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How CPE CBRND safeguards national health security

Government and Defense **Case Study**



7.5 yrs
production secured through proactive stockpiling

100+
components mapped for a single monoclonal antibody

0
disruptions when a supplier went bankrupt due to early warning

Case Study

How CPE CBRND safeguards national health security

The Capability Program Executive for Chemical, Biological, Radiological and Nuclear Defense (CPE CBRND) is the U.S. Department of Defense's lead agency for medical countermeasures. Their job is to ensure that lifesaving treatments from vaccines to battlefield antidotes—are always available, no matter what disruptions hit their supply chain. New supply chain risk mandates and the disruptions of COVID-19 showed that even advanced government programs needed better tools and data. CPE CBRND partnered with Resilinc to meet that need.

The challenge

Limited visibility into critical medical supply chains posed national security risks

The CPE CBRND needed to shift from reacting to crises to preventing them. They didn't have visibility into where critical materials came from, which suppliers were actually involved, or whether those networks faced risks like foreign influence, obsolescence, or manufacturing problems.

Several key obstacles stood in the way:

- **Predicting supply shortfalls:** Without clear visibility into supplier networks, the team couldn't tell if their supply chains had enough capacity to meet requirements or coordinate well with agencies like the U.S. Department of Health and Human Services (HHS).
- **Obsolescence and company health:** Program managers needed expert help to figure out if manufacturing facility shutdowns were routine maintenance or warning signs of bigger problems. They also needed insights into supplier financial health.
- **Foreign influence risks:** Executive mandates required treating supply chains as national security assets, but the agency didn't have tools to identify and mitigate foreign influence and control risks.
- **Disruption vulnerability:** COVID-19 exposed critical weaknesses. Port shutdowns and material hoarding by other countries created major supply shortages for essential medical countermeasures.

The solution

Working with the DOD's Defense Innovation Unit (DIU), the CPE CBRND evaluated multiple supply chain risk management vendors. They compared Resilinc's approach— which combines technology with human expertise—against fully automated solutions. Their priority was finding a system that could deliver validated, contextual intelligence that decision-makers could actually trust and act on.

> *Resilinc was different.*

What made the difference was Resilinc's track record in life sciences and pharmaceuticals, its collaborative approach to working with suppliers, and the clarity of its outputs. Unlike generic AI tools, Resilinc's approach combined supplier-verified data with domain expertise. The intelligence they delivered was accurate, trusted, and directly useful.

The program followed a deliberate "crawl-walk-run" strategy, starting with a single vaccine supply chain to build confidence and prove value before expanding to other high-priority products. This phased approach allowed the agency to scale its visibility and risk management capabilities without disruption, while strengthening internal buy-in and refining processes based on real-world feedback.

Using Resilinc's Multi-Tier Mapping, CPE CBRND gained visibility and trace critical components through multiple tiers, and identify risks at every level of their supply networks.

"The clarity and clarification Resilinc provides allows us to go back to our leadership team with valuable information that helps maintain a sense of calm when something happens."

Dr. Clay Holloway, Director, Office of Strategy and Integration (OSI)
JPM CBRN Medical

The results

Beginning with the anthrax vaccine supply chain, the team quickly demonstrated measurable results and expanded to other mission-critical products, including:

- Auto-injectors used on the battlefield for chemical exposure
- Small molecule drugs, including synthesized compounds like acetaminophen
- Large molecule therapies, such as monoclonal antibodies for botulinum toxin

With Resilinc, CPE CBRND gained clear visibility into where critical components originated, revealing foreign influence risks, site usage, and complex business relationships. In one case, Resilinc flagged a pharmaceutical starting material tied to a manufacturer with overseas operations. CPE CBRND engaged the supplier, reviewed their mitigation strategy, and confirmed it met security and continuity requirements—averting a potential disruption and strengthening supply chain trust.

As the program matured, measurable outcomes followed:



"We just keep finding value in the platform."

