



Board of Health – What is the Emergency Preparedness Program?

Public Health Emergency Preparedness Program

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Bureau of Public Health Preparedness and Emergency Response

- Initiated within Chicago in 2002 to develop plans for health & medical consequences of disasters
- Focus on vulnerable and at-risk populations
- Facilitates pharmaceutical and medication ancillary distribution
- Close collaboration with various city agencies and offices:
 - The Mayor's Office
 - The Office of Emergency Management & Communication
 - Emergency Responders (Fire, Police, Paramedics)
 - Hospitals (Hospital Preparedness Program)
- Coordinates with local organizations and coalitions to empower the public to take action



Public Health Potential Emergencies

- Severe weather
- Special events
- Communicable or Infectious Disease
- Pandemic capable disease
- Chemical, Biological, Radiological release
- Contamination of water or food supplies
- Synthetic narcotics or recreational drugs



SYNTHETIC CANNABINOIDS (K2/SPICE)
UNPREDICTABLE DANGER

K2/SPICE IS **NOT** MARIJUANA

It's often called synthetic marijuana or fake weed because some of its chemicals are like those in marijuana. The effects can be unpredictable and in some cases, severe or even life-threatening.

+ =

Shredded, dried plant material Man-made chemical A "natural" drug? Not even close!

For more information, visit drugabuse.gov/healthandharm/healthandharm-synthetic-cannabinoids



