

Evolution of the Cold Chain

THE COMPLETE COLD CHAIN, COMPLETED.



UPS Healthcare

1940s

Frederick McKinley Jones designed a portable air-cooling unit for trucks carrying perishable food.¹

1976

The World Health Organization created a strategy to address critical issues in vaccine distribution, including systems to monitor temperature during transport, lack of storage equipment and appropriate staff training.²

1980s

Companies in the U.S. and Switzerland developed a cold chain monitor that followed shipments of vaccines from manufacturer to countries.³

2012

The cold chain industry contributed \$56 billion to the U.S. gross domestic product and accounted for 67,000 jobs in the 49 states.⁴

2019

Of the \$17.2 billion expected to be spent on biopharma cold chain logistics in 2020, about \$5 billion was expected to be spent on packaging.⁵

2020

The sudden onset of the COVID-19 pandemic led to an immediate need to successfully transport and store temperature-sensitive vaccines.

50,000+ Square Meters

of coolers and freezers installed at UPS Healthcare facilities to support cold chain.

That's about the size of 55 Olympic swimming pools.

36 Countries

UPS handles regulated medicines in more than 11 million square feet of facilities in 36 countries.

That's roughly the size of nine MLB stadiums.

220+ Global Healthcare Facilities

with validated temperature-controlled storage and regulatory licenses.

That's complete protection of your delicate biologics from end to end.

A Timeline Of UPS Events



2000

Acquired Livingston Healthcare Services Inc., which specialized in supply chain management for healthcare, biotechnology and medical device companies.



2005

Built out Louisville, KY Healthcare Campus, expanding our largest dedicated healthcare space to provide third-party logistics services.



2011

Opened healthcare distribution centers in Asia, Europe, Canada and U.S., designed to serve pharmaceutical, biotech and medical device manufacturers.



2016

Acquired Marken, a global provider of supply chain solutions to the life sciences industry and leader in clinical trials, material storage and distribution.



2019

Launched UPS® Premier offering, enabling precise visibility of critical healthcare shipments.



2020

Launched UPS Healthcare, a dedicated healthcare and life sciences division.



2022

Acquired Bomi Group, an industry-leading multinational healthcare logistics provider, expanding capabilities, footprint and expertise throughout Europe, Latin America and the rest of the world.



2023

Acquired MNX, a time-critical logistics provider with a strong track record of transporting radiopharmaceutical and temperature-sensitive products in the US, Europe and Asia.

¹ https://www.mshdfo-arme.org/frederick_mckinley_jones.htm

² <https://www.sciencedirect.com/science/article/pii/S0264403X17300476>

³ <https://www.sciencedirect.com/science/article/pii/S0264403X17300476>

⁴ <https://largedata.org/the-evolution-and-history-of-the-cold-chain>

⁵ <https://www.pharmaceuticalcommerce.com/view/2020-biopharma-cold-chain-sourcebook-forecasts-a-17-2-billion-logistics-market>