



GEORGETOWN UNIVERSITY
Georgetown University Medical Center
Center for Global Health Science and Security

RAPID URBAN HEALTH SECURITY ASSESSMENT (RUHSA) TOOL

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AUTHORS

Matthew R Boyce, MSc

Senior Research Associate, Georgetown University Center for Global Health Science & Security

Rebecca Katz, PhD, MPH

Director, Georgetown University Center for Global Health Science & Security

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CONTACT INFORMATION

Center for Global Health Science & Security
3900 Reservoir Road NW
Medical-Dental Building, Room NW 306
Washington, DC 20057
<https://ghss.georgetown.edu/>



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BACKGROUND

Local governments and sub-national authorities are often the first to respond to public health emergencies, sometimes with wide-ranging responsibilities but often insufficient capacities to deal with them. The Rapid Urban Health Security Assessment (RUHSA) Tool is a resource designed primarily for local government leaders and policy makers to support public policy, decision making and organization as they prioritize, build, and implement capacities to improve local-level health security.

What is the purpose of the RUHSA Tool?

The RUHSA Tool is intended to assess municipal capacities to prevent, detect, and rapidly respond to health security threats. These threats include those that are naturally occurring, deliberate, or accidental in nature. The purpose of the assessment is to measure city specific capacities achieving targets outlined in various health security and urban resilience guidance documents.

The first time the assessment is conducted will establish a baseline measurement of a city's health security capacity. Any subsequent evaluations conducted – envisioned to occur every 3-5 years – will measure progress and identify improvements or reductions in municipal capacity.

While the RUHSA Tool was not designed to be used in the midst of a public health emergency, it may also be adapted to inform a checklist for prioritizing what capacities and activities a city needs to rapidly develop, or to help focus requests for assistance.

This will allow for municipal authorities and leaders to:

- i. Identify the strengths and weaknesses of their local health security systems;
- ii. Create multiyear action plans and prioritize opportunities for improving local health security;
- iii. Promote organizational and fiscal accountability and transparency;
- iv. Engage with current and prospective donors and development partners to target resources effectively; and
- v. Develop compelling narratives and a legacy of leadership.

Who is the Intended Audience?

The RUHSA tool is intended to be used by municipal authorities including mayors, municipal agencies, and municipal offices. Other audiences may include national-level authorities, independent researchers, and non-governmental agencies.

How was the RUHSA Tool Developed?

The tool was developed to provide a mechanism to evaluate a city's capacity for ensuring health security. This tool draws on core capacities referenced in the first and second editions of the International Health Regulations (2005) Joint External Evaluation Tool, and incorporates valuable content and capacities from tools and processes including the WHO Health Security Benchmarks, the WHO CBRN capabilities checklist, the United Nations Office for Disaster Risk Reduction's Resilience Handbook for Local Government Leaders, U.S. CDC Standards for State, Local, Tribal, and Territorial Public Health Emergency Preparedness and Response Capabilities, and the Robert Wood Johnson Foundation's Health Security Preparedness Index.

The resulting assessment tool contains 20 capacities and 46 indicators that are divided into the four following sections:

- Prevent (5 capacities and 9 indicators)
- Detect (4 capacities and 12 indicators)
- Respond (8 capacities with 19 indicators)
- Other Considerations (3 capacities with 6 indicators)

The tool was debuted at the 2019 Annual Summit of the Global Parliament of Mayors, held in Durban, South Africa in November 2019. Based on feedback solicited at this event from this global body of mayors, minor modifications and revision were made to the tool.

What is the RUHSA Scoring System?

Every indicator included in the RUHSA has attributes that reflect various levels of capacity with scores of 1-3 (1 indicates that no capacity exists; 3 indicates demonstrated capacity). Although overlap among the various capacity sections of the RUHSA exists, each indicator is considered separately in the assessment and receives a single score based on current capacity. The following describes the level of advancement or scoring with color coding:

Score	Indicator
1	No capacity: Attributes are not in place.
2	Developed capacity: Attributes are in place, but have not been used or funded sustainably.
3	Demonstrated capacity: Attributes are in place, and have been used in the response to a real event and/or tested through exercises, or are funded sustainably.

The contextual questions listed for each capacity do not inform the indicator scores, but are questions on or relating to circumstances that provide important and useful context for the given technical areas.

The technical questions are directly related to technical area indicators and attributes, which enable the assessor to measure municipal capacity and determine an appropriate score. Many of the technical questions require binary-qualitative answers (yes/no), though sub-questions may require more substantive answers. Municipal authorities are not required to provide relevant documentation for technical questions, though doing so will ensure that the city has compiled a resource of necessary documents that could prove beneficial.

PREVENT

P.1. Legislation, policy, and administrative frameworks

Rational:

Adequate policies and legal frameworks are prerequisites for the implementation of health security activities that are necessary for preventing, detecting, and responding to public health emergencies. The absence of appropriate legislation can hinder the implementation of other health security capacities and should thus be considered a priority. Municipal leadership should ensure that they are familiar with health security policies that are relevant in their context and should advocate for the creation of policies in the absence of appropriate legislation for all relevant sectors.¹

Targets:

- Establish a legislative framework as a foundation for urban health security and risk reduction.
- Review the use of relevant legislation, laws, regulations, policy and administrative requirements, and determine whether they cover all health security aspects.
- Identify specific areas that require additional legislation.
- Develop new or modified legislation for the implementation of health security activities.

Score	P.1.1. Legislation, laws, regulations, policy, administrative requirements are available in all relevant health security sectors.
1	Legislation, laws, regulations, policy, administrative requirements are not in place for health security sectors.
2	The municipality can demonstrate the existence and use of relevant legislation in all relevant health security sectors.
3	The municipality can demonstrate the existence and use of relevant legislation in all relevant health security sectors and coordination between sectors and governance levels when appropriate.

Score	P.1.2. The municipality has assessed, adjusted and aligned its legislation, laws, regulations, policy, and administrative requirements in all relevant health security sectors.
1	No assessment of relevant legislation, regulations, administrative requirements and other government instruments has been undertaken.
2	Assessment of relevant legislation, regulations, administrative requirements and other government instruments has been carried out and required adjustments have been identified.
3	Assessment of relevant legislation, regulations, administrative requirements and other government instruments has been carried out and required adjustments have been identified and implemented.

¹ Relevant sectors include both private and public sectors, and at a minimum include: agriculture, environment, finance, medicine, public health, emergency services, communications, security, trade, transportation, and veterinary health.

Contextual Questions:

1. How are policies and regulations developed, reviewed, and operationalized in the country?
2. Does national guidance consider all sectors and stakeholders involved in health security?
3. To what extent does legislation match the risk profile, as defined by multihazard risk assessments?
4. How are national-level policies operationalized in the municipality?

P.1.1. Technical Questions:

1. Is there legislation or other governmental instruments governing public health surveillance and response?
 - a. Does legislation or policy address the import and export of biological samples, hazardous materials, and dangerous goods across national or international borders?
 - b. Does legislation or policy address the importation, stockpiling, use, and management of licensed and unlicensed medical countermeasures?
 - c. Does legislation or policy define the roles and responsibilities of the health system in a public health emergency?
 - d. Does legislation or policy require health facilities to maintain current plans for risk reduction and crisis management?
 - e. Does legislation or policy require health care facilities to report communicable diseases to a health department?
 - f. Does legislation or policy exist relating to safe burial practices in case of a mass causality event?
 - g. Does legislation or policy exist relating to mass prophylaxis campaigns?
 - h. Does legislation or policy exist relating to the release of personally identifiable information?
 - i. Does legislation allow the government to detain/quarantine an individual who presents a public health risk?
2. Do policies or regulations exist for the use of drugs, chemicals, and other countermeasures that can be of public health importance (e.g., antimicrobial resistance, insecticides, etc.)?
3. Has the municipality identified administrative requirements for the implementation of legislation and/or regulations?
4. Are there mechanisms to ensure the coordination of legal frameworks between sectors?
5. Is there evidence of using relevant health security legislation and policies in various sectors?

