reference materials are in a minority of General Chapters.
- ▶ Typically used to confirm identity or instrument performance verification
- ▶ When they occur, they are often high impact
 - <711> Dissolution (Prednisone tablets)
 - <467> Residual Solvents
 - <90> Bovine Serum – Quality Attributes
 - <130> Protein A Quality Attributes
- ▶ May be proposed by staff, committee, panel, or an external source
- ▶ Evaluated via testing protocols similarly to reference materials in monographs
- ▶ Developed in parallel with documentary standard



Impact of General Chapters

Quality Standards for Medicines, Dietary Supplements, and Food Ingredients

- ▶ General Chapters have broad industry impact
 - Some are required testing in monographs
 - Some provide guidelines that are enforced outside the U.S. or are broadly applied in the U.S. even if not required
- ▶ Broad-based input is typically needed and provided
- ▶ For chapters with high impact, training may be needed
 - Pharmacopeial education courses
 - FAQs
 - Guidebooks
- ▶ Much of this material is developed through the appropriate Expert Committees



General Notices, General Chapters, and Monographs

Quality Standards for Medicines, Dietary Supplements, and Food Ingredients

- ▶ General Notices contain requirements applicable throughout *USP–NF* unless superseded by a chapter or monograph
- ▶ General Chapters contain requirements applicable to monographs to which they apply
 - General Chapter requirements supersede General Notice requirements in case of conflict
- ▶ Monograph requirements are specific to the monograph in which they appear
 - Monograph requirements supersede General Notice and General Chapter requirements in case of conflict



New Chapters or Major Revisions

- ▶ Proposal for new General Chapter or major revision comes from staff, committee member, or external source
- ▶ Committee, sub-committee, or panel evaluates idea and develops a *Pharmacopeia Forum (PF)* proposal
- ▶ Public comment solicited
 - Stimuli Article (common for new General Chapter) or draft chapter published in *PF*
 - “Design phase” of workshop or other public meeting scheduled for “high-impact” chapters (required chapters with broad industry impact)
- ▶ Comments collected from public forums and shared with committee/panel



New Chapters or Major Revisions

- ▶ Committee/panel develops updated proposal
 - Another Stimuli Article in *PF*
 - Draft General Chapter in *PF*
 - Final General Chapter in *USP–NF* with commentary addressing comments
- ▶ Timing
 - From inception to first *PF* publication often 12–18 months
 - Timing for final implementation of informational chapters typically shorter than for required chapters
 - For a high-impact chapter, timing from inception to final chapter can be five years or more (e.g., elemental impurities)



General Chapters – Current Status

Quality Standards for Medicines, Dietary Supplements, and Food Ingredients

- ▶ Chapters have been
 - Written and updated over many years
 - Under the auspices of many Expert Committees
 - Updated without vision for style and content
- ▶ Styles, formats, and information content depend on
 - Committee and USP norms at the time
 - Maturity of technology at time of updating



Vision for General Chapters

Quality Standards for Medicines, Dietary Supplements, and Food Ingredients

- ▶ Required chapters
 - Current technology
 - Easy to read, understand, execute
 - Clear acceptance criteria – latitude for procedural changes
- ▶ Informative chapters
 - Current guidance, no acceptance criteria
 - Context for enforceable chapters
 - Forward looking
 - Relevant to real-world pharmaceutical issues
- ▶ All look and read as if edited by one person
- ▶ Summarized in *PF* 35(5) Sept/Oct 2009 Stimuli Article



Why is This Important?

Quality Standards for Medicines, Dietary Supplements, and Food Ingredients

- ▶ Should represent standard industry practice
 - Current technology and acceptance criteria
 - Meaningfully assess quality attributes
- ▶ Used across the globe
 - Clear
 - Concise
 - Well-defined acceptance criteria
- ▶ Some countries enforce the whole book
 - Some informational chapters contain enforceable sections
 - Confusion, missed expectations, approval delays
- ▶ Harmonization – Clear, concise wording is critical



