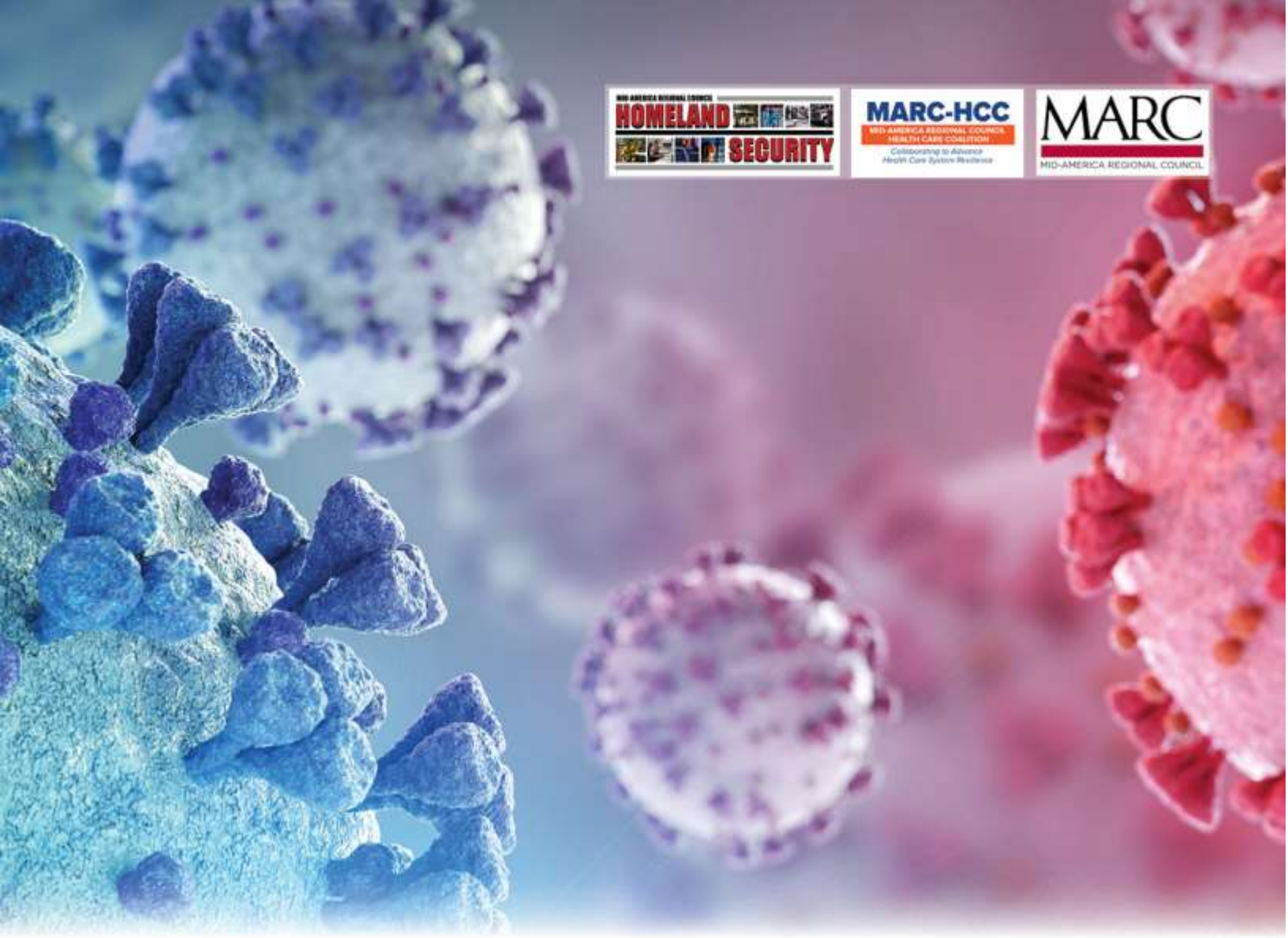
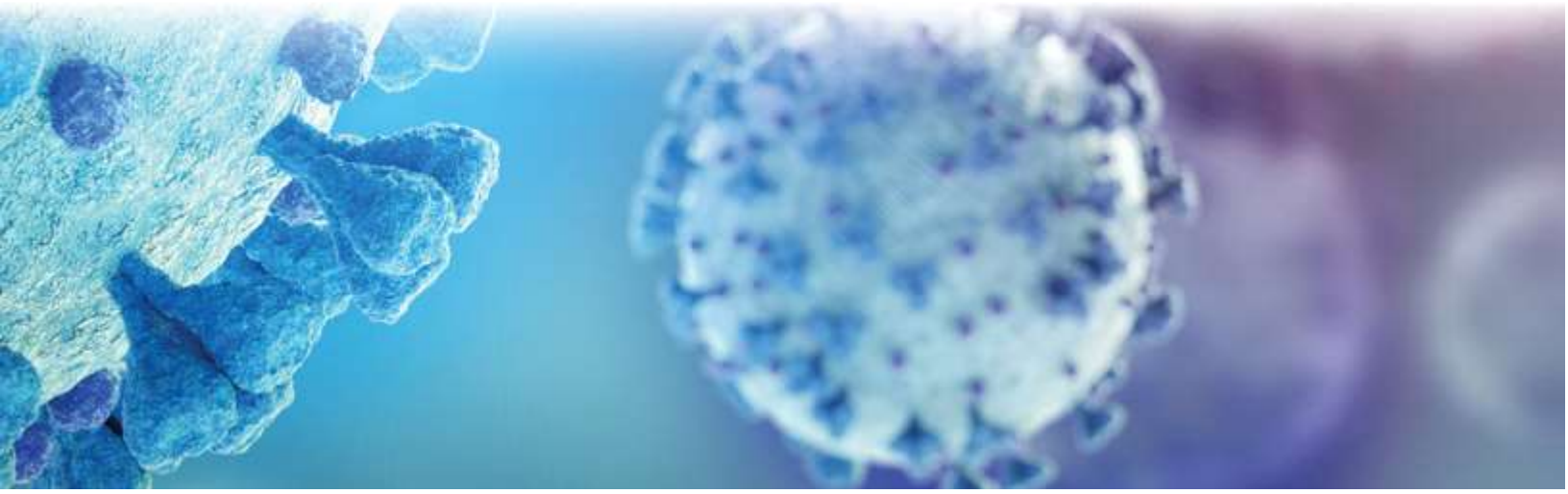


Greater Kansas City Regional Coordination

COVID-19 RESPONSE

After-Action Report | August 2022



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EVENT OVERVIEW

Event Name	Greater Kansas City Regional Response to COVID-19
Event Date(s)	February 28, 2020 (Mid-America Regional Council Health Care Coalition [MARC HCC] Regional Healthcare Coordination System [RHCS] Activation) through March 31, 2022 (Missouri and Kansas transitioned from COVID-19 Pandemic Response to Endemic Response).
Scope	This After-Action Report/Improvement Plan (AAR/IP) is limited to the regional response to the pandemic coordinated through the Kansas City Metropolitan Area Regional Coordination Guide (RCG) as well as the MARC Health Care Coalition (HCC) Response Plan. These documents support local emergency response plans, recognizing that operational emergency activities are coordinated and authorized at the local level through local decision-making protocols. Improvement items identified through this process are summarized in Appendix A. The geographic area covered by this AAR-IP include the Kansas City Metropolitan Area composed of four (4) counties in Kansas and four (4) counties in Missouri, plus the nine (9) counties in the northern and southern districts of Missouri Region A. (See Appendix B for the MARC and HCC Boundaries). The information contained in this report is current as of the date of publication. As of this date, the response and recovery to this incident continues.
Mission Area(s)	Response and Recovery
Core (Target) Capabilities	Healthcare Coordination Capabilities: Healthcare and Medical Response Coordination (Operational Coordination, Information Sharing, Resource Coordination); Continuity of Healthcare Service Delivery; Medical Surge (Enhanced Infectious Disease Preparedness and Surge Response) Public Health Capabilities: Emergency Operations Coordination; Emergency Public Information and Warning; Information Sharing; Mass Care; Public Health Laboratory Testing; Public Health Surveillance and Epidemiological Investigation; Medical Countermeasure Dispensing and Administration Department of Homeland Security Core Capabilities: Operational Coordination; Public Information and Warning; Situational Assessment; Logistics and Supply Chain Management; Public Health, Healthcare, and Emergency Medical Services; Mass Care Services See Appendix C for Analysis of Core Capabilities and Capabilities by Function
Objectives	1. Operational Coordination 2. Establish a Common Operating Picture that facilitates coordinated infectious disease information sharing among emergency response agencies, healthcare organizations, local jurisdictions, and other stakeholders in the bistate region 3. Resource Support and Coordination 4. Coordinate Public Information and Messaging 5. Recovery (accelerate early recovery/support services to mitigate impact)

Threat or Hazard	Pandemic
Real World Event	A novel coronavirus (Severe Acute Respiratory Syndrome Coronavirus 2 – SARS-CoV-2) that resulted in a pandemic outbreak. The illness caused by the virus has been named coronavirus disease 2019 (COVID-19).
Sponsors	Mid-America Regional Council (MARC) Regional Homeland Security Coordinating Committee (RHSCC) Multi-Agency Coordinating Group (MAC G) MARC Health Care Coalition (MARC HCC) including Missouri Region A (Metro, Northern, and Southern Districts) and the Kansas Metro Health Care Coalition
Participating Organizations	Several jurisdictions, agencies, and organizations within the nine (9) counties of the MARC bi-state region, and the northern/southern district of the Region A MARC Health Care Coalition. These include public health departments (18), hospitals (35), emergency management, emergency medical services (EMS), long term care, home care, hospice, Community Organizations Active in Disasters (COAD), Voluntary Organizations Active in Disasters (VOAD), Medical Reserve Corps of Greater Kansas City (MRCKC), and other organizations. In addition, several state and federal partners participated in the regional response coordination. See Appendix D for list of participating agencies and organizations.

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EXECUTIVE SUMMARY

This After-Action Report (AAR) builds on the Interim AAR released in the Fall of 2020 that covered the regional response during the first six (6) months of the pandemic. The goal of the AAR is to identify strengths, areas for improvement, best practices, and lessons learned in the regional response to COVID-19. This report does not address the incredible jurisdictional- or organizational-level responses that have occurred throughout the pandemic, as those will be captured by individual agency/organization specific AARs that are conducted.

The scope, scale, and duration of the COVID-19 pandemic is something the Kansas City region (as well as the rest of the world) has rarely experienced. However, the region was well positioned to respond to the pandemic due to the long-standing collaboration and coordination structures already in place through the Regional Homeland Security Coordinating Committee (RHSCC). See adjacent diagram ("Circle of Friends") of the various committees and organizations that make up the RHSCC. Through the RHSCC, the region has a long history of planning, training, and exercising together to strengthen the region's capabilities to protect residents from a variety of hazards including natural disasters, hazardous materials incidents, terrorism, or public health threats.

The first positive test result for COVID-19 in the region was identified on March 7th, 2020, and involved a resident of Johnson County, Kansas. Thirty days earlier, the mood of the region was quite different as the Kansas City Chiefs held their Championship Parade and Rally. Prior to these events, the region was already leaning forward towards response. The Hospital Committee began monitoring the situation and first discussed at a committee level during their January 2020 meeting, followed by a briefing from public health at the January 30, 2020, RHSCC Strategic Planning meeting. The Hospital Committee began sharing information on COVID-19, conducted a survey to gather essential elements of information (EEI), discussed testing and processes for submitting specimens, and facilitating communication between the public health departments and the hospitals. On February 28, 2020, the MARC Health Care Coalition (MARC HCC) Threat Assessment Team convened, and the decision was made to activate the MARC HCC Regional Healthcare Coordination System (RHSC) and activated an event in the regional incident management sharing platform (eICS). These early discussions positioned the region to quickly respond.

While the event was primarily a public health event with direct impacts on the area hospitals, it soon became apparent that the incident presented challenges beyond the MARC HCC and additional support would be needed. The region quickly stood up the Multi-Agency Coordination Group (MAC G) as outlined in the Kansas City Area's Regional Coordination Guide (RCG). The RCG ensures that a series of formal actions are in place to facilitate communication and cooperation among the many organizations in the region that might be involved in emergency events that require some degree of regional coordination.

Since the established committees could not meet in person due to mitigation measures in place, the groups pivoted to on-line meeting platforms for situational updates and information sharing. These included intra-discipline (e.g., hospitals, public health, emergency managers, long-term care, public information officers and risk communicators, etc.) and inter-discipline (e.g., MARC HCC Steering Committee, public health and hospitals, etc.). These calls (over 800 since the start of the pandemic) were helpful in gathering and sharing information, assessing resource needs, and providing an opportunity to share and hear from other partners on challenges and strategies in responding to the pandemic.

This AAR reviews the regional response in five areas that correspond to the objectives/goals of the MAC G – Operational Coordination, Information Sharing/Situational Awareness, Resource Support and Coordination, Public Information and Messaging, and Recovery. To solicit feedback from the various participants in the regional response to COVID-19, surveys were developed, distributed and analyzed. The survey results were shared with the appropriate MAC-S teams and meetings were held with each group to identify strengths and areas for improvement. Additionally, information learned from interviews and focus group discussions has been incorporated into the document.

Key strengths identified during the after-action review process included:

- The early formation of the MAC G by the RHSCC was helpful in coordination of the regional response as well as beneficial to participants' home agency or organization in that it facilitated information and resource sharing and created trust among peers in other jurisdictions.
- Long-standing committee structures allowed for COVID-19 coordination and information sharing calls to be quickly established across many disciplines. Most participants in the calls were well acquainted with each other through previous planning, training, exercises, committee work, and the networking that these opportunities provide.
- Through the MAC G, the region created several products to assist in providing a common operating picture to better understand the overall situation for the region.
- Acquisition of personal protective equipment (PPE) through regional efforts including the establishment of cooperative purchase agreements, list of potential PPE vendors, donation management, and access to state and federal caches of PPE.
- Established public information groups were helpful in developing regional common messaging language to provide information to the public through multiple channels. As the pandemic progressed, the groups were able to connect with private sector partners in developing other messages and campaigns to mitigate the transmission of the virus, encourage vaccination, and assist businesses in reopening.

Every disaster or crisis reveals challenges and COVID-19 was no exception. The following are some of the major opportunities for improvement identified during the after-action review process:

- The MAC G is a relatively new concept for the region, and there was some misunderstanding of the role and authority of the MAC G. It is a unified coordination group that is stood up during a significant disaster event that impacts multiple jurisdictions and necessitates regional coordination. Many respondents to the AAR surveys indicated that the MAC-G concept is not well understood beyond the emergency management field or those directly involved. Efforts to engage elected officials and private sector partners in the concept and operation of the MAC G should be pursued.

- Assure that community organizations, schools and business partners that are not routinely part of existing planning groups are included in the response coordination meetings and that their information needs are met.
- The COVID-19 exposed the need to invest more in public health infrastructure, so local public health departments are adequately resources (staff and equipment) to appropriately respond to epidemics, pandemics, and other public health emergencies.
- Continue to support and promote mental health and workforce resilience in the public health, healthcare, and emergency services sectors.

The identified strengths outlined in this AAR should be maintained and memorialized for future disaster response efforts. The areas for improvement should be reviewed and, where feasible, implemented to strengthen future response efforts.

PURPOSE

This Regional COVID-19 Response After Action Report (AAR) has been developed to identify strengths, areas for improvement, best practices, and lessons learned from the regional response to the COVID-19 pandemic, coordinated by the Multi-Agency Coordination Group (MAC G) that was established by the Regional Homeland Security Coordinating Committee (RHSCC). The development of this document has been coordinated by the MAC-S Planning Section of the MAC G. The aim of completing this after-action process is to improve the regional response to future disasters and is not intended to conflict with other ongoing reviews by agencies and organizations within the region.

This report builds on the Interim AAR that was completed in the Fall of 2020 (covering the events from late January 2020 through July 31, 2020) through March 31, 2022, when Kansas and Missouri transitioned from pandemic response to endemic response. However, COVID-19 response and recovery actions in the region continue.

This report focuses on the regional response to COVID-19 and does not address specific jurisdictional- or organizational-level responses outside of regional coordination as those will most likely be captured by their agency/organization specific AARs. Throughout the pandemic, there have been several political and societal challenges and constraints that have impacted the response, that are outside the scope of the regional response coordination and this AAR.

METHODOLOGY

To solicit feedback from the various participants in the regional response to COVID-19, surveys were developed and distributed. For the Interim AAR, two (2) surveys were deployed – one for the MAC Group and another for emergency services and health & medical response partners representing various committees and disciplines including public health, hospitals, emergency medical services, emergency management, long term care, the Community Disaster Resiliency Network (CDRN) and groups representing vulnerable populations, and others involved in the regional response. For this AAR, questions were updated for the MAC Group and emergency services and health & medical response partners. An additional survey was developed specifically for the MAC-S team. In addition to the surveys, information gathering interviews were conducted with other partners and stakeholders involved in the regional response including those from the private sector, business groups and associations, and philanthropic organizations.

Information on the regional COVID response was also solicited during city manager focus groups conducted as part of the RHSCC Model Analysis project.

The results from each of the three (3) most recent surveys were analyzed and themes identified. The survey results were shared with the appropriate MAC-S teams and meetings were held with each group (Operational Coordination [MAC S Chiefs and HCC Co-chairs], Resource Support, Information Sharing/Situational Awareness/Common Operating Picture, Public Information and Messaging, and Recovery). The groups reviewed and updated the status of the Improvement Plan items from the Interim AAR and reviewed the survey results and identified additional strengths and areas for improvement. Additionally, information learned from interviews and focus group discussions has been incorporated into the document. See Appendix E for a summary of the survey results.

In addition to any new Improvement Plan recommendations identified from the most recent surveys and focus groups, the improvement items from the Interim AAR (along with the current status) are also included in this document. The draft report AAR-IP was provided to the MARC HCC for review, input, and recommendation for approval at the August 22, 2022, meeting, with the final report and improvement plan submitted to the RHSCC on August 31, 2022, for final approval.

REGIONAL RESPONSE REVIEW

In late January 2020, various committees of the Regional Homeland Security Coordinating Committee (RHSCC) began monitoring the situation that began in Wuhan, China involving cases of pneumonia of an unknown cause (coronavirus), as well as the early U.S. federal response activities. This novel virus was discussed at the January 22, 2020, RHSCC Hospital Committee meeting and a briefing from public health was provided at the January 30, 2020, RHSCC Strategic Planning meeting. These early discussions positioned the region to quickly respond once the coronavirus was identified locally. See Appendix F for the Select Milestone and Response Actions Timeline.

OPERATIONAL COORDINATION

After monitoring the progression of the virus in the US, the MARC Health Care Coalition (HCC) Threat Assessment Team convened on February 28, 2020, and a decision was made to activate the MARC HCC Regional Healthcare Coordination System (RHCS) and open an incident in eICS (Electronic Incident Command and Incident Management System used by MARC HCC partners) to monitor the event and provide a platform for information sharing and situational awareness.

While the event was primarily a public health event with direct impacts on the regional hospitals, it soon became apparent that the incident presented challenges beyond the HCC and additional support would be needed as public health and hospital partners were heavily involved in their own response operations and had limited capacity to work on regional response activities. Recognizing this situation, the region quickly stood up the Multi-Agency Coordination Group (MAC G) as outlined in the Kansas City Area's Regional Coordination Guide (RCG). See Figure 1 for the organizational structure of the MAC G. The RCG ensures that a series of formal actions are in place to facilitate communication and cooperation among the many organizations in the region that might be involved in emergency events that require some degree of regional coordination. Participation is voluntary and the concepts are flexible.