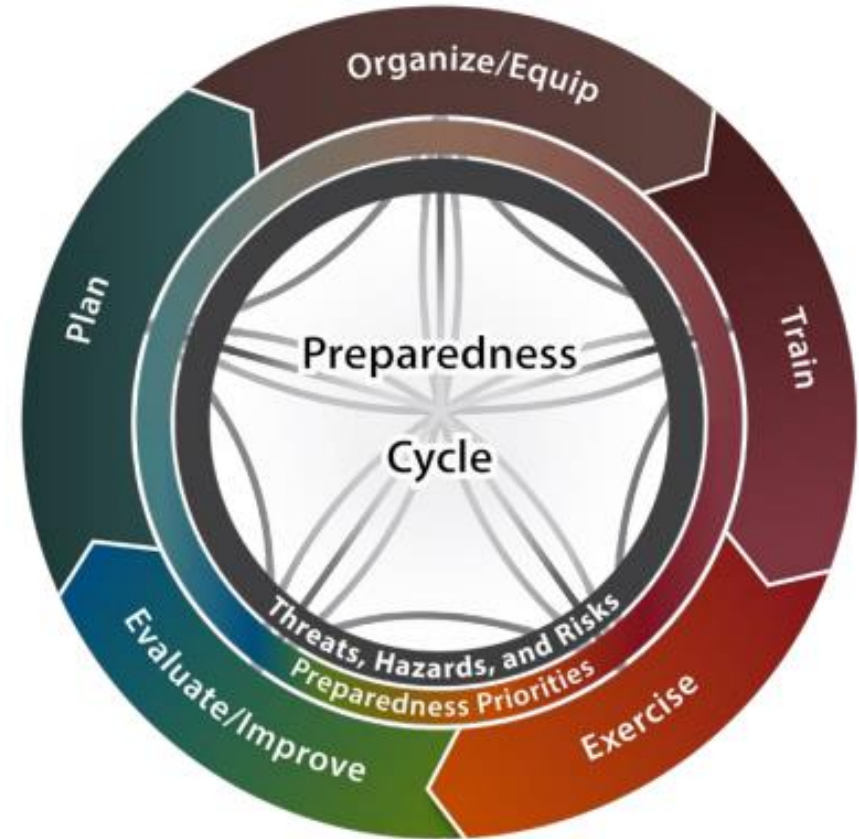


Preparedness

All measures taken before an event occurs

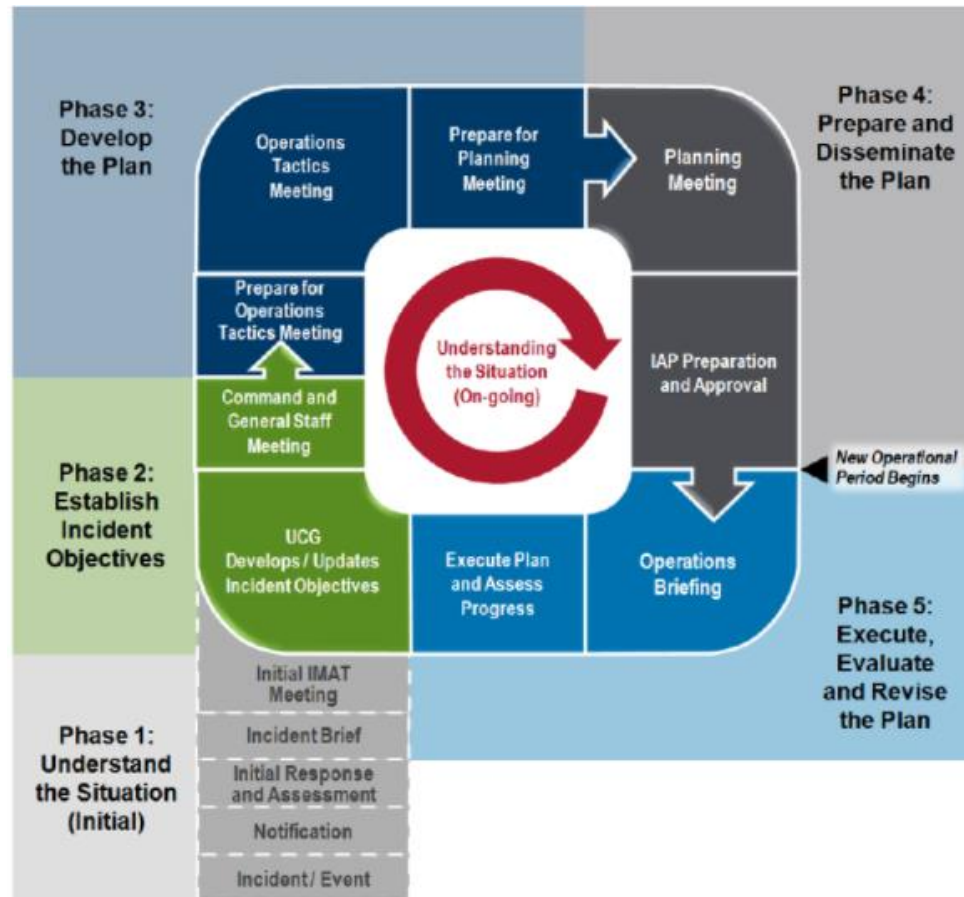
Preparedness includes:

- Defining the potential threats
- Developing All-Hazard management strategies
- Coordination of Organizational roles
- Conducting drills and exercises
- Evaluation and Improvement planning





Planning / Exercise





Planning

The city of Chicago utilizes various data components to inform the construction of programming, plans, policies and procedures. The activities drive training, which drives exercises, which drives corrective actions.

The Chicago Department of Public Health captures the population framework (Health Indicators) through our Healthy Chicago 2.0 program: <https://www.chicagohealthatlas.org/>

- Population density
- Economic Hardship
- Race / Ethnicity / Spoken Language
- Area resources (Health / Food / Services, etc.)
- Underlying disease trends and other social determinants

All of the data points inform predictive planning to support our population during emergencies, but allow for specific modifications based on the incident dynamics, i.e., Cold / Heat, Civil Unrest, Outbreaks



Planning

Once we capture the data sets (indicators), we visualize the city via heat mapping, turning layers on / off to better understand potential impacts to community areas or targeted populations.

Through planning scenarios and our Threat Hazard Analysis, we apply predictive analytics to identify positive and negative impacts on our city, based on the planning assumptions and the underlying data sets.

For seasonal influenza as the example, we utilize previous years data (negative impacts or outcomes) to inform response changes to the upcoming season:

- Did we see outbreaks in specific setting (Schools, Congregate housing, Churches, etc.)
- Did we see unusual clusters of disease, outside of the baseline groups
- Did hospitalizations trend as expected against virulence of disease burden
- What additional co-morbidities, social or environmental conditions impact response operations

