SMALL CITIES RESPONSE TO PUBLIC EMERGENCIES

PHASE I REPORT

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1. Our Connected World

Today, the human population is approximately 7.7 billion (U.S. Census) compared to 1 billion in 1800 with more than 50 percent of the world’s population residing in urban areas, i.e., towns, cities, and urban settlements; this represents the largest wave of urban growth in human history (United Nations Population Fund, World Bank). North America (Canada and the United States) is the most urbanized continent in the world. The global trend of urbanization indicates the number of urban dwellers will increase to 70 percent by 2050 with most of the growth occurring in existing urban areas. As of 2010, 80.7 percent (249,253,271) of the U.S. population was residing in urban clusters or urbanized areas.

As places become increasingly urbanized, globalization has intensified the exchanges and flows between places, countries, regions, and continents. This intensification of interactions and interconnectedness is fundamentally responsible for our contemporary world and pandemics. Taken together, globalization and urbanization mean that public health emergencies such as communicable or infectious diseases are no longer geographically isolated, spread easily, have no spatial constraints, and have far greater consequences. An apt example is the West Nile Virus which is believed to have entered the United States via New York City by mosquitoes hitching a ride across the ocean in the wheel wells of an airplane (Knobler et al, 2003).

Pandemics are pervasive, especially as globalization intensifies and urbanization increases. Generally, pandemics have been intertwined with globalization and urbanized areas (Antras et al, 2020). The docking of twelve ships from the black sea at the port of Messina, Italy initiated the spread of the black death in Europe. More recently the interactions of a local car parts dealer in Starnberg, Germany during a training session with a Chinese colleague from its operations in Wuhan, China precipitated the spread of COVID-19 in Germany. Similarly, the 1918 Spanish Flu (approximately 50 million deaths globally), and the various strains of the avian virus (1957-58, 1968, and 2009 which account for approximately 1.4 million deaths globally) are examples of pandemics resulting from an interconnected, global society.

2. Goal of the Research

Wisconsin adopts an All Hazard Planning approach to emergencies with the main objective of creating “systems to ensure that responders from multiple services, sectors, jurisdictions and levels of government can effectively communicate, coordinate and integrate their efforts.” And the Wisconsin Emergency Response Plan (WERP) developed by the authority of Wisconsin Statutes Chapter 323 seeks “to manage multi-agency state response to large-scale emergencies that exceed local response capacity” through “integration between local jurisdictions and state and federal agencies and is the mechanism for requesting federal disaster assistance.”

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The Michigan State Police, Emergency Management and Homeland Security Division (MSP/EMHSD) is “responsible for coordinating state and federal resources to assist local government in response and relief activities in the event of an emergency or disaster”. Whilst the Michigan Emergency Management Plan, 2018 developed by MSP/EMHSD in partnership with stakeholders in accordance with the Michigan Emergency Management Act (Public Act 390 of 1976, as amended) “provides an organizational and operational framework to enable state departments and agencies mitigate, prepare for, respond to, and recover from emergencies, disasters, threats or incidents.”

A division of the Minnesota Department of Public Safety, the Homeland Security and Emergency Management (HSEM), “assists communities prepare for, respond to, and recover from emergencies and disasters” as stipulated by Minnesota Statutes Chapter 12 Minnesota Emergency Management Act of 1996. Accordingly, the division coordinates “state agency preparedness for and emergency response to all types of natural and other emergencies and disasters.”

Preparedness is key in addressing public emergencies in our contemporary world. Most of the existing systems/infrastructure in Wisconsin prioritize responding to natural phenomena or manmade actions (i.e., terrorism) due to the economic losses and immediate need for relief. Likewise, since the passage of the 1803 United States, Congressional Act and subsequent creation of the Federal EMA by Executive Order 12127, emergency preparedness has tended to emphasize natural disasters as opposed to health-related pandemics largely due to the visible and immediate impact of the economic losses associated with natural disasters. For instance, since 1980 disasters have accounted for $285 billion in losses in the U.S.” (National Centers for Environmental Information).

The COVID-19 pandemic has made it evident cities need to rethink approaches to local public health and emergency management policies. Few municipalities if any have built or designed public policies with highly infectious diseases in mind. Public officials, administrators, and policy makers have had to devise different approaches to mitigate the fallout (shrinking economies, declining fiscal base, overburdened infrastructure, inaccessible core services, etc.). These stop gap measures have exposed the inadequacies of current policies and public leadership to address public health emergencies such as pandemics.

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3 Minnesota Department of Public Safety “Homeland Security and Emergency Management Division
https://dps.mn.gov/divisions/hsem/Pages/default.aspx” (accessed September 9, 2021)
Why is this significant? Relative to natural disasters, the effects of pandemics are not localized, account for more deaths, devastate economic systems, and have long term ramifications on the demographic structure of nations. Public emergencies, particularly health-related public emergencies can wreak havoc on a greater geographical scale thus threatening the viability of urban places. It should be noted that “the increasing interdependence of world economies as a result of the growing scale of cross-border trade of commodities and services, the flow of international capital and the wide and rapid spread of technologies” (Committee for Development Policy, UN) is responsible for more than 80 percent of global GDP being generated in urban settings, particularly in cities. It is no surprise that the COVID-19 pandemic caused (economic) disruptions due to the increased interconnectivity in the world markets thus maximizing the potential for global and local recessions (Michie, 2020). In the U.S., the COVID-19 pandemic caused a devastating loss of life and devastated the nation’s economy as the ratio of employment-to-population declined indicating the additional loss of employment due to the pandemic (U.S. Census) \(^4\). Simply put, the impact of pandemics might not be immediate or direct, but they do have an impact on the (economic) viability of societies both in the short and long term.

There are three broad categories of public emergencies: natural disasters, man-made and pandemics. The overall goal of this study is to assess the preparedness of small cities in Michigan, Minnesota, and Wisconsin for future public emergencies, in particular infectious diseases and to an extent natural disaster. So doing will entail assessing existing emergency management plans of small cities located in the upper Midwest (Michigan, Minnesota, and Wisconsin) for addressing future public health challenges in addition to other public emergencies. Overall, the findings will be useful in determining the preparedness of small cities to address pandemics, identify shortfalls in the existing preparedness structure, and inform policy for emergency management institutions and organizations at both the local and state level.

3. Methods

The research team adopted a mixed method approach using multiple sources of data to assess the preparedness of small cities to pandemic emergencies. Initially, the research team sought to collect local planning documents, deliver a questionnaire to a sample of emergency managers from small cities, and to display research results using maps and internet story mapping tools. As the study progressed, it became clear that local health and emergency management personnel were inundated by duties related to the COVID-19 pandemic. The research team concluded that a questionnaire approach would not result in response rate

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useful for analytics. Moreover, the team’s attempt to interview local officials was met with a lack of participation and some trepidation. To compensate, the research team modified the approach by focusing on document acquisition (i.e., emergency operations plan, all-hazard mitigation plans and community health improvement plans), document interrogation, and result mapping of the processed document information.