Portions of the plan that were activated early in the pandemic included:

- Information and Planning (ESF 5)
- Mass Care, Emergency Assistance, Temporary Housing and Human Services (ESF 6)
- Logistics (ESF 7)
- Public Health and Medical Services (ESF 8)
- Community Recovery (ESF 14)
- Emergency Public Information (ESF 15)

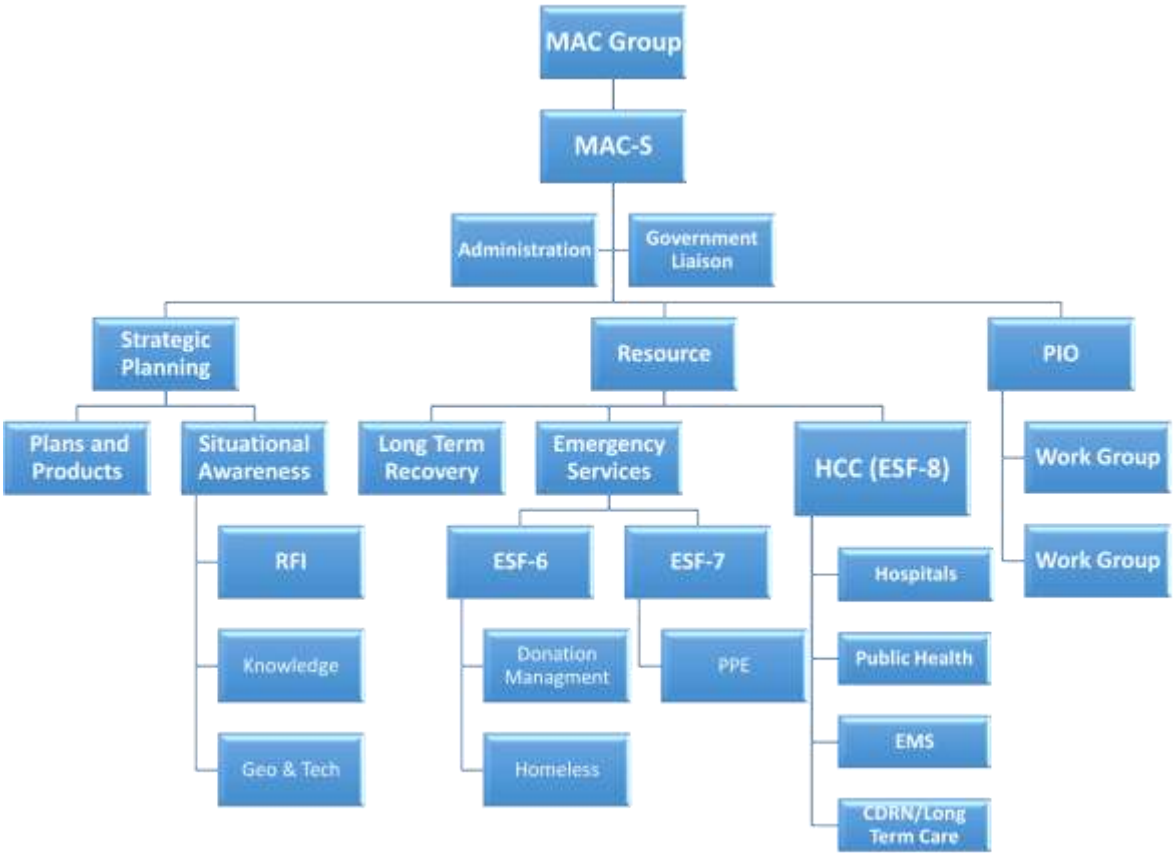
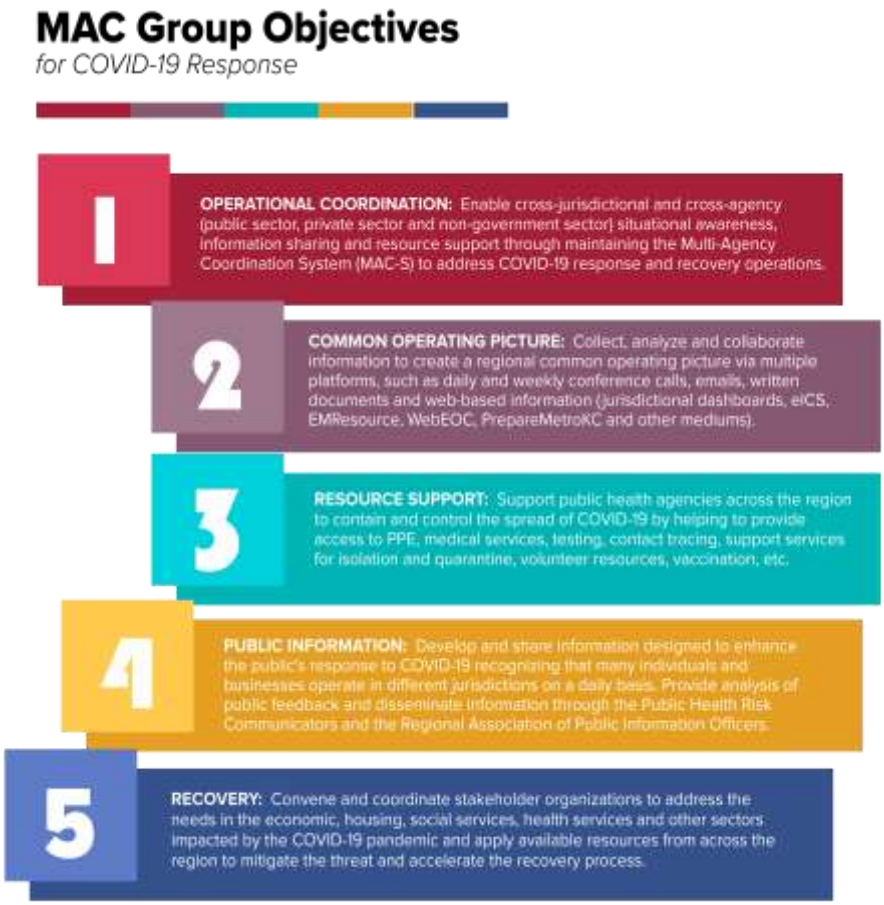


Figure 1 - MAC G Organizational Structure

PURPOSE

The primary purpose of the COVID-19 MAC Group was to broaden situational awareness through enhanced communication across the various disciplines and jurisdictions involved in incident response and recovery. The five identified objectives/goals for standing up the MAC Group in response to COVID-19 are listed in the adjacent table. The COVID-19 MAC Group assembles key leaders to share information in order to inform independent decisions and, as needed, to build consensus for decisions that have multi-jurisdictional implications. The MAC G assists in identifying and coordinating potential partners, support services and resources to respond to the event.



The actual administration and decision-making authority are maintained locally per existing jurisdictional plans and procedures. To support the mission of the MAC G, the MAC-S structure was put in place with four sections: Emergency Public Information, Resource Support, Strategic Planning, and Recovery. On April 7th, 2020, the first meeting of the MAC G was held. Meetings have continued during the response to the COVID-19 pandemic, pausing during periods of low transmission or when there were no pressing issues to address.

The survey results from 2020 and 2022 indicate that the MARC HCC and the MAC G organizations were very effective in the regional response to COVID-19. Identified areas for improvement include formalized personnel rotation schedules for the MAC-S and to ensure representation and information pertaining to both states. The identified strengths and areas for improvement for Operational Coordination are listed below.

Strengths/Areas to Sustain

Strength 1.1: The formation of the Multi-Agency Coordination Group (MAC G) to formalize and enhance regional coordination across the various disciplines and jurisdictions involved in the response and recovery to the pandemic. Based on the responses to the 2020 Survey, the top factors that influenced MAC G survey participants willingness to engage in regional coordination during an emergency event were 1) "better ability to provide information and resources to my organization", and 2) "established relationships and trust among peers in other jurisdictions". For the MAC G calls, 76% of the respondents indicate that the meetings were a "high priority", and they attend as much as

possible. From the 2022 Survey, 54% of the respondents rated the effectiveness of the MAC G as "Very" or "Extremely Effective".

Strength 1.2: The MARC Health Care Coalition (HCC) was effective in helping the region respond to COVID-19. Fifty-four percent of the respondents to the 2022 Survey indicated that the MARC HCC was effective in supporting the regional healthcare community response to COVID-19. For those that had a role in the HCC, 83% of the respondents to the 2022 Survey indicated that the MARC HCC was "very effective" or "extremely effective" in helping the region respond to COVID-19.

Strength 1.3: The MAC-S was effective in assisting the region in responding to COVID-19. One hundred percent of the respondents to the 2020 Survey that had a role in the MAC-S rated the effectiveness of the MAC-S as "good" or "excellent". Strengths identified include information sharing, communication, clearly defined roles and assignments, and the use of Microsoft Teams as a platform for collaboration.

Strength 1.4: Longstanding relationships with state and federal partners that pre-date the pandemic has been beneficial throughout the response. These contacts at the federal, regional, and state level have been very accessible and have participated in regional coordinating calls, assisted in resolving issues, being accessible to answer questions, and otherwise contribute to the regional response.

Strength 1.5: Bi-State representation on the MAC G was identified as a strength in assuring that both states had fair and equitable representation across the MAC. This bi-state representation on regional committees has been a long-standing practice used across all RHSCC committees.

Strength 1.6: The ability to expand the network of partners the region engaged with during the response was identified as a strength and demonstrated that the operational coordination structure was flexible/agile to quickly expand to pull in additional partners (e.g., vaccination partners, public information and messaging, etc.).

Strength 1.7: The operational coordination through the MAC G and MARC HCC in advocating for state/federal resources was very successful in getting needed resources to the area. These included the monoclonal antibody (mAbs) sites (University Health and Bothwell Regional Health Center) supported by the Missouri Disaster Medical Assistance Team (DMAT), and the federal medical team deployed to the area (Research Medical Center).

Areas for Improvement

Area for Improvement 1.1: Formalize personnel rotation schedule was identified as an opportunity to improve the MAC-S. There is also a need to develop processes to quickly onboard volunteers to work within the MAC-S structure.

> **Analysis:** Most of the individuals serving in positions within the MAC-S have full-time jobs within their respective agency/organization and assist with their local response. Approximately 89% of the respondents to the MAC-S 2022 Survey had been serving on the MAC-S for 18 or more months, with 72% serving since the beginning of the pandemic. Several comments in the surveys recommend regular rotation of personnel on the MAC-S and the importance of building the bench strength of qualified staff that can serve on the MAC-S.
>
> There are no clear written guidelines for the process to bring on volunteers – e.g., non-disclosure agreements, background checks, reference checks, orientation to position responsibility, and MAC-S organizational structure.

Area for Improvement 1.2: Provide a forum where elected and appointed officials can openly and honestly communicate, and to plan for coordinated responses to the pandemic.

Analysis: The 2020 MAC G survey asked an open-ended question: "The MAC Group was most successful when _____." Several respondents indicated that once the media started to attend the MAC G meetings, communication between elected and appointed officials was not as open and candid and attendees believed that they could not speak as freely due to the presence of members of the media. The 2022 Survey included similar comments. Following the Interim AAR, counsel was engaged to determine if the MAC G meetings could be closed to non-participants. This analysis indicated that these meetings are open meetings as defined by existing regulations.

Area for Improvement 1.3: Ensure there is routine representation and information pertaining to both states. Recognizing the region is bi-state and that can sometimes create challenges. Some comments were received that much of the information was specific to Missouri. There were some challenges with access to data and information sharing conduits with the state of Kansas.

Analysis: Representatives from the MAC G, MAC-S and HCC routinely participated in daily state level calls for Missouri and were able to bring information back to the regional calls. Sometimes the same routine direct access to information was not readily available for the Kansas side, or the Kansas representatives were unable to participate in regional calls due to competing demands. It is suggested that the region pre-identify multiple contact points within Kansas for data access and information sharing opportunities instead of relying on single points to relay information. For specific issues in both states, long standing relationships between local officials, MAC and MARC and state officials in KDHE, KDEM, DHSS and SEMA have been invaluable.

Area for Improvement 1.4: Develop awareness as to the role of the MAC G in a large-scale incident.

Analysis: Comments from the 2020 Survey indicate some misunderstanding of the role and authority of the MAC G. The MAC G is designed to be a unified coordination group during a significant disaster event that impacts cross-jurisdictional boundaries and necessitates regional coordination. The MAC G identifies and coordinates potential partners, support services and resources, but the actual administration and decision-making authority is maintained locally per existing plans and procedures. The MAC G convenes key leaders to share information in order to inform independent decisions and, as needed, to build consensus for decisions that have multi-jurisdictional implications. A question in the 2022 Survey asked how well the MAC G organization is understood in the region. Respondents indicated that it is not well understood beyond the emergency management field or those directly involved, although some other partners have become more knowledgeable of the existence of the MAC G. During the focus group meetings with city managers in the region, there was agreement that the MAC G was successful in supporting the region, but limited agreement in how the MAC G supported their local jurisdiction in COVID-19 response. City managers commented that there was a lack of understating as to the role of the MAC G and suggested work on "branding". Additional efforts to engage elected officials and private sector partners in the concept and operation of the MAC G should be pursued.

Area for Improvement 1.5: Preplanning is necessary to identify strategies to connect with other existing and spontaneous groups that are involved in regional response to minimize duplication, deconflict, and support each other's efforts including other elements of health care, business and civic organizations.

Analysis: The COVID-19 pandemic has affected all sectors of the community (individual, government, business, organizations, health care, schools, etc.). There was both a desire and a need to mobilize all sectors to work together to address information needs and resource demands. Since the Interim AAR,

coordination and engagement with other partners involved in the response expanded. Current regional plans do not adequately account for this aspect.

Area for Improvement 1.6: Ensure that the needs of vulnerable populations are being considered and addressed within the MAC Structure.

Analysis: While existing committees and groups are in place to address the impact of COVID-19 on vulnerable populations, comments from the 2020 Survey indicated that the needs of vulnerable populations should be addressed within the MAC structure. Several regional actions have been taken during the subsequent response to address vulnerable populations such as the development of the vaccine vulnerability index placed on the Regional COVID-19 Data Hub, and the work of the CDRN (e.g., access to PPE and other reopening resources for schools and childcare facilities). In addition, agencies and organizations within the region did an exceptional job in addressing the needs of vulnerable populations through placement of testing and vaccination sites in underserved areas, outreach, distribution of resources, and allocation of grant funds to make the most impact.

Area for Improvement 1.7: Review and update response plans at the appropriate time.

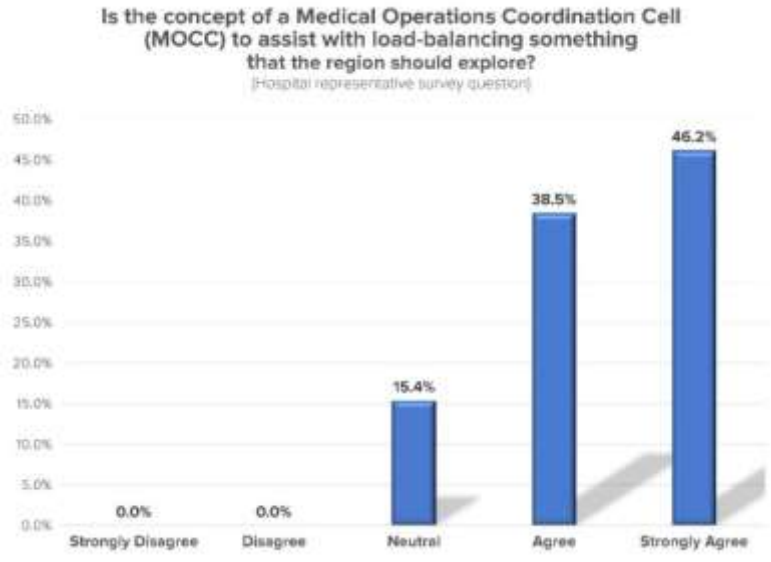
Analysis: Several operational coordination processes have been put in place during the regional COVID-19 response. In the Interim AAR/IP, it was recommended that the processes that were successful in the response operations be incorporated into the appropriate plans. Since that time, the MAC Annex has been added to the Regional Coordination Guide (RCG) Emergency Support Function (ESF) #5 (Emergency Management), as well as updates to the MARC HCC Response Plan.

Area for Improvement 1.8: Evaluate opportunities to stand-up a MAC G during a regional exercise.

Analysis: The MAC G is a relatively new operational coordination concept for the region and has only been used recently during an actual event. Emergency managers suggest that the region establish a MAC G during an exercise, with an appropriate scenario.

Area for Improvement 1.9: Explore the feasibility of establishing a Medical Operations Coordination Cell (MOCC) through the MARC HCC.

Analysis: Several regions across the country implemented MOCCs or other initiatives to handle patient transfers or move patients from overloaded facilities to ones with capacity (load-balancing) so that the highest possible level of care can be provided to all patients who need that care before transitioning hospitals toward crisis standards of care. Eighty-five percent of the hospital representatives that responded to the 2022 Survey agreed or strongly agreed that the concept should be explored in the region. See adjacent Chart.



INFORMATION SHARING / SITUATIONAL AWARENESS

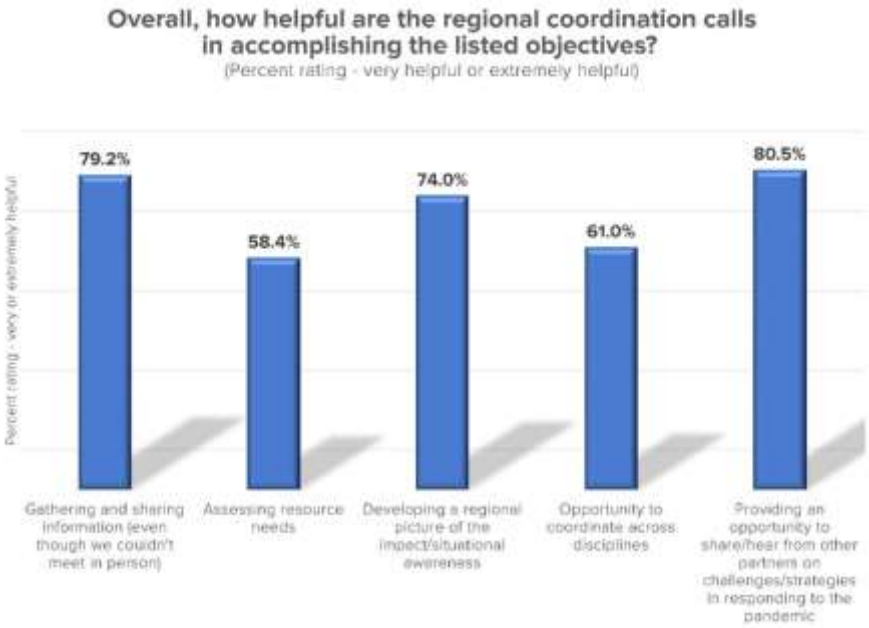
To assist in sharing information and situational awareness regarding the impact of COVID-19 and the regional response, over 800 coordinating calls were held that included intra-discipline (e.g., hospitals, public health, emergency managers, long-term care, etc.) and inter-discipline (e.g., MARC HCC Steering Committee, public health and hospitals, etc.). While there have been some adjustments in meeting cadence and consolidation, many of these meetings continue.

The importance of data has been well recognized throughout the pandemic in assisting in decision-making, directing public health interventions, prioritizing distribution of resources, and allocating grant dollars. In order to provide a regional common operating picture, the KC Region COVID-19 Resource Hub was created to share data about COVID-19 cases and aid users with finding information from city, county, state, and national sources relative to operations during the COVID-19 response. This regional resource hub has continued to evolve and improve as better data has become available. Additional information sharing/situational awareness/common operating picture products have been developed and were identified as being helpful in response operations. Areas for improvement identified through the survey and review meetings include a need to invest more in public health infrastructure, and to better define and obtain consistent access to essential elements of information (EEI).