P.1.2. Technical Questions:

1. Has an assessment of relevant legislations or other governmental instruments been conducted?
2. Did the assessment identify areas for adjustment or alignment?
3. Is there evidence of revision or alignment of health security legislation following the assessment?
4. Are review assessments conducted on a regular basis?
 - a. If yes, how often do assessments occur?
5. Are efforts taken to learn from what other municipalities, districts, and countries do to improve health security?

P.2. Financing and resources

Rational:

Many health security policies and plans require dedicated resources to ensure that actions are implemented. These finances² and resources can come from a variety of sources³ at local, national or international levels. The municipality should have access to financial resources for the development and maintenance of health security capacities; and resources that can be accessed in a timely fashion in response to public health emergencies.

Targets:

- Ensure adequate funding for health security capacities in all relevant sectors through local budgets or other mechanisms.
- Monitor budget distribution and expenditure by all relevant sectors at the municipal level.
- Demonstrate that financing and resources can be accessed and distributed in response to public health emergencies.
- Review the effectiveness of emergency financing mechanism following any response to a public health emergency and adjust procedures to ensure speed, transparency, and accountability of all funding and resources.

Score	P.2.1. Financing is available for the development and implementation of health security capacities in a municipality.
1	There is no budget line or budgetary allocation available to finance the development and implementation of health security capacities within a municipality.
2	A sufficient, well-coordinated budget exists and is implemented for some health security sectors at the municipal level, or a budget exists through extrabudgetary means.
3	A sufficient, well-coordinated budget exists and is implemented for all health security sectors at the municipal level.

² Financing refers to funds and resources that are identified, allocated, distributed, and executed on activities and interventions. It does not consider quantifying the level of resourcing necessary for the implementation of activities.

³ Local level resources can include: (i) local government budgets, (ii) revenue from service charges, taxes, fees, incentives, fines and municipal bonds, (iii) resources held jointly through alliances with local NGOs or the private sector, (iv) grants given by academia and scientific organizations, and (v) resources identified by mutual cooperation agreements with neighboring municipalities. National level resources can include: (i) national funds earmarked for public health or health security purposes, (ii) annual funds for municipalities from the national government, (iii) resources held by national NGOs and Foundations that can be accessed via local chapters, (iv) resources held by research and academic programs and scientific networks, and (v) national alliances among cities; International level resources can include: (i) participation in city and local government associations, (ii) bilateral or multilateral cooperation with national or international organizations (NB: most multilateral and bilateral cooperation requires agreement with the national government), (iii) loans or bonds from national and regional development banks or the World Bank, and (iv) grants from international development organizations.

Score	P.2.2. Financing mechanisms and funds are available for the timely response to public health emergencies in a municipality.
1	Financing for responding to public health emergencies in a municipality is not identified and funds are allocated and distributed in an ad hoc manner during a public health emergency.
2	An emergency public financing mechanism exists that allows for structured reception and rapid distribution of funds for responding to public health emergencies.
3	Financing can be executed and monitored in a timely and coordinated manner at all levels and for all relevant sectors, with an emergency contingency fund in place, for response to a public health emergency.

Contextual Questions:

1. What proportion of the national health budget is allocated for public health?
2. How dependent is the country on external sources of financing and other resources for developing and maintaining public health capacities?
3. How dependent is the country on external sources of financing and other resources for responding to public health emergencies?
4. How are subnational level public health activities generally funded in the country?
5. What processes and mechanisms are in place for cities to gather and channel financing and resources in response to public health emergencies?

P.2.1. Technical Questions:

1. Is there a municipal budget line for activities related to developing and implementing health security capacities?
 - a. If yes, what proportion of the municipal health budget is allocated for health security related activities?
 - b. If yes, what are the sources of this funding?
 - c. Are priorities for health security investment are clear and defensible?
 - d. To what extent is the budget influenced by multihazard risk assessments?
 - e. Are there delays in receiving funds for activities focused on health security activities?
2. Does the municipal budget consider all relevant health security sectors?
 - a. How does the municipality ensure coordination of budget planning and development, among different sectors?
 - b. Does a municipal authority coordinate different sectors in the implementation of health security activities, and the distribution and execution of their finances?
3. Is there an entity responsible for financial planning of essential municipal public health functions for health security including disease control?
4. Do any memoranda of understanding (MoUs) or other official agreements exist with external partners to provide financing for core health security capacities?
 - a. If yes, what proportion of the overall budget comes from these partners?
5. Does the municipality consider financial incentives or penalties to promote the development and maintenance of health security capacities?
 - a. If yes, how does the municipality engage with the private to promote health security?
 - b. If yes, how does the municipality engage with non-profits to promote health security?
 - c. If yes, how does the municipality engage with civil society to promote health security?

P.2.2. Technical Questions:

1. Does each relevant municipal sector have a budget line in place for activities related to responding to public health emergencies?
 - a. Is there financing in the local budget for recurrent or predictable public health emergencies?
 - b. How does the municipality ensure accountability and transparency of all financing and resources used during an emergency response?
2. Does the municipality know where it can access external financing and resources needed to respond to a public health emergency?
 - a. Is there a municipal authority with resource-raising responsibilities for when a public health emergency occurs?
 - b. If yes, how does this entity raise and coordinate externally donated finances and resources?
3. Does the municipality have a mechanism for rapidly disseminating financing and resources in the event of a public health emergency?
 - a. Are there special mechanisms (SOPs, MOUs, etc.) in place that allow for the execution of funds to go to actors not usually involved with public sector services, where these normally require special procedures or are excluded from the public provision of services?
 - b. Are there special mechanisms (SOPs, MOUs, etc.) in place that allow for fast-track procurement and service agreements that can be activated during public health emergencies to expedite response?
4. Does the municipality have a mechanism to ensure the coordination of funding related to response to public health emergencies?
 - a. Is there a municipal authority that provides oversight regarding the allocation and execution of financing in response to a public health emergency?
 - b. Is there a municipal authority that coordinates the interventions of sectors involved in the response, and executes funds related to these?
5. Does a contingency fund exist for post-emergency?

P.3. Multisectoral coordination and communication

Rational:

Multisectoral approaches that rely on partnerships allow for efficient health security systems. However, they depend on mechanisms that promote coordination and communication between various sectors and actors. These mechanisms lay the foundation not only for effective responses to public health emergencies, but also for communicating with authorities at other levels. To this end, municipalities should strive to create functional mechanisms that support multisectoral coordination, communication, and advocacy as a means of preventing, detecting, and responding to public health emergencies.

Targets:

- Establish or strengthen the municipal-level institutional and coordination capacity.
- Coordinate all public health emergency services within the municipality.
- Ensure that mechanisms are functional.

