



AFTER-ACTION REPORT

COVID-19 PANDEMIC RESPONSE

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INTRODUCTION

On March 11, 2020, the World Health Organization declared a global pandemic, the first since the short-lived H1N1 Pandemic was declared in 2009 and the most significant since the Spanish Flu pandemic of 1918 and 1919.

Following the declaration, Public Health units across Canada mobilized their responses to the global threat, and municipalities across Canada, including Hamilton, mobilized their Emergency Operations Centres (EOCs). Hamilton's EOC was mobilized on March 12, 2020, the day after the first case in Hamilton was declared and remained in full operation until approximately May 2022, and remains mobilized, currently in a monitoring phase.

The EOC Management Team is composed of municipal employees who dedicated thousands of hours to the emergency response, often in addition to their regular duties. EOC duties included various functions ranging from legal analysis and public education to the acquisition and storage of personal protective equipment to the redeployment of hundreds of municipal workers to staff vaccination clinics. As in all other municipalities, the City's EOC Management Team had to make important and timely decisions in a rapidly changing environment to provide services to the community.

During COVID-19, the EOC Management Team comprised of 16 staff members, met 269 times to discuss the city's response strategy to the pandemic.

The following After Action Report was informed through the feedback and documentation of the Mayor, Council and EOC Management Team members, and is meant to inform the response to future emergencies.

With an understanding that the Pandemic offers many lessons, the After-Action Report intends to:

- Review the EOC's response to the COVID-19 Pandemic
- Identify gaps, best practices, successes, challenges, barriers, and opportunities for improvement that contributed to the COVID-19 response; and
- Develop recommendations for future emergencies, including pandemics

It should be noted that the focus of this report is on the role of the EOC. Hamilton Public Health Services (HPHS) will be completing a separate review and plan to share it with Council later this year.

BACKGROUND INFORMATION

In accordance with Ontario's Emergency Management and Civil Protection Act (EMCPA) and its supporting Regulation 380/04, every municipality must have an Emergency Operations Centre (EOC) and a Municipal Emergency Control Group.

The City of Hamilton's Municipal Emergency Control Group, known as the EOC Management Team, is comprised of EOC personnel, including General Managers, Directors and support staff who were overseen by the EOC Director. At the height of the pandemic, there were 42 EOC personnel responding to the emergency.

Hamilton follows the standard emergency response structure, known as the Incident Management System (IMS), which is used nationally, provincially, and locally to address emergencies ranging from forest fires and flooding to public health emergencies.