The identified strengths and areas for improvement for Information Sharing / Situational Awareness / Common Operating Picture are listed below.

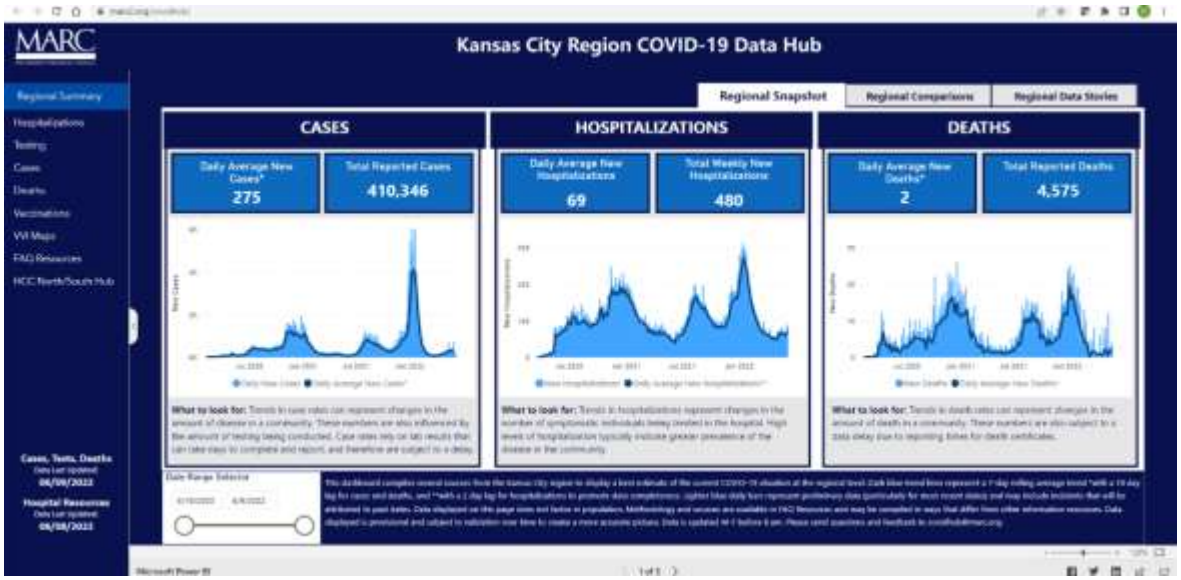
Strengths/Areas to Sustain

Strength 2.1: Long-standing committee structures allowed for COVID-19 coordinating calls to be quickly establishment across many disciplines as well as calls involving representatives from many different organization types for cross-functional coordination. Most participants in the calls were known to each other through previous planning, training, exercises, committee work, and the networking that these opportunities provide. Regional response partners appreciate the opportunity to share issues, ideas and strategies with different agencies and organizations and discussing how they can help each other in their response operations. From the 2020 Interim AAR Survey, 59% of the respondents indicated that the calls were "Very Helpful" or "Extremely Helpful". For the MAC G calls, 76% of the respondents indicate that the meetings were a "high priority", and they attend as much as possible. From the 2022 Survey, respondents were asked to rate the helpfulness of the regional coordination calls in accomplishing listed objectives. Eighty percent of the respondents indicated that providing an opportunity to share/hear from other partners on challenges/strategies in responding to the pandemic was "very helpful" or "extremely helpful". See adjacent chart.



Strength 2.2: Existing information sharing platforms (e.g., WebEOC, eICS, EMResource) provided the necessary mechanisms for agencies and organizations to share information and situational awareness with other response partners. From the 2020 Survey, 54% of the survey respondents rated these platforms as "Very Helpful" or "Extremely Helpful". This increased to 61% during the 2022 Survey. For the primary disciplines using eICS and EMResource (hospitals and EMS agencies), 75% rated those as "Very Helpful" or "Extremely Helpful", and for Emergency Management (the primary user of WebEOC), 70% rated the platform as "Very Helpful" or Extremely Helpful".

Strength 2.3: The region developed several products to assist in providing a common operating picture to help in understanding the overall situation for the entire metro area, as well as the Northern and Southern Districts of the MARC Region A HCC. The on-line KC Region COVID-19 Data Hub (screen image below) was developed to share



information about COVID-19 cases and aid users with finding information from local, state, and national sources relative to response operations during the COVID-19 pandemic. Information that feeds into the Data Hub was harvested from the jurisdictional public health departments to avoid redundant work for the health departments and to assure regional numbers match with what the departments are reporting. This provided the region with one location where the jurisdictional data was aggregated and presented in a regional view. This was very helpful for organizations and businesses with locations in multiple jurisdictions. Philanthropic organizations also found the

information helpful as they worked to direct their outreach where most needed. During the 2020 Survey, 61% of survey respondents rated the Regional Data Hub as "Very Helpful or Extremely Helpful". This increased to 83% in the 2022 Survey, showing that the use and helpfulness of the Data Hub increased as the pandemic progressed, and improvements were made to the platform.

Strength 2.4: Hospitals were able to quickly pivot during the many changes in data reporting platforms (i.e., EMResource, National Healthcare Safety Network [NHSN], TeleTracking) used to capture Essential Elements of Information (EEI) related to COVID-19. Through much effort and problem solving, the region was able to access data collected, and prepare and present in a format that contributed to the regional Common Operating Picture.

Strength 2.5: With differences between jurisdictions regarding reopening plans and mask requirements, regional documents were prepared to assist in understanding the differences. These resources were placed on the

Metropolitan Emergency Managers Committee (MEMC) PrepareMetroKC.org publicly available website. These crosswalks were found to be helpful by approximately 80% of the 2020 Survey respondents.

Strength 2.6: The use of the video meeting platforms allowed for the various response groups (e.g., emergency managers, hospitals, public health, EMS, RAPIO, etc.) to continue to communicate, collaborate, and coordinate while allowing various options for the participants to engage (i.e., video, audio only, and the chat function). The groups rapidly adapted to virtual meetings.

Strength 2.7: MARC HCC representatives participated in COVID-19 calls conducted by the other Missouri HCC's (St. Louis/STARRS Region C HCC and MHA Non-Urban HCC) to listen and share information/situational awareness for the region. This sharing of information between HCCs was recognized by U.S. Health and Human Services – Assistant Secretary for Preparedness and Response (HHS-ASPR) as a best practice. *(Note: in July 2022, HHS elevated ASPR from a staff division to an operating division, taking on the new name of the Administration for Strategic Preparedness and Response).*

Areas for Improvement

Area for Improvement 2.1: Developing a regional common operating picture has been difficult due to the initial lack of defined essential elements of information (EEI) specifically for a pandemic, and different definitions used by public health agencies at the local and state level.

> **Analysis:** While several EEI have been previously identified for various incidents, pandemic specific EEI were lacking. While some EEI may appear straightforward (e.g., number of cases, tests conducted, hospital bed availability, positivity rate, outbreaks, etc.) differences in definitions can make it difficult to interpret the numbers and make comparisons to other areas. Since the Interim AAR, there is more consistency in terminology and the overall situation has improved. Regarding EEIs, information from HHS-ASPR indicated that EEI reporting for grant requirements is suspended until further notice while CMS, CDC, and ASPR leadership are in discussions regarding how to coordinate EEI reporting efforts. (*From HPP FOA EP-U3R-19-001, June 12, 2021*).

Area for Improvement 2.2: The region struggled with getting consistent access to essential elements of information (EEI) from hospitals (e.g., COVID-19 positive patients, and availability of beds, ICUs, ventilators, etc.) as the collection of the information was moved from a local platform (EMResource) to federally mandated platforms (NHSN and TeleTracking).

> **Analysis:** Access to hospitalization data was challenging during the early stages of the pandemic. Initially, hospitals in the Region were providing data in EMResource through various queries from Missouri and Kansas. EMResource has been the platform hospitals have used for many years to provide EEI for daily capacity and capability as well as during mass casualty events. As the event progressed, hospitals were then required to input data into the National Healthcare Safety Network (NHSN) system. MARC data staff did not have access to the NHSN data, although Missouri Hospital Association (MHA) had Missouri hospital data and could provide information for Region A (Missouri only). After much effort, permissions were obtained to allow MARC access to the NHSN data. The reporting was then moved to a different platform (TeleTracking), further delaying access and analysis of the data. Through much effort, access to the data was obtained via HHS Protect and regional hospital data could finally be reviewed and analyzed. In order to eliminate issues with

access to this data, it is recommended that pre-event agreements between appropriate federal/state/local agencies be established to allow data sharing/linking to regional data hubs.

Area for Improvement 2.3: Review meeting frequency, agenda management, consolidation opportunities, meeting length, and material availability for the various committees and coordination calls.

Analysis: While the overall scores in the 2020 Survey for the coordination meetings were overwhelmingly positive, a number of suggestions were provided including the need to streamline some of the calls (i.e., frequency, content, report-out process, and possible call consolidation); presentation (i.e., graphics too small, encourage participants to use video, access to the information presented during the meeting); and a summary of meetings made available for those not able to attend. Many of these recommendations have been implemented; however, comments in the 2022 survey continue to request agendas and meeting summaries to include key decisions made, action items and assignments.

Area for Improvement 2.4: Assure that community organizations, schools and business partners that are not routinely part of existing planning groups, are included in the response coordination meetings and information they need is provided.

Analysis: Feedback from the 2020 Survey mentioned a need for more participation from "community organizations" such as businesses, schools and community partners as the focus cannot be entirely on healthcare. As the pandemic continued, these organizations became more engaged with the various committees and task forces established (e.g., Vaccine Workgroup), and relationships were formalized such as adding a public-school liaison to the RHSCC. It was also recommended that a diagram/chart be developed to map out where and how to connect during these events to engage more fully/formally.

Area for Improvement 2.5: Improve Data Hub and develop a generic or standard all-hazards Data Hub that could be used for future events beyond pandemic.

Analysis: Feedback indicated a desire to develop a Data Hub that could be used for other events that have a regional impact. There were also suggestions to improve the hub (e.g., mobile device compatible, visualization, user interface, the ability to extract usage data, etc.).

RESOURCE SUPPORT AND COORDINATION

The region provided resource support and coordination through a variety of methods. A Resource Support Section was established as part of the MAC Group to provide information and resources on personal protective equipment (PPE) acquisition and conservation and other emerging needs such as testing capacity and capability, and contact tracing to augment local public health efforts. Resource support efforts that were included in the interim AAR included the cooperative purchase agreement for PPE and the PPE/COVID supplies vendor list. Since the interim AAR was completed, access to PPE has significantly improved. With the approval of COVID vaccines, new challenges were encountered in obtaining vaccines and supplies in December 2020 and early 2021. Staffing issues were also a significant challenge in the region due to COVID-19 illnesses as well as resignations.

COVID-19 has revealed critical shortcomings in the health care supply chain as shortages of PPE, ventilators, and cleaning/disinfecting supplies (e.g., hand sanitizer, disinfecting wipes, etc.) hindered the ability of hospitals, long term care, EMS, and others to respond during the early stages of the pandemic. During the Delta and Omicron surges, agencies and organizations were impacted by critical staff shortages that significantly affected their response.

Most agencies and organizations rated their preparedness for resource shortages experienced during the initial onset of the pandemic as "Poor" or "Very Poor". The region assisted in the acquisition of PPE through several strategies including regional purchasing cooperative for PPE and contact tracing assistance, developing a list of potential PPE vendors, facilitating access to SNS/state PPE caches, and the regional donations management system. As supply inventories were at critically low levels, regional agencies and organizations implemented several resource conservation/optimization strategies to better manage scarce resources.

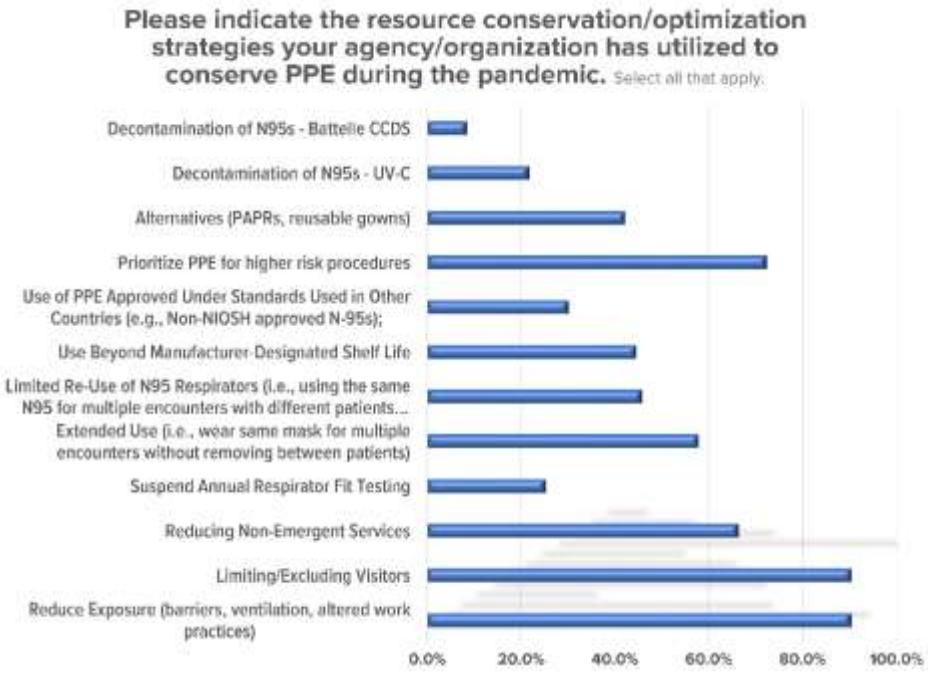
The survey results show that partners rated regional resource support and coordination activities as very effective. The surveys and review meetings identified several areas for improvement including exploring the development of regional stockpiles/caches of PPE, increase preplanning in donations management, and revisions to existing plans to incorporate some of the lessons learned regarding acquisition of resources (e.g., the regional purchasing cooperative).

The identified strengths and areas for improvement for Resource Support and Coordination are listed below.

Strengths/Areas to Sustain

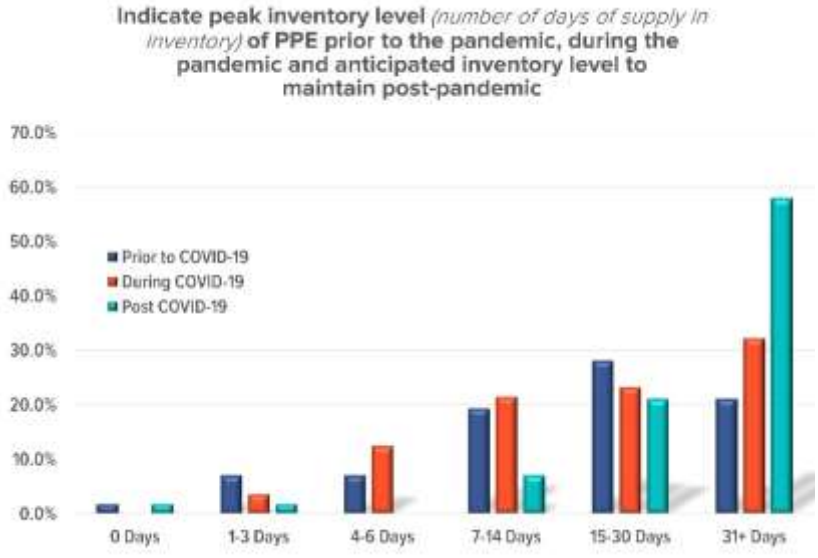
Strength 3.1: At the onset of the pandemic, most organizations and agencies were not prepared for the resource shortages, with only 28% of respondents rating their preparedness level at "well" or "very well". However, agencies and organizations responded well to the critical supply chain issues. From the 2020 survey, most organizations (66%) rated their response to the shortages as "Well" or "Very Well".

Strength 3.2: Due to the critical PPE supply shortages, agencies and organizations effectively implemented conservation and optimization strategies to prolong their inventories of PPE to protect staff. Hospitals reduced many non-emergent services, visitors were excluded/limited at many healthcare and public buildings, PPE was prioritized for higher risk procedures, decontamination of N95s to allow reuse, and other optimization strategies all allowed organizations to conserve PPE and stretch their inventories (see adjacent chart).



Once PPE became more readily available, agencies and organizations worked to increase their inventory levels and many

plan to maintain higher levels post-pandemic (see adjacent chart). Agencies and organizations also implemented several other strategies and changes in their supply chain/materials management process to address logistical challenges to increase resiliency. These include diversifying suppliers, moving away from just-in-time delivery models for critical supplies, purchasing of additional transportation equipment and storage space, vetting suppliers and manufacturers of critical supplies, etc.



Strength 3.3: Agencies and organizations that were at a critical stage in resource needs knew where to request assistance (93% of survey respondents, 2020 survey). Emergency Management agencies were frequently turned to for critical resource needs and responses to the survey indicate that they were able to deliver (41% rating their effectiveness in addressing needs as "Very Effective" or "Extremely Effective").

Strength 3.4: Area jurisdictions worked together to purchase PPE and other COVID-19 related supplies in bulk to lower costs and to meet minimum order quantities (MOQs) established by vendors during the pandemic. This cooperation allowed agencies to meet MOQs and acquire PPE and supplies at better pricing.

Strength 3.5: Utilizing the MARC Region A HCC to access the Missouri Department of Health and Senior Services (MO DHSS) Strategic National Stockpile (SNS) cache process was identified as a strength. Nearly 2900 healthcare organization PPE requests were reviewed and approved through the MO SNS process from March 2020 through March 2022 for Missouri Region A. From the 2020 survey, 57% of survey respondents rated the effectiveness of this source for PPE as "Very Effective or Extremely Effective". As access to PPE has improved, the number of requests from the region have decreased from approximately 300/month to approximately 40/month.

Strength 3.6: The establishment of Cooperative Purchase Agreements for PPE and to augment contact tracing and human resources support was identified as a strength. The Kansas City Regional Purchasing Cooperative and *List of Potential PPE Vendors* were also identified as strengths with 54% of 2020 survey respondents rating the use of the regional purchasing cooperative as "Very Effective" or "Extremely Effective". For the *List of Potential PPE Vendors*, 65% rating the document as "Very Effective" or "Extremely Effective".

Strength 3.7: Early recognition by emergency managers of the need to establish a regional donation management process to augment local donation management efforts. This included activating AmeriCorps, establishing a warehouse to receive donations, setting up a centralized number via 211 United Way to connect targeted in-kind donations with Emergency Support Function 6 (ESF-6) – Mass Care agencies, resulting in approximately 100 organizations receiving donations through July 2020.

Strength 3.8: The region worked well in identifying potential Alternate Care Sites (ACS) in the event there was a need due to capacity issues at the area hospitals. Representatives from hospitals, public health, emergency management, and EMS worked with US Army Corps of Engineers and MO National Guard to identify potential sites that could be used for patients from throughout the bistate metro area. While an alternate care site for the region was never established, going through the process of pre-identifying potential sites was helpful.

Strength 3.9: Local businesses responded to the COVID-19 supply needs of healthcare and emergency services organizations by retooling operations to manufacture PPE and formulate hand sanitizer, as well as sourcing PPE through alternate supply chains. Many agencies and organizations supported these efforts by purchasing these locally produced products.

Strength 3.10: The resource support section set up regional PPE warehouses to assist partners in addressing PPE shortages. These include the warehouses established in Lee's Summit, Miami County, and Liberty. The resource section also assisted area childcare providers with supplies including PPE and cleaning materials to allow safe reopening and continued operation.

