Alignment of Hazard Mitigation Plans and Health Hazard Vulnerability Assessments

Workshop Summary

January 15, 2026

Hosted by the Rural Partnerships Institute (RPI) at UW-Madison and the Western Wisconsin Public Health Readiness Consortium (WWPHRC)

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Introduction

On January 15, 2026, emergency managers, public health professionals, healthcare coalition coordinators, and regional planners met to discuss opportunities to better integrate Hazard Mitigation Plans (HMPs) and Health Hazard Vulnerability Assessments/Risk Assessments (HVAs/RAs). Currently, these two planning processes are largely conducted independently to meet different state and federal requirements and contracts. The workshop sought to identify specific areas where these processes overlap and to determine if a coordinated approach could reduce the administrative burden on local jurisdictions while improving the quality and consistency of risk data.

Statement of the Problem

Independent Mandates and Conflicting Scopes

HMPs and HVAs are required planning documents governed by state and/or federal requirements. Although Public Health and Emergency Management representatives often participate in the process of the other sector, differing requirements and timelines present barriers to alignment and efficiency. The respective planning processes are outlined below.

Hazard Mitigation Plans (HMPs): Required by the Federal Emergency Management Agency (FEMA) and Wisconsin Emergency Management (WEM), HMPs identify natural hazards, assess vulnerabilities, and propose mitigation strategies to reduce future disaster losses. Inclusion of non-natural hazards is optional, but common. Completion and approval of an HMP maintains eligibility for various FEMA funding programs, and some state programs.

Health Hazard Vulnerability Assessments (HVAs)/Risk Assessments (RA): County and tribal public health departments are required to conduct an HVA/RA to evaluate community vulnerabilities to environmental and climate-related health threats (e.g., extreme heat, flooding, vector-borne disease, air quality). These assessments must include the following Risk Assessment Data Elements (RADE): identify and rank risks; explain the public health consequences of the risk; identify data resources used; and experts to provide consultation.

Additionally, regional Healthcare Emergency Readiness Coalitions (HERCs) must complete HVAs for their region and review them annually for necessary updates. The HVAs include identification of threats, hazards, and vulnerabilities, evaluating the probability and severity of event occurrence, and establishing priority actions. These HERC processes reflect similarities with the planning processes described above.

There are many additional planning initiatives across public health, emergency management, and other sectors. These include, but are not limited to, comprehensive plans, Community Health Assessments and Community Health Improvement Plans, Threat and Hazard Identification and Risk Assessment, and more. While there may be opportunities to include these additional planning efforts in the review and processes outlined here, this workshop

focused specifically on alignment of Health Hazards Vulnerability Assessments and Hazards Mitigation Plans.

Redundancy and Resource Strain

The separation of these processes, despite their inherent commonalities, creates inefficiency. This inefficiency is particularly burdensome in rural areas, where fewer staff are still required to comply with all planning requirements.

1. **Duplication of Effort:** Both processes require intensive data collection regarding probability, severity, and community impact. Public Health and Emergency Management staff, or their contracted planning partners, may collect the same data twice—once for the HMP and once for the HVA—using different methodologies and reporting formats.
2. **Inconsistent Risk Assessments:** Because the assessments are conducted independently, a single county may end up with two different sets of hazard rankings. While the distinctive mitigation strategies or public health interventions may differ within a hazard category, exposure to a given hazard within a specific geography should be the same. This inconsistency may prevent synergies in education and outreach, as well as pursuit of grants or funding for activities that address the hazard.
3. **Stakeholder Engagement:** These processes, in addition to additional hazard planning efforts in each sector, require differing levels of engagement from community stakeholders. Local leaders and residents may be asked to provide input on similar topics multiple times, ultimately reducing the quality and breadth of engagement for both plans.
4. **Resource Limitations:** Many rural departments have just one or two staff members managing all required activities of the department. The staff time required to navigate these bureaucratic processes in conjunction with other obligations can be substantial.

The Vision for Alignment

The goal of this initiative is to move toward a model where these assessments are integrated rather than parallel. By aligning update cycles where possible, standardizing hazard terminology, and centralizing data resources, Wisconsin can create a more comprehensive approach to hazard assessment while providing space for the Public Health and Emergency Management professionals to tailor strategies and interventions for their own communities.

Perspectives by Sector

The first breakout discussion separated participants by sector – Public Health and Emergency Management – or, for those who are not clearly within one of those sectors, whether they work more closely with HMPs or HVAs.

Emergency Management (EM)

Primary themes within the discussion of Emergency Managers included the abundance of hazard or preparedness planning requirements beyond HMPs, the lengthy timeline to complete

a HMP update, challenges with stakeholder engagement, and the required frequency of comprehensive plan updates.

