

Know the Ins and Outs of Meds Needing Filtration

Updated guidance for injectable drugs requiring filtration may bring about changes to your hospital's policies.

Meds may require filtration during prep, admin, or both. Filters trap dangerous particles...so they don't get into a patient's bloodstream.

Brush up on best practices for meds needing filtration.

Take note of whether a med needs a certain filter type. Some can infuse through an in-line filter...which are built into the IV tubing.

Others require a low-protein-binding (LPB) filter, which can be attached to compounding syringes or the end of IV lines. Be aware, some in-line filters can also be LPB...confirm by checking product packaging.

Read product info carefully...since some meds even require use of a specific filtration device provided by the manufacturer, such as botulism immune globulin (BabyBIG).

Use filters with the appropriate pore size per the med manufacturer. Choosing one that's too small may trap large drug molecules or bind drug to the filter...causing the patient to miss the full dose.

For example, a 1.2-micron filter is often used for lipid-containing meds and all parenteral nutrition...and the 0.22 size for lipid-free meds (amiodarone, etc).

Recognize some unique but common exceptions. For instance, liposomal amphotericin B requires a separate 5-micron filter for EACH vial during compounding...but can be infused with a 1-micron or larger filter.

And concentrated mannitol (20% or more) must be infused with an in-line filter up to 5 microns...due to potential crystallization.

Some filter requirements vary by drug brand...even for the same med.

For instance, one brand of alpha-1 proteinase inhibitor (Glassia) requires a 5-micron filter during infusion...whereas another (Zemaira) must be prepped with a 15-micron filter and infused with a 5-micron.

Keep in mind, ampules will ALWAYS require use of a filter needle to catch glass shards...regardless of the drug. But ensure you replace the filter needle with a regular needle before adding the med to a diluent.

Follow your policy to ensure the pharmacist knows filters were used during compounding (including used filter wrappers in dispense prep photos, etc).

Suggest implementing reminders to help know which meds need to be filtered (default filter instructions on Rx labels for nurses, EHR pop-up alerts during dispense prep, etc).

Consider keeping an updated list of meds that require filtration.

Visit our CriticalPoint site for more on sterile compounding guidelines and incorporating filters in med prep.

Key References:

-Ipema HJ, Denton C, Koppen L, et al. Drugs to Be Used With a Filter for Preparation and/or Administration- 2024. Hosp Pharm. 2025 Mar 12:00185787251324867.

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<https://www.cytivalifesciences.com/en/us/news-center/global-iv-in-line-filter-recommendations-10001>. (Accessed May 2, 2025).

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