Score	P.3.1. A functional multisectoral mechanism is established for the coordination and integration of relevant health security sectors.
1	Coordination mechanisms within and between relevant municipal government agencies are not established.
2	Coordination mechanisms within and between relevant municipal government agencies are established.
3	Coordination mechanisms within and between relevant municipal government agencies are established and have been evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. What mechanisms exist at the national level to coordinate with different governmental ministries, agencies, and other relevant sectors before, during, and after public health emergencies?
2. Are there examples of effective coordination or communication regarding events that may constitute a public health event or risk of national or international concern?

P.3.1. Technical Questions:

1. Have functional mechanisms for multisectoral collaboration that include clinical services, animal and human health surveillance units, communication, laboratories, and security/law enforcement been established?
 - a. Are these mechanisms outlined in MOUs, SOPs, or other guidelines that clearly state the roles and responsibilities of all relevant organizations?
 - b. Have functional mechanisms for multisectoral collaboration with other relevant sectors for health security concerns (e.g., chemical and radiation sectors) been established?
2. Have mechanisms for coordinating with private-sector or civil society actors been established?
3. Are key municipal authorities able to communicate effectively, in writing and verbally, with national experts and authorities for reporting purposes?
4. Does the municipality endorse a ‘whole-of-government’ approach for responding to public health emergencies?



5. Have the mechanisms that promote coordination and communication been evaluated through the response to actual events or tested through exercises and/or simulations?
 - a. If yes, when was the last time mechanisms were used or tested?
 - b. If yes, were the mechanisms reviewed or updated based on this experience?

P.4. Multihazard risk assessment

Rational:

When planning for public health emergencies, municipal officials must inevitably make decisions about where to allocate resources. Thus, municipalities must have a clear understanding of the risks they face or jeopardize ineffective planning for meaningful health security risk reduction. To this end, risk multihazard assessments are prerequisites for prioritizing projects and capacity development, planning for risk reduction measures, and identifying areas most in need of attention according to their vulnerability and the cost-effectiveness of various interventions.

Targets:

- Identify and prioritize the nature and extent jurisdictional risks.
- Apply the assessment results to policy and risk-mitigation development decisions.
- Effectively communicate and disseminate risk information to relevant sectors.

Score	P.4.1. Multihazard risk assessment to determine the nature and extent of health security risks for the municipality.
1	No multihazard risk assessment has been conducted to identify the nature and extent of health security threats to a municipality.
2	A multihazard risk assessment has been conducted to identify the nature and extent of health security threats to a municipality.
3	A multihazard risk assessment has been conducted to identify health security threats and the municipality has identified remedial actions and plans to reduce the risks.

Score	P.4.2. Health security risk information is disseminated to relevant sectors and applied to administrative decisions.
1	Results from multihazard risk assessments have not been made available to relevant sectors through websites and other means of information.
2	Results from multihazard risk assessments are available to relevant sectors through websites and other means of information.
3	Results from multihazard risk assessments are available and applied to municipal development and policy decisions.

Contextual Questions:

1. Has the country conducted a multihazard risk assessment?
 - a. When was the last national strategic multihazard risk assessment conducted?
 - b. Which sectors participated in the risk assessment?
 - c. What are the findings of the national strategic emergency risk assessment?
 - d. How are results and resources shared among sectors?
 - e. Are strategic risk assessments used as the basis for emergency preparedness measures?
2. Are there any specific characteristics of the municipality that could contribute to a unique health security risk profile?

P.4.1. Technical Questions:

1. Has the municipality conducted a multihazard risk assessment?
 - a. Did the assessment include hazard identification?⁴
 - b. Did the assessment include a vulnerability analysis?⁵
 - c. Did the assessment include a risk analysis?⁶
 - d. If the country has conducted a multihazard risk assessment, do results differ?
2. Has the municipality identified the “most probable” health security threat?
3. Has the municipality identified the “most severe” health security threat?
4. Does the municipality have hazard maps?
 - a. When was the last time these were updated?
5. Has the municipality developed plans or policies to reduce identified threats?
 - a. Do these plans or policies consider vulnerable populations that may be disproportionately impacted by an event?

P.4.2. Technical Questions:

1. Are the results of the multihazard risk assessment publicly available?
2. Are the results of the multihazard risk assessment actively shared with municipal sectors involved in health security?
3. Are the results of the multihazard risk assessment actively shared with civil society organizations involved in health security?
4. Are the results of the multihazard risk assessment used to inform municipal policy decisions?

⁴ A hazard identification is a survey that identifies hazards and estimates their probability and potential magnitude in a given context.

⁵ A vulnerability assessment examines the relationships between hazards, people, and property with the intent of estimating potential casualties and damages that might result from an event.

⁶ A risk analysis involves quantitative estimates of the consequences of an event within a specific geographic area and over a specific period of time.

P.5. Immunization

Rational:

Evidence demonstrates that immunization is one of the most successful and cost-effective public health interventions. To this end, should be recognized as a core component of a human rights centered approach to public health and is an important responsibility of individuals and governments alike. Unburdened from the threat of vaccine-preventable diseases, immunized populations are provided the opportunity of leading longer, healthier lives. In addition to reducing morbidity and mortality, immunizations provide notable economic returns. Municipalities must ensure that they have the capacity to access, store and deliver vaccines to their populations and they have immunization surveillance systems to monitor coverage rates.

Targets:

- Establish a municipal vaccine delivery system with widespread reach, effective distribution, and access for marginalized populations.
- Ensure adequate municipal capacity for cold-chain systems.
- Develop and promote mechanisms for the collection, transmission, and analysis of immunization data.

Score	P.5.1. Municipality has the capacity to access, store and deliver vaccines to the entire population of the municipality.
1	No plan is in place for municipal-wide vaccine delivery, and vaccine delivery is available for 50% or less of the municipal population.
2	A plan is in place for municipal-wide vaccine delivery, and vaccine delivery is available for greater than 70% of the municipal population.
3	A plan is in place for municipal-wide vaccine delivery, and vaccine delivery is available for greater than 90% of the municipal population.

Score	P.5.2. Surveillance systems for immunization coverage are established and functional.
1	No plans or surveillance systems for immunization coverage exist for the municipality.
2	A surveillance system for immunization coverage exists for the municipality.
3	A surveillance system for immunization coverage exists for the municipality and data are analyzed to inform decision-making.

Contextual Questions:

1. Does the country have a national-level immunization program or plan?
 - a. What vaccine-preventable diseases are covered by this program or plan?
 - b. List the target rates for coverage for each of these vaccines.
 - c. Is the country's national vaccine action plan aligned with the WHO Global Vaccine Action Plan?
 - d. Does the country's plan take into account zoonotic diseases of national concern?
2. Is immunization mandatory or voluntary in the country?
3. What programs or incentives are in place to encourage/support routine vaccination?
4. What contextual factors may discourage/hinder routine vaccination?

P.5.1. Technical Questions:

1. Does the municipality have a plan or policy for jurisdictional vaccine delivery?
2. Does the municipality have capacities to support cold-chain systems?
 - a. Has a review of cold-chain quality assurance been conducted?
 - b. Does the municipality strive to minimize the environmental impact of energy, materials, and processes used in immunization supply systems?
3. Has the municipality established information systems to assist in tracking the available vaccine supplies?
4. Does a standardized system for monitoring and reporting adverse events following immunization exist?
5. Are there established procedures for procurement, storage and transportation of vaccines during public health emergencies?
 - a. If yes, are these procedures outlined in SOPs, MOUs, or other official guidelines?

