

CASE STUDY

REVOLUTIONIZING VACCINE STORAGE: A CASE STUDY IN NSF-CERTIFIED REFRIGERATION



THE GROWING CHALLENGE IN VACCINE STORAGE

As vaccine demand surges, pharmacies of all types face increasing pressure to ensure every dose is stored safely and effectively. However, many facilities still rely on refrigeration units that fail to maintain consistent temperatures, leading to vaccine waste, financial losses, and compliance risks.

The World Health Organization estimates that up to 50% of vaccines are wasted due to improper storage and temperature fluctuations — a costly problem that jeopardizes public health. Without proper refrigeration, vaccines may lose potency, leaving patients unknowingly unprotected.

A major national pharmacy chain faced this very issue. Their legacy refrigeration units struggled with temperature stability, especially during peak hours when staff frequently opened the doors. These inconsistencies not only threatened vaccine integrity but also increased regulatory scrutiny.

THE SOLUTION: TRANSITIONING TO NSF/ANSI 456-CERTIFIED REFRIGERATION

Recognizing the urgent need for a more reliable solution, the pharmacy chain adopted NSF/ANSI 456-certified refrigeration units. Unlike traditional refrigerators that may not be designed for frequent access or strict temperature control, these units offer:

- **Patented Plenum Airflow Technology:** Ensures consistent temperature distribution throughout the cabinet, eliminating hot and cold spots.
- **Rapid Temperature Recovery:** Maintains stability even with frequent door openings, preventing temperature excursions.

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“*Since switching to the NSF-certified units, we have experienced zero temperature excursions, even during peak usage periods.*”

— Pharmacy Manager

“*Our refrigerators are often packed to capacity, but internal temperatures remain stable throughout. It's a game changer.*”

— Operations Manager

- **NSF/ANSI 456 Certification:** Independently verified to meet the most rigorous industry standards for vaccine storage.
- **Maximized Storage Efficiency:** Unlike conventional units that rely on bulky airflow shelves, these refrigerators maximize usable space without compromising performance.

BEFORE & AFTER: THE IMPACT OF STANDARDIZED VACCINE REFRIGERATION

Before upgrading to NSF-certified refrigeration:

- Temperature fluctuations led to spoilage rates as high as 5% per month.
- Frequent excursions required constant manual adjustments by pharmacy staff.
- Regulatory compliance was a persistent concern, requiring extensive documentation.

After the transition:

- Spoilage rates dropped to near-zero, preserving valuable vaccine inventory.
- Temperature excursions were eliminated, giving pharmacy staff confidence in storage conditions.
- Compliance exceeded regulatory requirements, reducing the risk of failed inspections.

BEYOND COMPLIANCE: THE LONG-TERM BENEFITS

In addition to reducing waste and improving vaccine safety, the pharmacy chain discovered several unexpected advantages:

- **Quieter Operation:** Reduced noise levels enhance the work environment for pharmacy staff.
- **Standardized Maintenance:** Biomedical staff can now service all refrigeration units efficiently, reducing downtime.
- **Improved Workflow:** Staff no longer worry about adjusting temperatures or checking for excursions, allowing them to focus on patient care.

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“Having refrigeration units that exceed compliance standards allows us to confidently store critical vaccines without concern.”

— Operations Manager

CONCLUSION: A NEW STANDARD FOR VACCINE STORAGE

By upgrading to NSF/ANSI 456-certified refrigeration, this pharmacy chain transformed its vaccine storage operations. What was once a daily struggle with temperature inconsistencies and compliance risks became a seamless process, ensuring every vaccine dose remains viable and effective.

For pharmacy directors, facility managers, and healthcare providers, investing in industry-leading vaccine storage isn't just about compliance — it's about protecting public health and ensuring patient trust.

KEY TAKEAWAYS & NEXT STEPS

- Pharmacies using outdated refrigeration risk vaccine spoilage, compliance failures, and patient health.
- NSF/ANSI 456-certified refrigeration offers a proven solution with superior temperature stability and efficiency.
- Healthcare facilities of all types can reduce waste, lower operational costs, and improve compliance with the right storage solutions.

Interested in learning how NSF-certified refrigeration can improve your pharmacy's vaccine storage? Contact American Biotech Supply (ABS) today.

Revolutionizing Vaccine Storage

NSF CERTIFIED REFRIGERATION

Upgrade to NSF/ANSI 456-certified refrigeration and eliminate temperature fluctuations, reduce waste, and ensure compliance. Protect every dose with industry-leading technology—because patient safety starts with reliable cold storage.



Patented Plenum Airflow Technology:

Ensures consistent temperature distribution within the cabinet, eliminating hot and cold spots.



Rapid Temperature Recovery:

Maintains stability even with frequent door openings, preventing temperature excursions



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Maximized Storage Efficiency:

Unlike conventional units that rely on bulky airflow shelves, these refrigerators maximize usable space without compromising performance.



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