Health Security: Public Health and Medical Integration for Fusion Centers

An Appendix to the Baseline Capabilities for State and Major Urban Area Fusion Centers

July 2011
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About Global
The U.S. Department of Justice’s Global Justice Information Sharing Initiative (Global) serves as a Federal Advisory Committee to the U.S. Attorney General on critical justice information sharing initiatives. Global promotes standards-based electronic information exchange to provide justice and public safety communities with timely, accurate, complete, and accessible information in a secure and trusted environment. Global is administered by the U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Assistance.
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Introduction

Purpose
This document identifies the recommended actions for state and major urban area fusion centers (fusion centers) to integrate the public health and health care (PH/HC) community into the fusion process. Development of this capability will inform local, state, and national prevention, protection, response, and recovery activities that support and maintain the health security of the homeland.

This document is an appendix to the U.S. Department of Justice’s (DOJ) Global Justice Information Sharing Initiative’s (Global) Baseline Capabilities for State and Major Urban Area Fusion Centers (Baseline Capabilities document), which defines the capabilities and provides guidance necessary for a fusion center to be considered capable of performing basic functions of the fusion process (i.e., the gathering, processing, analysis, and dissemination of terrorism, homeland security, and law enforcement information).

This document does not identify additional capabilities for fusion centers. Rather, for fusion centers that choose to develop and support a health security capability, it identifies how the centers can effectively integrate the information, resources, personnel, and expertise of the PH/HC community into their existing analysis and information/intelligence sharing processes to assist the center in achieving its mission. This document also provides federal, state, local, tribal, territorial, and private sector PH/HC organizations with an overview of the mutual value of working with their fusion center and the many opportunities for establishing relationships with the fusion center.

The capabilities in this document are intended to be complementary to those described in the Baseline Capabilities for State and Major Urban Area Fusion Centers. They are organized and numbered to correlate directly with the capabilities listed in the Baseline Capabilities document; for example, I.A.1.b or I.A.3.a. For the sake of brevity and clarity, only those items that are directly relevant to the integration of the PH/HC community are included in this document.
Public Health and Health Care Community Role in Meeting the Baseline Capabilities

The Baseline Capabilities document describes the process, management, and administrative requirements for a fusion center to perform its core functions. Integrating the PH/HC community into a fusion center does not require additional capabilities but simply the incorporation of their information, expertise, and resources into the existing fusion center operations.

In maintaining the health of individuals, populations, and the environment, PH/HC personnel develop a unique understanding of their community that enables them to better detect anomalies in the environment. Incorporating the PH/HC community will aid a fusion center in achieving the all-crimes and/or all-hazards mission.

**All-Crimes**: When provided with training on criminal/terrorist indicators and warnings, protocols for reporting observed suspicious activities and behaviors, and the appropriate protections of health information, PH/HC personnel can provide fusion centers with information on criminal acts and/or terrorism precursors. Such information may include suspicious symptoms and/or abnormal environmental conditions that may be caused by an emergent disease or agent or abnormal patterns and trends indicative of the production or abuse of narcotics. PH/HC personnel provide specialized subject-matter expertise to assist in the analysis and interpretation of this information. This may aid fusion centers in achieving a better understanding of threats within a community and nationally. Likewise, fusion centers can share relevant threat information with PH/HC personnel, such as an injured criminal who may seek medical care at a local hospital or thefts/seizures of chemical, biological, and radiological materials or equipment.

**All-Hazards**: PH/HC personnel can both report and receive information from a fusion center that relates to terrorism, criminal acts, and other human-caused or natural disasters. As first responders, members of the PH/HC community become aware of the health and medical threats facing the community, provide prevention and protection activities, and are able to leverage a variety of surveillance and detection capabilities. The PH/HC community can help to identify existing vulnerabilities to the critical infrastructure and key resources (CIKR) within their communities and are an important part of the response to and recovery from the consequences that various threats present. The perspective of the PH/HC community adds an important dimension to all-hazard risk assessments, preparedness activities, and mitigation operations.

The relationship health security stakeholders have with a fusion center will depend on a number of factors unique to each jurisdiction. Regardless of capabilities, each fusion center should view the PH/HC community as important contributors, consumers, and collaborators for its all-crimes and/or all-hazards information and intelligence missions. As contributors, PH/HC personnel use the appropriate protocols to share information with a fusion center on suspicious activity or criminal/terrorism indicators and warnings. As consumers, PH/HC personnel receive appropriate and timely unclassified and/or classified threat/situational awareness information and risk analysis that will enable them to better guide their preparedness activities and enhance their ability to detect/respond to the occurrence or indicators of human-caused or natural incidents. As collaborators, PH/HC personnel provide subject-matter expertise and aid in the analysis, production, and appropriate dissemination of intelligence products. Such individuals may be embedded within the fusion center as analysts, act as a part-time liaison for the center, or receive training to be a Fusion Liaison Officer (FLO) who interfaces directly with the fusion center. As the link between the fusion center and the PH/HC community, such individuals should have the ability to reach back to a multitude of experts and resources within the state and local PH/HC community, including agencies responsible for the health and security of human and animal populations; food, water, and agricultural safety; and the overall environmental health of the community.