P.5.2. Technical Questions:

1. Do mechanisms exist for the collection of immunization data?
 - a. If yes, what are the sources of data?
 - b. If yes, what populations are monitored?
 - c. If yes, how often is vaccine coverage measured?
 - d. If yes, what vaccines are tracked?
 - e. If yes, is this data analyzed and by whom?
 - f. If yes, is this data transmitted to other public health authorities?
2. Is there specific support (i.e., monetary and staffing) for immunization data gathering and reporting?
3. Has the municipality assessed and mapped existing coverage data to identify high-risk areas and populations to target control of priority vaccine-preventable diseases?
4. Has the municipality used mapping and assessment data to plan targeted interventions for routine and supplemental immunization for high-risk areas and populations?

DETECT

D.1. Laboratory systems

Rational:

Health security laboratory systems provide capacities for implementing and performing methods to detect, characterize, and confirm health security threats. This capability is a crucial component of supporting passive and active surveillance activities when detecting, responding to, and recovering from biological, chemical, and radiological public health threats and emergencies. Although it is unlikely that all municipalities will have the laboratory capacities required to test for all priority diseases,⁷ municipal authorities should have access to laboratories or laboratory networks that can provide quality diagnostic services for these diseases.

Targets:

- Ensure municipal capacities to test for priority diseases or establish MOUs that provide access to these services.
- Establish functional specimen referral and transport systems for public health laboratories within the municipality and between other reference laboratories.
- Require all public health laboratories within the municipality to conform to laboratory quality standards.

Score	D.1.1. Laboratory testing for the detection of priority diseases is established and implemented through local laboratories or established laboratory networks.
1	Municipality does not have access to laboratory detection for priority health security threats as determined by a multihazard risk assessment or the national government
2	Municipality has ad-hoc access to laboratory detection for priority health security threats.
3	Municipality has policies or MOUs providing access to laboratory detection for priority health security threats.

⁷ The Joint External Evaluation Tool of the International Health Regulations specify that the list of 10 core tests in each country includes six testing methods selected according to the IHR immediately notifiable list and the WHO Top Ten Causes of Death in low-income countries. This includes: (1) polymerase chain reaction (PCR) testing for influenza virus; (2) virus culture for poliovirus; (3) serology for HIV; (4) microscopy for *Mycobacterium tuberculosis*; (5) rapid diagnostic testing for plasmodium spp.; and (6) bacterial culture for *Salmonella enterica* serotype Typhi. The remaining four tests should be selected by the country on the basis of major national public health concerns.

Score	D.1.2. Laboratory specimen referral and transport systems are established and functional.
1	No system in place for transporting specimens within a municipality or from municipal to national laboratories; only ad hoc transportation is available.
2	System in place for transporting specimens within a municipality or from municipal to reference laboratories.
3	System in place for transporting specimens within a municipality or from municipal to reference laboratories and transport systems are financially supported through a budget.

Score	D.1.3. Laboratory quality system is established and implemented.
1	There are no laboratory quality standards.
2	A system of licensing of laboratories that includes conformity to a quality standard exists, but it is voluntary or is not a requirement for laboratories in a municipality.
3	Mandatory licensing of all laboratories in a municipality is in place and conformity to a quality standard is required.

Contextual Questions:

1. What are the 10 priority diseases of the country?
2. Which of the 10 core tests is the country capable of conducting?
3. Do the ministries of health, agriculture or other relevant ministries have in-country production and/or procurement processes for acquiring necessary media and reagents for performing core laboratory tests?
4. Describe the structure of the national laboratory system, including the number of laboratories, at local, intermediate levels/districts, and the national level?
5. Describe the national laboratory quality system?
 - a. What accreditation standards are used?
 - b. Are guidelines and protocols for quality management system enforced and in use by public and animal health laboratories?
 - c. Is there a national body that oversees internal quality controls and EQA schemes for public health laboratories at all levels?

D.1.1. Technical Questions:

1. Does the municipality have the laboratory capacity to perform any of the 10 core tests?
 - a. If yes, which tests?
 - b. Of the core laboratory tests that cannot be conducted, are there plans in place to develop these capacities?
2. Do laboratories in the municipality have the required equipment to support core laboratory tests?
 - a. Are maintenance contracts in place for key equipment?
 - b. Are there protocols for regular preventive maintenance?
3. Do laboratories in the municipality use laboratory information management systems (LIMS) to exchange laboratory information and results electronically with (e.g., hospitals, clinical labs, national authorities, etc.)?



4. Does the municipality have access to national laboratory systems that are able to perform any of the 10 core tests?
 - a. If yes, which tests?
 - b. If yes, is this access outlined in SOPs, MOUs, or other formal agreements?
5. Do municipal public health laboratories have continuity of operations plans that are consistent with national guidelines?

D.1.2. Technical Questions:

1. Is the specimen referral network documented for each of the tests necessary to detect and confirm etiologies of the 10 priority diseases?
2. Does the municipality have access to specimen referral and transport systems?
 - a. If yes, is this access outlined in SOPs, MOUs, or other official agreements?
3. Does evidence exist that this referral network is functional?
 - a. Are standardized SOPs in place for specimen collection, packaging, and transport?
 - b. Is specimen transport supported by the health ministry or its partners?
 - c. Is there a way to “rush” high priority laboratory samples?
 - d. Is tracking in place to document specimen shipment and receipt?
4. Do municipal public health laboratories have plans to receive specimens from other laboratories?
 - a. Do these plans include non- or extended-business hours?

D.1.3. Technical Questions:

1. Are there national bodies in charge of laboratory licensing, certification, and accreditation?
 - a. If yes, describe the inspection mechanism (frequency, procedures, sanctions, etc.)
 - b. If yes, what standard is used for laboratory certification?
 - c. If yes, what standard is used for laboratory accreditation?
2. Does the municipality have any public health laboratories within its jurisdiction?
 - a. If yes, how many public health laboratories exist?
3. Does the municipality require certification for public health laboratories within its jurisdiction?
 - a. If yes, to what standard?
4. Does the municipality require accreditation for public health laboratories within its jurisdiction?
 - a. If yes, to what standard?

D.2. Surveillance systems

Rational:

Public health surveillance systems support ongoing systematic collection, collation, analysis, and management of data for public health purposes. These systems are critical health security capacities for identifying where health threats start, and for monitoring the spread during events so that they can be rapidly contained. Robust public health surveillance systems should be established in the municipality, be interoperable,⁸ and make effective use of electronic tools and systems.

Targets:

- Establish municipal surveillance systems that use EBS or IBS are established and supported by SOPs or technical guidelines.
- Ensure that municipal surveillance systems are interoperable and supported using electronic tools.
- Ensure that municipal surveillance systems exist for monitoring foodborne and zoonotic diseases.
- Analyze surveillance data on a regular basis to inform policy- and decision-making.

Score	D.2.1. Functional surveillance systems for identifying potential events of concern for public health and health security are established and implemented.
1	The municipality does not have a surveillance system for diseases, syndromes, or public health events.
2	A municipal surveillance system is in place relying either on indicator-based surveillance or event-based surveillance (or both); the system is supported by standard operating procedures and/or technical guidelines for surveillance.
3	A municipal surveillance system is in place and the performance of the surveillance system is regularly evaluated and updated.