Objective for the 2010-2015 Cycle

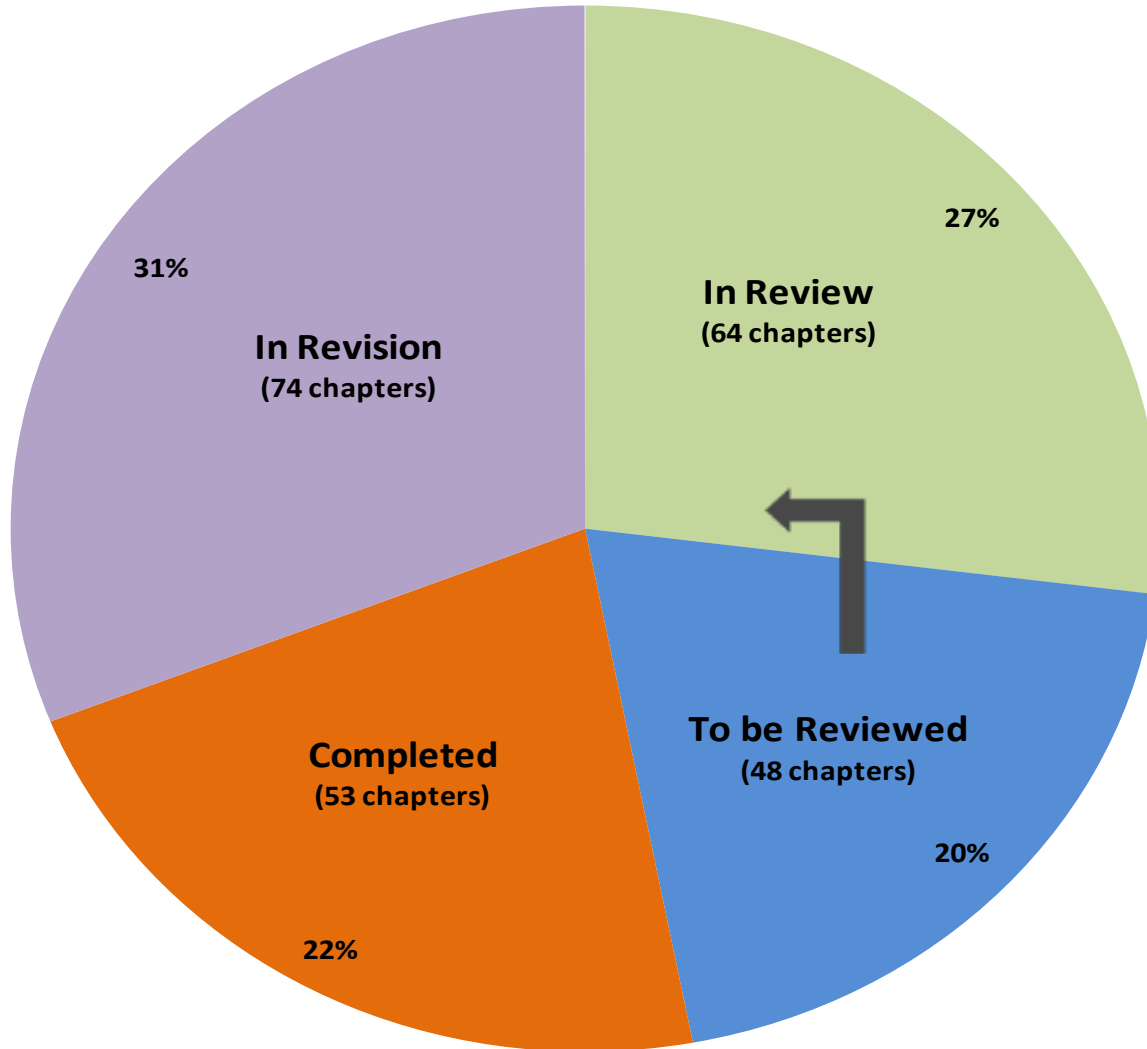
Quality Standards for Medicines, Dietary Supplements, and Food Ingredients

- ▶ Review the approximately 240 current chapters for content and format
- ▶ Prioritize the updating of those that need it using the appropriate committee, subcommittee or panel
- ▶ Develop and write new chapters as determined by each committee
- ▶ Collect broad-based stakeholder input for high-impact chapters