The incorporation of the PH/HC community’s perspective into the fusion center’s collection, analysis, and dissemination of information and intelligence processes enhances the collective homeland security effort by enhancing the preparedness level and situational awareness of PH/HC organizations across the country. Fusion center engagement with the PH/HC community supports the prevention, protection, response, and recovery efforts of all homeland security partners.
Recognition of the Value Added for Public Health and Health Care Community Engagement With Fusion Centers

Supporting and maintaining the health security of the homeland is a core activity of the PH/HC community. The responsibilities and preparedness activities of the PH/HC community, during day-to-day operations and human-caused or natural disasters, are fundamental to successful prevention, protection, response, and recovery functions.

The National Preparedness Guidelines have laid out specific capabilities that require action by PH/HC stakeholders and are enhanced by appropriate information sharing; these include strengthening chemical, biological, radiological, nuclear, and explosives (CBRNE) detection, response, and decontamination, as well as strengthening medical surge and mass prophylaxis capabilities. Additionally, the Pandemic and All-Hazards Preparedness Act (PAHPA) directed the development of a National Health Security Strategy led by the U.S. Department of Health and Human Services (HHS), with interagency contributions and support. The National Health Security Strategy has been developed as an overarching document that details how domestic and international preparedness and response programs will complement and enhance collective public health and medical preparedness. Information sharing is a component of this Strategy. Additionally, PAHPA directs that advances in information technology and information management be leveraged to support faster, larger-scale, more efficient, and higher-quality detection of, response to, and recovery from public health emergencies. These activities will augment fusion center operations by enhancing the quantity and quality of pertinent data from which to detect relevant threats. Lastly, Homeland Security Presidential Directive 21 (HSPD-21) directs that the U.S. Department of Homeland Security (DHS) develop mechanisms and processes to share unclassified and classified threat information with the appropriate members of the public health community. Together, these national-level policies support the enhancement of the nation’s health security by utilizing a variety of surveillance and detection tools to enhance information sharing activities with homeland security partners.

Achieving national health security requires understanding and sharing information related to human-caused and natural incidents, building a network of trusted individuals involved in robust information sharing partnerships, building a long-term and sustainable risk management strategy that addresses a changing threat environment, and maximizing the effective use of resources. Fusion centers are focal points for information sharing and are essential in understanding and disseminating threat data. Health security stakeholders and fusion centers should collaborate to ensure that the following resources are in place:

- Coordinated health security plans and programs that address known and potential threats.
- Regular and ongoing risk assessments of the PH/HC sector and related CIKR, as well as a process to identify and address sector interdependencies to allow for efficient information sharing and allocation of resources.
- Access to and participation in a fusion center’s robust information sharing processes that allow the movement of relevant and timely open source, unclassified, and classified intelligence and information that support routine and event-specific threat analysis.
- Tools and processes that are flexible and adaptable, allow for rapid adaptation to an evolving threat environment, and incorporate lessons learned and effective practices.
I. Fusion Process Capabilities

The Fusion Center Guidelines, Appendix C, provides examples of strategic and tactical information that public safety entities (including public health, emergency services, agriculture, food, environment) can provide to fusion centers.

A. Planning and Requirements Development

Intrastate Coordination
Fusion centers should partner with PH/HC stakeholders to develop and implement a plan to coordinate with regional emergency management or operations centers where PH/HC representatives are often involved or with centers specifically focused on health or medical analysis. [BC.I.A.1]

Risk Assessment
Fusion centers should collaborate with PH/HC partners to incorporate relevant health or medical information and analysis in statewide and/or regional risk assessments that identify and prioritize threats, vulnerabilities, and consequences to or within the PH/HC sector in a given geographic region. [BC.I.A.2]

- Fusion centers should partner with PH/HC stakeholders to develop a PH/HC sector topical risk assessment, as appropriate. [BC.I.A.2.b]

- PH/HC personnel and organizations should be included in the production and dissemination of risk assessments or a summary and/or briefings on the risk assessments. [BC.I.A.2.c]

Information Requirements
Fusion centers should work with PH/HC stakeholders to identify, prioritize, and regularly update PH/HC-specific information requirements for the center and the PH/HC community. Examples of the type of information and triggers for information exchange between law enforcement and the public health, food, and agriculture sectors are outlined in Criminal and Epidemiological Investigation Handbook and Criminal Investigation Handbook for Agroterrorism. [BC.I.A.3]

The Fusion Center Guidelines (page 14) states that types of information that may be provided to fusion centers by public safety entities include “an unusual sickness reported at a public health department” and “spikes in cattle disease on a farm.”
• Fusion centers should create a formal process to define, communicate, and modify PH/HC intelligence requirements and intelligence gathering. [BC.I.A.3.b]

• Fusion centers and PH/HC partners should establish goals and objectives for collecting, producing, and sharing health and medical information. [BC.I.A.3.c]

Baseline Capabilities I.A.4.c.ii states that fusion centers shall support “developing outreach material for first responders, public safety, and private sector partners and the public to educate them on recognizing and reporting behaviors and incidents indicative of criminal activity associated with international and domestic terrorism.”