Score	D.2.2. Surveillance systems are supported by the use of electronic tools.
1	The municipality does not have any electronic tools for the collection, reporting or analysis of public health surveillance data.
2	Ad hoc electronic tools have been developed to facilitate the collection, reporting, and analysis of public health surveillance data.
3	Municipality has implemented integrated electronic surveillance tools for the collection, reporting, and analysis of public health surveillance data.

⁸ Interoperable describes the extent to which systems and devices can exchange data, interpret, and present data.

Score	D.2.3. Surveillance systems for the detection and monitoring of foodborne diseases and food contamination are established and implemented.
1	No surveillance systems for the detection and monitoring of foodborne diseases and food contamination exist.
2	Surveillance systems for the detection and monitoring of foodborne diseases and food contamination are established and implemented.
3	A municipal surveillance system is in place for foodborne diseases and food contamination and the performance of the surveillance system is regularly evaluated and updated.

Score	D.2.4. Surveillance systems for zoonotic diseases and pathogens are established and implemented.
1	No surveillance systems in the animal health and public health sectors for zoonotic diseases and pathogens have been established in the municipality.
2	Coordinated surveillance systems in the animal health and public health sectors for zoonotic diseases and pathogens are established and implemented in the municipality.
3	Coordinated municipal surveillance systems are in place for zoonotic diseases and the performance of the systems are regularly evaluated and updated.

Score	D.2.5. Systematic analysis of surveillance data for action is implemented.
1	There is no municipal capacity to analyze reported surveillance data.
2	The municipality has a dedicated team in place for data analysis, risk assessment, and the reporting of surveillance data.
3	The municipality has a dedicated team in place for data analysis, risk assessment, and the reporting of data that produces regular analysis of surveillance data.

Contextual Questions:

1. Does the country have a list of notifiable diseases for human and animal health?
2. Does the country use one national surveillance system for infectious diseases or separate systems for different diseases?
3. Does the country have a national plan for the detection and reporting of antimicrobial resistant pathogens?
4. How are surveillance data shared between relevant sectors?
5. How does data from the laboratories feed into surveillance systems?

D.2.1. Technical Questions:

1. Does the municipality have any indicator-based surveillance system capacities?
 - a. List of priority diseases, conditions, syndromes and case definitions.
 - b. Are these capacities supported by SOPs or other guidelines?
2. Does the municipality have any event-based surveillance system capacities?
 - a. Describe sources utilized by EBS and mechanisms of collecting information.
 - b. Describe how data are validated.
 - c. Are these capacities supported by SOPs or other guidelines?

3. Does the municipality have any syndromic surveillance system capacities?
 - a. Describe various syndromes and pathogens that are detected and reported.
 - b. Describe how data are validated.
 - c. Are these capacities supported by SOPs or other guidelines?
4. Are surveillance systems evaluated and SOPs/guidelines updated?
 - a. If yes, how often?

D.2.2. Technical Questions:

1. Does the municipality utilize electronic tools for notifiable diseases for human health?
 - a. If yes, what tools are utilized?
2. Does the municipality utilize electronic tools for notifiable diseases for animal health?
 - a. If yes, what tools are utilized?
3. Are these systems and data shared between sectors, or are they independent?
 - a. Describe how surveillance data is shared with various sectors.
4. Are there any linkages that exist between municipal surveillance systems and those at other levels?
 - a. If yes, describe how data from surveillance systems are linked?
5. Do the electronic tools used in the municipality allow for the bi-directional flow of data and information?

D.2.3. Technical Questions:

1. Does the country have a list and case definitions for priority foodborne diseases?
2. Does the municipality have a surveillance system in place for priority foodborne diseases?
 - a. If yes, how often is this surveillance system evaluated and updated?
3. Does an updated list of laboratories that can perform the necessary testing during foodborne outbreaks or contamination events exist?
4. Are there municipal outbreak response teams trained to collect and transport appropriate specimens to a laboratory during foodborne outbreaks to identify the etiological agent?
 - a. If no, are there other outbreak response teams that can conduct these tasks?
5. Do coordination mechanisms for foodborne disease surveillance activities exist between relevant sectors?
 - a. If yes, how often are these mechanisms evaluated and updated?

D.2.4. Technical Questions:

1. Does the municipality have any characteristics that could heighten the risk of zoonotic diseases (e.g., wildlife markets, platforms for the exchange of exotic animals, proximity to wildlife habitat, etc.)?
2. Does the municipality have an agreed list of priority zoonotic diseases?
3. Does the municipality have a surveillance system in place for priority zoonotic diseases?
 - a. If yes, how often is this surveillance system evaluated and updated?
4. Does an updated list of laboratories that can perform testing for priority zoonotic diseases exist?

5. Do public health laboratories and animal health laboratories in the municipality coordinate and communicate with each other?
 - a. If yes, how often are these mechanisms evaluated and updated?
 - b. Is there a process for sharing biological specimens between public health and animal health laboratories?
 - c. Is there a process for sharing laboratory reports or alerts between public health and animal health laboratories?
 - d. Are reports shared on a regular basis, or only when zoonotic diseases are discovered or suspected in the municipality?

D.2.5. Technical Questions:

1. Are municipal surveillance data routinely analyzed?
2. Is there a team dedicated to analyzing municipal surveillance data?
 - a. If not, who analyzes municipal surveillance data?
3. Is there a mechanism in place to link epidemiological and laboratory data?
4. Is there a mechanism for integrating data from clinical case reporting and data from clinical or municipal reference laboratories?
5. Are the results of data analysis published and disseminated?
 - a. If yes, is it published systematically (i.e., weekly, monthly or annually)?

D.3. Reporting protocols, systems, and networks

Rational:

Reporting protocols and systems are vital for sharing information between sectors and among national, intermediate, and local levels of government. These capacities include the ability to report timely data, provide investigative support, and use partnerships to address actual or potential health security threats. They also support situational awareness amongst all relevant stakeholders and allow for informed decision making in response to events or incidents of public health significance. As a result, municipalities should ensure that there are protocols and systems in place for rapidly reporting public health emergencies.

Targets:

- Identify stakeholders that should be incorporated into reporting networks and information flows.
- Develop protocols and standards for supporting reporting system capacities.
- Ensure that reporting systems are capable of filing a report to relevant authorities within 24 hours.

Score	D.3.1. Municipal reporting protocols and systems.
1	Municipality does not have protocols or processes for reporting to intermediate or national authorities.
2	Municipality has established protocols, processes, regulations and/or legislation governing reporting for reporting to intermediate or national authorities.
3	Municipality has established protocols, processes, regulations and/or legislation governing reporting for reporting to intermediate or national authorities within 24 hours.

Contextual Questions:

1. Has the municipality experienced and reported any public health events or emergencies in the past?
2. Do different protocols and systems exist for reporting to different intermediate or national authorities?

D.3.1. Technical Questions:

1. Does the municipality have protocols or SOPs that outline reporting potential health security threats to intermediate or national authorities?
 - a. Do the municipal reporting procedures and processes promote multisectoral coordination?
2. Has the municipality identified an office or individual who is responsible for reporting potential health security threats to intermediate or national authorities?
 - a. Does this person report on threats to both human and animal health?
3. Have municipal reporting systems been tested using an exercise or through an actual event?
 - a. If yes, how was the health event identified? What surveillance systems were linked?
 - b. If yes, which sectors were engaged in the exercise or event?



4. Does the municipality report events to any other entities (e.g., intermediate authorities, neighboring municipalities, etc.)?
 - a. If yes, are these systems and networks supported by SOPs, MOUs, or other formal agreements?