3.1 Sampled Cities and Respective Counties

Using U.S. Census Data (2010), the research team identified a sample of small cities and villages with populations under 50,000 across the upper Midwest, specifically Michigan, Minnesota, and Wisconsin. The upper Midwest was chosen, since these three states are similar in a variety of respects and could be compared to determine the impact of state level policies on local level policy. This sample permitted the research team to compare between the three states, population size (for example, city populations under 20,000 versus above 20,000), and suburban versus a “stand-alone” city (one that is not a part of a larger metropolitan area). Our sample of small cities totaled 381, of which 76 percent were located within metropolitan counties and 24 percent were in non-metropolitan counties. As research continued, the research team discovered that most cities in the sample deferred emergency planning responsibility to the county they resided. Thus, the unit of analysis for the study changed from the small city to the county (counties containing small cities); the sample includes 108 counties within which our small city sample was drawn.

3.2 Documents

In the discovery process, three types of health and emergency preparedness - related plans were identified, each of which have their own purpose. Table 3.0 outlines the basic differences between each type of plan. Each type of plan was chosen because each should address epidemics, pandemics, and/or disease-related emergencies or events. During document acquisition, the research team discovered that these plans were only available at the county level and that each local government or municipality could sign on to the plan as a collaborator. This further reinforced the decision to use the county as the unit of analysis. Thus, collected county plans where our sample communities were located (as noted above) served as data in the methodology.

To interrogate plans, FEMA, CDC, and state statutes were reviewed to create a set of questions (see Appendix A). Some questions pertain to one plan type, for example, the hazard mitigation plan and other questions pertain to all three types of plans.

A content analysis of the plans was the interrogation method utilized; three primary analysts examined the plans from each state. Furthermore, a test was conducted to ascertain a high level of agreement between all the analysts. After we tested one county’s plans, we analyzed the level of agreement and then discussed where we had disagreements to make sure as each individual analyst went through his set of plans that each analyst was looking for similar items.
In addition, the team denoted the physical location and extent of local governmental units (small cities, and villages). The geospatial data was developed for the following uses in ArcGIS Pro:

1. Development of a Data Base Management System (DBMS) for managing interrogation responses as attributes organized by county and state.
2. Communicate interrogation results in the form of symbolized maps, charts, tables, story maps, and operations dashboards.

The team used ArcGIS Pro and compiled the interrogation items to generate thematic maps by attribute category.

**Table 3.0: Plan Purpose**

<table>
<thead>
<tr>
<th>Type of Plan</th>
<th>Emergency Operations Plans (EOP)</th>
<th>All-Hazard Mitigation Plans (HMP)</th>
<th>Community Health Improvement Plans (CHIP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose of the Plan</td>
<td>As a home rule state, Wisconsin (State) recognizes that the safety and well-being of every resident of every jurisdiction in the State is the responsibility of the senior elected officials at the lowest level of government affected by an emergency. It is the premise of this plan that all county departments share the responsibility for working together in mitigating, preparing for, responding to, and recovering from the effects of an emergency or disaster event.</td>
<td>A mitigation plan is a demonstration of the commitment to reduce risks from natural hazards and serves as a strategic guide for decision-makers as they commit resources. The planning process is as important as the plan itself. This process includes hazard identification and risk assessment leading to the development of a comprehensive mitigation strategy for reducing risks to life and property.</td>
<td>Since 1993, Wisconsin State Statutes have required communities throughout Wisconsin to develop and implement local health plans to address health conditions affecting their residents. This process has been referred to as the &quot;Community Health Improvement Process,&quot; named partly due to the resulting health status changes in a community and the people who live there.</td>
</tr>
</tbody>
</table>

### 3.3. Plan Acquisition

To conduct our analysis, we first gathered plans from our sample counties. We only gathered those plans that were available on-line; we did not request copies of plans. The Plans Acquired chart shows the number of sample counties in each state, the potential number of plans
including the HMP, EOP, and CHIP, and the number of plans that the team found available online.

![Chart 3.0: Plans Acquired](image)

### 3.3.1 Hazard Mitigation Plans

The Hazard Mitigation Plans, constructed by city members, county officials, and sometimes a privately owned business in relationship to the county, are made up of a multitude of important information ranging from the planning process and public involvement in section 1, general geography to development patterns in section 2, disaster risk assessments and prioritization in section 3, concluding with mitigation strategies, plan adoptions and maintenance in section 4. This plan is more detailed than the EOP in terms of its template and information being able to be released to the public. With that, 95 of 108 counties in the research area had HMPs displayable for public use and were a part of the interrogation process. The team found that 88 percent of the counties had HMPs available on-line.

### 3.3.2 Emergency Operation Plans

The Emergency Operations Plans, made up of a sequential process of Annexes, help city, county, state level emergency planners, and other aid professionals during a disaster event. A total of 12 out of 108 counties in the research area had a publicly displayable Emergency Operations Plan for use during the study. The plans briefly describe categories relating to assistance needed in the stages of emergency management (Preparedness, Response, Recovery, Mitigation) including Direction and Control, Warning and Communication, Resource Management, Law Enforcement, Evacuation and Sheltering, Human Services, Public Works and
3.3.3 Community Health Improvement Plans

The Community Health Improvement Plans, authored by public health officials and members of the county or counties in which the plan was constructed, is meant to prioritize efforts to improve the public’s health in various categories. The plans normally consider 3-5 community priority areas of needed change like nutrition, chronic disease, drug abuse, and mental health. Rarely were topics about pandemics and/or infectious diseases brought up and detailed as a problem or concern for WI, MN, and MI counties. A total of 76 of 108 counties in the research area had CHIPS displayable for public use. Some plans coupled multiple counties together within a single plan but were respectively counted individually and fairly counted in the final totals for each county represented in the study area. However, with the lack of pandemic efforts detailed in the plans, most of the counties in the study were unable to fulfill requirements made in the interrogation questions.

4. Plan Analysis and Results

The county sample and document interrogation required modification of the analytic approach. The research team used descriptive statistics to examine overall scores, to make assessments between states, and between types of plans. As much of the data as available was used to make comparisons.

4.1 HMP Interrogation Results

4.1.1 Hazard Mitigation Plan Qualification Scores

The research team assessed HMPs by considering a series of 29 questions (Appendix B). Some questions assessed the subject area with absence/presence (no/yes) qualifiers. The absence of a condition was assigned a score of “0.” The presence of a condition was assigned a score of “1.” Other questions assessed categories with more detail, characterizing how well the plan addressed certain subjects with three qualifiers: plans that did not address a subject area were assigned a score of “0”. Plans that addressed the subject area in an incomplete or limited fashion were assigned a score of “1.” Plans that addressed the subject area robustly were assigned a score of “2.” Based upon the scoring constructs for the set of 29 questions, the highest score that a county might be assigned is “36.”