Timeline

HMP updates are commonly funded through FEMA grants. WEM encourages counties approaching an HMP update to apply 24 months ahead of their current plan's expiration, with the plan writing, analysis, stakeholder engagement, and approval often consuming the last 12 months of that 24-month timeframe. The length of time required for a plan update is prompting some within the sector to advocate for a lower frequency of updates. Currently, HMPs must be updated every five years - with no flexibility of extension - for the jurisdiction to remain eligible for a variety of federal funding programs and some state programs. Some state that there is limited change to hazard risk and minimal progress on meaningful mitigation actions within a five-year timeframe, resulting in substantial resources required to complete an update without a significant change in the content within the updated plan.

Related Plans in Emergency Management

HMPs are among a number of required plans related to hazard preparedness at the local and state level. Participants noted Threat and Hazard Identification and Risk Assessments (THIRA) and their associated Stakeholder Preparedness Reviews (SPRs), Integrated Preparedness Plans (IPPs), Emergency Operations Plans (EOPs), in addition to plans developed by Public Health Departments that Emergency Managers also participate in. While these plans may have some distinct content and uses, the abundance of hazard planning activities can create confusion and participation fatigue, particularly for those outside of the Emergency Management sector that are asked to contribute to one or more of these processes.

Stakeholder Engagement

Participants cited stakeholder engagement – particularly from municipal officials that are required to participate in the planning process – as a time- and resource-intensive part of the HMP update. Active participation and approvals are required from each city, village, and township within a county, and EMs often find local governments unresponsive to their requests for information or participation. Local government representatives may not see the value in dedicating time to the process, particularly if a hazard has not occurred in their community recently. The length of the planning process – often longer than 12 months – can also generate fatigue on the part of necessary participants.

Data

Participants generally felt that data for natural hazards was available and accessible. Data availability and quality for non-natural hazards was cited as a significant hurdle. Although FEMA does not require non-natural hazards to be included in HMPs, many counties elect to do so given their importance in comprehensive hazard mitigation strategies. The voluntary inclusion of non-natural hazards can create inconsistency in the hazards evaluated across counties. Additionally, evaluating the frequency, severity, and future probability of events such as disease

outbreaks, cybersecurity events, and acts of violence can be more difficult to quantify due to a lack of centralized and standardized data.

Public Health (PH) and HERC

Timeline

HVAs for are required to be updated at least once every five years. In some cases, Local Public Health Departments will update their HVA sooner than required (i.e. every three years) to align with other planning processes. The HVA process typically takes up to 4 months to complete. The most time-intensive part of that process is data collection in collaboration with partners.

Participants also cited the Hospital Preparedness Plans (HPPs), which are required to be updated annually and carry some similarities with HVAs.

Population of Focus

HVAs at both the local and regional (HERC) level prioritize broad community health impacts. This is distinct from HPPs, which focus on hospital patients, and from HMPs, which place a strong emphasis on damage to infrastructure and property.

Data

Participants cited the challenge in integrating Social Vulnerability or Social Determinants of Health data into their hazard assessments. Inclusion and quality of this data is often dependent on a variety of partners, which can create issues with standardizing data and increase the time and resources required to collect, analyze, and integrate that data.

Additionally, the data collected when evaluating hazard risk is rarely at the spatial resolution necessary to design appropriate interventions. Data collected from partners and stakeholders can also be informed by the subjective experience of those stakeholders. This can result in an over-emphasis on hazards that occurred recently, as opposed to hazards posing the greatest objective risk.

Required Use of Tools

There are existing templates and tools to assist in the development of HVAs, including the Kaiser-Permanente Hazard Vulnerability Analysis Tool and the Risk Identification and Site Criticality (RISC) 2.0 Toolkit. There is uncertainty as to whether specific tools will be required when completing an HVA in the future. The required use of specific tools that do not have applications in the HMP process may limit the extent to which the processes can be aligned. Additionally, some participants stated the RISC 2.0 tool, which emphasizes risks and impacts to healthcare facilities, may have limited applicability in evaluating risk to broader community health.

Opportunities for Alignment

The second breakout group discussion paired Public Health and Emergency Management staff from the same county or region to respond to specific strategies for alignment identified in the previous discussion. The opportunities and barriers are discussed below.

Terminology and Hazard Categories

A significant portion of the discussion centered on terminology. For instance, a "respiratory outbreak" in a public health HVA might be categorized as a "communicable disease" or omitted entirely from an HMP as a non-natural disaster. Within natural hazard categories, there are inconsistencies in the specificity of hazards. For example, while one assessment may evaluate “blizzard”, “ice storm”, and “extreme cold” individually, another may consolidate these into “winter weather”.