D.4. Human resources for health security

Rational:

Skilled and competent human resources for health are central to all health security capacities. Human resources include nurses and midwives, physicians,⁹ emergency medical technicians (EMTs) and paramedics, pharmacists, public health and environmental specialists, social scientists, communication specialists, occupational health, laboratory scientists and technicians, epidemiologists,¹⁰ biostatisticians, information technology (IT) specialists, and biomedical technicians. There is a corresponding workforce in the animal health sector. Municipalities should work to ensure that they maintain a contextually appropriate health security workforce.

Targets:

- Establish and monitor a multisectoral workforce strategy.
- Ensure adequate human resources for implementing health security and surge activities.
- Require in-service trainings and professional education programs for health security workforce.

Score	D.4.1. A current multisectoral workforce strategy is in place.
1	No multisectoral health workforce strategy exists.
2	A multisectoral workforce strategy exists, but is not regularly reviewed, updated or implemented consistently.
3	A multisectoral workforce strategy exists and implemented consistently, and is reviewed, tracked and reported on annually.

Score	D.4.2. Human resources are available to effectively implement health security activities
1	Municipality does not have appropriate human resources capacity in relevant health security sectors.
2	Municipality has appropriate human resources capacity in relevant health security sectors.
3	Municipality has appropriate human resources capacity in relevant health security sectors and has adequate surge capacity.

Score	D.4.3. In-service training requirements.
1	Municipality does not require continuing professional education (CPE) programs through in-service training courses.
2	Municipality requires continuing professional education (CPE) programs through disease-specific programs or targeted initiatives in-service training courses.
3	Municipality requires continuing professional education (CPE) programs through multisectoral in-service training courses.

⁹ The WHO recommended density of doctors, nurses and midwives per 1000 population for operational routine services is 4.45 plus 30% surge capacity.

¹⁰ The WHO recommended density of trained (field) epidemiologists (or equivalent) per 200,000 population is 1.

Contextual Questions:

1. Describe which sectors and career tracks are considered in the national health care workforce strategy?
 - a. Are community health workers considered a part of the formal health workforce?
 - b. Are there job descriptions for the various career tracks and positions within them (e.g., performance appraisal, competency standards, career ladder)?
2. Is attrition a concern for the national public health system?
3. Are there incentives in place to maintain the existing public health workforce in the country?
4. Describe which career tracks are included in the national animal health workforce strategy?

D.4.1. Technical Questions:

1. Is there a municipal strategy that aims to ensure appropriate human resources for the health sector in place?
 - a. If yes, does this strategy cover the full range of tasks and services in the (public and private) health sector (prevention/detection and response, care and rehabilitation)?
2. Does the strategy address occupational safety and health in health care facilities?
 - a. If yes, what is the coverage of occupational safety and health in public health systems?
 - b. If not, how is occupational safety and health addressed in health care facilities?
3. Is attrition a concern for the municipal public health system?
4. Is there a separate workforce strategy for human resources in place for the animal health sector?
5. Are municipal workforce strategies implemented consistently and reviewed annually?

D.4.2. Technical Questions:

1. Does the municipality have appropriate human resources capacity in relevant health security sectors?
 - a. Describe the municipal capacity of nurses and midwives.
 - b. Describe the municipal capacity of emergency medical technicians (EMTs) and paramedics.
 - c. Describe the municipal capacity of physicians.
 - d. Describe the municipal capacity of epidemiologists.
 - e. Describe the municipal capacity of pharmacists.
 - f. Describe the municipal capacity of veterinarians or animal health specialists.
2. Are human resource capacities distributed and evenly available across the municipality?
 - a. Describe the distribution of nurses and midwives in the municipality.
 - b. Describe the distribution of emergency medical technicians (EMTs) and paramedics in the municipality.
 - c. Describe the distribution of physicians in the municipality.
 - d. Describe the distribution of epidemiologists in the municipality.
 - e. Describe the distribution of pharmacists in the municipality.
3. Does the municipality have a human resources for health database?
 - a. If yes, how is the database maintained and updated?
4. Does the municipality have established procedures for surge of these professionals?
5. Does the municipality have mechanisms for forming multidisciplinary task forces?
 - a. How are multidisciplinary task forces organized?
 - b. How do different individuals/sectors communicate with one another?

D.4.3. Technical Questions:

1. Are there continuing professional education programs for the human health workforce that include outbreak preparedness and control?
2. Are there continuing professional education programs for the animal health workforce that include outbreak preparedness and control?
3. Have any cadres have received special training on outbreak preparedness and response?
4. Does training exist relating to contingency planning, management of emergency situations, risk communications, or recovery from emergencies?
5. Does training exist that includes joint exercises for multidisciplinary teams?
 - a. If yes, what sectors are involved?

RESPOND

R.1. Municipal emergency preparedness

Rational:

Emergency preparedness – defined as, the knowledge and capacities and organizational systems developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from the impacts emergencies – can not only save lives but also mitigate the consequences of an event or emergency. Municipal preparedness activities can apply to any hazard that may cause an emergency including biological, chemical, and radiological threats. These efforts are likely to be informed by risk assessments (P.4.) and entail a combination of planning, allocation of resources, training, exercising, and organizing to build, sustain and improve operational capabilities in the municipality.

Targets:

- Identify and map municipal resources for emergency preparedness and response.
- Establish multisectoral multihazard emergency preparedness plans and mechanisms.
- Exercise emergency response plans and measures.

Score	R.1.1. Emergency response resources are identified and mapped.
1	Municipal level inventories and maps of multisectoral resources for emergency response are not available or have not been updated in the past five years.
2	Municipal level inventories and maps of health sector resources for emergency response are available and have been updated in the past three years.
3	Municipal level resource mapping is reviewed on an annual basis, and a plan for the management and distribution of national stockpiles is in place.

Score	R.1.2. Multisectoral multihazard emergency preparedness plans and measures are developed and implemented.
1	A multisectoral multihazard municipal emergency response plan is not available.
2	A multisectoral multihazard municipal emergency response plan with SOPs for core emergency response coordination functions has been developed to respond to emergencies.
3	A multisectoral multihazard municipal emergency response plan with SOPs for core emergency response coordination functions has been developed and evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. Does the national emergency response plan describe the procedures and plans to relocate or mobilize resources from national and intermediate levels to support response at the local level?
2. Is there emergency or contingency funding readily available to support response by public health, animal health, and other relevant sectors?

R.1.1. Technical Questions:

1. Does the municipality have a risk profile based on multihazard risk assessments?¹¹
 - a. When was the last risk assessment conducted?
 - b. Which sectors participated in the risk assessment?
2. Does the municipality have an inventory and mapping of the available resources for emergency response?
 - a. Does the mapping of resources include: expertise, staff, logistics, equipment, finance, and facilities (e.g. health facilities, laboratories, quarantine facilities, decontamination units, etc.)?
 - b. When was the last mapping of resources conducted?
3. Are assessments of the safety and functionality of the health facilities for emergencies included in resource mapping?
4. Does the municipality maintain access to a stockpile of essential medical countermeasures?
 - a. If yes, where are these inventories maintained?
 - b. If not, how does the municipality access resources in the national stockpile?