Assessment Result

Of the 108 counties in the study area, 13 were not accessible to score. Of the remaining 95 counties:
• 14 counties scored between 23-27 points, meeting only 63.9-75.0 percent of the 36 qualifier points.
• 21 counties scored between 19-22 points, meeting only 52.8-61.1 percent of the 36 qualifier points.
• 39 counties scored between 14-21 points, meeting 38.9-58.3 percent of the 36 qualifier points.
• 21 counties scored between 4-13 points, meeting 11.1-36.1 percent of the 36 qualifier points.
• The top scoring counties were all from Michigan and included Shiawassee, Menominee, Mason, and Muskegon.

Map 4.0: HMP Qualification Scores
### Table 4.0: HMP Descriptive Statistics

<table>
<thead>
<tr>
<th>State</th>
<th>Maximum Score assigned to a county</th>
<th>Median score of plans by state</th>
<th>Mean Score of plans by state</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>27</td>
<td>12</td>
<td>12.91</td>
</tr>
<tr>
<td>Minnesota</td>
<td>25</td>
<td>18</td>
<td>17.74</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>26</td>
<td>20</td>
<td>20.24</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>27</td>
<td>16.50</td>
<td>16.83</td>
</tr>
</tbody>
</table>

### 4.1.2 Is the Hazard Mitigation Plan Accessible (Available) to the Public?

HMP accessibility or availability was measured based upon whether a plan could be viewed or downloaded from an online source, most commonly from a county’s website. For clarification, this assessment category does not measure the existence of an HMP plan (i.e., Was a HMP plan developed?), but rather if a plan is online accessible. This category does not assess why the plan was not accessible online (e.g., Plan was not created. Plan was created but was not made available online). See map in Appendix A.

**Assessment Result**

One-hundred eight total counties in Michigan, Minnesota, and Wisconsin were included in the research area. Thirteen or 11.9 percent of researched counties had plans that were not accessible online to the research team while 95 or 88.0 percent of researched counties had plans that were accessible online (see Table 4.1).

### Table 4.1: Accessible HMP Plans by State

<table>
<thead>
<tr>
<th>State</th>
<th>Number of HMP Plans Accessible</th>
<th>Percent of HMP Plans Accessible</th>
<th>Number of HMP Plans Not Accessible</th>
<th>Percent of HPM Plans Not Accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>34/36</td>
<td>94.4%</td>
<td>2/36</td>
<td>5.6%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>23/25</td>
<td>92.0%</td>
<td>2/25</td>
<td>8.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>38/47</td>
<td>80.9%</td>
<td>9/47</td>
<td>19.1%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>95/108</td>
<td>88.0%</td>
<td>13/108</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

### 4.1.3 Does the Hazard Mitigation Plan (HMP) develop a mitigation strategy for health emergencies concerning infectious disease?

Mitigation is the act of reducing the severity or seriousness of a situation. This category assesses the HMP for including a mitigation strategy for reducing the severity or seriousness of infectious disease outbreaks, such as influenza or COVID-19. This assessment category is assessed with presence/absence indicators. See map in Appendix A.
Assessment Result

Of the 108 counties in the study area, 82 of them or 75.9 percent did not include a mitigation strategy for infectious disease as part of the HMP. Of the three states included in the study area, 56% of study counties in Minnesota did include a mitigation strategy. Wisconsin and Michigan shared a similar pattern with only 14.9 and 13.9 percent of research counties including a mitigation strategy in the HMP.

Table 4.2: HMP Mitigation Strategy by State

<table>
<thead>
<tr>
<th>State</th>
<th>HMP Includes a Mitigation Strategy</th>
<th>Percent of HPM Plans Including a Mitigation Strategy</th>
<th>HMP Does Not Include a Mitigation Strategy (or) plan not accessible</th>
<th>Percent of HPM Plans Not Including a Mitigation Strategy (or) plan not accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>5/36</td>
<td>13.9%</td>
<td>31/36</td>
<td>86.1%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>14/25</td>
<td>56%</td>
<td>11/25</td>
<td>44%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>7/47</td>
<td>14.9%</td>
<td>40/47</td>
<td>85.1%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>26/108</td>
<td>24.1%</td>
<td>82/108</td>
<td>75.9%</td>
</tr>
</tbody>
</table>

4.1.4 Does the HMP manage (address) the topic of infection diseases like COVID-19?

HMP plans were examined to determine if the topic of infectious disease is managed or addressed as a hazard included in the plan. The plans assessed were adopted prior to the COVID-19 pandemic, so terms such as “influenza,” “infectious disease,” and other similar terms were investigated. This assessment category does not consider the vigor of the infectious disease treatment in the plan, but rather if infectious disease is noted in the plan. The assessment is conducted with presence/absence indicators.

Assessment Result

Of the 108 counties assessed, 56 of them mentioned the topic of infectious disease, nearly 52 percent. Minnesota counties led in the percentage of counties mentioning infectious disease in HMP plans at 64 percent. Wisconsin reversed the pattern found in both Minnesota and Michigan. Only 38.3 percent of Wisconsin counties in the study area addressed infectious disease in HMPs (See Table 4.3).
Map 4.1: HMP and Infectious Diseases

Does the Hazard Mitigation Plan Manage the Topic of Infectious Diseases like COVID-19?

This map displays the status within the Hazard Mitigation Plans to the management of the topic of infectious diseases like COVID-19 in the assessment done by the UWSP Research Team (Circa April 2021).

Table 4.3: HMP Mentioned Infectious Disease

<table>
<thead>
<tr>
<th>State</th>
<th>HMP Mentioned Infectious Disease</th>
<th>Percent of HPM Plans which Mentioned Infectious Disease</th>
<th>HMP Does Not Mention Infectious Disease</th>
<th>Percent of HPM Plans which did Not Mention Infectious Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>22/36</td>
<td>61.1%</td>
<td>14/36</td>
<td>38.9%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>16/25</td>
<td>64.0%</td>
<td>9/25</td>
<td>36.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>18/47</td>
<td>38.3%</td>
<td>29/47</td>
<td>61.7%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>56/108</td>
<td>51.9%</td>
<td>52/108</td>
<td>48.1%</td>
</tr>
</tbody>
</table>
4.1.5 Did all jurisdictions (cities, villages, towns) within the county participate in the HMP formulation process?

HMP plans were examined to determine participation from other governmental entities in the plan formulation. Participation was determined when plans included a formalized statement indicating participation from city, village, and town governmental entities. The assessment of this category is conducted with three indicators: 1. All local governments participated, 2. Some local governments participated, and 3. No local governmental entities participated (or) participation was not noted. See map in Appendix A.

**Assessment Result**

Of the 108 counties in the study area, 70 of them or 64.8 percent included a formal statement of participation from all local governmental entities within the respective county. Of the three states included in the study, Minnesota’s HMP plans most often included a formal statement including all jurisdictions in the planning process. Only 36.2 percent of Wisconsin’s HMP plans included a formal statement of participation including all jurisdictions in the planning process (see Table 4.4).