Dr. Clay Holloway, Director, Office of Strategy and Integration (OSI)
JPM CBRN Medical

- **Secured long-term readiness:** The CPE CBRND proactively stockpiled enough raw material for 7.5 years of production for one countermeasure.
- **Expanded supply chain insight:** More than 100 components were mapped for a single monoclonal antibody product.
- **Prevented disruption:** When a supplier went bankrupt, there was zero disruption—they had advance warning and were ready.
- **Accelerated coordination:** Administrative lead time dropped, which meant faster, clearer conversations with suppliers.

These results show how even a careful, step-by-step rollout can deliver real wins across readiness, resilience, and risk mitigation. Using Resilinc's Multi-Tier Mapping, the team traced components to identify foreign influence risks, assess manufacturing dependencies, and secure critical materials.

Operational impact

Through its partnership with Resilinc, CPE CBRND strengthened the efficiency, visibility, and confidence behind every operational decision:

- **Accelerated decision-making:** Resilinc cut down on administrative time and internal back-and-forth. When concerns over foreign influence came up, Dr. Holloway's team could quickly engage with suppliers using Resilinc's validated insights.
- **Enhanced supply chain sustainment:** The organization has successfully stockpiled critical materials, securing "...enough starting material stockpiled to handle 7.5 years of manufacturing in our current requirements..." for one key product and "...all the material stockpiled for the current contract..." for another.
- **Improved risk communication:** The insights helped leadership feel more confident and improved how the team responded to issues. "There's no better way to invite senior leadership involvement than to hear 'I learned so much,'" Dr. Holloway said.
- **Program due diligence:** Resilinc now supports both ongoing program sustainment and early-stage drug evaluation—helping assess whether new candidates have viable manufacturing pipelines.

Future outlook: expanding capabilities to protect national security interests

The CPE CBRND continues to deepen its partnership with Resilinc, with plans to:

- Map their complete portfolio of medical countermeasures
- Leverage AI capabilities for enhanced due diligence on alternative suppliers
- Support scenario analysis for emergency response planning
- Enable proactive business continuity planning with suppliers

The success of CPE CBRND's work with Resilinc shows what's possible when supply chain risk management becomes strategic instead of reactive. With validated, multi-layered visibility and a scalable, phased implementation, the agency has done more than meet compliance mandates—it has strengthened its ability to protect national health security. As global threats evolve, White House directives shift, and supply chain vulnerabilities grow more complex, the CPE CBRND's proactive approach serves as a model for how public sector organizations can build resilient, responsive, and intelligence-driven supply networks. Together, Resilinc and the CPE CBRND are proving that when the stakes are high, visibility and partnership matter most.

About the CPE CBRND

The Capability Program Executive for Chemical, Biological, Radiological and Nuclear Defense (CPE CBRND) mission is to provide integrated, layered chemical, biological, radiological, and nuclear defense capabilities to the Joint Force across warfighting functions and combined Joint All-Domain Operations. CPE CBRND's goal is to enable the Joint Force to fight and win unencumbered by a CBRN environment.

To learn more about CPE CBRND, visit jpeocbrnd.osd.mil or follow CPE CBRND on social media @JPEOCBRND.

About the JPM CBRN Medical

The Joint Project Manager for Chemical, Biological, Radiological, and Nuclear Medical (JPM CBRN Medical)—part of the U.S. Department of Defense's Capability Program Executive for CBRN Defense—develops and acquires medical solutions to protect military personnel and the nation from chemical, biological, radiological, and nuclear threats. Its mission is to advance innovative medical countermeasures and response systems that strengthen U.S. readiness and biodefense capabilities.

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About Resilinc

Resilinc, a leading supply chain risk management solution, empowers companies to predict, mitigate, and quickly respond to disruptions. Our AI-powered supplier-customer collaboration platform backed by supplier-validated data provides real-time disruption monitoring, deep sub-tier visibility with part-site mapping, and predictive analytics. Resilinc enables companies to identify, analyze, and manage risks like compliance, supplier performance, extreme weather, and geopolitics to ensure operational resilience and a competitive advantage.

See agentic AI in action

Get a live demo, visit resilinc.ai or email sales@resilinc.ai

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