Strength 3.11: The Medical Reserve Corps of Greater Kansas City (MRCKC) provided much needed assistance to several agencies and organizations throughout the region, in support of COVID testing, vaccination, contact tracing, and home visits. Agencies and organizations that were supported by the MRCKC included public health agencies, emergency preparedness partners, health care organizations, academic institutions, faith-based partners, and other government agencies. During the early stages of the COVID response, the number of volunteers surged from approximately fifty (50) to seventeen hundred (1700). During 2021, MRCKC members volunteered more than 66,000 hours. The work of the MRCKC was recognized through several awards and grants, as shown in the adjacent table.

medical reserve corps Greater Kansas City

Awards and Grants Received 2020-2022

Awards	Grant Awards
National MRC Awards (Innovator, Volunteers) 2021	Points of Light, Service Enterprise, Kansas Volunteer Commission
National MRC Awards (Volunteer Honorable Mention) 2022	Kansas Volunteer Commission Mini-Grant 2021, 2022
State of Missouri Senior Volunteer Awards 2021	National Association of County and City Health Officials (NACCHO) RISE 2022
City of Independence, Missouri, 2021	NACCHO ORA 2020, 2021, 2022
	Mid-America Regional Council 2021-2022

Strength 3.12: The MARC HCC assisted hospitals with resource needs during the Omicron variant surge. The established process for HCC members to reach out to the MARC HCC Duty Officer via a 24/7 number to convene a call with coalition leadership (Threat Assessment Team) to assist in resolving resource needs was successfully used to address several requests.

Strength 3.13: Assistance was provided to support public health during regional vaccination efforts including efforts focusing on vulnerable populations.

Strength 3.14: Utilization of existing pre-disaster committees such as COAD and VOAD to lead ESF-6 efforts.

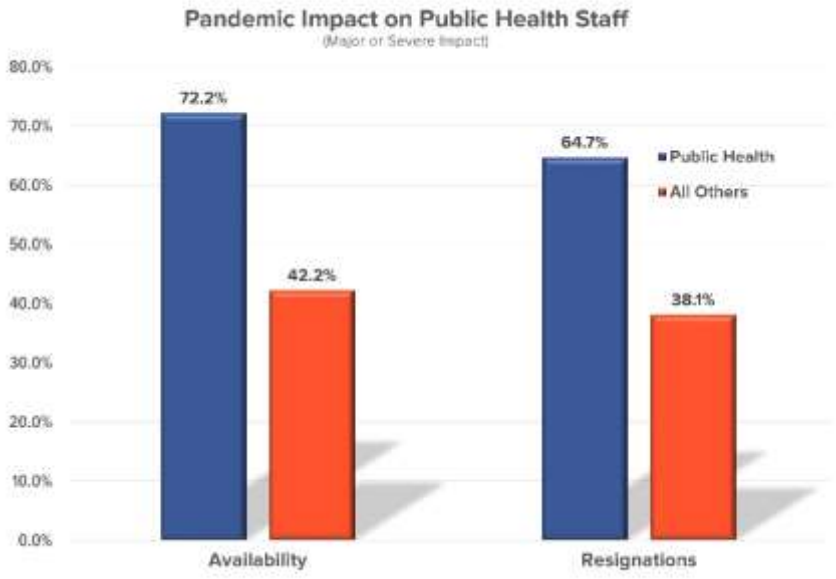
Strength 3.15: The MARC HCC assisted in the federal medical team request process for one of the region's acute care hospitals. The assistance in the request for the placement of this team was beneficial in increasing transfer acceptance rates as well as increased capacity within the facility.

Areas for Improvement

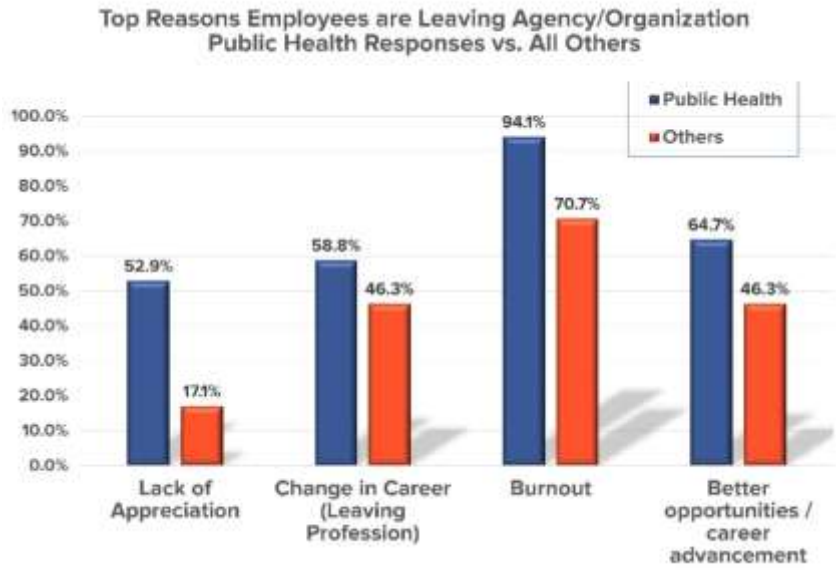
Area for Improvement 3.1: There is a need to invest more in public health infrastructure, so public health departments are adequately resourced (staff and equipment) to immediately respond to epidemics, pandemics, and other public health emergencies. Greater recognition of the technical expertise and knowledge of public health professionals during public health emergencies was also identified as an area for improvement. Support of public

health to rebuild trust was also identified as an area for improvement. The willingness of the public to follow health guidance depends on whether they trust, believe, and understand public health messages.

Analysis: Public health departments have been overwhelmed with the amount of work necessary in the response to protect public health. These include testing, contact tracing, providing advice to elected officials to mitigate the spread, vaccination of their citizens, responding to a variety of requests from federal and state agencies, in addition to the other normal public health services provided during non-disaster times. Both survey results indicate that public health respondents scored questions relating to information sharing much lower than other disciplines; possibly due to less capacity to engage with the region as their primary focus is on their own jurisdiction. During the 2020 Survey, public health respondents pointed out the need to provide assistance and relief for staff as many had not had any time off since the beginning of the pandemic. Public health agencies were also significantly impacted by staff availability and resignations as the pandemic progressed – with 72% rating the impact as "Major" or "Severe" for staff availability, and 65% rating the impact of resignations as "Major" or "Severe" (2022 Survey). These were much higher impacts than rated by all other agency/organizations completing the survey (see adjacent chart).



When asked to identify the top reasons for employees leaving the agency/organization, public health respondents rated "Burnout", "Lack of Appreciation", "Better Opportunities / Career Advancement", and "Change in Career – Leaving Profession" much higher than the other respondents to the 2022 survey (see adjacent chart).



Comments were also received in surveys and focus groups that recommendations from public health professionals were not followed, and political factors impacted their ability to mitigate COVID, with some state regulations passed that limit the ability of public health to issue orders designed to protect the public from disease. The willingness of the public to follow health guidance depends on whether they trust, believe, and understand the message from public health. Efforts to support public health departments and rebuild trust should be a priority.

Area for Improvement 3.2: Explore the feasibility and value of increasing stockpiles/cache of PPE.

Analysis: Recognizing the challenges with caches and stockpiles, several respondents suggested that there should be stockpiles of PPE – some at the organization/jurisdiction level and some looking for a regional cache so as not to depend on federal or state resources. During the 2022 survey, response partners were asked if the region should continue to explore the development of regional stockpiles/caches of PPE. Ninety-one percent agreed that this should be explored and 80% indicated an interest in participating in a regional cache of critical supplies/PPE.

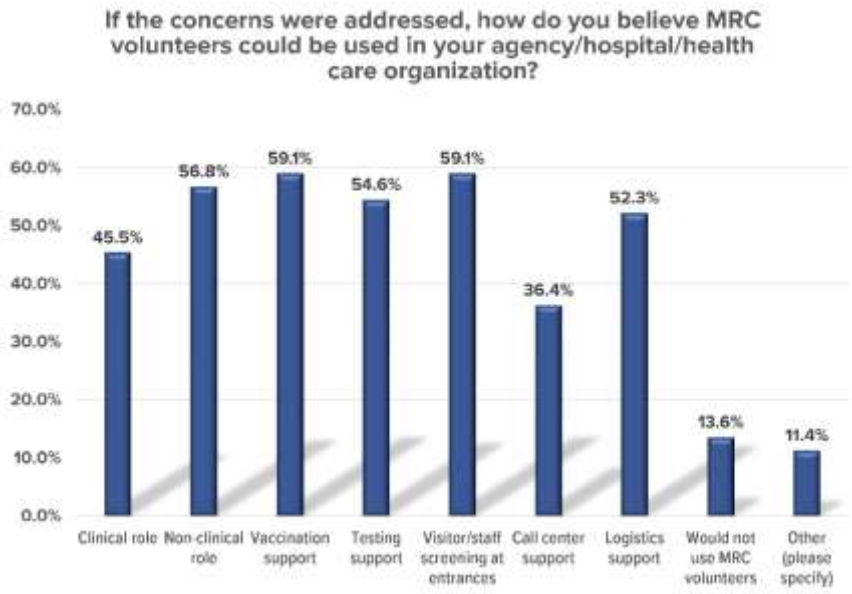
Area for Improvement 3.3: Increase preplanning in donations management to more quickly mobilize and coordinate the process for large scale events.

Analysis: Some feedback from the 2020 survey indicated that regional donations management should have been established earlier in the event and was demobilized too quickly. The AAR Debriefing with the MAC resource support and coordination leadership indicated a need to further improve the process for handling donations such as through trainings for emergency management staff involved in the process.

Area for Improvement 3.4: Assure that the Regional Coordination Guide (RCG) includes information related to procurement and cooperative purchasing for supplies and services.

Analysis: Working with the Kansas City Regional Purchasing Cooperative was effective in setting up contracts for the purchase of PPE and contact tracing staffing. This solution should be included in the RCG as an option for resources during similar long-term events. Information on eligibility to purchase through these regional cooperative purchase contracts should also be clarified as it was not clear if these were only available to government agencies and not-for-profit organizations.

Area for Improvement 3.5: Establish a clear process to request volunteers through the KCMRC to include any agency or organization requirements and assure requests are within the volunteers' scope of practice. Identify opportunities to address barriers to health care facilities reluctance to utilize KCMRC volunteers.



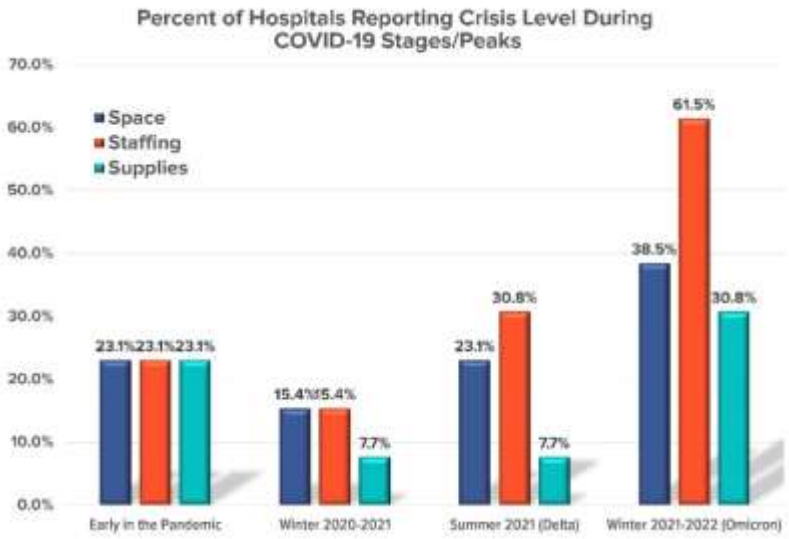
Analysis: There were many requests for volunteers through the KCMRC but not a clear process as to the tasks/activities to perform and an understanding of the limits of what the medical volunteer can do under their scope of practice. A question in the 2022 Survey asked respondents to identify barriers preventing their agency/organization from utilizing KCMRC volunteers (see adjacent chart). If concerns were addressed, 86% of survey respondents indicated that they would utilize KCMRC volunteers.

Area for Improvement 3.6: Improve processes for establishing regional resource warehouses to minimize issues when demobilizing.

Analysis: As supplies became more accessible, federal caches over-supplied what was needed for the region, and many supplies had limited shelf-life and soon became out of date. These issues contribute to the costs of demobilizing the regional resource warehouses. The Resource Support and Coordination section suggests working with partners on actual resource needs to prevent overstocking.

Area for Improvement 3.7: Finalize the Kansas City regional framework and protocol for mitigating Crisis Standards of Care (CSC) conditions.

Analysis: Early in the pandemic, the region began working on a regional framework and protocol for avoiding the need for any hospital to transition to crisis standards of care. While not a mechanism to declare CSC situations for the region or provide any regulatory or liability relief, this framework is designed for the regional healthcare system to work together to avoid hospitals from having to implement their individual CSC policies. As the pandemic progressed and staffing became a critical challenge at hospitals, rural hospitals in the region experienced challenges in transferring patients to hospitals that could provide the necessary care (e.g., critical care, dialysis, etc.). Based on the 2022 Survey, many hospitals reported reaching crisis level for staffing, supplies, and space during some stages of the pandemic (see chart below).



Throughout the pandemic, there were no state actions/orders/declarations from Kansas or Missouri supporting CSC activations, or acknowledgment of CSC conditions. In addition, there were no specific legal relief (i.e., liability protections) to providers during COVID-19. Absent state action on liability protections, regulatory support, and systems to aid hospitals, there is not an overwhelming benefit for hospitals or a region to independently declare CSC conditions. As part of the ASPR HPP grant funding requirements for recipients, both states are to develop a Crisis Standards of Care concept of operations (CONOPS) that integrates several elements including roles and responsibilities of state agencies during a crisis care situation, potential indicators and triggers for state actions, and legal and regulatory state actions that may be taken to support healthcare strategies during crisis care conditions. Representatives of the MARC HCC should be involved in the planning efforts to help inform the Kansas and Missouri CSC CONOPS.

PUBLIC INFORMATION AND MESSAGING

The region shares a single media market and people live, work and play in different jurisdictions on a daily basis. Regional coordination around COVID-19 messaging and education is critical but can also present challenges across jurisdictional lines. A goal of the MAC Group was to "Develop and share information designed to enhance the public's response to the COVID-19 threat that recognizes that many individuals and businesses operate in different

jurisdictions on a daily basis" and to "Provide analysis of public feedback and disseminate public information through the Public Health Risk Communicators and the Regional Association of Public Information Officers (RAPIO)."

As part of the MAC G, the Emergency Public Information Section was formed to assist in coordination of public messaging, and the well-established public information groups (e.g., Public Health Risk Communicators and RAPIO) were instrumental in informing and leading the work.

Throughout the pandemic, regional information has been offered to the public through several platforms. The multiple ways the information has been offered include social media, media campaigns, one-on-one conversations, websites, media briefings, coordinated press releases, official meetings, etc.

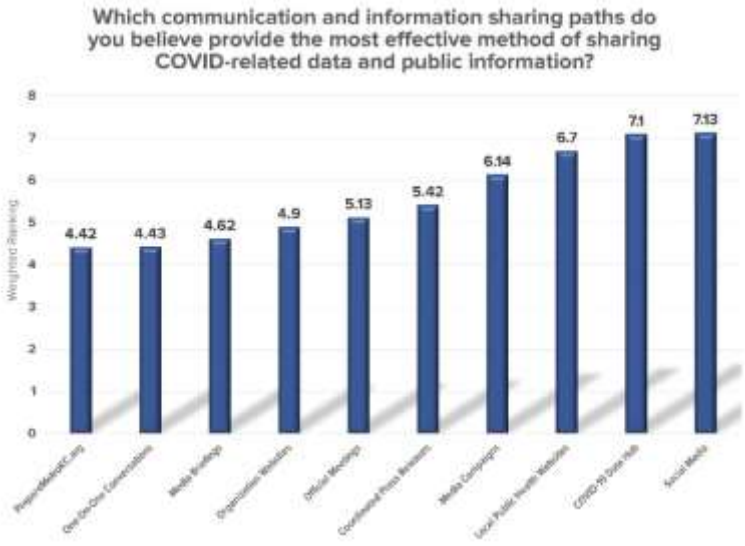
Considering the complexity of the situation and the number of communicators involved (e.g., federal, state, and the various local jurisdictions involved), most survey respondents felt that the public messaging regarding COVID-19 response and recovery was "somewhat" to "extremely unified." Identified areas for improvement include focusing on messaging where there is consensus and stronger policy coordination to allow for a unified message.

The identified strengths and areas for improvement for Public Information and Messaging are listed below.

Strengths/Areas to Sustain

Strength 4.1: Preexisting public information groups (e.g., Public Health Risk Communicators and RAPIO) working cooperatively was identified as a strength as the regularly scheduled calls allowed participants to share what they were hearing from the public and what messages to provide to the public. This served as the basis for developing common messaging language. Ninety-one percent of the 2020 survey respondents who served in a PIO role rated "having access to what other communicators were doing" as "very valuable" or "extremely valuable". Those involved in the Public Information section of the MAC identified the RAPIO group as a critical partner in the region's response and has been recognized by the emergency response community as a valuable partner in response operations.

Strength 4.2: Considering the complexity of the situation and the number of communicators involved (e.g., federal, state, and the various local jurisdictions involved), approximately 80% of the 2020 Survey respondents felt that the public messaging regarding COVID-19 response and recovery in the region was "somewhat", "very", or "extremely" unified. Regional messages around COVID-19 response and recovery were viewed as effective (53% rated the messaging "very effective" or "extremely effective").



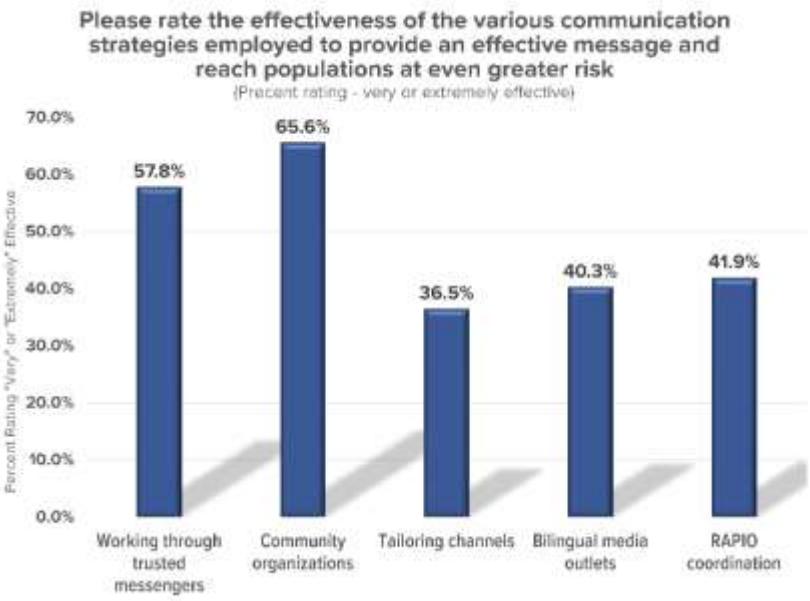
Strength 4.3: The regional tools/resources developed were helpful to those responsible for public information and messaging. From the 2020 Survey, the local officials' briefings videos were rated "very effective" or "extremely effective" by 61% of the respondents involved in public information, and the KC Regional COVID-19 Resource Hub was rated as "very effective" or "extremely effective" by 52% of respondents involved in public information. In the 2022 Survey, respondents were asked to rank ten (10) different communication and information sharing paths based on their effectiveness in

sharing COVID-related data and public information. The top four (4) were social media, COVID-19 Data Hub, local public health websites, and media campaigns.

Strength 4.4: The public information officers and others involved with the public information section identified the ability to quickly move to virtual meetings as a strength, as it enabled the groups involved in public information and messaging to continue to coordinate when meeting in person was not an option.