<table>
<thead>
<tr>
<th>State</th>
<th>All local governmental entities participated in the plan’s formulation</th>
<th>Some local governmental entities participated in the plan’s formulation</th>
<th>Local governmental entities with inaccessible plans.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>30/36 83.3%</td>
<td>4/36 11.1%</td>
<td>2/36 5.6%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>23/25 92.0%</td>
<td>0/25 0.0%</td>
<td>2/25 8.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>17/47 36.2%</td>
<td>21/47 44.7%</td>
<td>9/47 19.1%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>70/108 64.8%</td>
<td>25/108 23.1%</td>
<td>13/108 12.1%</td>
</tr>
</tbody>
</table>

4.2 EOP Interrogation

4.2.1 Emergency Operations Plan Qualification Scores The research team assessed EOPs by considering a series of 58 questions (Appendix C). Some questions assessed the subject area with absence/presence (no/yes) qualifiers. The absence of a condition was assigned a score of “0.” The presence of a condition was assigned a score of “1.” Other questions assessed categories with more detail, characterizing how well the plan addressed certain subjects with three qualifiers: plans that did not address a subject area were assigned a score of “0”. Plans that addressed the subject area in an incomplete or limited fashion were assigned a score of “1.” Plans that addressed the subject area robustly were assigned a score of “2.” The highest score that a county might be assigned is “84.” See map in Appendix A.
**Assessment Result**

Of the 108 counties in the study area, 96 were not accessible to score. Because so few counties had an EOP, the overall survey score is shown for all 12 counties with an accessible plan, and the variation between them. The total possible score for an EOP was 84.

**Chart 4.0: Overall EOP survey score for individual counties**

4.2.2 *Is the Emergency Operations Plan (EOP) Available? (Accessible to the public)*

EOP accessibility or availability was measured based upon whether a plan could be viewed or downloaded from an online source, most commonly from a county’s website. For clarification, this assessment category does not measure the existence of an EOP plan (i.e., Was a EOP plan developed?), but rather if a plan is online accessible. This category does not assess why the plan was not accessible online (e.g., Plan was not created. Plan was created but was not made available online). See map in Appendix A

**Assessment Result**

Within the study area of 108 total counties in Michigan, Minnesota, and Wisconsin, only 12 counties or 11.1 percent had an EOP that was accessible to the research team. Michigan had 1 or 2.8 percent of plans accessible over 36 counties. Minnesota had 3 or 12 percent of plans accessible over 25 counties. Wisconsin had 8 or 17 percent of plans accessible over 47 counties.

4.2.3 *Does the EOP Assess the Community’s Risk to Infectious Disease?*

EOP plans were examined to determine if it assessed the community’s risk to infectious disease. The plans assessed were adopted prior to the COVID-19 pandemic, so terms such as “influenza,” “infectious disease,” and other similar terms were investigated. This assessment category does not consider the vigor of the infectious disease assessment in the plan, but
rather if infectious disease is assessed as a risk to the community. The assessment is conducted with presence/absence indicators.

**Assessment Result**

Of the 108 counties within the study area, only 1 county, Waterford County in Michigan, assessed the risk of infectious disease to the community. The remaining 11 counties that had EOP plans accessible, did not assess risk of infectious disease.

**Map 4.2: EOP and Infectious Diseases Assessment**

Community capabilities are those resources already in place that a community has available to them to reduce hazard risks. Resources might include such things as preventative measures, property protection measures, emergency service measures, structural projects, among others. This assessment is conducted with presence/absence indicators. See map in Appendix A.
Assessment Result

Of the 12 counties that had accessible EOPs, only 4 counties in Wisconsin (Marathon, Portage, Outagamie, and Fond du Lac) identified community capabilities.

4.3 CHIP Interrogation Results

4.3.1 Community Health Improvement Plan Qualification Scores

The research team assessed CHIPs by considering a series of 29 questions (Appendix D). Some questions assessed the subject area with absence/presence (no/yes) qualifiers. The absence of a condition was assigned a score of “0.” The presence of a condition was assigned a score of “1.” Other questions assessed categories with more detail, characterizing how well the plan addressed certain subjects with three qualifiers: plans that did not address a subject area were assigned a score of “0”. Plans that addressed the subject area in an incomplete or limited fashion were assigned a score of “1.” Plans that addressed the subject area robustly were assigned a score of “2.” The highest score that a county might be assigned is “36.”

Assessment Results

Of the 108 counties in the study area, 32 were not accessible to score. Of the remaining 76 counties:

- The highest score received was 13 out of 36 by Ramsey County, MN.
- The lowest score (not including those not assessed) was 1 out of 36 total points. All counties scoring a 1 were from Michigan.
- 3 counties scored between 10-13 points, meeting only 27.8-36.1 percent of the 36 qualifier points.
- 11 counties scored between 7-9 points, meeting only 19.4-25 percent of the 36 qualifier points.
- 43 counties scored between 4-6 points. Meeting only 11.1-16.7 percent of the 36 qualifier points.
- 19 counties scored between 1-3 points, meeting only 2.7-8.3 percent of the qualifier points.

Table 4.5: CHIP Descriptive Statistics

<table>
<thead>
<tr>
<th>State</th>
<th>Maximum Score assigned to a county</th>
<th>Median score of plans by state</th>
<th>Mean Score of plans by state</th>
<th>Plan Not Accessible # of plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>1/36</td>
<td>1/36</td>
<td>1.27/36</td>
<td>25/36 69.4%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>13/36</td>
<td>6/36</td>
<td>5.85/36</td>
<td>5/25 20.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>12/36</td>
<td>5/36</td>
<td>5.4/36</td>
<td>2/47 4.3%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>13/36</td>
<td>4/36</td>
<td>3.46/36</td>
<td>32/108 29.6%</td>
</tr>
</tbody>
</table>
4.3.2 Are Community Health Improvement Plans Available/Accessible to the Public?

Part of the research team’s approach to Community Health Improvement Plan assessment was to first gather plans from counties containing small cities and villages. Only plans that were accessible or available online were gathered. CHIP accessibility or availability was measured based upon whether a plan could be viewed or downloaded from an online source, most commonly from a county’s website. For clarification, this assessment category does not measure the existence of a CHIP plan, but rather if a plan is online accessible. This category does not assess why the plan was not accessible online (e.g., Plan was not created. Plan was created but was not made available online). See map in Appendix A.

Assessment Result

Of the 108 counties in the research area, 76 or 70.4 percent of counties had CHIP plans accessible to the public and 32 or 29.6 percent did not have plans available to the public. Michigan had the least number of CHIP plans accessible to the public at 30.6 percent.
Wisconsin counties had the greatest number of CHIP plans accessible to the public at 95.7 percent.