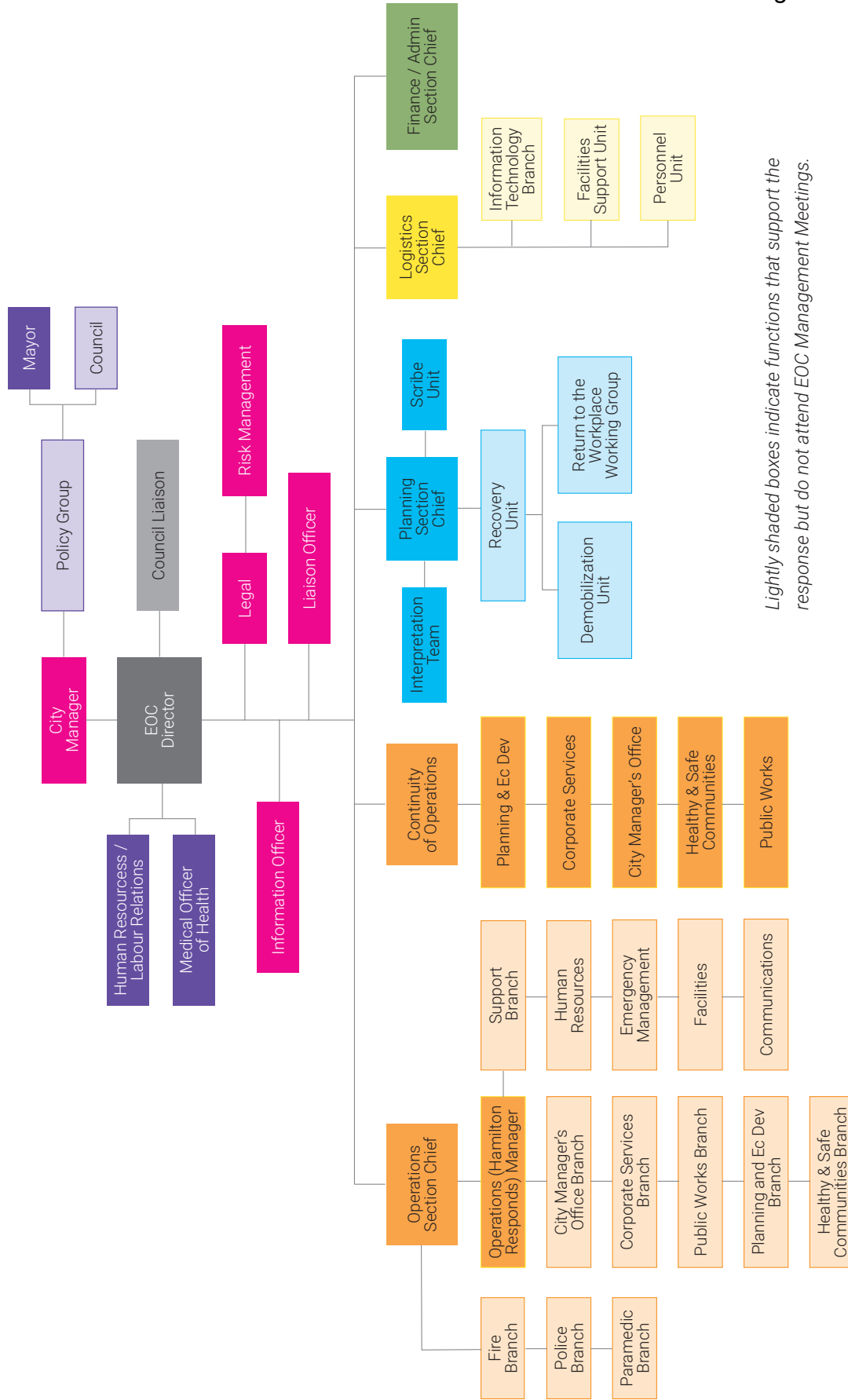
IMS structures are divided into five sections: Command, Operations, Logistics, Planning and Finance and Administration. Individual sections themselves can be expanded into branches or units with specific functions.

During COVID-19, the IMS response model was quickly expanded to include several branches, requiring the EOC to draw upon additional municipal resources to account for the sheer scale of the COVID-19 pandemic and the threat it posed to public health and safety. On the following page is an organizational diagram of the IMS model used by the City of Hamilton to respond to the COVID-19 Pandemic.