Suspicious Activity Reporting (SAR); Alerts, Warnings, and Notifications; Situational Awareness Reporting
Fusion centers should incorporate core and ad hoc PH/HC stakeholders into their plans and procedures for the primary information flows described in the Baseline Capabilities, Section I.A, to include SAR; alerts, warnings, and notifications; and situational awareness reporting. [BC.I.A.4, 5, 6]

Fusion centers should collaborate with PH/HC stakeholders to develop outreach materials and support training for PH/HC personnel on recognizing and reporting suspicious activities, indicators, and warnings indicative of criminal activity or terrorism, as well as the associated protection of privacy, civil rights, and civil liberties. [BC.I.A.4.c.ii, f]

Fusion centers should collaborate with PH/HC partners to identify the appropriate dissemination methods for federally generated alert, warning, and notification messages, bulletins, and situational reports to other analytic centers, agencies, or organizations with a health or medical interest. [BC.I.A.5.a, 6.a]

Data Sources
Fusion centers should work with PH/HC partners to identify and, if appropriate, request access to relevant PH/HC-related data resources or systems that aid analysis of health and medical information. Resources may include, but are not limited to, health surveillance networks, syndromic surveillance, the DHS National Biosurveillance Integration System (NBIS), CDC’s Early Aberration Reporting System (EARS), national and state Health Alert Networks (HAN), or the CDC’s Epi-X alerting and notification system. Any use of health and medical data sources should be conducted in accordance with the federal Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule, as well as state and local laws and regulations. [BC.I.A.7]

Coordination With Response and Recovery Officials
Fusion centers should work with PH/HC partners to ensure that information sharing and analysis capabilities of the center are leveraged to support PH/HC components of emergency management and response operations, including weapons of mass destruction and other public health investigations and/or response, as appropriate, and in accordance with the National Incident Management System (NIMS) and Incident Command System (ICS). Roles, responsibilities, and mechanisms for sharing information and intelligence should be identified and communicated to all relevant stakeholders. [BC.I.A.8]

Exercises
Fusion centers should participate in exercises conducted by federal, state, and local PH/HC organizations and agencies responsible for maintaining the health of individuals, the community, and the environment. Additionally, fusion centers should include appropriate individuals from PH/HC organizations and agencies in exercises designed to evaluate fusion center operations and information sharing processes. Fusion centers should work with PH/HC partners to develop action plans to mitigate any gaps in collaboration efforts that are identified during these exercises. [BC.I.A.10]
B. Information Gathering/Collection and Recognition of Indicators and Warnings

The Fusion Center Guidelines (page 17) states that public safety partners “represent nontraditional information gatherers and can provide fusion centers with both strategic and tactical information, including crime-related trends (e.g., prescription drug fraud and fire investigations); additional response capabilities (fire and hazmat); and suspicious activity (e.g., unusual diseases reported at hospitals).”

Information-Gathering and -Reporting Strategy
Fusion centers should incorporate PH/HC information requirements and stakeholders into their information-gathering and -reporting strategy. [BC.I.B.1]

- The process for fusion centers to report information to or request information from partner PH/HC organizations should be clearly outlined. [BC.I.B.1.c]

Feedback Mechanism
Fusion centers should work with PH/HC stakeholders to define and implement (or use existing) feedback mechanisms for information both provided and received to communicate the value of the product and the use of the information and to make suggestions to improve products. [BC.I.B.2]

Collection and Storage of Information
In collaboration with PH/HC partners, fusion centers should identify the relevant legal authorities and policies for handling and using health and medical information, as well as the mechanisms for receiving, cataloging, and retaining information at the center in a manner that is consistent with the center’s privacy, civil rights, and civil liberties protections. PH/HC personnel are in a unique position because individuals trust them with private health information; therefore, proper collection and handling of this type of information is essential to ensure that PH/HC personnel maintain the trust of their community. [BC.I.B.3]

PH/HC personnel should work with fusion centers to develop guidance for the appropriate storing, use, and sharing of protected health information, as required by the federal or state HIPAA Privacy Rule, if use of this information is deemed necessary.

C. Processing and Collation of Information

Information Collation and Levels of Confidence
Fusion centers should collaborate with PH/HC partners to ensure that processing and collation of information that relates to health or medical threats, indicators and warnings, or suspicious activity is valid and reliable and then sorted, combined, categorized, and arranged appropriately. [BC.I.C.1, 2]
D. Intelligence Analysis and Production

Analytic Products
Fusion centers should update their production plans to incorporate PH/HC-related analysis, work with PH/HC stakeholders to develop relevant health and medical products, and determine to whom and how products will be disseminated. [BC.I.D.1]

Enhancing Analyst Skills
Fusion centers should work with PH/HC stakeholders to develop and implement a Training and Professional Development Plan to incorporate training and mentoring opportunities for analysts to learn content and resources related to the analysis of health and medical disciplines. [BC.I.D.3]