### Table 4.6: CHIP Plans Accessibility

<table>
<thead>
<tr>
<th>State</th>
<th>Number of CHIP Plans Accessible</th>
<th>Percent of CHIP Plans Accessible</th>
<th>Number of CHIP Plans Not Accessible</th>
<th>Percent of CHIP Plans Not Accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>11/36</td>
<td>30.6%</td>
<td>25/36</td>
<td>69.4%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>20/25</td>
<td>80.0%</td>
<td>5/25</td>
<td>20.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>45/47</td>
<td>95.7%</td>
<td>2/47</td>
<td>4.3%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>76/108</td>
<td>70.4%</td>
<td>32/108</td>
<td>29.6%</td>
</tr>
</tbody>
</table>

#### 4.3.3 Is the County Health Department (or authority) accredited by the Public Health Accreditation Board?

This assessment category is addressed by examining the CHIP plan for language stating if the county health department or similar authority is accredited by the Public Health Accreditation Board (PHAB). According to PHAB, it is a nonprofit organization dedicated to advancing the continuous quality improvement of Tribal, state, local, and territorial public health departments. Accreditation measures health department performance against a set of nationally recognized, practice-focused, and evidence-based standards. See map in Appendix A.

**Assessment Result**

Of the three states in the study, Minnesotan counties had the highest number of accredited health departments with 36 percent. Only 4.3 percent of Wisconsin county health departments in the study were accredited and zero Michigan county departments were accredited by the Public Health Accreditation Board.

### Table 4.7: Accredited Health Departments

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Departments Accredited</th>
<th>Percent of Departments Accredited</th>
<th>Number of Departments Not Accredited</th>
<th>Percent of Departments Not Accredited</th>
<th>Plan Not Accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>0/36</td>
<td>0.0%</td>
<td>11/36</td>
<td>30.6%</td>
<td>25  69.4%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>9/25</td>
<td>36.0%</td>
<td>6/25</td>
<td>24.0%</td>
<td>5  20.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>2/47</td>
<td>4.3%</td>
<td>43/47</td>
<td>91.5%</td>
<td>2  4.3%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>11/108</td>
<td>10.2%</td>
<td>60/108</td>
<td>55.6%</td>
<td>37  34.3%</td>
</tr>
</tbody>
</table>
4.3.4 Are (CDC state identified) frequent public health emergencies addressed in the plan?

The CDC identifies frequent health emergencies faced by communities in the states of Wisconsin, Michigan, and Minnesota as part of the funding received under the Public Health Emergency Preparedness (PHEP) Cooperative Agreement. These funds are specifically targeted towards the establishment of flexible emergency-ready public health departments to help develop the capacity to respond to public health threats including the frequent health emergencies identified for each state. See map in Appendix A.

Assessment Result

The assessment of CDC frequent public health emergencies addressed; each state measured a mixed bag of results. Only 2 Minnesotan counties of the 108 researched counties addressed all CDC public health emergencies. Nearly 90 percent of Wisconsin counties and 20 percent of Minnesotan counties addressed some of the CDC frequent public health emergencies. Not a single Michigan county addressed CDC frequent public health emergencies in their CHIP plans.

Table 4.8: CDC Public Health Emergencies Addressed

<table>
<thead>
<tr>
<th>State</th>
<th>All CDC Public Health Emergencies Addressed</th>
<th>Some CDC Public Health Emergencies Addressed</th>
<th>No CDC Public Health Emergencies Addressed</th>
<th>Plan Not Accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>0/36 0%</td>
<td>0/36 0%</td>
<td>11/36 30.6%</td>
<td>25/36 69.4%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>2/25 8.0%</td>
<td>5/25 20.0%</td>
<td>13/25 52.0%</td>
<td>5/25 20.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>0/47 0.0%</td>
<td>42/47 89.4%</td>
<td>3/47 6.4%</td>
<td>2/47 4.3%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>2/108 1.9%</td>
<td>47/108 43.5%</td>
<td>22/108 20.4%</td>
<td>37/108 34.3%</td>
</tr>
</tbody>
</table>

4.3.5 Did all jurisdictions (cities, villages, towns) within the county participate in the plan formulation process?

CHIP plans were examined to determine participation from other governmental entities in the plan formulation. Participation was determined when plans included a formalized statement indicating participation from city, village, and town governmental entities. The assessment of this category is conducted with three indicators: 1. All local governments participated, 2. Some local governments participated, and 3. No local governmental entities participated (or) participation was not noted. Formal participation in the planning process is an indicator that adopted plans are endorsed by participating entities and that those plans are more likely to be used to influence local and shared decision-making (Creighton, 1981; Wang, 2001). See map in Appendix A.
**Assessment Results**

Of 108 counties in the study, only 18.5 percent had all local governmental units participating in the plan formulation. Counties located within Minnesota had the greatest number of counties with all jurisdictions participating (76 percent). In Wisconsin, 53.2 percent of counties did not include any cities, villages, or towns in the plan formulation process, or they did not note their participation in the plan.

**Table 4.9: Local Government Participation in CHIP**

<table>
<thead>
<tr>
<th>State</th>
<th>All local governmental entities participated in the plan’s formulation.</th>
<th>Some local governmental entities participated in the plan’s formulation.</th>
<th>No local governmental entities participated in the plan’s formulation.</th>
<th>Plan Not Accessible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>1/36 2.8%</td>
<td>1/36 2.8%</td>
<td>9/36 25.0%</td>
<td>25/36 69.4%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>19/25 76.0%</td>
<td>0/25 0.0%</td>
<td>1/25 4.0%</td>
<td>5/25 20.0%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>0/47 0.0%</td>
<td>20/47 42.6%</td>
<td>25/47 53.2%</td>
<td>2/47 4.3%</td>
</tr>
<tr>
<td>Total Research Area</td>
<td>20/108 18.5%</td>
<td>21/108 19.4%</td>
<td>30/108 27.8%</td>
<td>37/108 34.3%</td>
</tr>
</tbody>
</table>

Overall, for the plan interrogation phase of the 108 counties, only 11 counties had all plans accessible, 54 counties had two plans (generally HMPs and CHIPS) accessible whilst 42 counties had just one plan (either HMP or CHIP) accessible. One county had no plans accessible at all.

**5. Policy Implications of Plan Interrogation Findings**

There are three issues we found trying conduct research on plans that deal with public health: 1) availability of plans to the public; 2) lack of focus on infectious disease, including epidemics or pandemics; and 3) lack of mitigation strategies to contend with infectious disease.

**5.1 Availability**

The HMPs are the most available and are more likely to address these issues, but often they address infectious diseases in relation to natural disasters, for example, not a situation like the COVID-19 pandemic. CHIPS are available in most counties – over two-thirds of them had a downloadable plan. In contrast, few EOPs are available – likely for security purposes – but it means county residents are left in the dark about what to do in the event of a disease outbreak.

**5.2 Focus on Infectious Disease**

Only a little more than half of the HMPs recognized infectious disease as an issue. Given that natural disasters are the primary focus of a HMP, it is imperative to deal with infectious diseases that might arise during a disaster. Because of the lack of EOPs it is difficult to say
anything constructive about whether these plans address infectious disease, including epidemics or pandemics, but it is clear from the past 18 months that communities need to have an emergency plan in place to deal with disease outbreaks like COVID-19.