CITY OF HAMILTON EOC IMS ORGANIZATIONAL CHART

Event Name: COVID-19

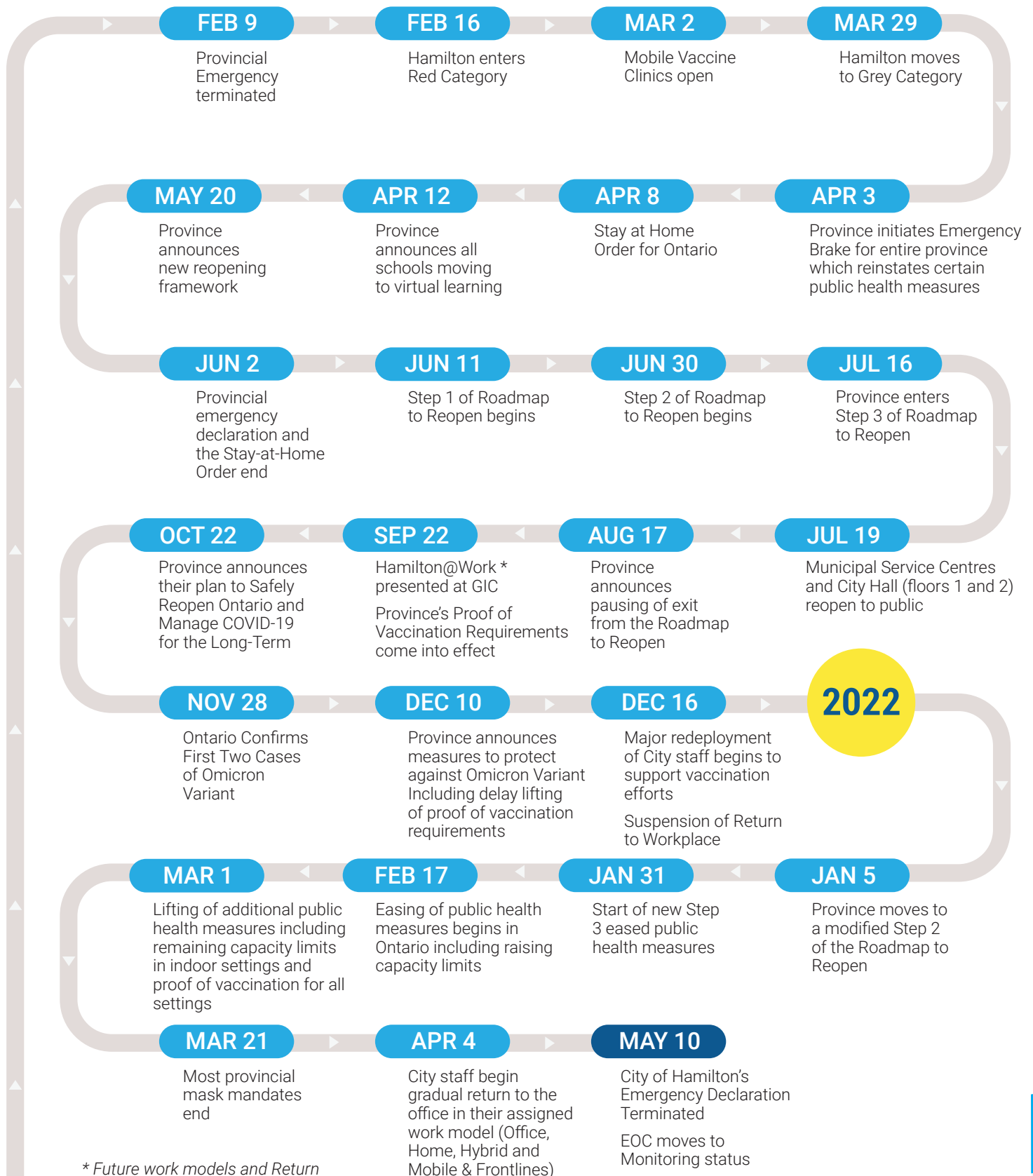


Lightly shaded boxes indicate functions that support the response but do not attend EOC Management Meetings.

TIMELINE OF EVENTS

The pandemic has gone through many waves and phases that included identifying and learning about the disease, mandatory closures and masking policies, stages of opening and closing, vaccine rollouts, to the current stage of reopening, and the elimination of many provincial mandates.





* Future work models and Return to the Workplace Strategy.

METHODOLOGY

The methodology used to gather information for this After-Action Report was:

1. **Facilitated discussions or debrief sessions with Mayor and Council and EOC management staff**
2. **A targeted survey sent to EOC branch leads**

Given the number of staff members involved in EOC operations and the City's pandemic response, it was not feasible to interview everyone involved. Thus only staff who played a significant role greater than two months were included in the review.

Both the survey and the debrief sessions were designed to collect the same information, which focused on:

- **What went well**
- **What could have gone better**
- **What actions should the City consider in the future to improve its emergency response capabilities (lessons learned)**

After-Action Insights **WHAT WE HEARD**

The information from the survey and the debrief sessions was synthesized and organized in line with the IMS structure.

After-Action Insights
WHAT WE HEARD

COMMAND

The **Command Section** refers to those holding the position of EOC Director, City Manager, Legal, Communications, Liaison Officer, and the Mayor. This Section oversees, coordinates and directs the incident and incident-related support activities. Councillor feedback is also included in this section.

It should be noted that the majority of the EOC leadership positions were occupied by administrative leaders, who remained responsible for their regular duties while also assuming responsibilities for the pandemic response.

The team was also informed by input of City Council members, who indicated that they saw a dramatic increase in correspondence from constituents, particularly correspondence related to the pandemic.



WHAT WENT WELL

Overall, respondents identified three main areas that went well concerning EOC Command, including having the appropriate skills sets at the table for informed decision making, the ability for the EOC structure to be highly adaptable to meet the needs of a rapidly changing pandemic, and was highly effective at leveraging the experience of other municipalities who were facing similar if not identical challenges.