Strength 4.5: Public information and messaging representatives from the region were able to participate in statewide communication efforts to advocate for the region. This provided visibility to the messaging campaigns being funded at the state level, and an opportunity to advocate for inclusion of the region in those campaigns.

Strength 4.6: As the pandemic continued and public messaging became more difficult due to perceived trust and suspicion issues caused by the "politicization" of the pandemic, the public information and messaging section partnered with hospitals and medical professionals to communicate information to the public, as they were recognized as a more trustworthy source. Public health departments in the region also worked with community organizations and other trusted messengers to communicate information to the public. The 2022 Survey showed that working through trusted messengers and community organizations were rated as "Very" or "Extremely Effective" in reaching populations at greater risk.



Strength 4.7: Connections were made with private sector partners that were not initially involved in the regional response coordinated via the MAC. Examples include the Two-Million Arms Campaign developed by private sector partners that were involved in the regional vaccination workgroup, as well as the KC Chamber of Commerce that partnered with MAC staff in developing workplace reopening resources and sponsored several webinars on the impact of the pandemic on the region and focusing on increasing vaccination rates.

Areas for Improvement

Area for Improvement 4.1: Focus on where there is consensus of the message to communicate to the public.

> **Analysis:** Focusing on where there was consensus such as social distancing and encouraging mask wearing rather than whether masks were mandated or not helped to amplify a common message and to develop tools to support local agencies. Identified during the Interim AAR, this recommendation was followed as the pandemic progressed.

Area for Improvement 4.2: Look for opportunities to use the same terminology in local plans.

> **Analysis:** The different terminology in initial reopening plans caused more confusion for the public and for businesses – especially those who operate in different parts of the region. As the pandemic continued, terminology was more consistent which improved the public messaging.

Area for Improvement 4.3: Stronger policy coordination to allow unified message.

> **Analysis:** Where there is coordination in policies and operations, coordination of messaging is much more achievable. In order to make a stronger policy for coordination, it needs to include all jurisdictions - not just a portion. The corrective actions identified during the Interim AAR for this area for improvement was to provide a forum for elected/appointed officials to communicate and plan for coordinated responses, and to perform an environmental scan to look at how other similar regions/communities have coordinated their public messaging in a unified manner.

Area for Improvement 4.4: Advocate for regional funding to support the development and deployment of public information and messaging campaign to mitigate the impact of COVID-19.

> **Analysis:** There were not any regional funds to support the development and deployment of regional public information and messaging campaigns to mitigate the impact of COVID-19. The private sector provided in-kind assistance to develop vaccination campaigns, but there were no regional funds to deploy the campaign.

RECOVERY

The COVID-19 pandemic has been unique in its scope and duration and has disrupted virtually every area of society. During the onset of the pandemic, the region suffered widespread job loss (unemployment in the KC Metro increased from 3.5% to 12.2% and 133,800 jobs were lost between March and April of 2020, *Ref: MARC Monthly Workforce Indicators*), businesses were closed, childcare was significantly limited, schools were shut down, and loved ones were becoming ill or dying resulting in financial hardship for their families.

Nonprofit and social services organizations were also challenged in providing needed services to the community. Early challenges were due to the shutdown of operations or the health risks that staff faced, particularly before vaccines were available. Many clients had challenges seeking services with limited hours and capacities in offices and limited technology to seek resources online. These social service providers have also been impacted by staffing challenges, like other agencies and organizations in the region.

Early in the pandemic, foundation leaders came together and recognized the need to combine efforts and make it as easy as possible for nonprofits serving households in need to seek funding. The Kansas City Regional COVID-19 Response and Recovery Fund was created in March 2020 to address the needs of the Kansas City region's most vulnerable communities affected by the COVID-19 pandemic. The fund is coordinated by the Greater Kansas City Community Foundation, United Way of Greater Kansas City, LISC Greater Kansas City (Local Initiatives Support Corporation), and the Mid-America Regional Council. This fund has invested in area nonprofits to address needs related to food insecurity, hygiene and baby supplies, rent and utility assistance, mental health and health care services, digital access and other support. Approximately $16 million was raised in the first few weeks, increasing to nearly $18 million by the end of 2020.

Recognizing the importance of recovery, the MAC G activated ESF-6 (Mass Care, Emergency Assistance, Temporary Housing and Human Services) and ESF-14 (Community Recovery) to ensure that both short and long-term recovery coordination activities were being addressed at a regional level.

Early in the response, the region took action to accelerate the recovery process by:

- Providing recovery information (i.e., webinars on economic impact, disaster assistance process, preparemetrokc.org website for access to resources, etc.).

- Convening and coordinating stakeholder organizations to address the needs in the economic, housing, social services, health services, and other sectors to mitigate the impact of the COVID-19 to accelerate the recovery process.

Community Organizations Active in Disasters (COAD) mobilized to support unmet needs and set up a virtual volunteer registration center in partnership with the United Way of Greater Kansas City. COAD leadership also filled key positions in the MAC structure to connect the regional efforts to the MAC.

The identified areas for improvement related to Recovery are listed below and include incorporating the various business groups/associations and the philanthropic community into existing structures and plans for future operations, and addressing impacts on the public health, healthcare, and emergency services workforce.

Strengths/Areas to Sustain

Strength 5.1: Private businesses, organizations, and charitable foundations in the region came together during the early stages of the pandemic and provided PPE to area healthcare organizations and purchased coronavirus test kits to increase the region's testing capacity.

Strength 5.2: Early in the pandemic, foundation leaders came together and recognized and prioritized the needs and combined efforts to make it as easy as possible for nonprofits serving households in need to seek funds. The approximately $18,000,000 raised through the Community Fund was quickly made available to community organizations to address urgent needs. Approximately 50% of respondents (2020 Survey) rated these actions as "very helpful" or "extremely helpful". The philanthropic community went from funding direct services offered by nonprofits to funding operating support for agencies so they could remain open to meet increased needs.

Strength 5.3: The MAC G established a recovery section to assist in sharing information on recovery resources available at the federal, state, and local level. Webinars for accessing public assistance funds were provided and/or promoted. Having a designated liaison to each state specific to recovery proved beneficial in bringing important recovery information back to the MAC and other regional partners.

Strength 5.4: The ESF-14 Recovery section worked to develop/identify resources to assist COVID-19 affected populations including:

- Evaluated childcare needs of area businesses through a survey and determining what childcare programs were open or timing for others to open. Developing and providing guidance to childcare programs on procedures to safely operate.
- Convened housing sector stakeholders around the region to outline steps to respond to the increasing need for assistance to avoid evictions and foreclosures.
- Partnered with organizations serving older adults to determine specific needs that could be addressed.
- Worked to identify and quantify demand for utility assistance in terms of numbers of customers and dollars to ascertain gaps in available programs and funding.
- Developed Essential Elements of Information (EEI) for Recovery to track status in the areas of Planning, Housing, Health and Human Services and Infrastructure (focusing on transportation).

Strength 5.5: Establishing a regional donations management process and the development of the Regional Donations Management Reference Guide were identified as strengths. This allowed regional coordination of the receipt of donations and targeted distribution to those with the greatest needs – which was critical during the early days of the pandemic.

Strength 5.6: Through various communication routes such as the PrepareMetroKC.org website, information was shared on resources such as isolation/quarantine centers for the homeless, food insecurity (e.g., food pantries, soup kitchens, home delivery meals), resources for childcare providers, etc.

Strength 5.7: Several webinars were hosted to assist in recovery including:

- Economic Forecast for Local Officials webinars to share the latest forecasts for regional economic conditions as the area was responding to the COVID-19 pandemic.
- Responsible reopening webinar to assist businesses in safely reopening following relaxation and lifting of restrictions.
- Vaccination Employment Issues webinar to better prepare business leaders and human resource professionals for employment issues related to vaccination.
- Safe Return webinar series that addressed topics such as mental health and childcare in the workplace.

Areas for Improvement

Area for Improvement 5.1: Determine how best to incorporate the business groups/associations and the philanthropic community into existing structures and plans.

> Analysis: The regional HCC Response Plan and the Regional Coordination Guide RCG) do not adequately incorporate a mechanism for coordinating with the business associations and the philanthropic community to leverage their significant contributions in knowledge and resources. Early connections with these groups can assist in clarifying their information needs to assist in their work and decision-making processes. Include in the RCG a process for convening foundations and other key organizations to determine process for collecting and allocating resources (depending on the scope and scale of the incident).

Area for Improvement 5.2: Meetings with federal and state officials for insight and advice on obtaining/utilizing grants and public assistance money.

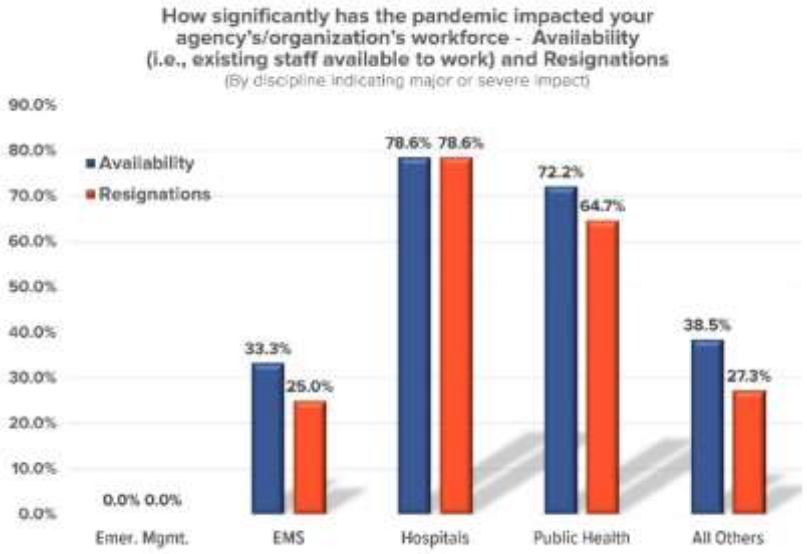
> **Analysis:** There appeared to be a need for additional information and clarification on the availability of and use of federal funds. This information is also vital to the philanthropic community in determining how best to target funding.

Area for Improvement 5.3: Establish a standing regional committee for Recovery (possibly under MEMC) to incorporate the other public and private partners.

> **Analysis:** This was identified during the Interim AAR and a Recovery subcommittee has been established under the MEME, with work continuing to build out the subcommittee to assure appropriate representation. This improvement item is complete.

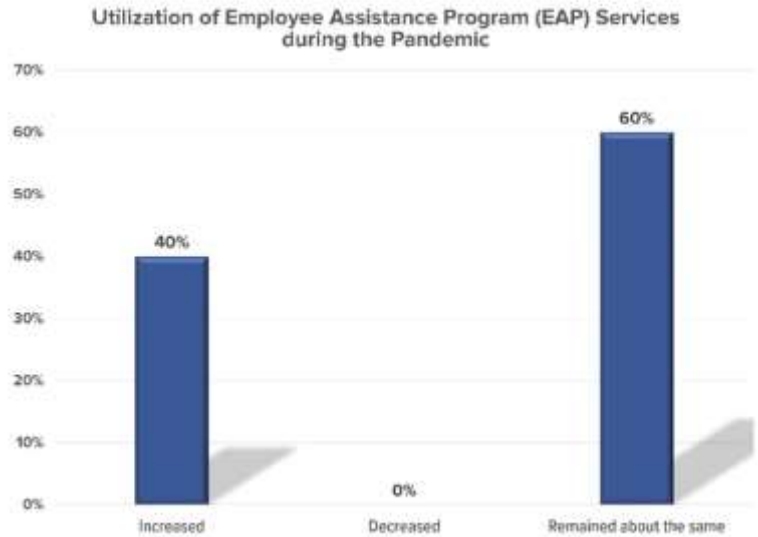
Area for Improvement 5.4: Continue to support and promote mental health and workforce resilience in the public health, healthcare, and emergency services sectors.

Analysis: The duration of the COVID-19 pandemic has placed significant strain on public health, healthcare, and other emergency services staff involved in the prolonged response. In addition to significant health and financial impacts, the coronavirus disease has resulted in increased mental health needs and has exacerbated pre-COVID conditions for those impacted. The health care and emergency services workforce have not been immune to these challenges. Many individuals involved in the two-plus year response have job-related stresses to deal with due to workloads and lack of time away from work. During committee meetings as well as the COVID-19 coordination calls, the region shared resources for mental health and critical incident stress management. During the 2022 Survey, questions were asked regarding workforce resilience including availability of staff to work, access to employee assistance programs, actions taken to enhance workforce resilience, and the impact of staff resignations.



Agencies and organizations were asked how significantly the pandemic impacted their workforce availability (i.e., existing staff available to work) and resignations. Overall, 50% of respondents indicated staff availability was a "Major" or "Severe" impact and 46% responded that resignations were a "Major" or "Severe" impact. Breaking down the results by "organization type," hospitals and public health experienced the greatest impact (see chart above).

Eighty-two percent of agencies and organizations responding to the 2022 survey indicate that they have access to an employee assistance program (EAP). For those respondents that were knowledgeable about their EAP utilization, 40% indicated that there was an increase in demand for the services and 60% indicated that utilization remained about the same. No respondents indicated that the utilization of services decreased (see adjacent chart)



As the pandemic continues, agencies and organizations will need to continue to provide supportive services (e.g., mental health resources and tools for coping with stress) to their communities and staff.

APPENDIX A: IMPROVEMENT PLAN

This Improvement Plan (IP) has been developed specifically for the Greater Kansas City Regional Response to the Coronavirus (COVID-19) Disease Pandemic and includes improvement areas identified during the Interim AAR (including current status) as well as additional areas for improvement identified through the AAR process.

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
Operational Coordination							
1.1 - Most MAC-S staff have served in their role since the start of the pandemic (2+ years) increasing risk of "burnout"	Include in RCG a process for rotating personnel. Pre-identify others that can serve in a leadership role in the MAC. Develop written process for volunteer "on boarding".	Planning, Organization	MEMC, MARC HCC	In process	12/2023	Open – In process.	
1.2 - Provide forum where elected and appointed officials can openly and honestly communicate, and plan for coordinated responses (MAC G)	Conduct an environmental scan of comparative practices researching how other communities have organized multi-jurisdictional/agency coordination. RHSCC to develop suggested principles for operational coordination and include in RCG.	Organization	RHSCC, Director of Local Government Services, ES/Homeland Security Program Director	In process	To be determined – After COVID-19	Open – In process Applicability of open meetings investigated twice. "Kansas City Regional Multi-Agency Coordination" document (Annex) developed.	

[1] Capability Elements: Planning, Organization, Equipment, Training, or Exercise (POETE).

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
	RHSCC and MARC Board work together to evaluate the role, function and regional coordination mechanisms and assure that there is an understanding of the concept. Develop a policy statement on how the MAC G will function and provide a training program for elected officials.						
1.3 - Strengthen representation and information from both states in coordination activities	Work with KDHE and KS Metro HCC to enhance participation in groups/committees at the regional and state level. Assure appropriate contacts for public health departments and hospitals are included in appropriate databases (e.g., EBMS, EMResource, and eICS).	Organization	Public Health, Hospital, KS HCC	Sept. 2020	October 2021	KS Metro HCC Readiness and Response Coordinator involved in regional coordination calls (HCC, Hospital, Public Health) and provides updates on Kansas activities. Contacts within MARC databases updated.	Complete
1.4 - Develop an awareness as to the role of the MAC G in a large-scale incident	Educate why it is important and build awareness and credibility in advance.	Planning, Organization Training	RHSCC, Director of Local Government Services, ES/Homeland Security Program Director	In process	To be determined – After COVID-19		

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
1.5 - Preplan to connect with other existing and spontaneous groups that have/will form that are involved in the regional response	Understanding that input from businesses, schools, and community is key. Identify regional business and school organizations to connect with on both sides of the state line, and designate liaisons. Include this information in the RCG.	Planning, Organization	MEMC, MARC HCC	10/2020	12/2023	Partial – Liaison strategy established to link MAC to business groups; school organization (MO only) included on RHSCC.	
1.6 - Ensure that the needs of vulnerable populations are being considered and addressed within the MAC Structure	Identify the vulnerable populations at the time of the incident. Define the specific action plans for each vulnerable population (children, functional access needs, homeless) and care needs. Ensure the MAC is connected to broader MARC programs (e.g., older adults, early learning, etc.), to leverage connections and expertise. Further develop the CDRN that can be activated at the time of the incident to help to determine the impacted populations and serve as a	Planning, Organization	MEMC, CDRN, MARC ES/Homeland Security Program Director	12/2020	9/2023	Several actions taken during COVID-19 response to address vulnerable populations (e.g., vaccine vulnerability index, CDRN activities, etc.)	

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
	conduit to serve the populations.						
1.7- Review and update regional/local response plans at the appropriate time	Review existing relevant plans and update based on lessons learned from COVID-19. Provide information that can be added to EOPs.	Planning	MEMC	In Process	7/2023	Partial – RCG Base Guide / MAC Annex developed; HCC Response Plan updates (6/30/2022 version)	
1.8 - Evaluate opportunities to stand-up a MAC G during a regional exercise	During a regional exercise with an appropriate scenario, establish a MAC G to continue to practice and exercise this structure.	Exercise, Organization	MEMC, Training & Exercise	1/2023	12/2023		
1.9 - Explore the feasibility of establishing a MOCC	Explore the feasibility of establishing a Medical Operations Coordination Cell (MOCC) through the MARC HCC. Identify any operational differences between a MOCC and the existing RHCC.	Planning, Organizing	Hospital / MARC HCC	1/2023	12/2023		
Information Sharing							
2.1- Better define Essential Elements of Information (EEI) for a public health emergency	EEI for public health emergencies will be defined by Public Health epidemiologists and other subject matter experts.	Planning	Public Health Subcommittee	10/2020	10/2023	In process. Public Health (federal, state, local) defined many EEIs. HHS, CDC, and ASPR leadership in discussions regarding EEI reporting efforts.	

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
2.2- Consistent access to health care (hospitals, LTC) EEI	Secure needed permission from federal and state agencies to enable the HCC to received information, to include data from hospitals and LTC facilities. Explore possibility of formalizing understanding that the HCC can access healthcare EEI information – with understanding that information will be deidentified.	Planning	MARC HCC, Hospital Committee	10/2022	10/2023	In process. COVID Data Hub was provided access to NHSN/TeleTracking hospital data. Unknown on LTC facility data reported in NHSN. Need for an agreement/MOU on MARC access to data for future events.	
2.3 - Improvements to coordinating meetings/calls (e.g., frequency, agenda management, etc.)	Identify opportunities to consolidate meetings, reduce frequency, agenda management, meeting reports published (e.g., attendees, topics, actions taken). Clarify which meetings should have meeting reports.	Planning, Organization	MARC Emergency Services Staff	6/2020	12/2022	Partial - Adjustments have been made in meeting frequency and consolidation has occurred where appropriate. Comments in AAR 2.0 survey on desire for meeting notes / reports.	
2.4-Assure community organizations and business partners are included in meetings	Incorporate community organizations and business partners in the appropriate meetings.	Organization	RHSCC and MARC HCC	5/2020	12/2020	Community and business partners added to appropriate meetings (vaccination workgroup, MAC, etc.). See IP 1.5 in Operational Coordination section for preplanning to connect with groups	Complete

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
						involved in regional response (partial)	
2.5 - Improve Data Hub to allow use in future events	Improve the Data Hub and develop a generic or standard all-hazards Data Hub that could be used for future events beyond the pandemic. Clarify information for all-hazards data hub (e.g., community lifelines) as well as user interface enhancements.	Planning	MARC ES, MARC Research Services, MARC HCC, MEMC	12/2021	12/2023		
Resource Support and Coordination							
3.1- Advocate for additional investment in public health infrastructure to assure adequately resourced	Work with MOHAKCA to draft letter to congress on the need to fund public health infrastructure: Work with Civic Council and Chamber on post-election stimulus bill to include investments in public health; research and identify modern public health infrastructure models; develop a written public health needs statement (needed disease investigation capacity, data analysis capability and capacity, capacity to respond to stakeholders and the public); develop a Board report; develop a regional	Planning, Organization, Equipment	MOHAKCA, Public Health Subcommittee	10/2020	12/2023	Partial – Letters completed, public health issues included in 2021 federal legislation agenda, conversation with Chamber staff about public health legislation at the state level, federal post-election stimulus bill not passed, public health report provided to board.	