R.1.2. Technical Questions:

1. Does the municipality have a multisectoral emergency response plan?
 - a. Does the plan include an emergency risk assessment?
 - b. Does the plan include capacity assessments and resource mapping?
 - c. Does the plan include contingency planning for specific hazards or risk scenarios?
 - d. Does the plan include plans for developing emergency response capacities, including emergency operation centers (EOCs)?
 - e. Does the plan include non-pharmaceutical interventions?
 - f. Does the plan include plans for developing surge capacity?
 - g. Does the plan include business continuity planning?
 - h. Does the plan include training?
 - i. Does the plan include exercising?
2. Do emergency response plans exist for other specific health security threats (e.g., pandemic influenza, chemical emergencies, radiological emergencies, etc.)?
3. Do contingency plans exist for high priority risks/specific events?
 - a. Are they based on strategic risk assessments and resource mapping?
4. Do plans address other relevant health security concerns such as mass gathering events or municipal points of entry?
5. Have response plans been evaluated following a real event or tested in a simulation exercise?
 - a. If yes, when was the last time plans were used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

¹¹ This portion of the RUHSA is likely linked to P.4. Multihazard risk assessment

R.2. Municipal emergency response and incident management systems

Rational:

Deploying resources and coordinating response activities and personnel are great challenges in an emergency. Emergency operations centers (EOCs), incident management systems (IMs), and emergency coordination mechanisms are crucial for effectively responding to emergencies. These capacities allow for municipalities to establish a standardized, scalable system of oversight, organization, and supervision when responding to public health emergencies.

Targets:

- Define triggers for activating emergency response operations.
- Establish health sector emergency response coordination mechanisms or committees.
- Establish emergency operations center plans and procedures.
- Exercise emergency response mechanisms, capacities, procedures, and plans.

Score	R.2.1. Emergency response coordination mechanisms.
1	A municipal emergency response coordination mechanism does not exist.
2	A municipal emergency response coordination mechanism for emergencies exists.
3	Municipal emergency response coordination mechanism exists and has been evaluated through the response to actual public health events or simulation exercises.

Score	R.2.2. Emergency operations center (EOC) capacities, procedures and plans.
1	Municipality does not have an emergency operations center and is not considered in other EOC plans and procedures.
2	Municipality has established an EOC or is considered in National or Intermediate EOCs (or equivalent structures) that are established on an ad hoc basis in response to emergencies.
3	Municipality has established an EOC or is considered in National or Intermediate EOCs (or equivalent structures) and EOC plans and capacities have been evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. During an emergency, is there a process for sharing scientific data and recommendations with policy-makers and national leaders?
2. Is there a national health sector emergency response coordination mechanism, committee or national health EOC?
3. How do subnational entities manage emergency response activities?

R.2.1. Technical Questions:

1. Are there relevant health sector emergency response coordination mechanisms or committees?
 - a. If yes, are these mechanisms outlined with SOPs, MOUs, or other formal agreements?
2. Are there defined triggers for activating emergency response operations?
3. Are there multiple levels of emergency response activation?
 - a. Who decides the change of level?
 - b. Is there a national point of contact available for 24/7 coverage of emergency operations?

4. Have mechanisms been evaluated following the response to a real event or tested in a simulation exercise?
 - a. If yes, when was the last time mechanisms were used or tested?
 - b. If yes, were the mechanisms reviewed or updated based on this experience?

R.2.2. Technical Questions:

1. Does the municipality have plans and capacities to support health sector emergency operations centers (EOCs)?
 - a. If there is a dedicated EOC facility?
 - b. What is the total staff capacity for the EOC?
 - c. Is there a reliable power source for the EOC?
 - d. Is there a reliable communications structure for the EOC?
 - e. Does the plan incorporate SOPs that describe the procedures for activating and implementing the plan for all key response management and technical functions in relevant sectors (e.g., human and animal health, emergency management, chemicals, radiation, mass gathering events, etc.)?
 - f. Is the EOC able to convene participants from all relevant sectors and other national and multinational partners (as appropriate)?
 - g. Is there a procedure in place for decision making in the EOC?
 - h. Does the EOC use standardized forms and templates for data/information management, reporting, briefing, etc.?
2. Is there an incident management system (IMS) in the health sector at the national level? And at subnational levels?
 - a. Does the IMS include incident command?
 - b. Does the IMS include operations?
 - c. Does the IMS include planning considerations?
 - d. Does the IMS include logistic considerations?
 - e. Does the IMS include financing considerations?
3. Does the municipality have a designated individual who serves as the “incident manager” for the health EOC?
4. Are there role descriptions and job aids for EOC functional positions?
5. Have plans and capacities mechanisms been evaluated following the response to a real event or tested in a simulation exercise?
 - a. If yes, when was the last time plans and capacities were used or tested?
 - b. If yes, were the plans and capacities reviewed or updated based on this experience?

R.3. Non-pharmaceutical interventions

Rational:

Non-pharmaceutical interventions (NPIs) are actions that people and communities can take to help slow the spread of disease by delaying the introduction of a disease into a population and reducing the total number of cases and hence the severity of the emergency. NPIs often represent the first line of defense against health security risks and are the only countermeasure that are readily available at all times. NPIs can include personal,¹² community,¹³ or environmental¹⁴ measures that municipalities implement in response to a public health emergency. To this end, it is crucial for municipalities to develop functional plans and triggers for various NPIs.

Targets:

- Develop plans for personal, community, and environmental NPIs.
- Define triggers for implementing various NPIs.
- Exercise NPI capacities, procedures, and plans.

Score	R.3.1. Personal non-pharmaceutical intervention capacities, procedures and plans.
1	Municipal capacities, procedures, and plans to implement personal non-pharmaceutical interventions do not exist.
2	Municipal capacities, procedures, and plans to implement personal non-pharmaceutical interventions exist.
3	Municipal capacities, procedures, and plans to implement personal non-pharmaceutical interventions exist and have been evaluated through the response to actual public health events or simulation exercises.

Score	R.3.2. Community non-pharmaceutical intervention capacities, procedures and plans.
1	Municipal capacities, procedures, and plans to implement community non-pharmaceutical interventions do not exist.
2	Municipal capacities, procedures, and plans to implement community non-pharmaceutical interventions exist.
3	Municipal capacities, procedures, and plans to implement community non-pharmaceutical interventions exist and have been evaluated through the response to actual public health events or simulation exercises.

¹² Examples of personal NPIs can include: Voluntary isolation of ill persons, respiratory etiquette, hand hygiene, and the use of face masks in public

¹³ Examples of community NPIs can include: curfews, isolation, quarantine, school measures and closures, workplace measures and closures, and mass gathering measures and closures

¹⁴ Examples of environmental NPIs can include: larvicide spraying, environmental modification, and surface and object cleaning.

Score	R.3.3. Environmental non-pharmaceutical intervention capacities, procedures and plans.
1	Municipal capacities, procedures, and plans to implement environmental non-pharmaceutical interventions do not exist.
2	Municipal capacities, procedures, and plans to implement environmental non-pharmaceutical interventions exist.
3	Municipal capacities, procedures, and plans to implement environmental non-pharmaceutical interventions exist and have been evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. Do personal, community, or environmental NPI plans exist at the national level?
2. Have any NPIs been implemented in the country within the last ten years in response to a public health emergency?
3. Which individual or office holds the legal authority to implement, suspend, and end NPIs in the municipality?