The most common comments regarding the Command of the EOC response included:

- As the response progressed, command became evident. There was a good balance and clear distinguishing of roles between EOC, Council and Public Health. Staff involved in the EOC response had knowledge and confidence that the EOC Management team was leading the response.
- The Command structure was able to adapt the IMS structure in response to numerous changes brought about by the pandemic, enabling the municipality to continue to meet the community's needs during an extended emergency period.
- The ability to connect with other municipalities, particularly through the Mayor's office (e.g. weekly GTHA Mayors and Chairs meetings), was extremely helpful in understanding and learning from the experiences of other municipalities.
- The Council Liaison was a key role that provided valued support and assistance to Council members.



AREAS FOR IMPROVEMENT

The review highlights several areas the City of Hamilton can learn from regarding the Command of the IMS response. The most common areas for improvement identified through the review process were clarity around the decision-making authority of the EOC and City leadership and the ability to apply rules consistently in a rapidly changing regulatory environment.

The most common feedback on areas for improvement in the City's EOC Command included:

- During the early days of the pandemic, it was challenging to determine who had ultimate authority (EOC or conventional leadership structure) to make an emergency decision under the IMS model for a decision such as facility closure or changes to service levels.
- Regulations from provincial authorities in response to a changing health environment made it challenging at times to understand some of the operational changes that needed to be implemented to comply with provincial orders.
- Clarity on why decisions were made, and the level of enforcement needed to comply with provincial regulations.

After-Action Insights
WHAT WE HEARD

COMMUNICATIONS

The **Communications Team** is responsible for all communication functions during the response (media briefings and media response, social media, website updates, public information management, public education campaigns, etc.), with decision-making authority resting with the Emergency Information Officer under the IMS structure.

In response to rapidly increasing workloads among the Communications team and the strain on existing resources, the City expanded its Communications Team as the demand for crisis communication was extraordinary. The Communications Team changed multiple procedures to prioritize pandemic communications and the needs of Public Health Services. Extra resources were 100% funded through provincial pandemic funding and made it possible for the municipality to keep up with the ever-increasing demands of the organization, the media, and the community. In total, the City released over 300 COVID-19 media releases and held 57 media briefings.



AREAS FOR IMPROVEMENT



WHAT WENT WELL

Participants in the review identified three main areas where they believed the EOC communications went well, including the City's ability to leverage numerous processes and tools to reach diverse audiences, the ability to provide clarity to often very complex and rapidly changing information, and the ability to act as a conduit to help internal stakeholders gain a better understanding of emerging issues.

The most common comments made by participants of the review included:

- The City was able to provide information to a wide variety of stakeholders, often with different information needs, through the strategic use of communications tools, including media briefings, news releases, website updates, newsletters, internal memos, and internal and external town halls and weekly meetings with General Managers and Directors.
- The EOC Management team benefited from the vast array of relationships held by the Communications division, which had a line of sight on business areas across the corporation.
- Communications staff were vital in helping the EOC translate complex subject matter into information that was consistent and accessible across numerous audiences.
- Communication to Councillors to answer constituent questions was facilitated successfully via the Council Liaison.

Participants in the review cited several communications challenges that made it difficult to meet all the needs of citizens and members of the press during the pandemic.

The completeness and often competing nature of information from numerous organizations made it difficult and time-consuming to validate emerging information.

Workload demands of the pandemic often outstripped available resources to do the work. This resulted in significant evening and weekend work and had considerable impacts on staff wellbeing and regular work. The Communications Team also had difficulty engaging subject matter experts for interviews outside of scheduled media briefings.

The most common comments made by the participants of the review included:

- There were often significant delays between the time provincial orders were issued and the accompanying regulations were distributed, making it challenging to speak to the impacts of orders on City operations and efforts.
- Demands on communications resources during the pandemic were significantly elevated and characterized as "never-ending".
- Interpretations of COVID regulations varied across municipalities, making it difficult to always provide the public with information that was consistent with other information they were receiving from other jurisdictions.

After-Action Insights
WHAT WE HEARD

OPERATIONS

The role of the **Operations Section** is to complete the objectives/tasks stated in the EOC's Incident Action Plan. The Operations Section is the City's tactical team who operationalize City services based on EOC decisions. The Operations Section is comprised of City staff from each City department as well representatives from Human Resources (Health, Safety and Wellness Manager), Communications and Emergency Management.