Recommendation #1: Evaluate the feasibility of developing a master list or shared template of hazard categories to be used consistently across HMPs and HVAs.

Clarity in terminology also means a better cross-sector comprehension of the plans, plan requirements, and workflows of public health and emergency management. Hazard Mitigation Plans and Hazard Vulnerability Assessments have strikingly similar names and content, but are unique and serve different needs. Guidance should be developed jointly with public health and emergency management staff to describe these planning processes for each sector.

Recommendation #2: Work jointly with public health and emergency management staff to develop general guidance on the planning process, components, and requirements of the respective plans.

Centralized Data Sources

There are opportunities and challenges in improving the data collection required to complete both HMPs and HVAs. Both sectors identified local, reliable, an accessible data as a critical and time-consuming part of the respective planning processes. While there is data available to evaluate the frequency, severity, impact, and future probability of many natural hazards, inclusion of non-natural hazards raises questions about data availability and quality.

If there is mutual agreement on the list of hazard categories to be assessed for both HMPs and HVAs, there may be an opportunity to create a standardized and centralized database for the selected hazards. This would result in reduced resource costs in collecting and analyzing data, while also improving consistency across plans.

Recommendation #3: Evaluate the feasibility of creating a standardized and centralized database of hazard data for use across both HMPs and HVAs.

Timeline Alignment

Both HMPs and HVAs are required to be updated at least once every five years, creating an opportunity to align update cycles. This alignment is made more difficult by the differences in how long each planning process typically takes to complete. HVAs can be updated within a four-month timeframe, whereas HMPs often take longer than 12 months and are dependent on the timeline for grant funds. Still, clarity on timeline and update cycles may allow for data collection, stakeholder engagement, and other planning processes to be completed concurrently, reducing the resource requirement to execute these activities independently.

Recommendation #4: Develop a detailed timeline of each planning process to identify areas of alignment.

Stakeholder Engagement

While HVA and HMP planning processes have different requirements around public participation and stakeholder engagement, these different requirements have resulted in unique networks that can be leveraged for better engagement across all stakeholders. Public Health staff are often more integrated with the general public and disadvantaged populations, because those groups are more likely to interact with public health services. Conversely, Emergency Managers generally maintain stronger relationships with local elected officials and municipal staff. By leveraging these different networks for cross-sector stakeholder engagement during development of HVAs and HMPs, both planning processes will likely benefit from contributions by a larger and more representative population.

Additionally, there may be opportunities to leveraging existing outreach strategies to gather feedback and data on the HMP and HVA where appropriate. For example, the Community Health Assessments (CHAs) and Community Health Improvement Plans (CHIPs) often include surveys of the general public to identify key health issues. While these surveys have not traditionally been used to evaluate public perception and response to natural hazards, there may be an opportunity to leverage this survey instrument to meet certain needs of HMPs and HVAs while maintain the integrity of the survey data collected for CHAs and CHIPs.

Recommendation #5: Develop guidance for stakeholder engagement that addresses the required outreach for both HMPs and HVAs. This should include opportunities where engagement efforts can be consolidated to reduce the frequency with which stakeholders are asked to participate, thereby reducing the likelihood of participation fatigue.

Areas of Divergence

This workshop sought to identify areas of alignment between Public Health and Emergency Management planning processes. However, there are many unique needs of these processes, sectors, and jurisdictions that do not lend themselves to regional or statewide alignment. Consideration should be given to components of these planning processes that benefit from singular expertise and attention by each respective sector or locality.

Post-Assessment Programming, Interventions, and Strategies

Although exposure to many hazard categories can be evaluated quantitatively, there are differing professional responsibilities of Public Health and Emergency Management related to mitigation, intervention, and response. HMPs require the development of mitigation actions based on the Risk Assessment conducted for the plan. Results of the HVA are used to design training and education administered by Local Public Health Departments. These localized, sector-specific strategies in response to an assessment of hazard exposure may not be conducive for a statewide or cross-sector approach.

Unique Local Conditions

The development of standardized and centralized data, resources, and guidance naturally limits local context in favor of broad application. Development of data tools and resources is not intended to replace high-quality local data or unique local or regional conditions, and jurisdictions are encouraged to use their own primary information when available.

Conclusion

The workshop identified many opportunities to better align Hazard Mitigation Planning and Hazard Vulnerability Assessments in Wisconsin, including the development of resources to improve the efficiency of the process and quality of the plans. The Rural Partnerships Institute and Western Wisconsin Public Health Readiness Consortium will be seeking additional support and engagement from emergency management, public health, and other staff and experts to refine the recommendations presented in this summary, and begin developing the data, resources, and guidance to improve collaboration and alignment in hazard planning.