5.3 Lack of Mitigation Strategies

Over three-quarters of the county HMPs that we examined, addressed mitigation strategies for contending with infectious disease. It would be helpful to address infectious disease outbreaks not attributable to a specific natural disaster but occurring at the same time. With recent news of Hurricane Ida, public officials have had to deal with a natural disaster while contending with a public health emergency. It would be useful for these public officials to have guidelines within a plan rather than making it up as they go along. The CHIP is focused on immediate health concerns and appear to address such issues as addiction and obesity. The CDC defines the CHIP as “A community health improvement plan (or CHIP) is a long-term, systematic effort to address public health problems based on the results of community health assessment activities and the community health improvement process” (CDC - Assessment and Plans - Community Health Assessment - STLT Gateway). For the purposes of dealing with infectious disease, the CHIP appears not to be the most appropriate plan to contend with this issue. In examining three types of plans that deal with emergencies and human health in some way, we have realized several shortcomings that could be rectified as each of these plans are updated.

6. Next Phase

The next phase of our research is to conduct either an interview or a survey of regional and county public health staff, including emergency managers to learn how plans are formulated, distributed, and accessed. There is a need to understand how topics or issues are identified for further study and strategy formulation. We also want to learn how counties will address pandemics and epidemics in the future and what these counties have learned since February/March 2020. What would have been done differently, for example, if they had the opportunity?
7. Appendices

Appendix A – Maps

Map 1: HMP Accessibility

Is the Hazard Mitigation Plan Accessible to the Public?

This map displays the accessibility of the Hazard Mitigation Plan to the public. The plans must be reviewed by the county and reapproved by FEMA every 5 years for proper satisfaction and qualification for grant assistance (Circa April 2021).

Map 2: HMP Mitigation Strategies

Does the Hazard Mitigation Plan Develop a Mitigation Strategy for Health Emergencies?

This map displays the status within the Hazard Mitigation Plans to the development of strategies related to health emergencies concerning infectious diseases like COVID-19 in the assessment done by the UWSP Research Team (Circa April 2021).
SMALL CITIES’ RESPONSE TO PUBLIC EMERGENCIES

Map 3: HMP Jurisdictional Participation

Did all Jurisdictions within the County Participate in the Hazard Mitigation Planning Process?

This map displays the status of jurisdictional participation (Towns, Villages, Cities) in the formulation process of the Hazard Mitigation Plans prepared by each county in the represented states (Circa April 2021).

Map 4: EOP Qualification Scores

Emergency Operations Plan Pandemic Qualification Scores

This map displays total pandemic qualification scores. Pandemic scores were assessed with the interagency of the Emergency Operations Plans using the sum of the entire questionnaire-scoring method done by the UWR Research Team for counties that contain small cities within the research area (Circa April 2021).
SMALL CITIES’ RESPONSE TO PUBLIC EMERGENCIES

Map 5: EOP Accessibility

Is the Emergency Operations Plan Accessible to the Public?

This map displays the accessibility of the Emergency Operations Plan to the public. The plans must be revised by the county and re-approved by FEMA every 3 years for proper inspection and qualification for grant assistance (Circa April 2022).

Map 6: EOP Community Capabilities

Does the Emergency Operations Plan Identify Community Capabilities?

This map displays the status of the Emergency Operations Plans in identifying community capabilities during all stages of Emergency Management in the assessment done by the UWSP Research Team (Circa April 2022).
Map 7: CHIP Accessibility

Is the Community Health Improvement Plan Accessible to the Public?

This map displays the accessibility of the Community Health Improvement Plan to the public. The plans are a long-term strategy that identifies key public health priorities and offers information on where resources are found to meet community needs (Circa April 2021).

Map 8: County Department Accreditation Status

Is the County Health Department Accredited by the Public Health Accreditation Board?

This map displays the status within the Community Health Improvement Plans for the accreditation of the county by the Public Health Accreditation Board. The assessment done by the (WSP Research Team). Each county is represented by a health department that leads health emergencies like COVID-19 (Circa April 2021).
Map 9: Identification of CDC Public Health Emergencies

Are CDC State Identified Public Health Emergencies Addressed in the Plan?

Map 10: CHIP Jurisdictional Participation

Did all Jurisdictions within the County Participate in the Community Health Improvement Planning Process?
Appendix B – HMP questions

The following is the list of interrogation questions and how they were evaluated.

1. Is a hazard mitigation plan available (accessible)?
   a. Absence = 0, Presence = 1

2. Does the HMP identify and prioritize the risks faced by the jurisdiction?
   a. Absence = 0, Presence = 1

3. Does the HMP outline what will be done when conducting emergency operations?
   a. Absence = 0, Presence = 1

4. Did all jurisdictions (cities, villages, towns) within the county participate in HMP formulation process?
   a. None = 0, Some = 1, All = 2

5. Does the HMP manage (address) the topic of infection diseases like COVID-19?
   a. Absence = 0, Presence = 1

6. Does HMP address the capability and limitations of health care assets related to regulation, administration, technicality, financing, and education or outreach?
   a. Absence = 0, Presence = 1

7. Does HMP address the capability and limitations of health care staffing related to regulation, administration, technicality, financing, and education or outreach?
   a. Absence = 0, Presence = 1

8. Does HMP address the capability and limitations of health care funding related to regulation, administration, technicality, financing, and education or outreach?
   a. Absence = 0, Presence = 1

9. Characterize how well the HMP addressed health care assets related to regulation, administration, technicality, financing, and education or outreach.
   a. Absence = 0, Limited = 1, Robust = 2

10. Characterize how well the HMP addressed health care staffing related to regulation, administration, technicality, financing, and education or outreach.
    a. Absence = 0, Limited = 1, Robust = 2

11. Characterize how well the HMP addressed health care funding related to regulation, administration, technicality, financing, and education or outreach.
    a. Absence = 0, Limited = 1, Robust = 2

12. Does HMP assess the community’s risk to infectious disease? And how did they assess risk?
    a. Absence = 0, Presence = 1
    b. Description of assessment noted using plan page numbers.

13. Characterize how well the HMP assessed the community’s risk to infectious disease.
    a. Absence = 0, Limited = 1, Robust = 2

14. Does HMP develop a mitigation strategy for health emergencies concerning infectious disease? And describe the strategy?
    a. Absence = 0, Presence = 1
b. Description of assessment noted using plan page numbers.

