Unmatched global network of resources and capabilities for the pharmaceuticals cold chain

To maintain the integrity of life-saving products and ensure regulatory compliance, pharmaceutical companies require a cold chain that meets GxP standards. Proven competencies in packaging, tracking, handling, intervention, and reporting are critical to managing temperature-controlled pharmaceutical shipments around the world.

TYPICAL BUSINESS CHALLENGES
✓ Ensuring regulatory compliance
✓ Achieving shipment visibility across the cold chain
✓ Synchronizing logistics handoffs
✓ Competently handling operational problems
DHL SOLUTION

Based on DHL Thermonet, this solution represents the global standard in temperature-controlled GxP-compliant shipment, enabling 24/7 visibility and proactive intervention. A worldwide network of trained personnel and resources, including certified handling stations, delivers the competencies needed to operate the pharmaceutical cold chain.

SOLVING YOUR BUSINESS CHALLENGES

✓ Ensuring regulatory compliance
Trained personnel, resources, certified stations, systems, processes, and reporting ensure operational regulatory compliance.

✓ Achieving shipment visibility across the cold chain
Enabled by DHL’s integrated IT systems; proactive and reactive action to adverse events such as temperature excursions, unplanned delays, theft, and more.

✓ Synchronizing logistic handoffs
Effective and agreed SOPs and service levels ensure complete handoffs between manufacturers, carriers, consignees, and other supply chain partners, each with their own compliance protocols.

✓ Competently handling operational problems
Data-driven analytics inform DHL’s trained personnel, resources, effective systems, and proven corrective and preventative action (CAPA) processes; quick, safe problem resolution; proactive prevention of future occurrence.

Unmatched global network of resources and capabilities

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<th>Physical Component</th>
<th>Services</th>
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<td>People – dedicated trained staff.</td>
<td>Document SOPs</td>
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<td>Products – safe handling of sensitive products</td>
<td>SOP Compliance</td>
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<td>Processes – SOPs as required for GxP</td>
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<td>Packaging – risk scoring and packaging solutions</td>
<td>Staff Training</td>
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<td>Places – all stations are certified</td>
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<td>Partners – qualified carriers, handlers, and technology providers.</td>
<td>Quality Management</td>
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KEY BENEFITS FOR YOUR BUSINESS

SAFETY & SUSTAINABILITY
Health and safety prioritized in operations; clear sustainability goals and action plans.

INNOVATE AND IMPROVE
Innovations to improve customer experience and operations; mindset of continuous improvement.

TEMPERATURE-CONTROLLED AIR & OCEAN FREIGHT

DHL’s ThermoNet global coverage:
+2,000 Trade Lane Pairs, 119 LSHC Certified Stations, + 1,000 Life Science Trained Resources
## Business Scenario & Key Customer Challenges / Requirement

**Business Scenario:** A large percentage of pharmaceuticals in the supply chain are temperature sensitive. Cold products must be kept between 2°C and 8°C; frozen products at -20°C; and deep frozen products at temperatures as low as -80°C. It is the carrier’s responsibility to not only ensure but also prove products are kept at these temperatures so it’s in the carrier’s best interests to have methods of monitoring near-excursions in temperature and ways of intervening to protect product safety. DHL Global Forwarding does this by using a product called DHL ThermoNet.

1. **Monitoring:** Sensors can monitor temperature, humidity, pressure, shock, and tilt, depending on the needs of the customer.
2. **Documented proof:** The system records sensor readings and can generate reports as proof that the temperature was maintained within limits.
3. **GxP:** ThermoNet guides users to follow best practices, meet regulatory requirements, and adhere to certification.
4. **Compliance and CAPAs:** Thermonet stores compliance requirements and can help with corrective and preventative action (CAPA) management.
5. **IATA CEIV Pharma recertification:** This product helps users to maintain IATA CEIV Pharma certification.
6. **Preferred Life Sciences Carrier Program:** Thermonet tracks the performance of carriers and highlights high performers as DHL’s preferred carriers.

DHL’s Temperature-Controlled Air and Ocean Freight solution, based on DHL Thermonet, represents the global standard in temperature-controlled GxP-compliant shipment, enabling 24/7 visibility and proactive intervention.

## DHL Solution Value Proposition

DHL Air & Ocean ThermoNet is the global standard for temperature controlled GxP compliant shipments that require 24/7 visibility and proactive intervention.

**ThermoNet Features:**
- 24/7/365 proactive monitoring and intervention
- Highly trained and dedicated quality team
- Temperature data recording during transport
- CEIV- and QEP-certified
- Investigation tool and CAPA management for root-cause analysis
- Analytics and reporting utilizing data from DHL LifeTrack and external sources

**Value Proposition:**
- Minimize product loss with enhanced traceability and proactive intervention
- Systematic integration of SOP with CAPA and root-cause analysis to ensure continuous improvement
- Dedicated customs brokerage helps products arrive in the right timeframe and condition
- CAPA analysis is streamlined through ambient temperature sensor placement; this increases logistics transparency
- Data analytics for faster and more informed decision making
- Enhanced process efficiency and cost optimization
Webinar: Enhancing air freight lane risk assessment to the next-level

In this webinar, we review new approaches for data-driven risk management and explored how risk assessment processes can be further simplified ensuring GDP compliance, aided by machine learning, IoT, and cloud computing technologies.

Article: IOT and data mining smarten the solutions

Keeping the supply chain cool opens another opportunity: Data Analytics. Find out how your data could drive further improvements and add value to your cold chain.

Temperature controlled road freight for Life Science & Healthcare

Explore DHL’s Road Freight solutions, featuring temperature control, compliance, and active monitoring.