



COVID-19 VACCINE DISTRIBUTION: PLANNING, LOGISTICS, & PROGRAM MANAGEMENT

The Coronavirus pandemic continues to impact our lives and has had a tremendous impact on human life and the global economy. In late 2020, with access to vaccines a more challenging task lied ahead for state, local, tribal, and territorial (SLTT) officials - distributing, tracking, and administering the vaccine.

This arduous effort required SLTT officials to plan and execute a vaccination plan that best fit their jurisdictions. Pre-planning logistical operations for an effort of this scale is an area was a challenge for most jurisdictions. Federal and state resources and supply chains had to be aligned with local needs to assure that the commodities and resources were distributed in the needed quantities to the areas that needed them most. **IEM Health stood ready to assist with this effort and continues to support vaccine distribution today.**

IEM Health's vaccine distribution planning, logistics, and program management operations account for the complexity, scale, and speed required to distribute immunization resources. Our capabilities include:

Planning | IEM Health's world class public health planners implement forward-leaning, efficient, and well-coordinated logistics and program management systems to rapidly distribute vaccines to overcome the challenges posed by COVID-19 pandemic. IEM uses interactive planning tools to analyze the optimal delivery, distribution, and administration sites of the vaccine and incorporates artificial intelligence (AI) Modeling to identify vulnerable populations to deliver an equitable vaccine distribution plan.

Stockpile Locations, Staging Areas, and Points of Distribution (PODs) | IEM Health locates protected areas appropriate for long-term and short-term stockpiling to store immunization resources that are accessible to staging areas and distribution points. Using our AI Modeling, IEM determines the most strategic placement of vaccination locations based on population and other critical factors.

Program Management | IEM Health knows how to balance service, quality management, and productive, efficient staff capacity management. Our products and services are flexible and customized to meet the unique demands of each client. Team IEM is ready to apply our innovative approach to solve issues that may arise, such as estimating vaccination capacity, assessing vaccine administration, vaccine ordering, receipt, and cold chain management, and volunteer management and tracking.

IEM QUICK FACTS

Founded

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Headquarters

Research Triangle Park, NC

Office Locations

Washington, D.C. • Baton Rouge, LA • Tallahassee, FL • Conroe, TX • Bel Air, MD • Neptune, NJ • Pueblo, CO • Richmond, KY • San Juan, PR • Aguadilla, PR

Our Experts

The expansive IEM team includes public health, emergency management, homeland security, disaster recovery, and national security professionals, former senior-level FEMA, HUD, DOD, and state and local officials as well as technical and subject matter experts.

Key Service Areas

- Public Health and Medical
- Disaster Recovery and Management
- Homeland Security and Emergency Management
- Defense and National Security
- Digital Services

Supplies Logistics | Coordination between multiple parties and stakeholders is key to ensure vaccines are delivered safely and rapidly. IEM Health identifies, categorizes, types, and inventories supplies needed throughout the distribution process and generates a dashboard to monitor and manage supply chain data in real-time.

Transportation | IEM's logistics accounts for all transportation methods and potential roadblocks to get supplies from the distributor, the stockpile location, staging areas, and eventually to the POD.

Communications | Vaccine distribution protocols, mobilization, and safety need to be communicated to public officials and residents in a timely manner. IEM develops communication procedures and public messaging to engage with communities and provide residents with accurate information on vaccination distribution.

Throughout the COVID-19 vaccination planning and implementation, the IEM Health team ensured that:

- **Federal funds are maximized** – IEM Health helped identify federal resources available and ensure no monies are left on the table;
- **State and local resources were utilized** when available and possible – to expedite the process and secure necessary staffing and supplies;
- **Best practices and benchmarking were brought to bear for your communities** – throughout the pandemic, IEM documented what did and did not work across the nation allowing for quick access to best practices and methods and lessons learned; and
- **Business process improvement and continuous improvement remain a cornerstone of our efforts** – to ensure that your jurisdiction provides quality support and assistance to those in your community who need it most.

IEM Health uses risk-based, data-driven services to help decision-makers achieve results. We review and revise plans and procedures on an ongoing basis to include new information and the input of key players. Our experience in building and developing asset management plans, coordinating and collaborating with federal, SLTT and private sector partners ensures that vaccination resources are adequately ordered, tracked, delivered, and reported for transparency.

IEM Health's AI-Based COVID-19 Projections and Vaccine Distribution

Using state-of-the-art technology, IEM built an AI COVID-19 model that was executed daily during the height of the pandemic to evaluate the changing dynamics of the virus. Our AI projections were typically within 10%, and often within 5% of actual confirmed cases. Through AI-based modeling, IEM supported nationwide COVID-19 vaccination program planning and logistics. With AI, IEM can:

- Develop and adjust COVID-19 vaccination plans to include timelines, deliverables, prioritization, and metrics based on real-time and projected cases.
- Examine the change in transmission rates (new cases) in the different regions to better determine vaccine deployment and prioritization.
- Design and help identify appropriate and optimal geographic locations for vaccine distribution using key metrics.
- Identify communities at highest risk.

IEM Health understands what is needed during a pandemic or other health emergency and wants to help the nation navigate through a crisis. Let our seasoned experts in project management and logistics assist you to strengthen your community against your public health threat.

IEM Health Leadership

Through existing contract vehicles and rapid procurement, including standby contracts, IEM is prepared to address your critical emergency and healthcare preparedness and response needs for the Coronavirus pandemic.

Contact us to learn more.



Dr. Rashid Chotani

has spent over 20 years providing biodefense, infectious disease (with a focus on influenza, coronavirus, zika, Ebola, CCHF, dengue), and public health expertise to public agencies, private industry, academia, and non-profits. He is a recognized expert in medical countermeasure (MCM) development, biosecurity, healthcare management, health surveillance, and the diagnosis of human and zoonotic diseases.

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Dr. Prasith "Sid" Baccam

is a Computational Epidemiologist with more than 20 years of experience in medical consequence modeling and simulation of disease outbreaks. He develops simulation models and decision support tools for public health, disaster response, and medical countermeasures to enhance data-driven decision making and improve modeling assumptions.

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