Analytic Tools
Analysts focused on PH/HC issues should be provided with mechanisms to securely communicate with other PH/HC-focused fusion center analysts within the region to develop collaborative networks; for example, the Homeland Security Information Network (HSIN) Health Security Intelligence Enterprise (HSIE) and the HSIN Healthcare and Public Health (HPH). [BC.I.D.8.c]

Open Source Analysis Capability
Fusion centers should work with PH/HC organizations to develop and implement an open source analysis capability utilizing the training and tools provided by the federal government in the PH/HC arenas. [BC.I.D.6]

Analyst Specialization
Fusion centers should consider assigning or bringing in from a partner PH/HC organization a full-time or part-time analyst to focus on health and medical analysis if the center’s priorities require this specialization. [BC.I.D.7]

Information Linking
Analysts focused on health and medical issues should work in partnership with other fusion center analysts and partner agencies to understand and identify links between terrorism/criminal information and indicators and warnings of threats to human, animal, agricultural, food, and environmental health or PH/HC critical infrastructure and key resources. Systems that could provide early warning of health threats and potential bioterrorism events may include, but are not limited to, NBIS Biosurveillance Common Operating Picture (BCOP), BioWatch, and syndromic surveillance systems (such as CDC’s BioSense). [BC.I.D.4]

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The Fusion Center Guidelines (page 14) states, in reference to public safety entities (including fire departments and public health departments), “These entities should be recipients of information and intelligence from fusion centers, including threat alerts and related response efforts.”
E. Intelligence/Information Dissemination

**Dissemination Plan**
Fusion centers should incorporate PH/HC stakeholders into the center’s dissemination plan. This plan should document the types of products and information to distribute to the appropriate PH/HC stakeholders, the procedures for doing so, and the appropriate mechanisms. [BC.I.E.1]

**Reporting of Information to Federal Partners**
Consistent with Guideline I.E.3 in the Baseline Capabilities, fusion centers should ensure that relevant health or medical products or related information be shared with appropriate federal agencies, such as the DHS Office of Intelligence and Analysis (I&A), the Office of Health Affairs (OHA), the National Biosurveillance Integration Center (NBIC), the Office of Infrastructure Protection (IP), and the National Operations Center (NOC) for further dissemination to HHS, the U.S. Department of Agriculture (USDA), the Environmental Protection Agency (EPA), the U.S. Department of Defense (DoD), and the Federal Bureau of Investigation (FBI), as appropriate, to support national patterns and trends analysis. [BC.I.E.3]

F. Reevaluation

**Performance Evaluation**
Fusion centers should collaborate with PH/HC stakeholders to develop a mechanism to provide and receive feedback on the effectiveness of incorporating health and medical topics into information and intelligence products. [BC.I.F.1]

**Fusion Center Processes Review**
Fusion centers should engage PH/HC partners in reviewing and, as appropriate, updating the center’s information requirements, collection plan, and analytic production strategy on a regular basis as threats or vulnerabilities evolve or emerge. [BC.I.F.2]
Baseline Capabilities II.A.2.c states that fusion centers “should consider using an all-crimes approach and/or an all-hazards approach. If using an all-hazards approach, centers shall adhere to the forthcoming appendices to this document, which will outline the baseline capabilities for incorporating the following disciplines into the center”:

a) Fire Service

b) Public Health

c) Critical Infrastructure and Key Resources

A. Management/Governance

Governance Structure
Fusion centers should include PH/HC representatives with decision-making authority within the center’s governance body and develop a mechanism for them to provide input and feedback. [BC.II.A.1]

Mission Statement
Fusion centers should review and update their mission, if appropriate, to ensure it conveys the purpose, priorities, and roles of the center as they pertain to health and medical-related activities. [BC.II.A.2]

PH/HC organizations should aid fusion centers in refining their mission by participating in the jurisdictional risk assessments. [BC.II.A.2.b]

Collaborative Environment
Fusion centers should work with PH/HC partners to identify the core and ad hoc stakeholders (such as federal, state and local agencies involved in human, animal, food, and agricultural health and safety), as well as the roles and responsibilities of each stakeholder and mechanisms and processes to facilitate collaboration with these stakeholders. [BC.II.A.3]

PH/HC partners should participate in the review of the most recent risk assessment to identify stakeholders with
PH/HC partners should work with fusion centers to identify the roles and responsibilities of PH/HC stakeholders, their information needs, and potential contributions as consumers, collaborators, and contributors of the information processing and analysis. [BC.II.A.3.c]

PH/HC partners should work with fusion centers to determine whether there is a need for the development of a Memorandum of Understanding (MOU) or Agreement (MOA) and, if needed, nondisclosure agreements (NDA) between the center and each participating PH/HC organization to help define collaborative efforts such as resources or personnel and ensure understanding of all relevant information privacy, civil rights, and civil liberties protections. [BC.II.A.3.f]