Official General Chapters in 2010-2015 CoE Cycle

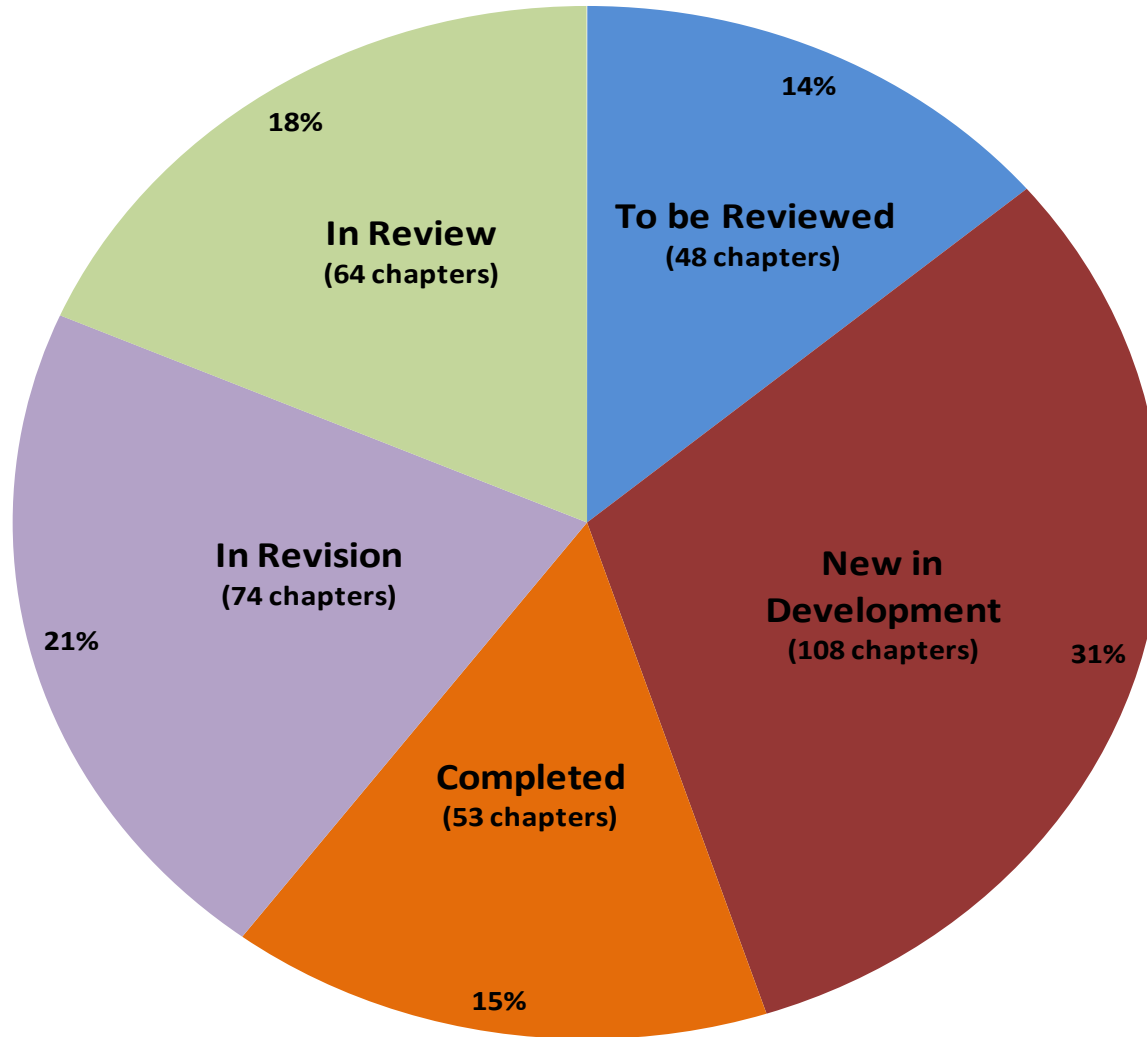
Quality Standards for Medicines, Dietary Supplements, and Food Ingredients





New & Official General Chapters, 2010-2015 CoE Cycle

Quality Standards for Medicines, Dietary Supplements, and Food Ingredients





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Thank You