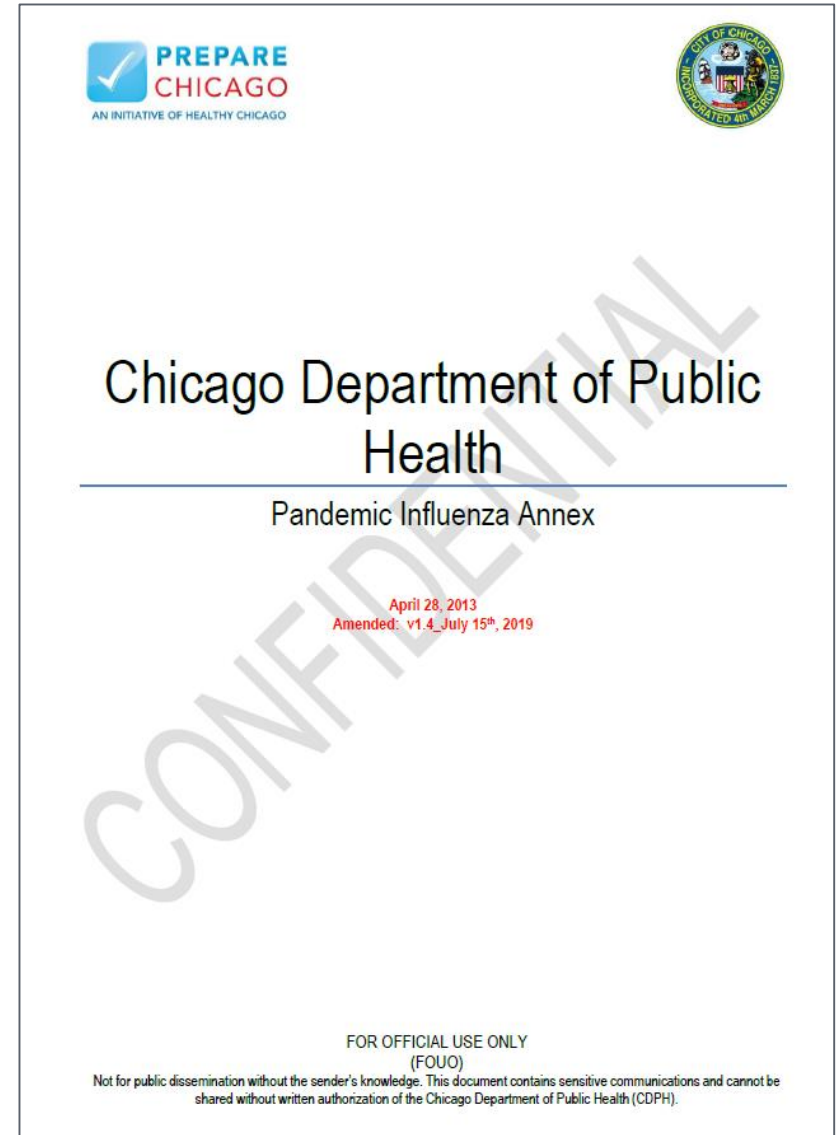
Pandemic Influenza Annex


Chicago maintains an active Pandemic Influenza plan / annex as part of our Communicable Disease program, which undergoes internal / external peer review with our strategic partners (Emergency Management, Fire / EMS and trusted coalition partners) every 2 years, in alignment with EOP refreshes


This annex was amended and reviewed as part of the Crimson Contagion “All of Nation” exercise during the summer / fall of 2019

Annex is built based on two novel influenza categories (Spanish Flu – high mortality and the H1N1 Pandemic – low mortality)

Unlike many plans, this document was built as a decision matrix structure; providing “Courses of Action” discussion points, spread across an 18-month pandemic timeline



 **PREPARE
CHICAGO**
AN INITIATIVE OF HEALTHY CHICAGO



Chicago Department of Public
Health

Pandemic Influenza Annex

April 28, 2013
Amended: v1.4_July 15th, 2019

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Crimson Contagion Exercise

A National Full-Scale Exercise undertaken during August 13-16th, 2019, which involved multiple Chicago Departments and Sister agencies, 17 states, and multiple Federal agencies to focus on a Pandemic Influenza (H7N9) incident. The exercise series included local Tabletop Exercises, a Federal Seminar, and a Functional Full-Scale Exercise.



★ Crimson Contagion: Goals



2019 Chicago co-authored and participated in the “All of Government” Pandemic Influenza Exercise series “Crimson Contagion” to:

- Examine what administrative and fiscal actions are required by the City of Chicago to initiate and sustain coordinated response actions during a Pandemic Influenza Incident.
- Examine available coordination mechanisms between HHS/CDC, IDPH and CDPH to develop priority groups, incident specific messaging and medication protocols (anti-viral, vaccine, etc.) for a sustained Pandemic Influenza response (assumes event duration 9 – 18 months)
- Examine the effectiveness of adapting CDPH/IDPH and CDC/HHS communicable disease surveillance systems and tools to address a pandemic influenza response.
- Examine the Political, Economic, Social and Health impacts associated to the implementation of Non-Pharmaceutical Interventions to the public and at-risk populations, to include but not limited to: School, University and venue closures within the city of Chicago.