WHAT WENT WELL

Participants' responses in the review process identified three main areas of strength as it relates to the EOC Operations Section including effective coordination among EOC teams and business units, a solid commitment to collaboration in the face of significant pressures, and well-orchestrated role clarity so issues and actions could be triaged quickly and appropriately.

The most common comments heard by review participants included:

- Operations were able to provide a reliable and consistent approach across City operations regardless of the issue.
- The Operations team consistently and proactively identified and prioritized vulnerable populations.
- Operations efforts were able to overcome the siloing effect that often happens in different departments and was able to adapt quickly to changes and utilize the skills of staff to work outside their regular duties.



AREAS FOR IMPROVEMENT

Review participants cited change management, business continuity planning, and staffing levels of the Operations team, particularly a lack of front-line staff.

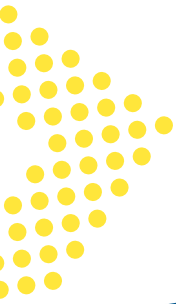
The most common comments heard included:

- It was challenging to manage the public's expectations for action on issues related to provincial regulation changes as orders often occurred on Friday afternoon, and implementation was often expected to occur immediately, or on Monday morning.
- The City of Hamilton needs to augment existing business continuity plans to a more formalized process.
- It was challenging to help the community understand the difference between the announcement of provincial regulations and the time the City required to implement the changes.

After-Action Insights
WHAT WE HEARD

PLANNING

The **Planning Section** collects, documents, confirms, analyzes, and shares critical information to inform decisions and develop the Incident Action Plan. To respond to the approximately 200 provincial orders put in place over the duration of the pandemic, the EOC Management team added an Interpretation Team consisting of representatives from Legal, Public Health and Licensing & By-Law Services. This team provided guidance and interpretations of the orders to ensure consistent messaging and enforcement of provincial regulations in Hamilton, as well as providing communications/interpretation to community partners, local businesses and organizations and Hamilton residents.



WHAT WENT WELL

Review participants identified three key areas they felt went very well from the planning perspective, including the consistency and predictability of the approach, the ability to support other teams across the EOC, and the reliability of the documentation they produced to record decisions that were made and plans carried out.

The most common comments heard from review participants include:

- It was extremely helpful over the course of a two-year emergency to have consistent and reliable documentation that could be referenced as needed.
- The Interpretation Team made a difference as there were many unique scenarios for services, businesses and individuals who needed to navigate changing regulations and their implications.
- The continuity of the team allowed for a consistent approach and valuable history of decisions that had been made.

AREAS FOR IMPROVEMENT

Review participants cited the need for greater consistency in documentation and role clarity and structure for the Interpretation Team.

The most common comments heard include:

- Regulations changed over 200 times during the pandemic, making it challenging to keep track of all of the implications the rules might have on City business and efforts.
- The Interpretation Team was often asked to review the reopening plans of other businesses in place of doing their review of the City's own plans, which put significant pressure on the team.
- The inconsistent regulations across the province resulting in closure of services in Hamilton and available service in neighbouring municipalities.

After-Action Insights
WHAT WE HEARD

LOGISTICS

The **Logistics Section** performs several important functions related to obtaining resources needed to respond to the emergency. This includes retaining personnel for vaccine clinics, personal protective equipment for staff, and the procurement of supplies needed to protect the health and safety of staff. During the pandemic there was an extreme shortage of global supplies and resources. This was a huge challenge for the Logistics Team as they struggled to secure supplies and resources needed to respond to the pandemic. The Logistics team was comprised of staff from Human Resources, Facilities, Procurement and Information Technology.



WHAT WENT WELL

Review participants identified a number of issues that went well as it relates to logistics support to the pandemic, including successful redeployment efforts of staff from across the organization, engagement in effective supply management, and enhanced use of information technology to allow 20% of the City's workforce to be able to work from home.

Most common comments heard from review participants include:

- Logistics was able to redeploy staff from all over the organization and was also able to hire quickly to mobilize vaccine clinics.
- Procurement and facilities staff mobilized quickly and were well organized. The function of the supply depot became a safety net that was able to deliver supplies when and where they were needed.
- IT services was quick to mobilize a remote workforce and the municipality's ability to transition to virtual meetings saved time and allowed for the continuity of services in a safe environment.



AREAS FOR IMPROVEMENT

Review participants identified the changing scope of the City's needs over the pandemic and resources challenges in meeting significantly increasing workloads, particularly in IT services.