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
	Action Strategy to support Public Health; (explore cooperative services), Develop a Public Health Task Force (multi- disciplinary PH Directors, elected official, city/county manager, etc.)						
3.2- Explore the feasibility and value of Increasing stockpiles/ caches of PPE	Bring back recommendation after research of pros/cons and costs. Consider quantity to maintain in a stockpile to avoid shortfall. Address inventory and supply chain. Consider agreements to increase inventory.	Equipment	MEMC with input from HCC	In process	4/2023	Open – follow-up questions in 2022 survey on need for regional cache.	
3.3- Increase planning in donation management	RCG rewrite for donations management, but emphasis on complex plans. Consider the response and recovery fund activity in the plan. Provide clarity and broad scope of the stakeholder groups and the level of service and expectations. Volunteer resources: AmeriCorps staff	Planning	MEMC	In process	12/2023	Open	
3.4- Assure RCG includes information on procurement and	Add procurement information to the RCG / MARC HCC Response Plan.	Planning	MARC HCC	9/2020	6/2021	Information on developing cooperative purchasing contracts,	Complete

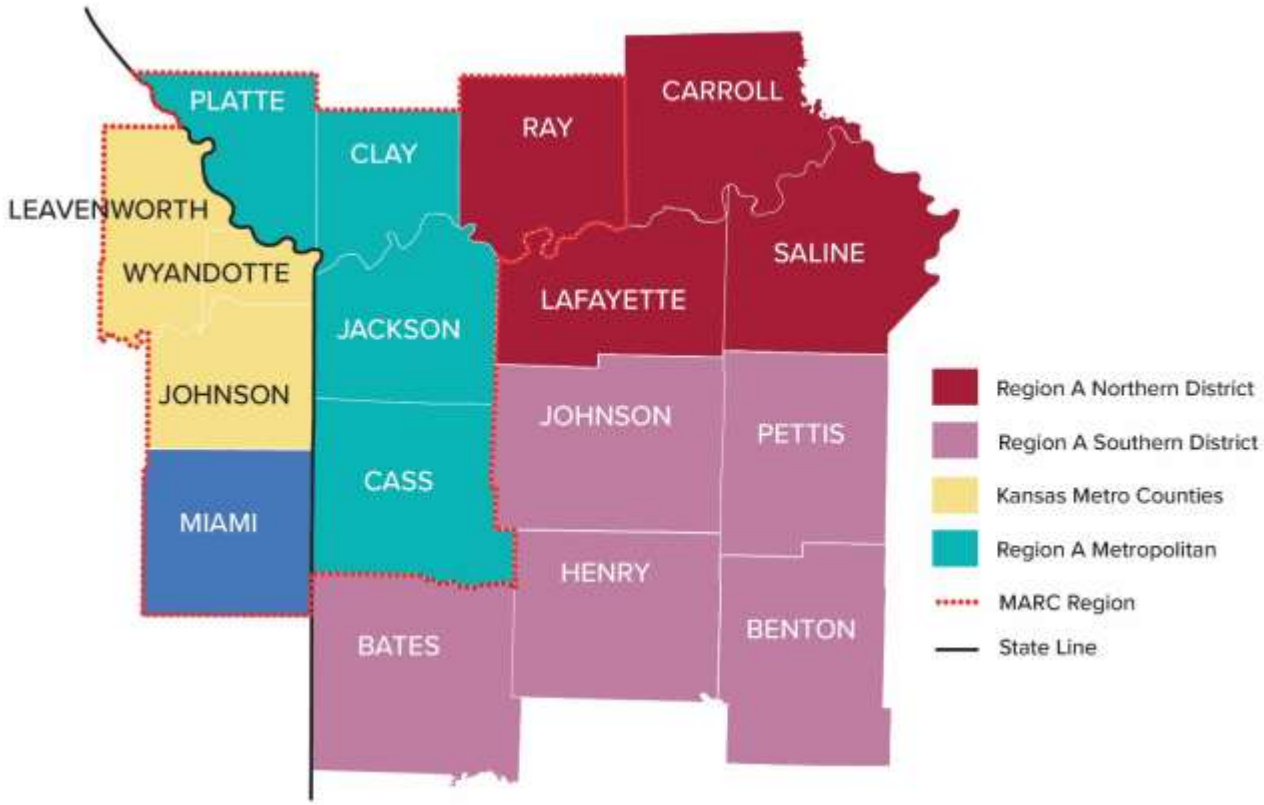
Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
cooperative purchasing of supplies and services						solicitating and managing donations, compiling and distributing potential vendor lists, monitoring supply chains was added to HCC Response Plan	
3.5- Establish clear structure to request volunteers through the KCMRC and that requests are within the volunteers' scope of practice	MRC will develop a written protocol for requesting volunteers that will be included in next update of RCG and briefed at the MEMC.	Planning, Organization	MEMC and KCMRC	In process	7/2023	Open – specific MRC questions included in AAR 2.0 Survey.	
3.6- Improve processes for establishing regional resource warehouses to minimize issues when demobilizing	Establish process for accepting supplies for regional resource warehouses. Federal caches should not over-supply what is needed, and resources should not be at their expiration date.	Planning, Equipment	MEMC	1/2023	12/2023		
3.7- Finalize regional framework and protocol for mitigating Crisis Standards of Care	When resources are critical, the region should work to mitigate the need for any hospital to implement crisis standards of care.	Planning	MARC HCC, Hospital Committee	In process	12/2023	CSC Protocol and Framework developed. Additional work connecting with CMOs and awaiting information from KS and MO CONOPS.	
Public Information and Messaging							
4.1- Focus public information and messaging where there is consensus	Develop and document in ESF-15 a process to emphasize focusing on where there is	Planning	PH Risk Communicators RAPIO	5/2020	6/2023	In process – ESF-15 review not yet complete.	

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
	consensus as the basis for regional communications						
4.2- Look for opportunities to use the same terminology in jurisdictional public health orders/plans	Evaluate opportunities to use same/similar terminology in jurisdictional public health orders/plans	Planning	MOHAKCA and PH Subcommittee	In process	6/2023	Partial - Situation has improved as pandemic progressed.	
4.3- Stronger policy coordination to allow for unified messaging	In conjunction with the IP 1.2 - providing a forum for elected/appointed officials to communicate and plan for coordinated responses, the environmental scan will also look at how other communities have coordinated their public messaging in a unified manner.	Planning	RHSCC, RAPIO, Public Health Communicators, MARC Director of Local Government Services, MARC ES Program Director	In process	6/2023		
4.4- Advocate for regional funding to support development and deployment of public information	Explore opportunities to secure regional funding for the development and/or deployment of public information.	Planning	MOHAKCA and PH Subcommittee	11/2022	12/2023		
Recovery							
5.1- Incorporate business groups/ associations and philanthropic community into existing structures and plans	Review RCG and HCC Response Plan and incorporate business associations to leverage contributions and resources.	Planning, Organization	RHSCC, MEMC, and HCC	In process	12/2023		
5.2- Meetings with federal and state officials for insight and advise on obtaining/ utilizing	MEMC develop a resource guide readily available on how to access federal grants and at the time of the incident	Organization	MEMC	In process	12/2023		

Issue/Area for Improvement	Corrective Action	Capability Element[1]	Responsible Committee(s) / Individual	Start Date	Target Completion Date	Action Taken / Status	Completion Date
grants and public assistance funds	customize as needed with available grants and make available						
5.3 - Establish a standing regional committee for Recovery	MEMC working to establish a standing regional committee for Recovery.	Organization	MEMC	October 2020		Complete – MEMC established a subcommittee for Recovery to raise visibility pre-disaster. Scope and membership/ representation under development.	Closed
5.4 - Support and promote mental health and workforce resilience	Continue to support and promote regional mental health resources available to public health, healthcare, and emergency services sectors. HCC Steering to work on better defining actions to address resources and best practices (e.g., include in HCC Annual Assembly, etc.).	Planning, Training	MARC HCC	In process	12/2023		

APPENDIX B: MARC REGION AND MARC HCC BOUNDARIES

MARC HCC Coalition Boundaries



APPENDIX C: ANALYSIS OF CORE CAPABILITIES AND CAPABILITIES BY FUNCTION

Aligning objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises, planned events, and real-world incidents to support preparedness reporting and trend analysis. The table below includes the regional incident objectives aligned core capabilities, and performance ratings for each core capability as determined by the evaluation team.

SUMMARY OF OBJECTIVES AND CORE CAPABILITY PERFORMANCE

Objectives	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Provide products and opportunities for information sharing, situational awareness and establish a common operating picture	Information Sharing/ Situational Awareness		X		
Resource Support and Coordination	Resource Support - Logistics and Supply Chain Management		X		
Coordinate public information and messaging to optimize mitigation and response activities	Public Information and Warning		X		
Provide early recovery support services to mitigate the impact of the incident.	Recovery		X		
Provide structure for operational coordination, cooperation, and collaboration	Emergency Operations Coordination		X		

Core Capability Ratings Definitions:

Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).

Capabilities by Function

Capability	Program Capability - Function	Public Health	Healthcare Coalition	DHS Core Capabilities
Information Sharing/Situational Awareness	PH - Information Sharing	☑	☑	☑
	HCC - Information Sharing			
	EM - Situational Assessment			
Resource Support - Logistics and Supply Chain Management	PH - Public Health Surveillance and Epi. Investigation	☑	☑	☑
	HCC - Continuity and Health Care Services Delivery			
	EM - Logistics and Supply Chain Management			
Public Information and Warning	PH - Emergency Public Information and Warning	☑	☐	☑
	EM - Public Information and Warning			
Recovery	PH - Community Recovery	☑	☑	☑
	HCC - Coordinate Health Care Delivery System Recovery			
	EM - Community Recovery (ESF-14, NDRF)			
Public Health, Healthcare, Emergency Medical Services		☐	☑	☑
	HCC - Continuity and Health Care Services Delivery			
	EM - Public Health, Health Care, EMS			
Emergency Operational Coordination	PH - Emergency Operations Coordination	☑	☑	☑
	HCC - Health Care and Medical Response Coordination			
	EM - Operational Coordination			

[1] Public Health Emergency Preparedness and Response Capabilities, CDC. Updated January 2019
[2] 2017-2022 Health Care Preparedness and Response Capabilities, November 2016
[3] National Response Framework, Third Edition, June 2016

APPENDIX D: PARTICIPATING AGENCIES, ORGANIZATIONS AND COMMITTEES INVOLVED IN REGIONAL COVID-19 RESPONSE

Regional Committees

Regional Homeland Security Coordinating Committee (RHSCC)	Mid-America Regional Council (MARC) Board of Directors and Executive Committee
MARC Health Care Coalition (MARC HCC)	Metropolitan Official Health Agencies of the Kansas City Area (MOHAKCA)
Public Health Subcommittee	Hospital Committee
Metropolitan Emergency Managers Committee (MEMC)	Mid-America Regional Council Emergency Rescue Committee (MARCER)
Regional Association of Public Information Officers (RAPIO)	Community Disaster Resilience Network (CDRN)
Children and Youth in Disasters (CYID)	Long Term Care (LTC) Facilities
Older Adults in Disasters (OAID)	Interfaith Preparedness Advisory Group (IPAG)
Kansas City Regional Home Care Association (KCRHCA) Emergency Preparedness Committee	Medical Reserve Corps of Greater Kansas City (MRCKC)
Kansas City Regional Mortuary Operations Group (KCRMORG)	KC Community Organizations Active in Disasters (KC COAD)

Multiagency Coordination (MAC) Group

Co-Chair of RHSCC (City Manager, Lee's Summit, MO)	Co-Chair of RHSCC (City Manager – Overland Park, KS)
Co-Chair of RHSCC Policy Committee (Emergency Manager – Kansas City, MO)	Co-Chair of RHSCC Policy Committee (Assistant County Administrator – Johnson County, KS)
Chair of Metropolitan Emergency Managers Committee (MEMC) (Emergency Manager – Independence, MO)	Vice Chair of the Metropolitan Emergency Managers Committee (MEMC) (Emergency Manager – Shawnee, KC)
Regional Association of Public Information Officers (RAPIO) – Assistant City Manager – North Kansas City, MO	Chair of MARC Emergency Rescue Committee (MARCER) – Leavenworth County, KS
Co-Chair of RHSCC Hospital Committee and HCCs – Truman Medical Center, Kansas City, MO	Co-Chair of RHSCC Hospital Committee and HCCs – AdventHealth Shawnee Mission, Overland Park, KS
Officers of the MARC Board of Directors	Mayors, or their designees, of the following: Kansas City, MO Unified Government of Wyandotte County & Kansas City, KS

Chief elected county officials, or their designees (another official in the county or a city within the county), of the following:

Clay County, MO

Jackson County, MO

Johnson County, KS

Leavenworth County, KS

Platte County, MO

Ray County, MO

K-12 Schools Representatives:

Cooperating School Districts of Greater Kansas City

Kauffman Foundation

Other representatives who are leaders in regional emergency coordination:

Emergency Management Coordinator – Clay County, MO

Health Director – Unified Government, KS

Fire Chief & Assistant City Manager – Kansas City, MO

Sheriff – Platte County, MO

Health Department Director – Jackson County, MO

Coordination and staff support (MARC)

MARC Emergency Services Program Director

MARC Executive Director and/or designee

MARC Public Affairs Director or designee

Public Health Agencies

Johnson County, KS

Leavenworth County, KS

Unified Govt. of Wyandotte Co. and Kansas City, KS

Miami County, KS

Cass County, MO

City of Kansas City, MO

Clay County, MO

City of Independence, MO

Jackson County, MO

Platte County, MO

Carroll County, MO

Lafayette County, MO

Saline County, MO

Ray County, MO

Bates County, MO

Benton County, MO

Henry County, MO

Pettis County, MO

Johnson County, MO

Hospitals

AdventHealth Shawnee Mission

Menorah Medical Center

Overland Park Regional Medical Center

Saint John Hospital

Saint Luke's South Hospital

Belton Regional Medical Center

Centerpoint Medical Center

Excelsior Springs Hospital

Lee's Summit Medical Center

North Kansas City Hospital

Saint Luke's East Hospital

Saint Luke's North Hospital

Children's Mercy Hospital Kansas

Olathe Medical Center

Providence Medical Center

Saint Luke's Cushing Hospital

The University of Kansas Health System

Cass Regional Medical Center

Children's Mercy Hospital

Kansas City VA Medical Center

Liberty Hospital

Research Medical Center

Saint Luke's Hospital

St. Joseph Medical Center

St. Mary's Medical Center	University Health Truman Medical Center
University Health Lakewood Medical Center	Carroll County Memorial Hospital
Lafayette Regional Health Center	Ray County Memorial Hospital
Fitzgibbon Hospital	Bates County Memorial Hospital
Bothwell Regional Health Center	Golden Valley Memorial Hospital
Western Missouri Medical Center	Kindred Hospital

Emergency Management

Cass County	City of Belton
City of Lake Winnebago	City of Raymore
Clay County	City of Gladstone
City of Liberty	City of North Kansas City
Jackson County	City of Independence
Central Jackson County EMA	Fort Osage Fire Protection District Emergency Mgmt.
City of Grandview	Inter-City Fire Protection District Emergency Mgmt.
City of Kansas City, Missouri	City of Lee's Summit
Oak Grove/Sni Valley Fire Protection District – EM	City of Raytown
Platte County	City of Riverside
City of Weatherby Lake	Ray County
Carroll County	Lafayette County
Saline County	Bates County
Benton County	Johnson County (MO)
Henry County	Pettis County
Johnson County (KS)	City of Leawood
City of Lenexa	City of Overland Park
City of Olathe	City of Shawnee
Leavenworth County	Miami County
Wyandotte County	

Other Organizations/Agencies

Heart to Heart International	American Red Cross
The Family Conservancy	Health Forward Foundation
REACH Healthcare Foundation	Marion and Henry Bloch Charitable Foundation
Hall Family Foundation	COVID-19 Community Response and Recovery Fund
BioKansas	Blue KC
Compass Health, Inc.	Health Care Coalition of Lafayette Co. (Live Well)

Healthcare Partnership	Heart to Heart
Hope Family Care Center	Katy Trail Community Health
KC BioNexus	Comeback KC
KC Care Health Care System	KC Digital Drive
KC Medical Society	mySidewalk
Cooperating School Districts of Greater Kansas City	Sharon Lee Family Health Care
Swope Health Services	Turner House Clinic (Vibrant Health)
Samuel U Rodgers Health Center	Kansas City Metropolitan Healthcare Council
Missouri Hospital Association	Kansas Hospital Association
Missouri Department of Health and Senior Services	Kansas Department of Health and Environment
Kansas Division of Emergency Management	Missouri State Emergency Management Agency (SEMA)

Emergency Medical Services (EMS)

Johnson County Med Act	Kansas City, Kansas Fire Department
Leavenworth Co. EMS	Olathe Fire Department
Central Jackson County Fire Protection District	Independence Fire Department
Kansas City Fire Department	Lee's Summit Fire Department
Liberty Fire Department	North Kansas City Fire Department
Riverside Fire Department	

Private Sector

Agile Government Services	Burns & McDonnell
McKesson	Walgreens

APPENDIX E: SURVEY RESULTS

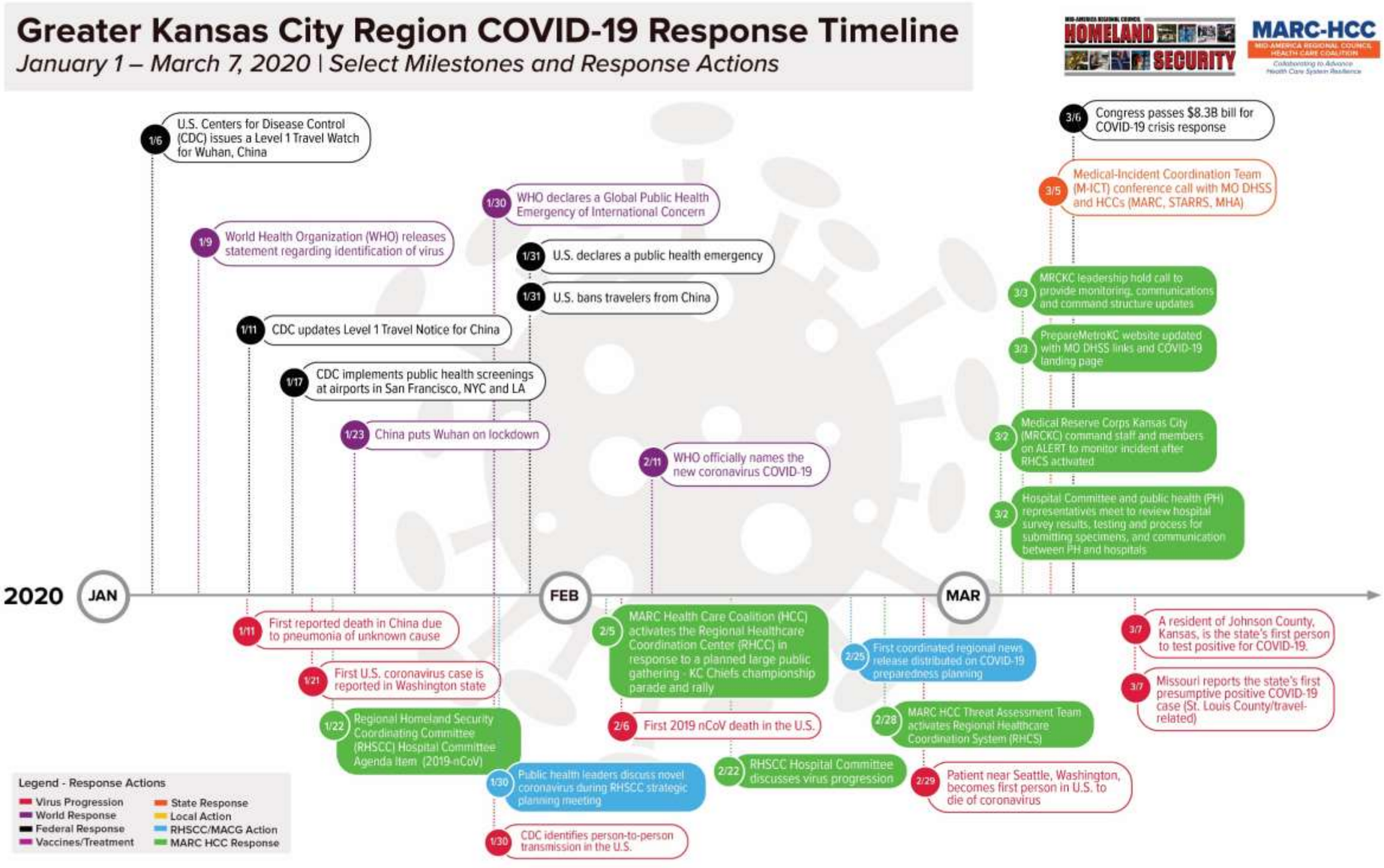
Right click on images below to open file with summary results of 2022 AAR Surveys – Full Survey (All Response Partners), MAC-S Survey, MAC G Survey, and City Manager Focus Groups. The results from the 2020 survey that were included in the Interim AAR are also included below.