Crimson Contagion: CDPH Activities

- Initiate a local Public Health Emergency (Declaration), follow-on to MPO, OEMC and Governor's office
- Activate our cached resources and deploy Personal Protective Equipment (PPE) to 12 hospitals (self-selected for exercise)
- Conduct multiple conference calls with local stake-holders, while generating guidance, press releases and safety messaging
- Initiate Federal resource requests for medical materials (anti-viral pharmaceuticals, PPE, etc.), and fiscal support through existing grant streams and an available Crisis Notice of Funding Opportunity with CDC.
- Initiate cost tracking of all resources for personnel, equipment and supplies. (costs projected to have exceeded 42 million at day 47)
- Validate a syndromic monitoring process, over-laid with GIS to identify geo-spatial clusters and work with our hospital partners to track First Responder illness rates
- Activation of our Fatality Management mobile morgues; to assist the Cook County Medical Examiner's office with the significant increase in local deaths.
- Convene Citywide senior leadership to discuss the need for non-pharmaceutical interventions (NPI) and the closure of schools, universities and major venues.



Crimson Contagion: Lessons Learned

- Inventory Management Systems (IMS) were not utilized at the Federal level, indicating potential challenges for Chicago to receive and further deploy assets in an efficient manner
- Coordination calls (Federal, State and local applications); ability to quickly assemble necessary agencies engage in multi-layered strategy discussion were not efficient – requires follow-up
- Emergency Operations Coordination – highly effective locally, scaled activations (health to all of city) worked effectively, information dissemination broadly utilized
- Logistics mission could be highly dynamic; PPE, Oral medication and Vaccine sustainment through duration of campaign
- Examine the Political, Economic, Social and Health impacts associated to the implementation of Non-Pharmaceutical Interventions to the public and at-risk populations, to include but not limited to: School, University and venue closures within the city of Chicago.
 - Served as a precursor to the current response
 - Established necessary coordination links through-out local government and private sector for timely decision making



SARSCoV-2 (COVID-19): City of Chicago Pandemic Preparedness – Crosswalk status report

Planning Considerations Pan Flu Annex versus SARS CoV-2 Pandemic response

- Agricultural Production Disruption - *Yes*
- Critical Infrastructure Impacts - *Yes*
- Educational Disruption - *Yes*
- Elderly Mobility Disruption - *Yes*
- Food Service Disruption – *Yes*
- Hospital / Medical SURGE – *Yes*
- Attack and Mortality rates – *Yes*
- Large Event Cancellation - *Yes*
- Media Demands - *Yes*
- Mutual Aid Logistics break-down - *Yes*
- Travel Restrictions – *Yes*
- Public Sector Personnel Shortage – *Yes*
- Social Unrest - *Yes*
- Social Vulnerability – *Yes*
- Transportation Sector Limits – *Yes*
- Vaccination – *Yes*
 - *456,000 + delivered by CDPH*
 - *302,000 + delivered at T1-United Center alone*

★ SARSCoV-2 (COVID-19): Response



CDC confirms coronavirus case in Chicago woman



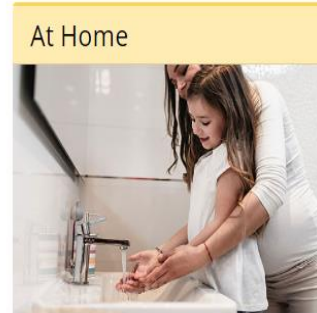
MCCORMICK CONVERTS TO TEMP CARE FACILITY



★ SARSCoV-2 (COVID-19): Activities

- Airport Operations
- Quarantine and Isolation Housing
- Contact Tracing
- Testing
- PPE Distribution
- McCormick Alternate Care Facility
- Healthcare system support; Ventilators
- Public Health Messaging and Communications
- Mass Vaccination campaign - (3) vaccines

How to prepare and take action for COVID-19:



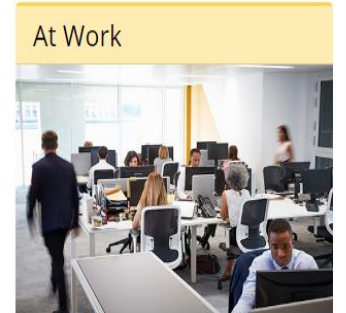
At Home

Get my household ready



At School

Get my school ready



At Work

Get my workplace ready

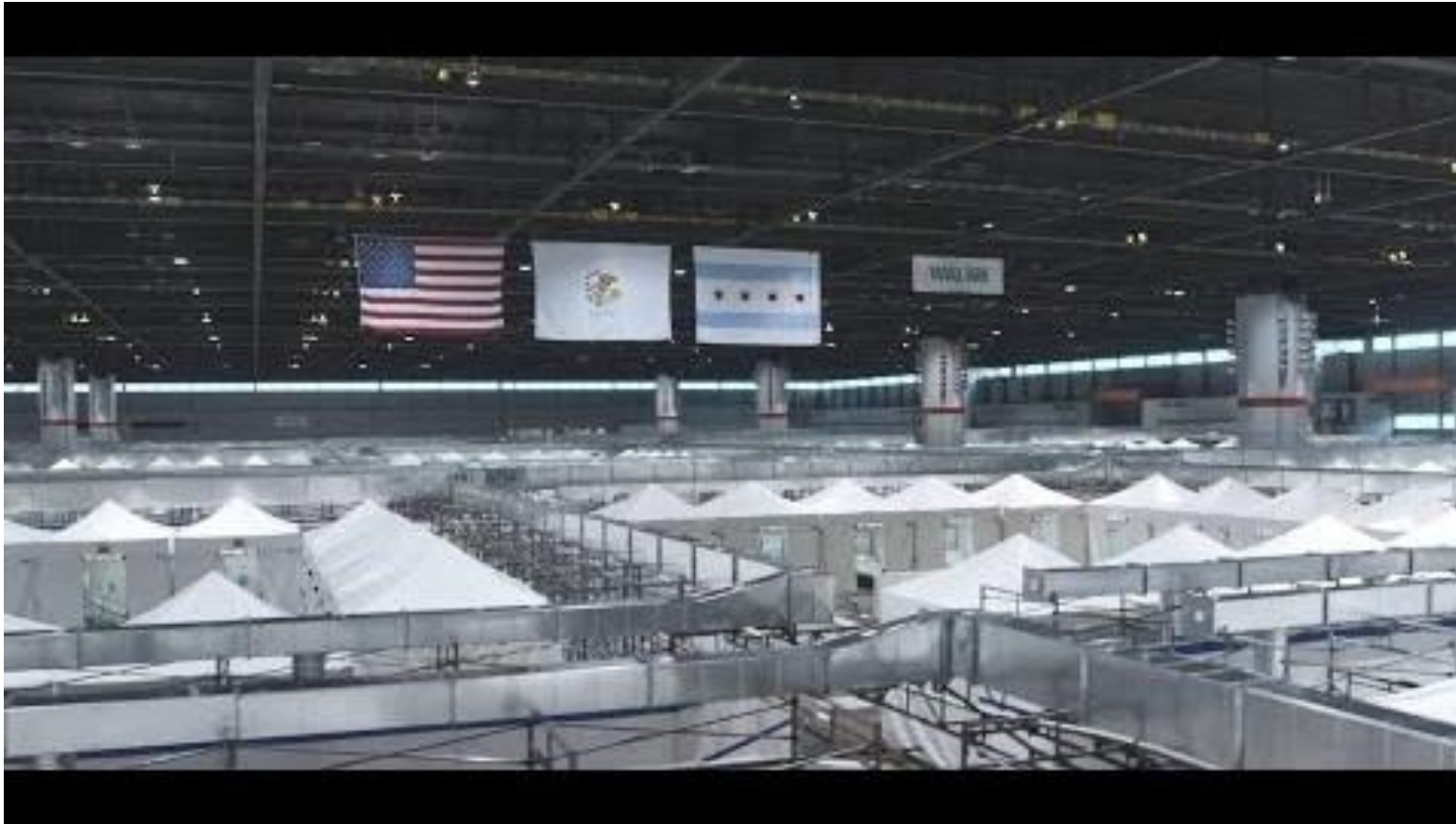


Healthcare Settings

Information for healthcare professionals



SARSCoV-2 (COVID-19): Alternate Care Facility

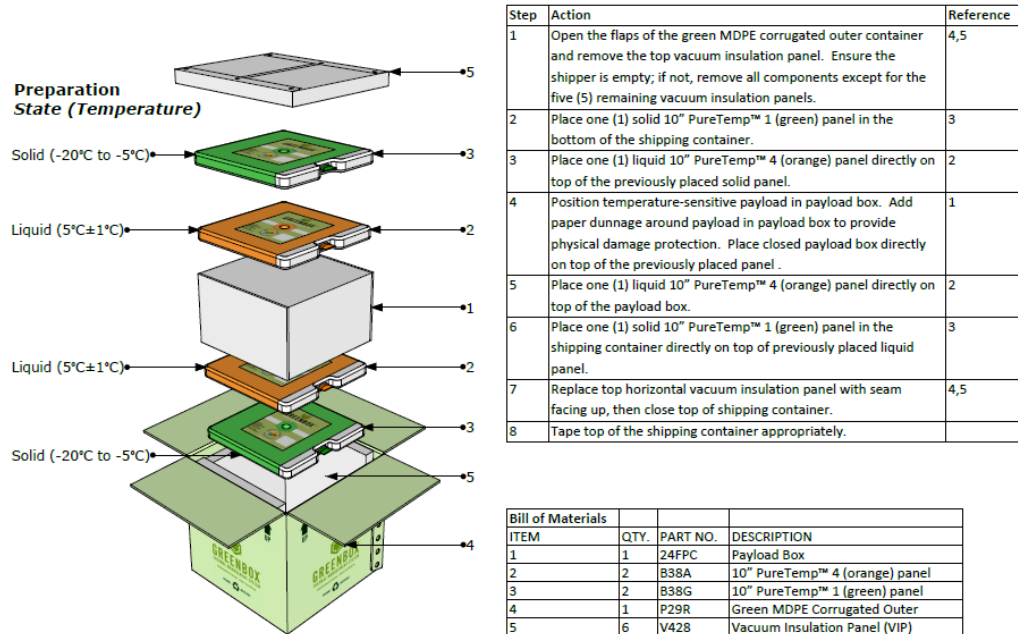


SARSCoV-2 (COVID-19): Vaccination Campaign

Citywide planning efforts:

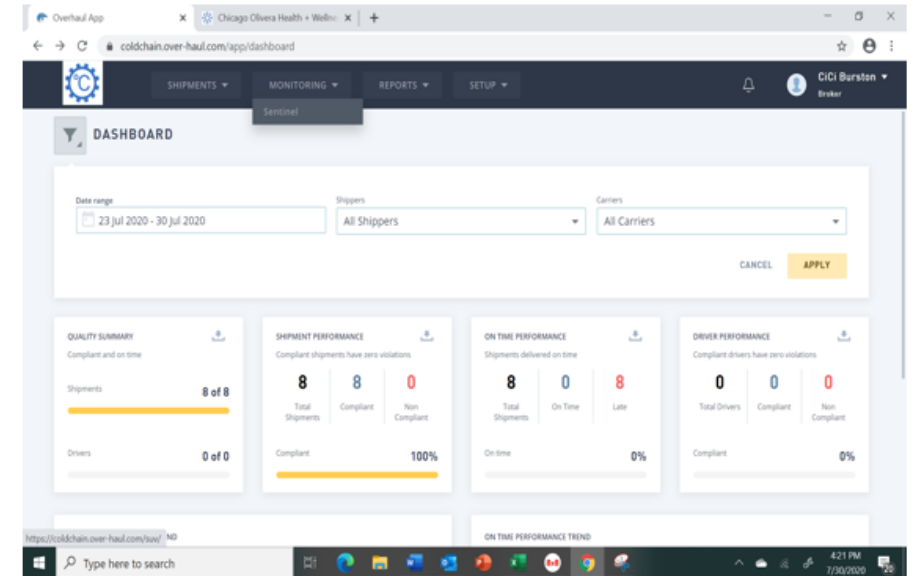
- Concept of Operations Planning
- Medical Policy for clinical operations
- Paperless solution for clinical operations
- Development and deployment of training and education documents
- Increasing vaccine storage capacity
- Continued evaluation of logistics capabilities and capacity
- Procure ancillary support materials
- Engage other stakeholders
 - Public and Private
- Micro planning scenarios
- Document internal practices