**B. Information Privacy Protections**

**Privacy Policy Development**
Fusion centers should incorporate PH/HC partners into the development, vetting, and implementation of a privacy policy that addresses gathering, analysis, and dissemination of protected health information and other personally identifiable information. [BC.II.B.2]

**Privacy Protections**
Fusion centers should collaborate with PH/HC partners to ensure the incorporation of health and medical-related information and analysis into their operations in a manner that protects privacy, civil rights, and civil liberties in accordance with the center’s privacy, civil rights, and civil liberties protections and all applicable laws, to include HIPAA. [BC.II.B.3]

**Privacy Policy Outreach**
Fusion centers should work with PH/HC partners to develop and implement the necessary outreach and training to ensure appropriate privacy, civil rights, and civil liberties protections for health and medical information. PH/HC stakeholders and fusion center personnel should participate in ongoing and regular training. PH/HC partners should participate in available privacy, civil rights, and civil liberties trainings, including training on 28 CFR Part 23 as referenced in II.B.3 of the Baseline Capabilities, to ensure compliance with fusion center privacy, civil rights, and civil liberties policies and procedures. [BC.II.B.4]
C. Security

Securing Information
Fusion centers should collaborate with PH/HC partners to identify appropriate members of the PH/HC community to be included in the center’s dissemination of Secret-level information. The center should aid in facilitating the acquisition of the appropriate clearances, policies, procedures, and training to receive and safeguard Secret-level information. Appropriate PH/HC personnel include those serving as an analyst within the fusion center, serving as a subject-matter expert for the fusion center, serving in a defined intelligence function within a state or major urban area health or medical organization and actively collaborating with the fusion center, and/or serving as an executive decision maker within a state or major urban area health organization, where Secret-level information could support decisions regarding health security operations. [BC.II.C.3.a]

PH/HC partners should collaborate with the center to identify appropriate members of the PH/HC community to include in the center’s dissemination of federal Controlled Unclassified Information (CUI). The center should aid in facilitating the acquisition of the appropriate policies, procedures, and training to receive and safeguard CUI. [BC.II.C.3.c]

PH/HC partners should participate in ensuring that the center’s security policies allow for the timely distribution of intelligence products to the center’s PH/HC stakeholders, including daily, weekly, and monthly analysis reports and assessments, alerts, warnings, executive reports, briefings, etc. [BC.II.C.3.d]

D. Personnel and Training

Baseline Capabilities II.D.3.c states that “all fusion center personnel—including analysts, intelligence officers, and non-law enforcement personnel assigned to the center (corrections, fire services, public health, private sector, and others)—assigned both full-time, part-time, and on an ‘as needed’ basis should be included in the training plan.”

Staffing and Training Plans
Fusion centers should work with PH/HC partners to update staffing and training plans to support the incorporation of PH/HC interests into the fusion center’s operations. For example, the FBI/CDC Joint Criminal and Epidemiological Investigations Workshop provides public health and law enforcement officials with the opportunity to build partnerships, discuss their respective roles and responsibilities for responding to potential bioterrorism incidents, and improve information sharing and joint investigation processes. [BC.II.D.1, 3]

Fusion centers should develop and document a staffing plan that supports the incorporation of PH/HC personnel into the fusion center as analysts or defines a mechanism to utilize subject-matter support from PH/HC personnel who do not staff the fusion center. [BC.II.D.1]

PH/HC stakeholders should participate in the development, documentation, and regular delivery of a training program to ensure that all fusion center personnel and PH/HC partners understand the fusion center’s mission, policies, procedures, and operations, as well as the intelligence process and how health and medical information is incorporated into this process, consistent with Guideline II.D.3 in the Baseline Capabilities. [BC. II.D.3]
E. Information Technology/Communications
Infrastructure, Systems, Equipment, Facility, and Physical Infrastructure

The Fusion Center Guidelines (page 66) states that fusion centers should consider “incorporating current communications plans that are utilized by law enforcement and emergency services (including hospitals, EMS, and fire)” when identifying communications needs.

Information Exchange Within the Fusion Center
Fusion centers should work with PH/HC partners to ensure that the appropriate technological and physical solutions are achieved to allow for the appropriate integration of PH/HC interests into the center’s operations. [BC.II.E.2]

Fusion centers should ensure that the appropriate PH/HC personnel are colocated and/or virtually integrated within the fusion center. [BC.II.E.2.a]

PH/HC partners should identify and inform the fusion center of relevant databases, systems, and networks available from PH/HC federal, state, local, tribal, territorial, and private sector organizations to maximize information sharing and analysis that relate to health and medical information (such as national and state Health Alert Networks and CDC’s Epi-X alerting and notification system). [BC.II.E.2.b]

Communications Plan
Fusion centers should collaborate with PH/HC partners to identify how they will communicate during an incident or emergency, especially those requiring health or medical expertise, and ensure that communication capabilities are interoperable. A useful resource is the Communication and Public Health Emergencies: A Guide for Law Enforcement, which identifies considerations for law enforcement in the development of their communications plans for public health emergencies. [BC.II.E.3.a]