2022 AAR Survey Results

Full Survey (All Response Partners), MAC-S, MAC G, and City Manager Focus Groups

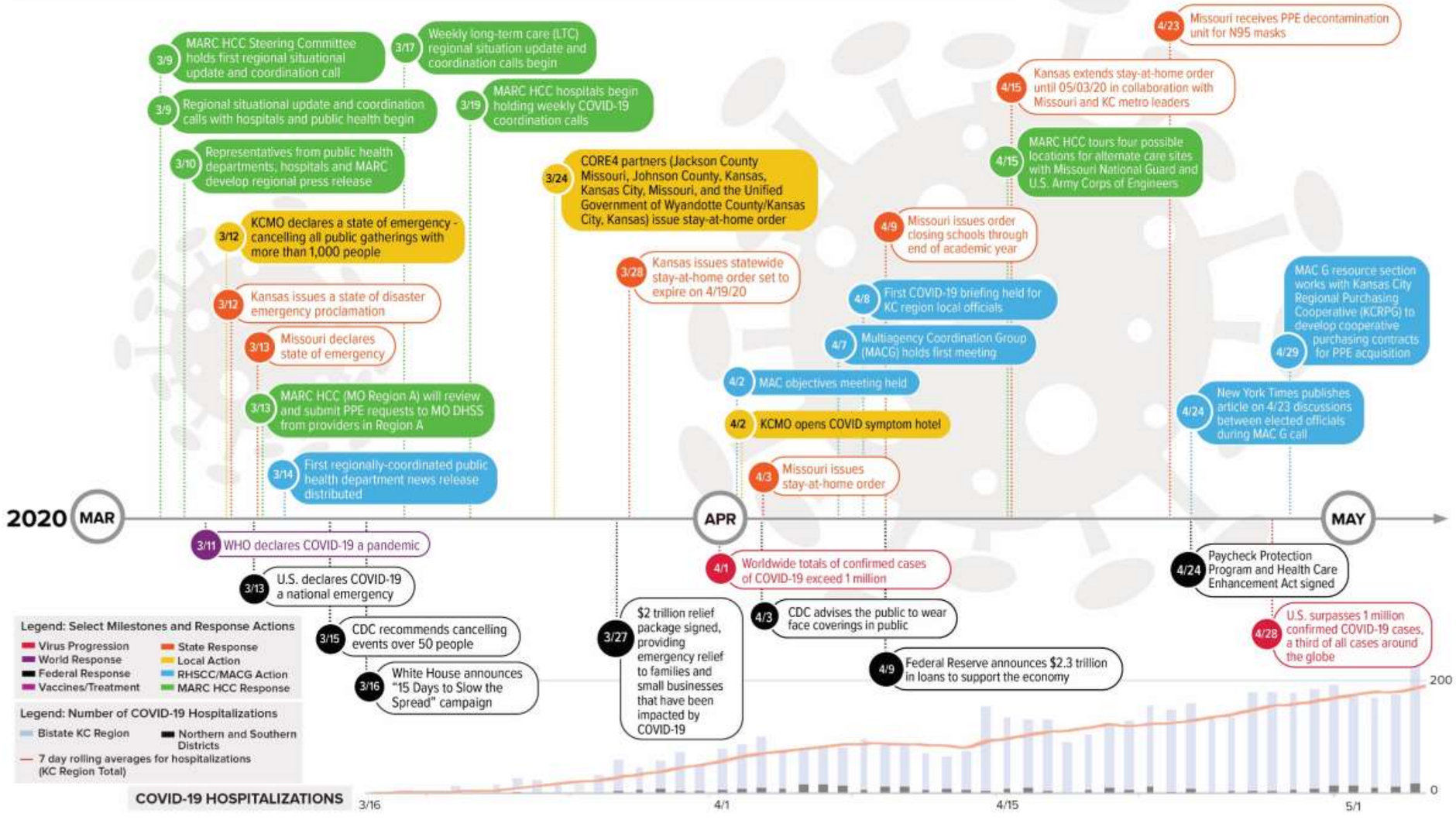
Interim AAR Survey Results

APPENDIX F: SELECT MILESTONES AND RESPONSE ACTIONS TIMELINE



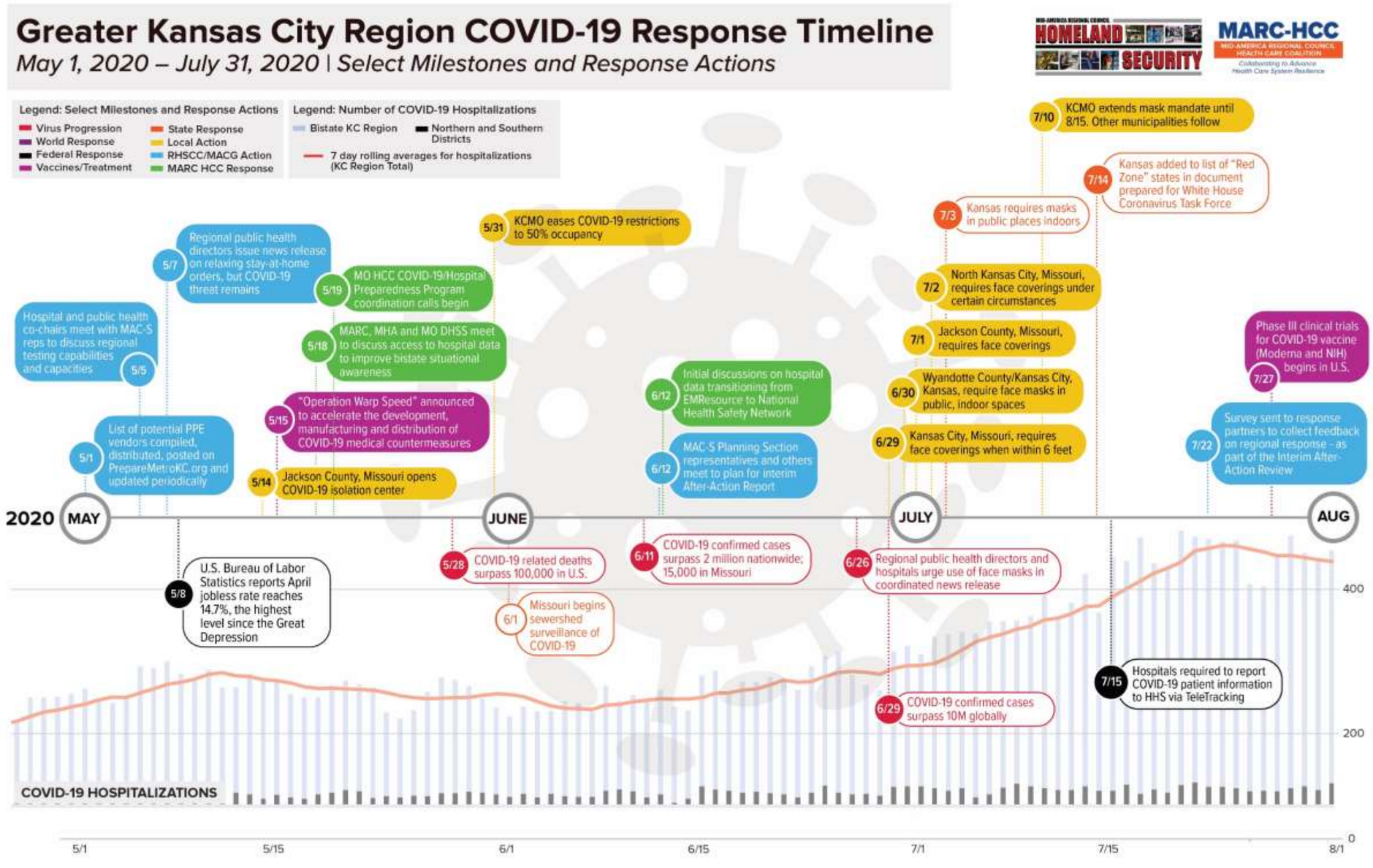
Greater Kansas City Region COVID-19 Response Timeline

March 9, 2020 - April 30, 2020 | Select Milestones and Response Actions



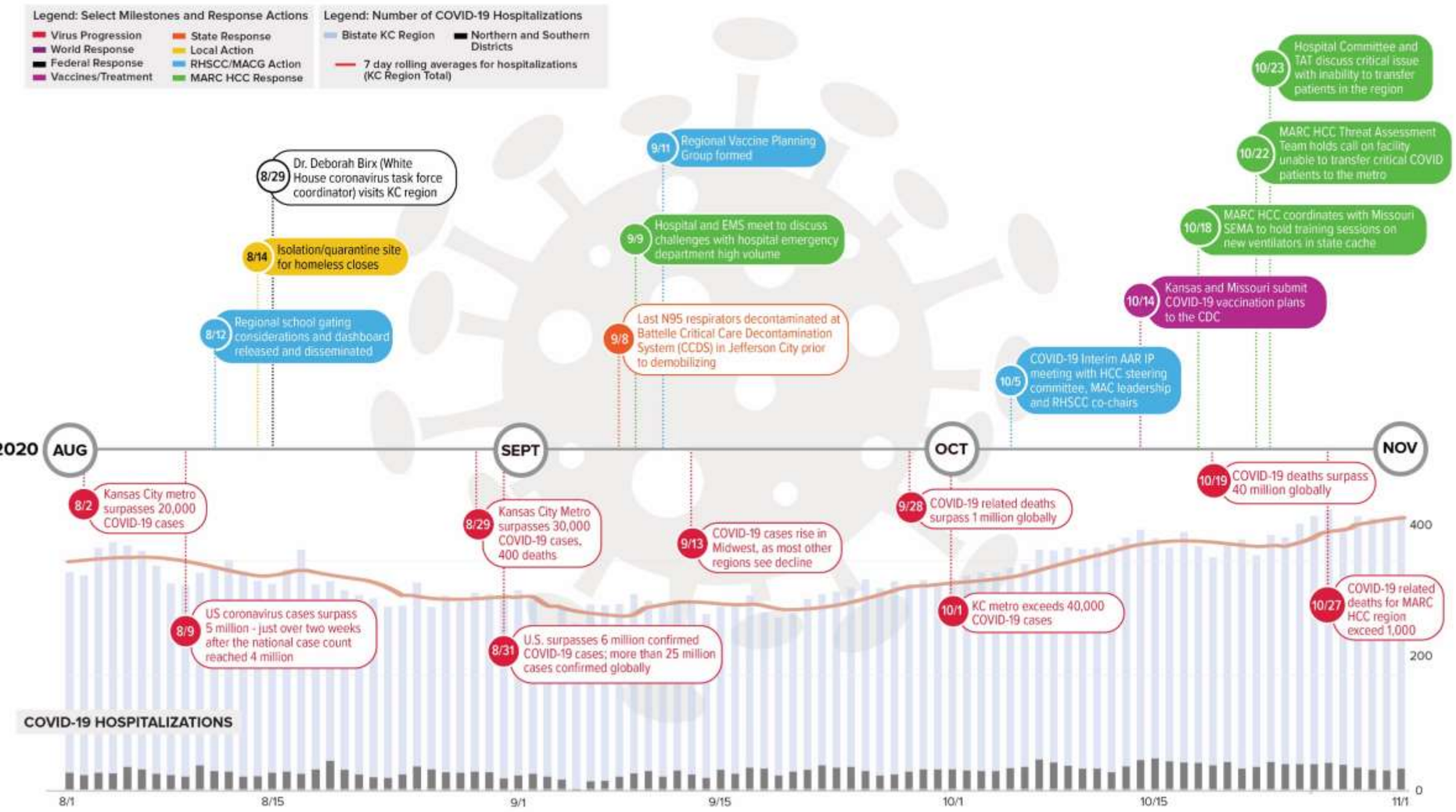
Greater Kansas City Region COVID-19 Response Timeline

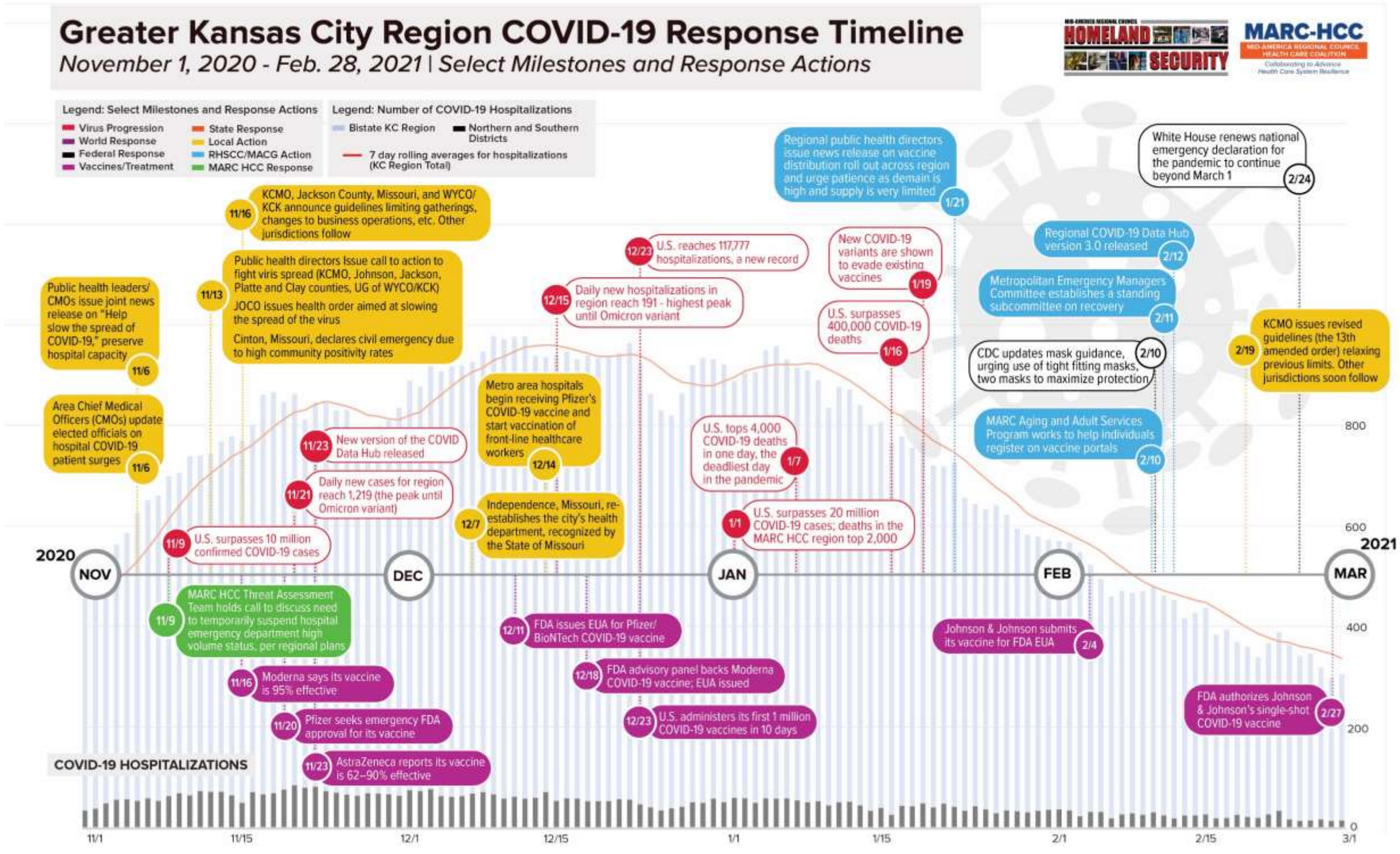
May 1, 2020 – July 31, 2020 | Select Milestones and Response Actions



Greater Kansas City Region COVID-19 Response Timeline

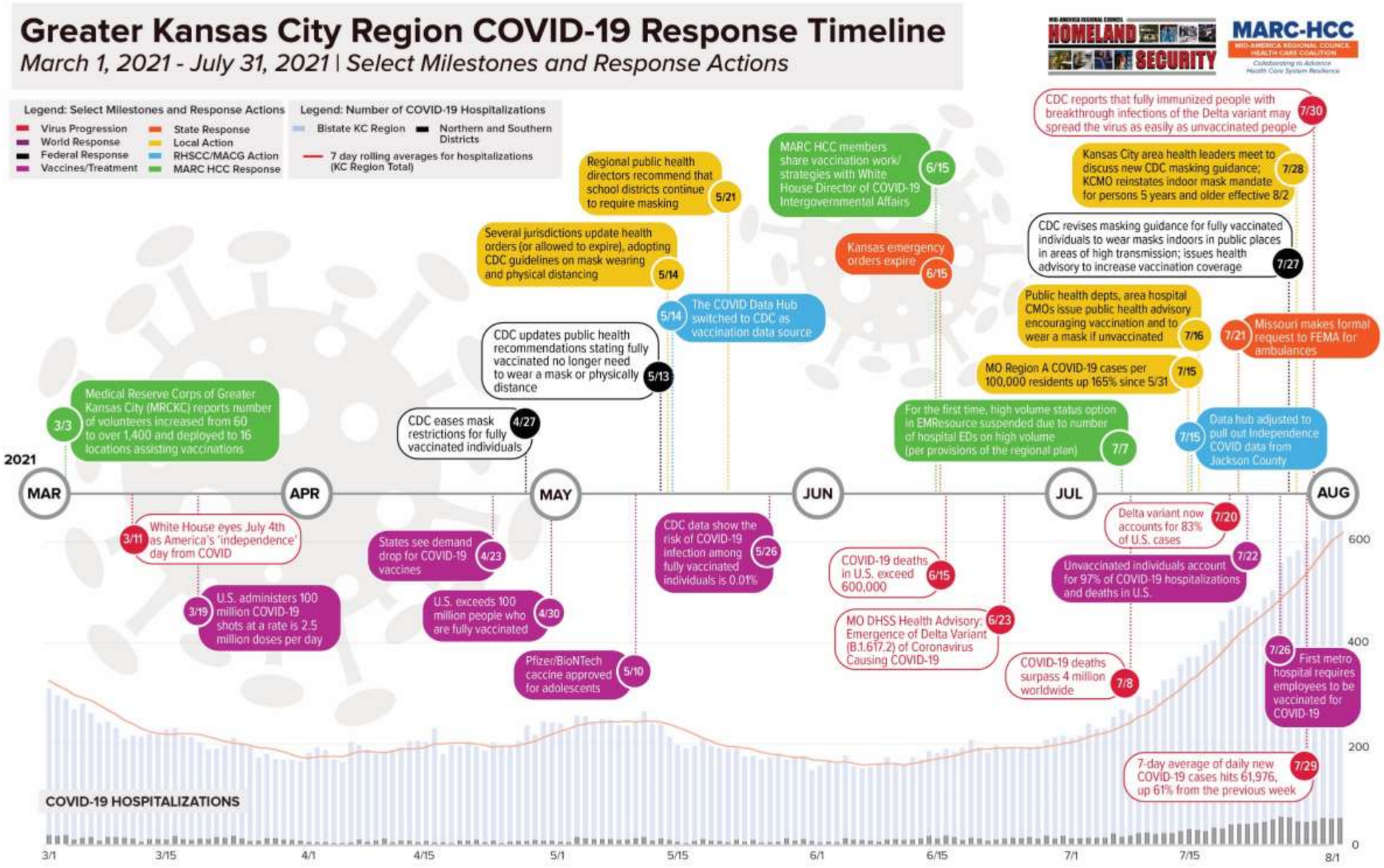
August 1, 2020 – October 31, 2020 | Select Milestones and Response Actions