15. Characterize how well the HMP does at developing a mitigation strategy for health emergencies concerning infectious disease?
   a. Absence = 0, Limited = 1, Robust = 2

16. Does HMP describe a prevention strategy for infection disease?
   a. Absence = 0, Presence = 1

17. Characterize how well the HMP does at describing a prevention strategy for infectious disease?
   a. Absence = 0, Limited = 1, Robust = 2

18. Does the HMP vulnerability assessment include at least three optional FEMA requirements? A general description of land uses and future development trends within the community so that mitigation options can be considered in future land uses?
   a. Absence = 0, Presence = 1

19. Does the HMP vulnerability assessment include at least three optional FEMA requirements? The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazards areas.
   a. Absence = 0, Presence = 1

20. Does the HMP vulnerability assessment include at least three optional FEMA requirements? A description of potential dollar losses to vulnerable structures and a description of the methodology used to prepare the estimate.
   a. Absence = 0, Presence = 1

21. Are major disaster declarations that occurred prior to being updated included in the plan?
   a. Absence = 0, Presence = 1

22. Is a list of hazards provided in the plan?
   a. Absence = 0, Presence = 1

23. Does the HMP make use of the best available data (flood maps, HAZUS, flood studies) to describe significant hazards?
   a. Absence = 0, Presence = 1

24. Does the HMP communicate risks on people, property, and infrastructure to the public (through tables, charts, maps, photos, etc.)?
   a. Absence = 0, Presence = 1

25. Does the HMP incorporate techniques and methodologies to estimate dollar losses to vulnerable structures;
   a. Absence = 0, Presence = 1

26. Does the HMP incorporate Risk MAP products (i.e., depth grids, Flood risk report, changes since last FIRM, areas of mitigation interest, etc.; and
   a. Absence = 0, Presence = 1

27. Does the HMP identify any data gaps that can be filled as new data became available.
   a. Absence = 0, Presence = 1

28. Does the plan identify mitigation strategies for the hazards?
a. Absence = 0, Presence = 1
29. Is the plan FEMA approved? Year of last approval?
   a. Absence = 0, Presence = 1
   b. If Present, date indicated
Appendix C – EOP Questions

The following is the list of interrogation questions and how they were evaluated.

1. Is the EOP accessible?
   a. Absence = 0, Presence = 1
2. Does the plan identify and prioritize the risks faced by the jurisdiction?
   a. Absence = 0, Presence = 1
3. Does the plan outline what will be done when conducting emergency operations?
   a. Absence = 0, Presence = 1
4. Did all jurisdictions (cities, villages, towns) within the county participate in plan formulation process?
   a. None = 0, Some = 1, All = 2
5. Does the EOP manage the topic of infection diseases like COVID-19?
   a. Absence = 0, Presence = 1
6. Does the EOP address the capability and limitations of health care assets related to regulation, administration, technicality, financing, and education or outreach? In the text column, note if assets, staffing, or funding are related to regulation, administration, etc.
   a. Absence = 0, Presence = 1
7. Does the EOP address the capability and limitations the capability and limitations of health care staffing related to regulation, administration, technicality, financing, and education or outreach? In the text column, note if assets, staffing, or funding are related to regulation, administration, etc.
   a. Absence = 0, Presence = 1
8. Does the EOP address the capability and limitations the capability and limitations of health care funding related to regulation, administration, technicality, financing, and education or outreach? In the text column, note if assets, staffing, or funding are related to regulation, administration, etc.
   a. Absence = 0, Presence = 1
9. Characterize how well the EOP addressed the capability and limitations of health care assets?
   a. Absence = 0, Limited = 1, Robust = 2
10. Characterize how well the EOP addressed the capability and limitations of health care staffing?
    a. Absence = 0, Limited = 1, Robust = 2
11. Characterize how well the EOP addressed the capability and limitations of health care funding?
    a. Absence = 0, Limited = 1, Robust = 2
12. Did the EOP assess the community’s risk to infectious disease?
    a. Absence = 0, Presence = 1
13. Characterize how well the EOP assessed the community’s risk to infectious disease?
SMALL CITIES’ RESPONSE TO PUBLIC EMERGENCIES

a. Absence = 0, Limited = 1, Robust = 2

14. Did the EOP develop a mitigation strategy for health emergencies concerning infectious disease?
   a. Absence = 0, Presence = 1

15. Characterize how well the EOP developed a mitigation strategy for health emergencies concerning infectious disease
   a. Absence = 0, Limited = 1, Robust = 2

16. Did the EOP describe a prevention strategy for infection disease?
   a. Absence = 0, Presence = 1

17. Characterize how well the EOP described the prevention strategy for infectious disease/
   a. Absence = 0, Limited = 1, Robust = 2

18. Has the Emergency Operations Plan (or equivalent) been reviewed in collaboration with the local health department? As signatory
   a. Absence = 0, Presence = 1

19. Has the Emergency Operations Plan (or equivalent) been reviewed in collaboration with the local health department? As primary partner
   a. Absence = 0, Presence = 1

20. Has the Emergency Operations Plan (or equivalent) been reviewed in collaboration with the local health department? As a subsidiary partner
   a. Absence = 0, Presence = 1

21. Has the Emergency Operations Plan (or equivalent) been reviewed in collaboration with the local health department? As other
   a. Absence = 0, Presence = 1

22. Has a public information plan been developed and implemented?
   a. Absence = 0, Presence = 1

23. Characterize the public information plan
   a. Absence = 0, Limited = 1, Robust = 2

24. Has responsibility been assigned to organizations and individuals concerning health emergencies?
   a. Absence = 0, Presence = 1

25. Has critical information related to health emergencies been identified (considered common to most public health emergencies)? Number of Hospitals
   a. Absence = 0, Presence = 1

26. Has critical information related to health emergencies been identified (considered common to most public health emergencies)? Number of ICU beds.
   a. Absence = 0, Presence = 1

27. Has critical information related to health emergencies been identified (considered common to most public health emergencies)? Number of Staff
   a. Absence = 0, Presence = 1

28. Does the EOP address the composition of the population? (e.g. people with disabilities, ages, poverty)
a. Absence = 0, Presence = 1

29. Characterize how the EOP logically and analytically addresses the uncertainty of pandemic health threats?
   a. Absence = 0, Limited = 1, Robust = 2

30. Characterize how the EOP logically and analytically addresses the complexity of pandemic health threats?
   a. Absence = 0, Limited = 1, Robust = 2

31. Characterize how the EOP logically and analytically addresses the risk of pandemic health threats?
   a. Absence = 0, Limited = 1, Robust = 2

32. Characterize how the EOP clearly defines the mission and supporting goals related to pandemic incidents?
   a. Absence = 0, Limited = 1, Robust = 2

33. Does the EOP depict an anticipated environment related to pandemic incidents? Are conditions anticipated?
   a. Absence = 0, Limited = 1, Robust = 2

34. Does the EOP depict an anticipated environment related to pandemic incidents? Are potential problems systematically identified?
   a. Absence = 0, Limited = 1, Robust = 2

35. Does the EOP depict an anticipated environment related to pandemic incidents? Are workable solutions systematically identified?
   a. Absence = 0, Limited = 1, Robust = 2

36. Does the EOP identify community capabilities?
   a. Absence = 0, Presence = 1

37. Does the EOP address the following minimum standards? Identifies the departments and agencies designated to perform response and recovery activities and specifies tasks they must accomplish
   a. Absence = 0, Limited = 1, Robust = 2

