



**LOGISTICS SOLUTION GUIDE:**

# Expert guidance for shipping finished pharmaceuticals, temperature-sensitive goods, and more

Understanding the life sciences supply chain

**Efficient safe, and compliant transportation is essential for life sciences commodities. Shipments of biologics, pharmaceuticals, and medical equipment require seamless logistics, particularly in emergency situations where quality, speed, and temperature integrity are paramount.**

Life sciences and pharmaceutical logistics involve careful handling, which medical facilities, laboratories, and other healthcare institutions rely on for their daily operations.

Shippers must navigate a variety of ambient temperature and packaging requirements, adhere to strict schedules, and utilize different modes of transportation to safely and securely deliver life sciences products.

When every patient outcome is important, choosing the right logistics partner becomes even more crucial. Effective and compliant life sciences logistics reduces the risk of product loss and benefits both the shipper and the patient.

## What Items Do Life Science Shipments Cover?

Life sciences shipments encompass a broad range of goods, including finished pharmaceuticals, time and temperature-sensitive biologics, blood products, and medical equipment. The logistics of life sciences require careful planning and in-depth subject matter expertise. These shipments consist of:



### 01 | Pharmaceuticals

Pharmaceutical products often require strict cold-chain solutions or customized shipping plans. These plans involve careful packaging to maintain the required temperatures and quality for each item. Shippers must ensure constant compliance and monitoring while transporting these heavily regulated products, delivering them in optimal condition to distributors, medical institutions and, ultimately, to patients.



### 02 | Blood Samples

Blood samples are time-sensitive shipments that require strict storage and packaging standards. Often needed within hours, these shipments demand a combination of specialized courier services, customized packaging, and advanced tracking systems. Additionally, they must be backed by a robust, live support team with experienced personnel available 24/7.



### 03 | BioTech and Active Pharmaceutical Ingredients

The logistics of biopharmaceuticals and active pharmaceutical ingredients (APIs) encompass a variety of important and highly sensitive product categories. Each product has unique demands for maintaining temperature integrity during transit. That's why it's imperative to partner with an experienced company that understands the complexities involved in active, hybrid, and passive packaging technologies. These technologies play a crucial role in maintaining product integrity during transport, even in the face of supply chain disruptions.



### 04 | Clinical Trial and Critical Logistics

Clinical and critical supply chains leave no margin for error. From investigational medical products to cell and gene therapies, all shipments must adhere to strict chain of custody protocols. Time- and temperature-sensitive interventions scheduled for procedures mean that each shipment carries consequences that extend far beyond the freight itself. A Good Distribution Practice (GDP) compliant shipment management system, qualified packaging, and 24/7 critical response capabilities ensure that your most time-sensitive shipments arrive with complete integrity.

## Three Things You Need From Life Sciences Logistics Providers

Partnering with an experienced logistics provider is essential for managing the diverse, time-sensitive, and often temperature-sensitive requirements of your life sciences shipments. In addition to industry expertise, look for a life sciences logistics provider that possesses the following capabilities:



### Versatile and Compliant Solutions

The life sciences industry encompasses a diverse range of products, including pharmaceuticals, biologics, and medical devices. This field has numerous logistical needs, such as temperature monitoring, GPS tracking and monitoring, reefer trucks and containers, and may involve temperature-controlled facilities, cross-docks. To ensure successful shipments, it is essential to start with well-equipped and compliant providers.



### Dedicated Customer Service

Customer service and communication from the logistics partner are critical components of life sciences supply chain operations. Companies that provide extensive value-added services (such as white-glove delivery and product repackaging), 24/7 control tower supervision and expertise, high-tech shipment monitoring, and dedicated inventory management stand out as ideal partners for challenging life sciences shipments.



### Accreditations that Matter

When partnering with a logistics provider for life sciences shipments, ensure they are experienced, familiar, and trained to handle these highly regulated products. While specific compliance and federal requirements depend on geographies, important credentials include:

- ✓ C-TPAT, IATA and TAPA certifications, including IATA CEIV, enable effective customs brokerage management and efficient, wheels-up cargo clearance for life sciences imports into the U.S.
- ✓ Registration with the Food and Drug Administration (FDA)
- ✓ TSA-approved Certified Cargo Screening Facilities
- ✓ Good Distribution Practices (GDP) certification
- ✓ Compliance system (QMS) and accreditation

## How Can AIT Help Me With Life Sciences Logistics?

AIT offers decades of expertise in life sciences logistics, combining a dedicated global team, in-depth compliance knowledge (including customs brokerage and FDA and USDA regulation) along with a quality management approach and cutting-edge technology to securely transport your products.

From pharmaceuticals and healthcare products, we have extensive experience across all sectors of the life sciences industry, ranging from product development and pharmaceutical product launches to large-scale distribution.

We prioritize the requirements and integrity of your shipments across the supply chain, ensuring dependable delivery of your products. With constant monitoring, extensive, dedicated global resources, and specialized life sciences expertise, we collaborate with you to provide efficient, compliant, and successful deliveries.