The most common comments heard were:

- Services including vaccine delivery, the vaccine verification policy, information technology needs, and the development of entirely new work models were resource-intensive and caused significant strain on employees.
- The scope and approach of projects that arose from the emergency response often required the City to pivot, making it difficult to plan for and respond to requests for services such as IT.

After-Action Insights
WHAT WE HEARD

FINANCE & ADMINISTRATION

The **Finance and Administration Section** is responsible for the procurement, tracking, and payment of resources and for keeping a financial record of costs related to the emergency.



WHAT WENT WELL

Review participants identified several areas that went well, including the ability to quickly access resources where and when it was needed through delegated authority and effective tracking of COVID-related costs.

Common feedback received in the review included:

- When Council couldn't meet in the early days of the pandemic, having a delegated authority bylaw in place helped when federal or provincial money came through so that funds could be quickly flowed to agencies in the community who needed it.
- Staff were able to streamline many processes to minimize the administrative burden.



AREAS FOR IMPROVEMENT

Feedback from interviews and surveys identified challenges related to tracking of financial transactions, the need for a less labour-intensive tracking tool and approval processes and the need for a procurement policy that expedited the purchase of essential products.

The most common comments heard include:








- The City needs to examine a way to make tracking of certain expenses less cumbersome for staff.
- Approval processes, particularly those related to the need for additional staff or staff working out of the City, province, or country, need improvement.
- Procurement policies in a declared state of emergency should be reviewed in order to fast track procuring essential products to save time and resources.

LESSONS LEARNED

Over the course of the Pandemic, the efforts of the City of Hamilton's EOC Management Team and the staff that support those efforts had numerous learning opportunities that the City can capitalize on to ensure it can adapt and prepare for future emergencies.

While the review indicated that the ability of the City of Hamilton to react and respond to the global health crisis, which threatened the health of the community and impacted every part of its business, should be considered a success, there are a number of takeaways for the City and the community to reflect on and incorporate into its planning and operations moving forward.

Key lessons learned from the pandemic to date include:

-  The pandemic affected all aspects of our community, including businesses, City services and the healthcare system, and success requires a collective effort.
-  There is high value to the City's practice of undertaking regular emergency training and exercises, which allowed for a greater understanding of the role of an Emergency Operations Centre and its function during an emergency.
-  Emergency response structures need to be adaptable to meet the changing nature of a prolonged emergency.
-  The role and value of technology in enabling many procedures, services, and meetings to be conducted remotely.
-  Adapting to a changing environment, including multiple waves of provincial orders and regulations, takes time to consider and implement properly.
-  Effective communication involves multiple resources, many communications channels to reach audiences, and a significant amount of time and effort to do well.
-  There is considerable value in being proactive and flexible when faced with challenging circumstances.










CONCLUSIONS & RECOMMENDATIONS

The past two-and-a-half years have been difficult, with no part of the world, the nation, or the community untouched by the pandemic. It led to the loss of loved ones and friends, and caused considerable stress, anxiety, and uncertainty for many.

For the EOC, and the staff at the City of Hamilton, the past 28 months have represented a time of significant challenges and resilience. The City continued to provide the community with services, was instrumental in supporting the health and safety of community members and did its best to understand and respond to the most significant public health emergency in more than 100 years.



To ensure the City of Hamilton can learn and adapt from the experiences of the COVID-19 pandemic, the following recommendations should be considered:

-  During extended emergencies, dedicate specific resources to respond and make them separate from resources dedicated to the continuation of essential services.
-  During emergencies, activate temporary succession plans for key leadership roles to ensure approvals and essential services continue.
-  Business Continuity Plans need to be further developed and updated annually. Staff need to be aware of services that will continue and services that will be altered or ceased when an interruption occurs.
-  During an emergency of this type, form an Interpretation Team early to provide guidance and interpretation of provincial orders. Inform people that the team exists and define their purpose so that the roles and responsibilities of this team are clearly understood.
-  Provide ongoing orientation and training for the Mayor, members of Council and City staff so that they understand roles and responsibilities during an emergency response.
-  Anticipate future waves and how they may impact critical events and activities, such as large-scale gatherings or processes such as elections. Ensure essential supplies including personal protective equipment for staff.
-  Look at ways to further streamline communications strategy and tools and tactics to be able to respond quickly in a fast-paced, rapidly changing environment.



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