

RE-ENVISIONING PREPAREDNESS

Collaborating Across Sectors to Build a Biopharma Industrial Base

In an evolving threat landscape, MITRE's public service mission and trusted relationship with government has never been more important than it is today. The nation will continue to grapple with the threat of biological events such as COVID-19, and MITRE stands ready to partner across sectors to mitigate the consequences of such events to the American people.

MITRE has extensively engaged leaders from industry, academia, and government to develop sustainable solutions for building a biopharma industrial base. This industrial base secures access to, and supply of medical countermeasures, essential medicines, and critical medical supplies, which MITRE understands as vital to national, economic, and health security interests.

In bringing interdisciplinary, systems thinking to the complex challenges facing government in securing and sustaining a biopharma industrial base, MITRE serves as a uniquely qualified partner to government. Our experts offer decades of experience related to the persistent challenges facing government and industry in the strengthening and sustainment of this industrial base.

In crisis or "peacetime," we lead with a driving sense of urgency to help government develop innovative business models, establish strong partnerships, and implement evidence-based recommendations to see a world safer from health threats.

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The loss of life and livelihood caused by COVID-19 brought in stark relief the devastating nature of novel pathogens and the critical importance of being prepared for the next threat.

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Dr. Jay Schnitzer, Chief Medical and Technology Officer

Building National Resilience to Health Security Threats

MITRE's global health security team is dedicated to responding to the current pandemic and preparing for future challenges by building a world more resilient against health security threats. Our experts in domains such as biotechnology, digital health, economics, epidemiology, finance, health policy, life sciences, medicine, public health, supply chain, and systems engineering bring multidisciplinary and systems-based thinking to solve complex problems. The result? Accelerated development of evidence-based solutions and recommendations for federal agencies and industry partners toward a country and a world more prepared to respond to health security threats.

Examples of MITRE's recent work in the global health security mission-space include:

- **MITRE's Great Power Competition Initiative Health/Life Sciences Sprint:** A team of leading experts in biotechnology, finance/economics, and supply chains identified the serious challenges to US-led innovations in the biopharmaceutical sector posed by competing nations and commercial market dynamics. Using mRNA platform technology as a primary use case, the team conducted a rigorous mixed-methods analysis to identify the systems-level factors which influence competitiveness of US market access to emerging biotechnology. This work resulted in a comprehensive set of recommendations to federal government stakeholders on how to sustain a robust biopharma industrial base to protect national, economic, and health security interests.
- **10-Point Action Plan to Sustain a Biopharma Industrial Base for a More Secure Nation:** The COVID-19 pandemic laid bare deficiencies in the way government manages the biopharma industrial base—a critical capability needed for the nation to be able to access medical countermeasures, essential medicines, and medical supplies. In consultation with leading ex-government officials, industry experts, and academicians, the MITRE team developed a 10-point action plan to address this gap. This action plan specifies policy, program, and financing actions, which the current administration can act upon now to build and sustain an industrial base capability responsive to security interests.
- **Enhancing the Domestic Vaccine Ecosystem for Influenza and Other Epidemic/Pandemic Threats:** MITRE led a virtual roundtable, sponsored by Assistant Secretary for Preparedness and Response (ASPR), to explore novel business models focused on accelerating platform technologies to address seasonal and pandemic influenza. The roundtable, facilitated by the former Secretary of Health and Human Services and MITRE's Chief Medical Officer, included over 20 global thought leaders and senior executives in the global health security, business, and biopharmaceutical ecosystems. The insights gained from these discussions, coupled with MITRE research, culminated in a technical report, which identified proposed actions for developing and sustaining state-of-the-art platform technologies for rapid development of vaccines to counter influenza and other epidemic/pandemic threats.

MITRE brings a diverse set of expertise and capabilities to advance the global health security mission:

- Threat & Risk Assessment
- Surveillance Systems & Mission-wide Situational Awareness
- Industrial Base & Supply Chain Resilience
- Healthcare/Public Health System Resilience
- Individual, Community and Business Resilience.

For more information, email GHSTeam@mitre.org

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.

MITRE | SOLVING PROBLEMS
FOR A SAFER WORLD®