38. Does the EOP address the following minimum standards? Outlines the integration of assistance that is available to local jurisdictions during disaster situations that generate emergency response and recovery needs beyond what the local jurisdiction can satisfy
   a. Absence = 0, Limited = 1, Robust = 2

39. Does the EOP address the following minimum standards? Specifies the direction, control, and communications procedures and systems that will be relied upon to alert, notify, recall, and dispatch emergency response personnel; warn the public; protect residents and property; and request aid/support from other jurisdictions and/or the Federal Government (including the role of the Governor’s Authorized Representative)
   a. Absence = 0, Limited = 1, Robust = 2

40. Does the EOP address the following minimum standards? Provides coordinating instructions and provisions for implementing Mutual Aid and Assistance Agreements (MAA), as applicable
a. Absence = 0, Limited = 1, Robust = 2

41. Does the EOP address the following minimum standards? Describes the logistical support for planned operations.
   a. Absence = 0, Limited = 1, Robust = 2

42. Does the EOP Provide a situation overview
   a. Absence = 0, Presence = 1

43. Does the EOP summarize hazards faced and how the jurisdiction expects to receive or provide assistance?
   a. Absence = 0, Limited = 1, Robust = 2

44. Does the EOP generally describe the relative probability and impact of hazards.
   a. Absence = 0, Limited = 1, Robust = 2

45. Does the EOP identify geographies likely impacted
   a. Absence = 0, Limited = 1, Robust = 2

46. Does the EOP identify vulnerable critical facilities.
   a. Absence = 0, Limited = 1, Robust = 2

47. Does the EOP Identify population distributions and locations.
   a. Absence = 0, Limited = 1, Robust = 2

48. Does the EOP identify critical information common to all operations?
   a. Absence = 0, Presence = 1

49. Does the EOP cite the type of information or source of information common to all operations?
   a. Absence = 0, Presence = 1

50. Does the EOP have a Health Annex?
   a. Absence = 0, Presence = 1

51. Does the Health Annex Identify critical operational functions?
   a. Absence = 0, Presence = 1

52. Does the Health Annex identify who is responsible for pandemics?
   a. Absence = 0, Presence = 1

53. Does the Health Annex clearly describe polices, processes, and roles that agencies, and departments carry out before a pandemic?
   a. Absence = 0, Presence = 1

54. Does the Health Annex clearly describe polices, processes, and roles that agencies, and departments carry out during a pandemic?
   a. Absence = 0, Presence = 1

55. Does the Health Annex clearly describe polices, processes, and roles that agencies, and departments carry out after a pandemic?
   a. Absence = 0, Presence = 1

56. Does the EOP identify hazards and assess risks?
   a. Absence = 0, Presence = 1

57. Are all known public emergency hazards identified in the plan? i.e., is it comprehensive as recommended by FEMA
a. None = 0, Some = 1, All = 2
58. Does the plan identify GIS data gaps required to enhance risk assessment?
   a. Absence = 0, Presence = 1
Appendix D - CHIP Questions

The following is the list of interrogation questions and how they were evaluated.

1. Is the Community Health Improvement Plan available (accessible) to the public?
   a. Absence = 0, Presence = 1

2. Does the CHIP identify and prioritize the risks faced by the jurisdiction?
   a. Absence = 0, Presence = 1

3. Does the CHIP outline what will be done when conducting emergency operations?
   a. Absence = 0, Presence = 1

4. Did all jurisdictions (cities, villages, towns) within the county participate in the CHIP formulation process?
   a. None = 0, Some = 1, All = 2

5. Does the CHIP manage (address) the topic of infectious diseases, like COVID-19?
   a. Absence = 0, Presence = 1

6. Does the CHIP address the capability and limitations of health care assets related to regulation, administration, technicality, financing, and education or outreach?
   a. Absence = 0, Presence = 1

7. Does the CHIP address the capability and limitations of health care staffing related to regulation, administration, technicality, financing, and education or outreach?
   a. Absence = 0, Presence = 1

8. Does the CHIP address the capability and limitations of health care funding related to regulation, administration, technicality, financing, and education or outreach?
   a. Absence = 0, Presence = 1

9. Characterize how well the CHIP addresses the capability and limitations of health care assets related to regulation, administration, technicality, financing, and education or outreach.
   a. Absence = 0, Limited = 1, Robust = 2

10. Characterize how well the CHIP addresses the capability and limitations of health care staffing related to regulation, administration, technicality, financing, and education or outreach.
    a. Absence = 0, Limited = 1, Robust = 2

11. Characterize how well the CHIP addresses the capability and limitations of health care funding related to regulation, administration, technicality, financing, and education or outreach.
    a. Absence = 0, Limited = 1, Robust = 2

12. Does the CHIP assess the community’s risk to infectious disease?
    a. Absence = 0, Presence = 1

13. Characterize how well the CHIP assessed the community’s risk to infectious disease.
    a. Absence = 0, Limited = 1, Robust = 2

14. Does the CHIP include a mitigation strategy for health emergencies concerning infectious disease?
a. Absence = 0, Presence = 1

15. Characterize how well the CHIP mitigation strategy addresses health emergencies concerning infectious disease.
   a. Absence = 0, Limited = 1, Robust = 2

16. Does the CHIP include a prevention strategy for infectious disease?
   a. Absence = 0, Presence = 1

17. Characterize how well the CHIP prevention strategy addresses health emergencies concerning infectious disease.
   a. Absence = 0, Limited = 1, Robust = 2

18. Has responsibility been assigned to organizations and individuals concerning health emergencies?
   a. Absence = 0, Presence = 1

19. Has critical information (locations of hospitals) related to health emergencies been identified?
   a. Absence = 0, Presence = 1

20. Has critical information (number of ICU beds) related to health emergencies been identified?
   a. Absence = 0, Presence = 1

21. Has critical information (number of staff) related to health emergencies been identified?
   a. Absence = 0, Presence = 1

22. Is the County Health Department (or authority) accredited by the Public Health Accreditation Board?
   a. Absence = 0, Presence = 1

23. Does the CHIP indicate how to establish communications with key health and medical organizations?
   a. Absence = 0, Presence = 1

24. Does the CHIP priorities align with the top five preparedness initiatives of the state? (Medical Surge)
   a. Absence = 0, Presence = 1

25. Does the CHIP priorities align with the top five preparedness initiatives of the state? (Public Health Lab Testing)
   a. Absence = 0, Presence = 1

26. Does the CHIP priorities align with the top five preparedness initiatives of the state? (Medical Material Management and Distribution)
   a. Absence = 0, Presence = 1

27. Does the CHIP priorities align with the top five preparedness initiatives of the state? (Mass Care)
   a. Absence = 0, Presence = 1

28. Does the CHIP priorities align with the top five preparedness initiatives of the state? (Medical Countermeasure Dispensing and Distribution)
a. Absence = 0, Presence = 1

29. Are (CDC state identified) frequent public health emergencies addressed in the CHIP?
   a. Absence = 0, Presence = 1
References


