



SAFE HANDLING Q&A

EXTERNAL VENTILATION

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WHAT ARE THE BENEFITS OF EXTERNAL VENTILATION OF BIOLOGIC SAFETY CABINETS?

There are numerous studies that document the various ways healthcare workers are exposed to hazardous drugs (HDs) during the life cycle of the product. Although it is difficult to establish a safe level of exposure for healthcare workers, it is paramount to minimize this exposure to an incidence that is as low as reasonably achievable (Occupational Safety and Health Administration [OSHA], 2016).

One such method is storing and manipulating HDs under negative pressure. Negative pressure and external ventilation are requirements for compounding HDs per the National Institute for Occupational Safety and Health alert from 2004 on HDs, American Society of Health-System Pharmacists HD guidelines from 2006, USP<797> from 2012, and USP<800> from 2016. (U.S. Pharmacopeial Convention, 2012, 2016). Negative pressurization prevents airborne contaminants (e.g., HD residue) from migrating to other areas where they can potentially cause harm to those exposed on a regular basis (e.g., healthcare workers, office staff). When the biologic safety cabinet is not externally vented, the air and any HD aerosols and vapors are exhausted into the room. The air should be externally exhausted into the

outside environment to prevent recirculation of hazardous materials back into the workspace.

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