F. Funding
Fusion centers should work with PH/HC organizations to leverage existing resources/funding and identify supplemental funding sources to support the integration of PH/HC personnel and information into fusion center operations. [BC.II.F.1.d]

- Relevant grant programs that could be leveraged include the Federal Emergency Management Agency (FEMA) Metropolitan Medical Response System (MMRS) Program and the CDC Public Health Emergency Preparedness (PHEP) Cooperative Agreement.
A fusion center that chooses to develop health security capabilities should incorporate threat, vulnerability, and consequence data gathered from and of relevance to the PH/HC community. To achieve complete integration, fusion centers will require the incorporation of PH/HC interests at all steps in the information and intelligence process (a process for systematically collecting, evaluating, and disseminating information and intelligence obtained by the fusion center). The steps and how they relate to the PH/HC community are described below.

Step 1: Planning and Requirements Development

This step will require PH/HC stakeholder engagement and identification of information requirements relevant to this community, so that collection, collation, analysis, and dissemination plans that meet these needs may be developed. Requirements may be event-specific, related to CIKR vulnerabilities, or standing information needs. Additionally, it will be useful for stakeholders to identify the target audience for various products or product lines, such as decision makers or operators, as well as appropriate production and distribution frequency.

Step 2: Information Gathering/Collection

In order to gather the appropriate information from the PH/HC community and other homeland security partners or the Intelligence Community that is health- and/or medical-related, the relevant people, organizations, and systems from which to gather this information will need to be identified. A collection plan should be developed that includes collaboration with and input from PH/HC stakeholders. This will also serve to enhance the PH/HC community’s own information-gathering activities. For threat and vulnerability assessments related to the PH/HC sector, it will be important to identify and gain access to federal or jurisdictional databases, surveillance tools, and alerts and warnings systems. Additionally, fusion centers should identify and implement reporting mechanisms.

Step 3: Processing and Collation of Information

This step involves organizing and sorting the gathered information in order to make appropriate and accurate assessments and evaluating the information’s validity and reliability. This process would be aided by utilizing expertise within the PH/HC stakeholder community. The information is organized and categorized, according to case or topic area, into a form or system that is easy to use; this process will allow for more effective and efficient retrieval of the data when needed.

Step 4: Intelligence Analysis and Production

This step involves the evaluation and transformation of health and/or medical information into a finished product that includes descriptions, explanations, and conclusions and may present a confidence rating. During this process, the health and/or medical data are assimilated and crafted to address the information requirements. The process of analysis yields intelligence products.
Step 5: **Intelligence/Information Dissemination**

The finished intelligence product on health- and/or medical-related threats and vulnerabilities is shared with appropriate PH/HC stakeholders and homeland security partners to inform their planning, policy-making, decision-making, or preparedness activities. This process should ensure that the appropriate review, distribution frequency, and distribution mechanisms are in place to share relevant intelligence products with PH/HC stakeholders.

Step 6: **Reevaluation**

Gathering feedback on the usefulness and appropriateness of an intelligence product will aid analysts in developing specific products or lines to meet the information needs of the PH/HC stakeholders. This process also allows the consumers of the information and intelligence to refine their information requirements.

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**The Path Forward**

Ensuring the health security of our nation and each community is a shared responsibility by PH/HC stakeholders across all levels of government and the private sector. The integration of the PH/HC community into the national network of fusion centers will enhance collective response and mitigation efforts. An effective partnership among fusion centers, their jurisdictional PH/HC organizations, and federal partners will inform efficient preparedness activities for both the PH/HC community and all homeland security partners.

Information and intelligence sharing is the foundation for preventing, protecting against, or mitigating threats to the health of our nation’s human and animal populations, agricultural and food supplies, and environment and natural resources. The capabilities described above will enable a fusion center to develop the policies, processes, and personnel to enhance the effective sharing of information and intelligence to support the nation’s health security. Resources and tools described below will aid in the incorporation of health and/or medical information from PH/HC stakeholders and the analysis of this information and will result in the production of threat and/or risk assessments that are meaningful statewide or in a local community.
The Health Security Intelligence Enterprise (HSIE) is an initiative to integrate the interests of the PH/HC community into the national network of fusion centers. The HSIE initiative has been designed to leverage and build on existing fusion center initiatives, as managed by the DHS Office of Intelligence and Analysis (I&A), State and Local Program Office (SLPO). The HSIE is coordinated through a collaboration of several DHS entities—I&A and the Office of Health Affairs (OHA), with support from the Federal Emergency Management Agency (FEMA), Protection and National Preparedness (PNP).

The goals of the HSIE initiative are being pursued by engaging a diverse group of PH/HC stakeholders and utilizing their expertise to identify and/or develop information and intelligence sharing requirements, mechanisms, technical assistance, and training. Outcomes will foster communication and collaboration among the PH/HC community; fusion centers; the Intelligence Community (IC); federal, state, local, tribal, and territorial law enforcement and public safety providers; and the private sector. The HSIE will strive to strengthen partnerships among federal entities, such as DHS, the Department of Health and Human Services (HHS), and the Centers for Disease Control and Prevention (CDC), resulting in enhanced coordination of federal health security resources that are available to support the national network of fusion centers.

