


U.S. COLD CHAIN DISTRIBUTION: CHALLENGES AND OPPORTUNITIES



Cold chain and temperature-sensitive products will see remarkable growth over the next five years. While moving novel COVID-19 therapies showed the strength and resiliency of cold chain management in the U.S. supply chain, future success will depend on significant stakeholder coordination; investments in packaging, monitoring and workforce capacity; and other industry enhancements to help ensure the continued safe and effective distribution of these highly specialized, lifesaving medications to patients.

INCREASING DEMAND FOR PRODUCTS

 **Refrigerated** (2 to 8 °C) **+8%** ↑

 **Frozen** (-20 to -40 °C) **+17%** ↑

 **Cryogenic** (-150 to -190 °C) **+39%** ↑

These percentages represent expected market growth rate.

TODAY'S TOP CHALLENGES

- 1 Consistency
- 2 Shipping Lane Exceptions
- 3 Cost & Quality Decisions
- 4 Sustainability
- 5 Cold Chain Workforce

SIX CALLS TO ACTION

-  Investment to manage expected growth
-  Build a broad industry forum for conversations
-  Partner earlier with manufacturer R&D teams
-  Develop an exceptions/excursions playbook
-  Create workforce certification programs
-  Embrace sustainable packaging solutions

TOMORROW'S OPPORTUNITIES

- 1 Improving Real-Time Tracking
- 2 Managing Temperature Excursions
- 3 Creating Capacity
- 4 Addressing Staff Shortages and Training
- 5 Improving Sustainability

For more information, download the HDA Research Foundation report, *The Future of the U.S. Pharmaceutical Cold Chain Distribution*, at [HDA.org/publications](https://hda.org/publications).