SARSCoV-2 (COVID-19): Vaccine Technology



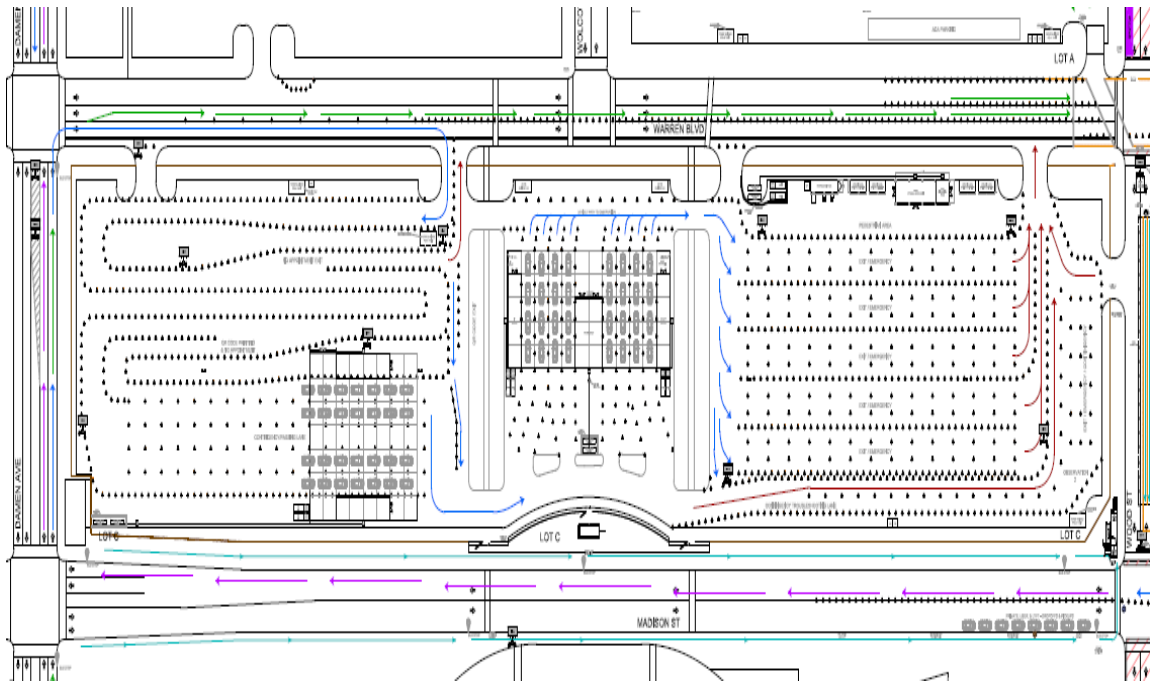
Monitoring (Sentinel)

Application tracks unit while in motion to destination, while onsite, and the return trip. Intent is to ensure temperature compliance (FDA controls) over vaccine when outside of standard containment environment)





SARSCoV-2 (COVID-19): Activities – T1 United Center



<https://drive.google.com/file/d/1rfE3jAFTXLvfgicAq00-P-iPo97jjWda/view?usp=sharing>

SARSCoV-2 (COVID-19): Community Preparedness Message

KEEP UP THE GREAT WORK!

Continue to:

- Wear a mask (Guidance to Mandates)
- Avoid gatherings
- Social distance when possible
- Wash your hands frequently
- Check in on friends / family
- <https://www.chicago.gov/city/en/sites/covid-19/home.html>

Ways to help your community:

- Build a community network
- Help CDPH distribute information
- Be a savvy consumer of health information – find a trusted source
 - Share the information with those around you
- Find a medical home
 - Doctor, Federally Qualified Health Center, Clinic, etc.
- Encourage others to find a medical home



SARSCoV-2 (COVID-19): Successes / Lessons Learned

Success

- Partners have been engaged since original annex development; understand roles and responsibilities
- Transitioning Health Command to Citywide Unified Command as incident moved from local containment to systemic response
- Incorporation of planning Course of Action (COA's) to operationalize a multitude of components throughout the response
- Vaccine Management Plan is National Standard – highlighted by CDC and White House

Lessons Learned

- Planning assumptions did not address speed in which planning considerations (Hospital Surge, Sheltering, Food shortage, Education disruption) occurred
- Rapid progression through phases of response strained infrastructure capabilities, even with surge protocols in place
- Non-traditional consumers of Personal Protective Equipment (PPE) response resources were severely stretched in a scarce resource environment
- 20+ month campaign has caused significant work-force burn-out

Thank You!



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