Greater Kansas City Region COVID-19 Response Timeline
November 1, 2020 - Feb. 28, 2021 | Select Milestones and Response Actions
HOMELAND SECURITY
MARC-HCC
MID-AMERICA REGIONAL COUNCIL HEALTH CARE COALITION
Collaborating to Advance Health Care System Resilience
Legend: Select Milestones and Response Actions
Virus Progression
World Response
Federal Response
Vaccines/Treatment
State Response
Local Action
RHSCC/MACG Action
MARC HCC Response
Legend: Number of COVID-19 Hospitalizations
Bistate KC Region
Northern and Southern Districts
7 day rolling averages for hospitalizations (KC Region Total)
11/16 KCMO, Jackson County, Missouri, and WYCO/KCK announce guidelines limiting gatherings, changes to business operations, etc. Other jurisdictions follow
11/13 Public health directors issue call to action to fight viris spread (KCMO, Johnson, Jackson, Platte and Clay counties, UG of WYCO/KCK)
JOCO issues health order aimed at slowing the spread of the virus
Cinton, Missouri, declares civil emergency due to high community positivity rates
Public health leaders/ CMOs issue joint news release on "Help slow the spread of COVID-19," preserve hospital capacity 11/6
Area Chief Medical Officers (CMOs) update elected officials on hospital COVID-19 patient surges 11/6
11/23 New version of the COVID Data Hub released
11/21 Daily new cases for region reach 1,219 (the peak until Omicron variant)
11/9 U.S. surpasses 10 million confirmed COVID-19 cases
11/9 MARC HCC Threat Assessment Team holds call to discuss need to temporarily suspend hospital emergency department high volume status, per regional plans
11/16 Moderna says its vaccine is 95% effective
11/20 Pfizer seeks emergency FDA approval for its vaccine
11/23 AstraZeneca reports its vaccine is 62–90% effective
Metro area hospitals begin receiving Pfizer's COVID-19 vaccine and start vaccination of front-line healthcare workers 12/14
12/7 Independence, Missouri, re-establishes the city's health department, recognized by the State of Missouri
12/11 FDA issues EUA for Pfizer/ BioNTech COVID-19 vaccine
12/15 Daily new hospitalizations in region reach 191 - highest peak until Omicron variant
12/18 FDA advisory panel backs Moderna COVID-19 vaccine; EUA issued
12/23 U.S. reaches 117,777 hospitalizations, a new record
12/23 U.S. administers its first 1 million COVID-19 vaccines in 10 days
1/7 U.S. tops 4,000 COVID-19 deaths in one day, the deadliest day in the pandemic
1/1 U.S. surpasses 20 million COVID-19 cases; deaths in the MARC HCC region top 2,000
1/16 U.S. surpasses 400,000 COVID-19 deaths
1/19 New COVID-19 variants are shown to evade existing vaccines
1/21 Regional public health directors issue news release on vaccine distribution roll out across region and urge patience as demain is high and supply is very limited
2/4 Johnson & Johnson submits its vaccine for FDA EUA
2/10 CDC updates mask guidance, urging use of tight fitting masks, two masks to maximize protection
2/10 MARC Aging and Adult Services Program works to help individuals register on vaccine portals
2/11 Metropolitan Emergency Managers Committee establishes a standing subcommittee on recovery
2/12 Regional COVID-19 Data Hub version 3.0 released
2/19 KCMO issues revised guidelines (the 13th amended order) relaxing previous limits. Other jurisdictions soon follow
2/24 White House renews national emergency declaration for the pandemic to continue beyond March 1
2/27 FDA authorizes Johnson & Johnson's single-shot COVID-19 vaccine
2020
NOV
DEC
JAN
FEB
MAR
2021
COVID-19 HOSPITALIZATIONS
800
600
400
200
0
11/1
11/15
12/1
12/15
1/1
1/15
2/1
2/15
3/1

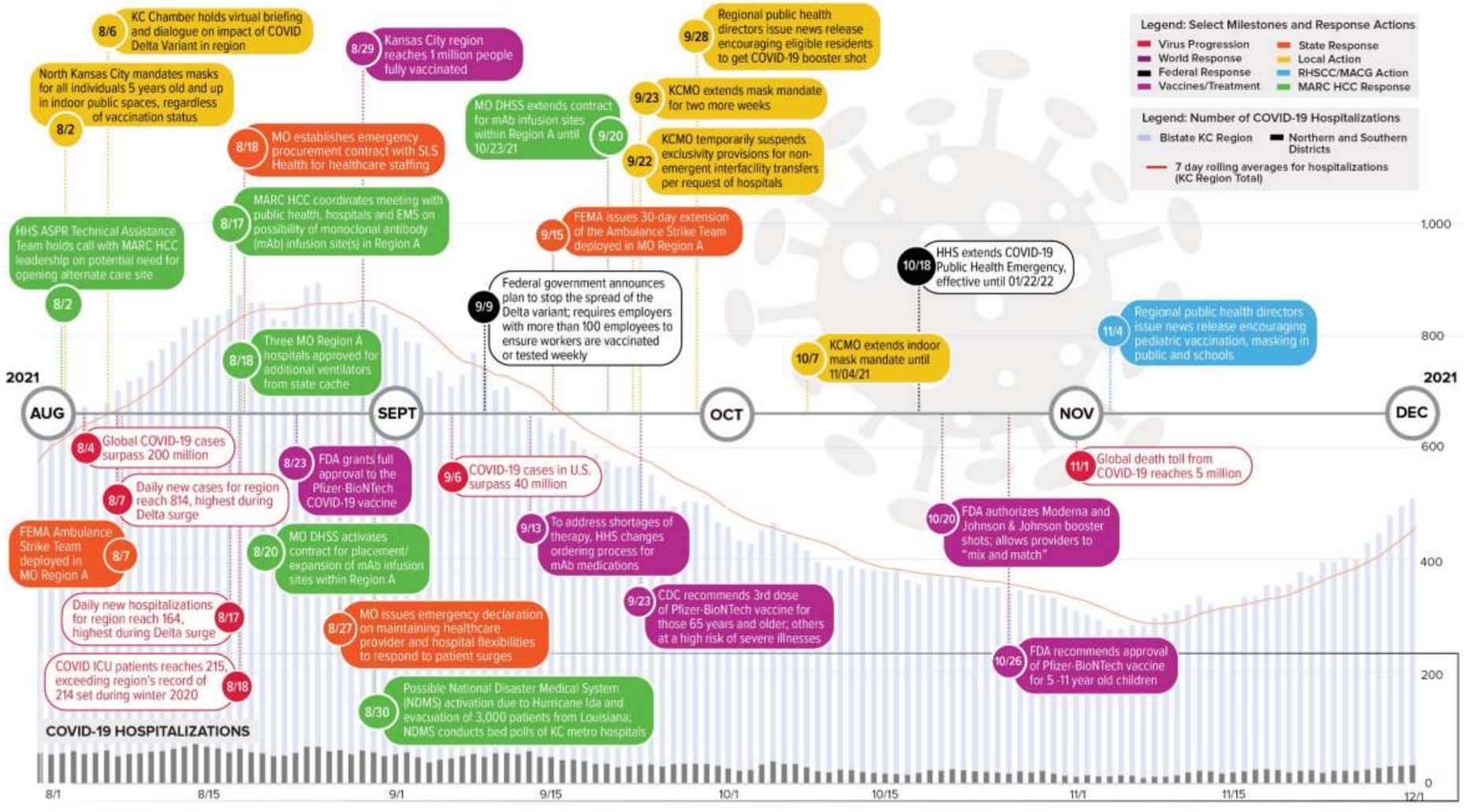
Greater Kansas City Region COVID-19 Response Timeline

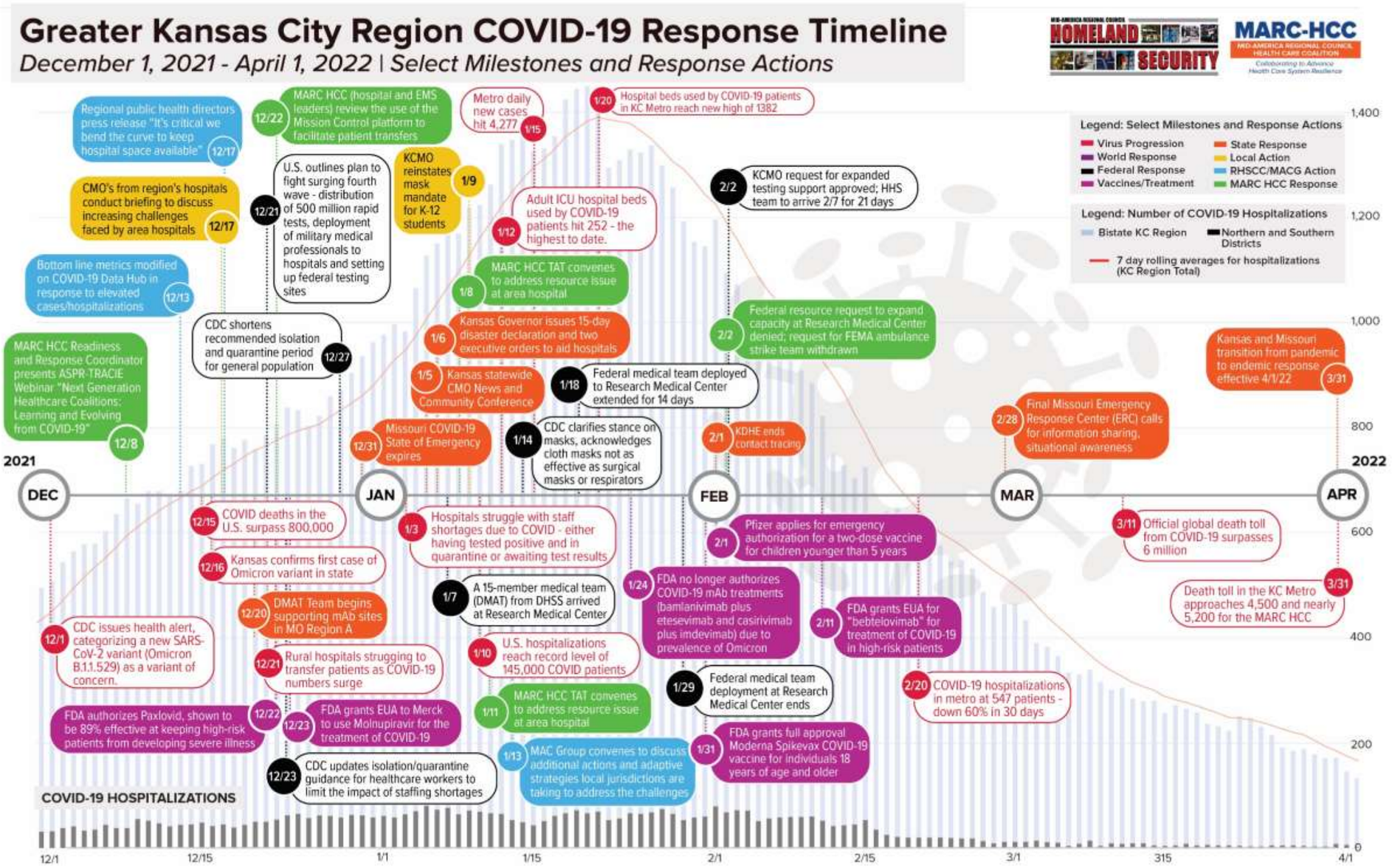
March 1, 2021 - July 31, 2021 | Select Milestones and Response Actions



Greater Kansas City Region COVID-19 Response Timeline

August 1, 2021 - November 30, 2021 | Select Milestones and Response Actions




Greater Kansas City Region COVID-19 Response Timeline
December 1, 2021 - April 1, 2022 | Select Milestones and Response Actions
HOMELAND SECURITY
MARC-HCC
MID-AMERICA REGIONAL COUNCIL HEALTH CARE COALITION
Collaborating to Advance Health Care System Resilience
Legend: Select Milestones and Response Actions
Virus Progression
World Response
Federal Response
Vaccines/Treatment
State Response
Local Action
RHSCC/MACG Action
MARC HCC Response
Legend: Number of COVID-19 Hospitalizations
Bistate KC Region
Northern and Southern Districts
7 day rolling averages for hospitalizations (KC Region Total)
1,400
1,200
1,000
800
600
400
200
0
2021
2022
DEC
JAN
FEB
MAR
APR
Regional public health directors press release "It's critical we bend the curve to keep hospital space available" 12/17
CMO's from region's hospitals conduct briefing to discuss increasing challenges faced by area hospitals 12/17
Bottom line metrics modified on COVID-19 Data Hub in response to elevated cases/hospitalizations 12/13
MARC HCC Readiness and Response Coordinator presents ASPR TRACIE Webinar "Next Generation Healthcare Coalitions: Learning and Evolving from COVID-19" 12/8
12/22 MARC HCC (hospital and EMS leaders) review the use of the Mission Control platform to facilitate patient transfers
12/21 U.S. outlines plan to fight surging fourth wave - distribution of 500 million rapid tests, deployment of military medical professionals to hospitals and setting up federal testing sites
CDC shortens recommended isolation and quarantine period for general population 12/27
12/31 Missouri COVID-19 State of Emergency expires
Metro daily new cases hit 4,277 1/15
KCMO reinstates mask mandate for K-12 students 1/9
1/20 Hospital beds used by COVID-19 patients in KC Metro reach new high of 1382
Adult ICU hospital beds used by COVID-19 patients hit 252 - the highest to date. 1/12
MARC HCC TAT convenes to address resource issue at area hospital 1/8
1/6 Kansas Governor issues 15-day disaster declaration and two executive orders to aid hospitals
1/5 Kansas statewide CMO News and Community Conference
1/18 Federal medical team deployed to Research Medical Center extended for 14 days
1/14 CDC clarifies stance on masks, acknowledges cloth masks not as effective as surgical masks or respirators
2/2 KCMO request for expanded testing support approved; HHS team to arrive 2/7 for 21 days
2/2 Federal resource request to expand capacity at Research Medical Center denied; request for FEMA ambulance strike team withdrawn
2/1 KDHE ends contact tracing
2/28 Final Missouri Emergency Response Center (ERC) calls for information sharing, situational awareness
Kansas and Missouri transition from pandemic to endemic response effective 4/1/22 3/31
12/15 COVID deaths in the U.S. surpass 800,000
12/16 Kansas confirms first case of Omicron variant in state
12/20 DMAT Team begins supporting mAb sites in MO Region A
12/1 CDC issues health alert, categorizing a new SARS-CoV-2 variant (Omicron B.1.1.529) as a variant of concern.
12/21 Rural hospitals struggling to transfer patients as COVID-19 numbers surge
FDA authorizes Paxlovid, shown to be 89% effective at keeping high-risk patients from developing severe illness 12/22
12/23 FDA grants EUA to Merck to use Molnupiravir for the treatment of COVID-19
12/23 CDC updates isolation/quarantine guidance for healthcare workers to limit the impact of staffing shortages
1/3 Hospitals struggle with staff shortages due to COVID - either having tested positive and in quarantine or awaiting test results
1/7 A 15-member medical team (DMAT) from DHSS arrived at Research Medical Center
1/10 U.S. hospitalizations reach record level of 145,000 COVID patients
1/11 MARC HCC TAT convenes to address resource issue at area hospital
1/13 MAC Group convenes to discuss additional actions and adaptive strategies local jurisdictions are taking to address the challenges
2/1 Pfizer applies for emergency authorization for a two-dose vaccine for children younger than 5 years
1/24 FDA no longer authorizes COVID-19 mAb treatments (bamlanivimab plus etesevimab and casirivimab plus imdevimab) due to prevalence of Omicron
2/11 FDA grants EUA for "bebtelovimab" for treatment of COVID-19 in high-risk patients
1/29 Federal medical team deployment at Research Medical Center ends
2/20 COVID-19 hospitalizations in metro at 547 patients - down 60% in 30 days
1/31 FDA grants full approval Moderna Spikevax COVID-19 vaccine for individuals 18 years of age and older
3/11 Official global death toll from COVID-19 surpasses 6 million
3/31 Death toll in the KC Metro approaches 4,500 and nearly 5,200 for the MARC HCC
COVID-19 HOSPITALIZATIONS
12/1
12/15
1/1
1/15
2/1
2/15
3/1
315
4/1

APPENDIX G: ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are found throughout this document. Acronyms and abbreviations are listed in alphabetical order.

Acronym/Abbreviation	Description
AAR	After Action Report
AAR-IP	After Action Report – Improvement Plan
ACS	Alternate Care Site
ASPR	Administration for Strategic Preparedness and Response
CDC	Centers for Disease Control and Prevention
CDRN	Community Disaster Resiliency Network
COAD	Community Organizations Active in Disasters
CSC	Crisis Standards of Care
EEI	Essential Elements of Information
DMAT	Disaster Medical Assistance Team
eICS	Electronic Incident Command System (Juvare product)
EMS	Emergency Medical Services
ESF	Emergency Support Function
HCC	Health Care Coalition
HSEEP	Homeland Security Exercise and Evaluation Program
ICS	Incident Command System
IP	Improvement Plan
JIC	Joint Information Center
KDHE	Kansas Department of Health and Environment
LPHD	Local Public Health Department
MAC G	Multi-Agency Coordination Group
MAC-S	Multi-Agency Coordination Staff
MARC	Mid-America Regional Council
MEMC	Metropolitan Emergency Managers Committee
MO DHSS	Missouri Department of Health and Senior Services
MRCKC	Medical Reserve Corps of Greater Kansas City
NHSN	National Healthcare Safety Network
NIMS	National Incident Management System
PIO	Public Information Officer
PPE	Personal Protective Equipment

RAPIO	Regional Association of Public Information Officers
RCG	Regional Coordination Guide
RHCC	Regional Healthcare Coordination Center
RHCS	Regional Healthcare Coordination System
RHSCC	Regional Homeland Security Coordinating Committee
VOAD	Voluntary Organizations Active in Disasters