

Safety Challenges in Sterile IV Compounding

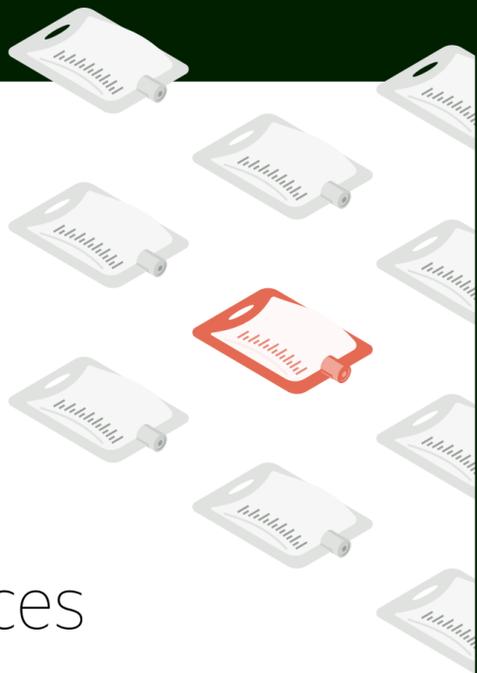
And the dangers posed to patients

Why should we tolerate errors in 1 out of 10 sterile compounded products?

Would you skydive if 1 in every 10 parachutes were improperly packed?

What if Amazon lost 1 in 10 orders you placed?

This is unacceptable.



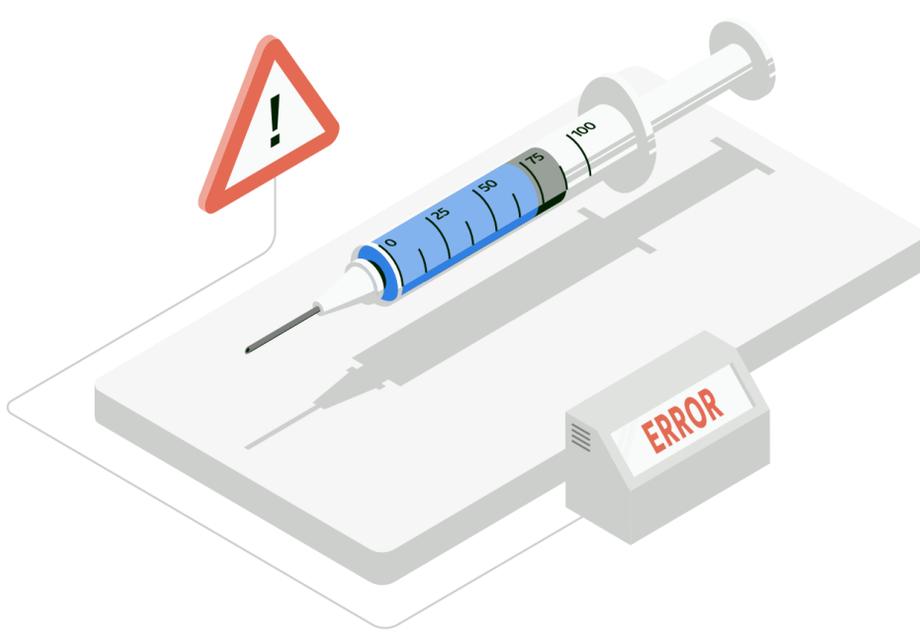
Alarming Gaps in Compounding Practices

A recent survey by ISMP found alarming gaps in sterile compounding practices across the United States.

74% of survey respondents

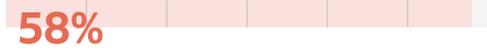
acknowledged at least 1 sterile compounding error within the past 12 months.

Compounded Sterile Preparations (CSPs)
Medications intended to be injected or infused into the human body.

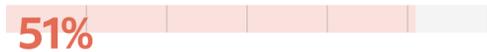


What types of errors?

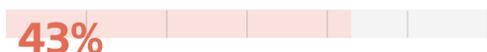
Incorrect dose or concentration



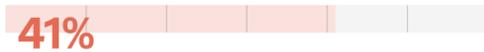
Incorrect base solution



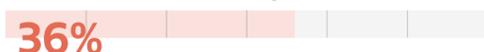
Incorrect base solution volume



Issue or error with labeling



Incorrect reconstitution of a drug



Roadblocks to Safety

Ideally, these errors never occur and all hospital pharmacies are backed by the latest cutting edge technology, but there are significant barriers to this ideal state of safety.

Human Error

In most health system pharmacies, sterile compounding is still a manual process prone to inaccuracies and human error.



52%

Inaccurate Doses

Inability to confidently verify using syringe pull-back method

Only 52% always confident verifying with certainty which drugs, diluents, and volumes used

49%

Inconsistent Processes

Potential for medication errors

Only 49% always use standard labeling workflow

Lack of Technology

Other industries use automated technologies to eliminate errors. Yet many hospital pharmacies rely on manual processes for IV compounding.

25%

Modern Workflow

25% use modern workflow systems with images, barcode scanning and/or gravimetric verification for only 50% of CSPs

8%

Robotics Utilization

8% use precise, sterile compounding robotics for only 30% of CSP



"We hope that pharmacies will use the results of this survey to prompt internal discussions about improvements that may be needed in their sterile compounding practices to reduce the risk of errors."

- ISMP

<https://ismp.org/resources/ismp-survey-provides-insights-pharmacy-sterile-compounding-systems-and-practices>

The Path to a Zero-Error Future

Technology & Automation

We must find new and innovative ways to empower pharmacies to reduce medication errors. This starts with leveraging technology to practice safety at scale for sterile compounding preparations.



Technology is no longer a "nice to have." It is imperative to providing the infrastructure to reach zero errors in sterile compounding.

To learn how technology and automation can help eliminate errors visit Omnicell.com/IVSolutions.