The State and Local Program Office (SLPO) coordinates DHS support to fusion centers. The SLPO partners with state and major urban area fusion centers to strengthen information sharing, enable fusion centers to operate as an integrated national network, and achieve a universal analytic capability. The SLPO provides functional support to fusion centers, ensures integrated DHS support to fusion centers, facilitates coordinated federal support to fusion centers, integrates external stakeholders and communities of interest into the fusion center environment, and supports advocacy on behalf of the national network of fusion centers through strategic communication. The SLPO, in partnership with OHA, provides support for the integration of health capabilities into the national network of fusion centers.
DHS OHA Watch Desk

The OHA Watch Desk (Desk) located in the National Operations Center (NOC) is staffed 24/7/365 in support of OHA’s tasking as the principal medical authority to both the Secretary of DHS and the FEMA Administrator. The Desk collects, collates, and provides open source and government-source reporting during continuous operations for the situational awareness of OHA senior leadership.

During steady state operations, the Desk carries out its mission through these core functions:

- **Active Biosurveillance**—Constant awareness and collection of biological events around the world that have the potential to impact humans, animals, plants, and national security.

- **RFI and RFA Processing**—All requests for assistance (RFA) or information (RFI) that are directed to OHA are received at the Desk and tasked to the appropriate subject-matter expert (SME). Requests originating with OHA for tasking to other DHS components or other federal, state, or local agencies will be processed through the Desk and routed to the NOC Senior Watch Officer (SWO) for assignment.

- **Health Security at Borders**—The Desk works collaboratively with the CDC, Customs and Border Protection (CBP), and the Transportation Security Administration (TSA) to ensure that potentially infectious travelers are not allowed to cross our borders or travel by commercial air. Additionally, when agricultural inspectors at the borders detect a pest that may threaten our nation’s food supply, the Desk notifies OHA’s Food, Agriculture, and Veterinary Defense Division (FAVD) to increase its situational awareness and begin heightened surveillance for any threat to our crops. FAVD works in collaboration with the U.S. Department of Agriculture (USDA) to help ensure protection of agricultural health and food safety.

DHS I&A Cyber, Infrastructure, and Science Division

I&A’s Cyber, Infrastructure, and Science Division (CISD) is responsible for identifying, evaluating, and reporting on threats to the homeland stemming from adversary intent to use chemical, biological, radiological, or nuclear (CBRN) materials; attacks to the cyber and communications infrastructure; global infectious disease, public health, veterinary, agricultural, and food security hazards; and threats to critical infrastructure and key resources (CIKR). CISD analysts access all-source intelligence from across the intelligence and homeland security communities to provide analytic products that support decision making and the statutory missions of the Department’s components and answer the key intelligence questions of DHS leadership; state, local, tribal, and territorial partners; and the private sector.

- The Division’s CBRN and Health Intelligence Branch is the principal DHS intelligence unit looking at adversaries’ intent, capability, and plans to acquire, develop, and use CBRN agents and materials against the United States. Its health intelligence analysts combine unique data available from the Department with all-source intelligence information to provide actionable intelligence assessments on health threats to the homeland.

- CISD’s Strategic Infrastructure Threat Branch plays a unique role in looking at foreign and domestic threats to the nation’s 18 CIKR, including the health care and public health, agriculture and food, water, chemical, and nuclear sectors. Its analysts look at the intent, capabilities, likely attack methods, and potential CIKR targets of adversarial groups and actors.

During an incident, the Desk maintains normal surveillance and incident situational awareness and coordinates tracking and passing of RFI and RFA activity for the OHA Incident Management Cell (IMC) through the Crisis Action Team (CAT). The Desk provides on-the-spot
DHS OHA National Biosurveillance Integration Center

The National Biosurveillance Integration Center (NBIC) is the management and operations center for the National Biosurveillance Integration System (NBIS). NBIS is a national program with participation from 12 federal member agencies and in the near future will also include state and local stakeholders as well as select private sector representatives. NBIC products enhance the situational awareness of senior leaders and decision makers regarding natural disease outbreaks, accidental or intentional use of biological agents, and emergent biohazards through the acquisition, integration, analysis, and dissemination of information from existing human health, animal, plant, food, and water surveillance systems. NBIS' subject-matter experts span several agencies and collaboratively produce various products, such as the Biosurveillance Common Operating Picture (BCOP), general disease reports, and event-based spot and situational reports. By integrating information and disseminating it to member agencies and agencies of state, local, and tribal governments, NBIC and the NBIS community work to reduce the intensity and duration of a biological event by providing early cueing resulting in superior mitigation.

Access to NBIC and NBIS products (such as the BCOP) is possible through access to the Homeland Security Information Network (HSIN). DHS representatives to state and local entities, such as fusion centers, can request access to the NBIC portal (send request to NBICOHA@hq.dhs.gov). Additionally, a special BCOP portal has been developed to allow state and local government agencies that have completed NBIC Memorandums of Agreement to directly access NBIS/NBIC products.

