

CASE STUDY

MARKEN'S RAPID RESPONSE TO CROWDSTRIKE CRISIS ENSURES VITAL THERAPY DISTRIBUTION TO PATIENTS

MITIGATING MASSIVE AIRLINE DISRUPTION TO EXPEDITE LIFESAVING TREATMENTS WORLDWIDE

Described as the “largest IT crisis in history”¹, the CrowdStrike outage on July 19, 2024, caused widespread crashes of operating systems, disrupting many industries and companies around the world. Triggered by a faulty update to the company’s security software, the incident had a catastrophic impact on the clinical and commercial supply chains with thousands of flight cancellations threatening timely patient care and critical healthcare distribution.

OBJECTIVE

Ensure all advanced therapy shipments stuck in-transit around the world reach patients securely within temperature specifications to avoid or minimize patient impact.

CHALLENGE

The outage shut down computer operating systems around the world, leading to digital system failures and massive disruption throughout the entire supply chain.

- **Airlines Suspended:** Grounded planes globally, including charter flights, carrying advanced therapy shipments in both hemispheres, necessitating immediate rerouting, many involving transoceanic routing.
- **Crisis Timeline:** The incident occurred during late-night hours in the U.S., requiring Marken and its clients to develop immediate solutions outside of working hours to ensure product integrity and distribution continuity.
- **In-transit Disruption:** Volumes of time and temperature-critical materials for advanced therapies and apheresis, which needed to reach the manufacturer within 48 hours, were trapped enroute to a client’s facility during the outage.

SOLUTION

Marken remained fully operational with business continuity and contingency plans in place throughout the unprecedented situation, including leveraging the UPS Air network. Marken’s Advanced Therapy Division (ATD) provided full visibility and operational transparency as clients were immediately informed about the disruption’s potential impact on their in-transit shipments. By overlaying in-transit shipments



with airport and flight disruption maps, Marken quickly identified alternate routing options and effective mitigation strategies.

Marken's Advanced Therapy Control Towers monitored around-the-clock airport and carrier conditions, providing real-time valuable insights as the crisis unfolded. The specialized advanced therapy project management (PM) teams ensured every shipment was rerouted to reach destinations within the product's life cycle. Marken's "patient-first" mindset accelerated shipment continuity, with support from officials in external organizations.

Within hours, Marken's ATD control tower, PM, and operations teams began implementing solutions. All Marken stakeholders coordinated with clients before, during, and after the disruption, saving irreplaceable time and ensuring alternative pathways for the therapies were quickly identified and executed upon.

OUTCOME

All shipments reached their destinations with minimal delays, ensuring no significant patient impact. Notably, Marken was praised for "saving 51 lives" over a few short days for one client. Most shipments were quickly reevaluated and booked onto air freight options avoiding the CrowdStrike shutdown, while others were transported via alternative transport modes such as direct drives. Marken's unwavering commitment to delivering what matters ensured hundreds of patients received the essential healthcare they needed.

1. Capoot, A. Contantino, A.K., Goswami. R. et al. (2024). "Microsoft-CrowdStrike issue causes 'largest IT outage in history'". <https://www.cnn.com/2024/07/19/latest-live-updates-on-a-major-it-outage-spreading-worldwide.html>

ABOUT MARKEN

Marken is the clinical precision logistics and advanced therapy subsidiary of UPS Healthcare. The UPS Healthcare network consists of 200+ locations worldwide. Marken offers a state-of-the-art GMP-compliant depot network and logistic hubs for clinical drug product storage and distribution in 46 locations worldwide, while maintaining the leading position for cell and gene therapy services, direct-to-patient and home healthcare services, biological sample shipments and biological kit production. Marken's dedicated 2,500+ staff members manage 200,000 drug product and biological sample shipments every month at all temperature ranges in more than 220 countries and territories and have orchestrated 17,500+ home healthcare visits. Additional services such as ancillary material sourcing, storage and distribution, shipment lane verification and qualifications, as well as GDP, regulatory and compliance consultancy add to Marken's unique position in the pharma and logistics industry.

Delivering What Matters From Clinical to Commercial.