DHS FEMA Protection and National Preparedness (PNP)

In coordination with I&A and the Department of Justice (DOJ) Bureau of Justice Assistance (BJA), FEMA offers many valuable resources that are currently leveraged by fusion centers and could be utilized to support health security-related capabilities within a fusion center, including the joint DHS/DOJ Fusion Process Technical Assistance Program.

Technical Assistance

As a service under the joint DHS/DOJ Fusion Process Technical Assistance Program, Health Security: Public Health and Medical Integration for Fusion Centers is an introductory service designed to facilitate discussion between the PH/HC community and their respective fusion centers. The objective of this service is to provide support for jurisdictions as they consider coordination with and/or integration of the health security communities into existing information sharing initiatives. It also assists health security community personnel as they examine the mutually beneficial relationship between fusion centers and PH/HC agencies. The service will be tailored to present best practices and lessons learned for the inclusion of public health and/or health care partners in fusion center operations and facilitates discussions on potential next steps and requirements to effectively achieve the desired end state. Additionally, on-site Health Security service deliveries will cover broad scope considerations, foster networking opportunities, and provide resources for effective collaboration and information sharing. This service is delivered in coordination with I&A, OHA, DOJ, and other federal PH/HC agencies.

For information regarding the Fusion Process Technical Assistance Program or assistance with the request process, please contact program staff at fusionprocessprogram@iir.com.
Glossary

**Public Health** is the science and practice of protecting and improving the health of a community, as by preventive medicine, health education, control of communicable diseases, application of sanitary measures, and monitoring of environmental hazards. As used here, it refers to the activities, infrastructure, and workforce that support human, animal, agricultural, food, air, and water health and safety. The term includes departments of health, agriculture, environment, and occupational safety; public laboratories; and poison centers.

**Health Care** is the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions. It is provided and maintained by both public and private resources. As used here, it refers to the activities, infrastructure, and workforce. The term includes health care providers, such as that support hospitals, pharmacies, home caregivers, emergency medical services and technicians, research facilities, and laboratories.

**Health Security** is a state of preparedness that ensures the public is prepared for, protected from, and resilient in the face of health threats having potential economic or homeland security implications. Health security is achieved when health threats are identified; risks and consequences to human, animal, agriculture, food, water, and environmental health are minimized; and response and recovery actions are robust and effective.

**Intelligence** is defined as information of all types and from all sources that is collected and analyzed in the context of threats to the United States. This process provides senior policymakers with warnings or forecasting to aid and inform strategic, operational, or tactical decisions. This may include information from foreign and domestic federal, state, local, tribal, territorial, and private sources and is often weighted towards forecasting.

**Health Intelligence or Medical Intelligence**, within the DHS intelligence discipline and for the purposes of the HSIE, is the collection, evaluation, analysis, and interpretation of all-source information concerning foreign infectious disease, public health, veterinary, agricultural, and food safety and security threats to the homeland. The goal is to provide estimative finished intelligence to inform the decisions of homeland health security stakeholders.

**Enterprise** is defined as the grand scope of the health security information and intelligence sharing initiative, including the primary organization and all of its component parts (administration, advisors, stakeholders).
Acronyms

BCOP  Biosurveillance Common Operating Picture
CAT   Crisis Action Team
CBP   U.S. Customs and Border Protection
CBRN  Chemical, Biological, Radiological, and Nuclear
CBRNE Chemical, Biological, Radiological, Nuclear, and Explosives
CDC   Centers for Disease Control and Prevention
CIKR  Critical Infrastructure and Key Resources
DHS   U.S. Department of Homeland Security
DoD   U.S. Department of Defense
DOJ   U.S. Department of Justice
EPA   Environmental Protection Agency
FAVD  Food, Agricultural, and Veterinary Defense Division
FBI   Federal Bureau of Investigation
FEMA/PNP Federal Emergency Management Agency/Protection and National Preparedness
FLO   Fusion Liaison Officer
HAN   Health Alert Network
HHS   U.S. Department of Health and Human Services
HIPAA Health Insurance Portability and Accountability Act
HITRAC Homeland Infrastructure Threat and Risk Assessment Center
HPH   Health Care and Public Health
HSIE  Health Security Intelligence Enterprise
HSIN  Homeland Security Information Network
HSPD-21 Homeland Security Presidential Directive 21
I&A   Office of Intelligence and Analysis
IC    Intelligence Community
ICS   Incident Command System
IMC   Incident Management Cell
NBIC  National Biosurveillance Integration Center
NBIS  National Biosurveillance Integration System
NIMS  National Incident Management System
NOC   National Operations Center
OHA   Office of Health Affairs
PAHPA Pandemic and All-Hazards Preparedness Act
PH/HC Public Health and Health Care
RFA   Request for Assistance
RFI   Request for Information
SAR   Suspicious Activity Reporting
SME   Subject-Matter Expert
SWO   Senior Watch Officer
TSA   Transportation Security Administration
USDA  U.S. Department of Agriculture
WMD   Weapons of Mass Destruction