R.3.1. Technical Questions:

1. Have plans for personal NPIs been developed?
 - a. For which personal NPIs do plans exist?
 - b. Were these plans informed by a multihazard risk assessment?
 - c. What sectors were engaged in developing these plans?
 - d. Do plans include monitoring the effectiveness of NPIs?
2. Do the plans consider contextual values and preferences, ethical considerations, and resources that could impact their acceptability or feasibility?
3. Are there defined triggers for implementing personal non-pharmaceutical interventions?
4. Have plans for personal NPIs been evaluated following in the response to a real event or tested in a simulation exercise?
 - a. If yes, when was the last time plans and capacities were used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

R.3.2. Technical Questions:

1. Have plans for community NPIs been developed?
 - a. For which community NPIs do plans exist?
 - b. Were these plans informed by a multihazard risk assessment?
 - c. What sectors were engaged in developing these plans?
 - d. Do plans include monitoring the effectiveness of NPIs?
2. Do the plans consider contextual values and preferences, ethical considerations, and resources that could impact their acceptability or feasibility?
3. Do the plans discuss the public health benefits against economic and social costs (including opportunity costs) for implementing these actions?
4. Are there defined triggers for implementing community non-pharmaceutical interventions?
5. Have plans for community non-pharmaceutical interventions been evaluated following in the response to a real event or tested in a simulation exercise?
 - a. If yes, when was the last time plans and capacities were used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

R.3.3. Technical Questions:

1. Have plans for environmental NPIs been developed?
 - a. For which environmental NPIs do plans exist?
 - b. Were these plans informed by a multihazard risk assessment?
 - c. What sectors were engaged in developing these plans?
 - d. Do plans include monitoring the effectiveness of NPIs?
2. Do the plans consider contextual values and preferences, ethical considerations, and resources that could impact their acceptability or feasibility?
3. Do the plans discuss the public health benefits against economic and social costs (including opportunity costs) for implementing these actions?
4. Are there defined triggers for implementing environmental NPIs interventions?
5. Have plans for environmental NPIs been evaluated following the response to a real event or tested in a simulation exercise?
 - a. If yes, when was the last time plans and capacities were used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

R.4. Health care delivery

Rational:

The ability to deliver health care services relies on infrastructure, human resources, functioning communications and information systems, and support services that may be compromised during the response to a public health emergency. These challenges to health care delivery threaten the provision of essential services and special attention must be given to ensuring that health care can be delivered continuously during an emergency and capacity exists to scale up operations in response to an emergency. Such efforts will bolster the resiliency of the health care delivery system in the municipality and allow for it to more rapidly return to normal operations.

Targets:

- Develop case management guidelines for priority health security hazards.
- Review and update case management guidelines.
- Develop plans, protocols, and standard operating procedures for medical surge capacities.
- Exercise medical surge capacities.

Score	R.4.1. Case management procedures implemented for health security hazards.
1	No case management guidelines are available for priority health security concerns as identified by a multisectoral risk assessment or national guidelines.
2	Case management guidelines are available for priority health security concerns as identified by a multisectoral risk assessment or national guidelines.
3	Case management guidelines are available for priority health security concerns as identified by a multisectoral risk assessment or national guidelines and guidelines are regularly reviewed and updated.

Score	R.4.2. Medical surge capacity is available for the timely response to public health emergencies.
1	No plans or standard operating procedures for dealing with medical surge exist.
2	Protocols or standard operating procedures for dealing with medical surge exist and are adequately resourced.
3	Protocols for dealing with medical surge exist, are adequately resourced, and have been evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. Does the country have a national-level plan for medical surge operations?
 - a. If yes, does the plan consider personnel requirements?
 - b. If yes, does the plan consider resource and equipment requirements?
2. Are there any contextual factors that could hinder medical surge capacities?
3. How would the municipality work to maintain essential medical services during a public health emergency?

R.4.1. Technical Questions:

1. Are case management guidelines for priority diseases and relevant health security threats available?
 - a. If yes, when was the last time guidelines were reviewed and/or updated?
2. Are SOPs (according to national or international guidelines) available for the management and transport of potentially infectious patients?
3. Is there an adequately resourced patient referral and transportation mechanism available?
4. Are there guidelines for responding to health care-associated infections?
 - a. If yes, do guidelines identify protection and control measures, medical services, and mental/behavioral health support services for responders
 - b. If yes, how are cases reported?

R.4.2. Technical Questions:

1. Have plans for medical surge capacity been developed?
 - a. Are there defined triggers for activating medical surge capacities outlined in SOPs, MOUs, or other official guidelines?
 - b. Are there defined triggers for demobilizing medical surge capacities outlined in SOPs, MOUs, or other official guidelines?
 - c. Does this plan include considerations related to the continuity of regular operations and essential medical services?
2. Are there sufficient human resources to support medical surge capacity?
 - a. Are staffing needs defined for the “most probable” and “most severe” scenarios as defined by multihazard risk assessments?
 - b. Is there sufficient back-up or para-professional capacity to meet these needs?
 - c. Is there a roster of available health security staff?
 - d. Is there training available to surge staff in advance of a response?
 - e. Is “just in time” training available in partnership with relevant sectors and authorities?
3. Are there sufficient resources and equipment to support medical surge capacity?
 - a. Are equipment and supply requirements defined for the “most probable” and “most severe” scenarios as defined by multihazard risk assessments?
 - b. Are there sufficient supplies to meet these needs?
 - c. Have alternate municipal treatment sites and facilities been identified?
 - d. Do mechanisms exist for addressing resource gaps (e.g., MOUs with other levels of government, other municipalities, or private sector actors)?
4. Is there a system for tracking surge resources during emergencies?
 - a. Does this system include hospital bed availability?
 - b. Does this system include essential personal protective equipment?
 - c. Does this system include essential medicines?
5. Have medical surge capacity plans been evaluated following the response to a real event or tested in a simulation exercise?
 - a. If yes, when was the last time plans were used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

R.5. Medical countermeasures and health personnel deployment

Rational:

Medical countermeasures (MCMs) are life-saving medicines and medical supplies¹⁵ that can be used to diagnose, prevent, or treat conditions associated with public health emergencies. The ability to have access to and be able to rapidly deploy MCMs and health personnel in response to a public health emergency is a fundamental capacity for responding to the outbreak, preventing the spread of disease, and saving lives. To ensure health security and effectively respond to public health emergencies, municipalities must have systems in place to activating and coordinating MCMs and health personnel.

Targets:

- Establish a plan for activating and coordinating medical countermeasures during the response to a public health emergency.
- Exercise emergency response medical countermeasures plans.
- Establish a plan for activating, receiving, and deploying medical personnel during the response to a public health emergency.
- Exercise emergency response health personnel plans.

Score	R.5.1. System in place for activating and coordinating medical countermeasures during a public health emergency.
1	No medical countermeasures plan exists.
2	A medical countermeasures plan exists.
3	A medical countermeasures plan exists and has been evaluated in the municipality through the response to actual public health events or simulation exercises.

Score	R.5.2. System in place for activating and coordinating health personnel during a public health emergency.
1	No personnel deployment plans exist for responding to public health emergencies.
2	Personnel deployment plan exists for responding to public health emergencies.
3	A personnel deployment plan exists and has been evaluated in the municipality through the response to actual public health events or simulation exercises.

Contextual Questions:

1. Does the country have a plan relating to procedures and decision-making for sending and receiving MCMs during a public health emergency?
2. Does the country have a stockpile of MCMs for use during a public health emergency?
3. Has the country exercised plans for sending or receiving MCMs within the past year?

¹⁵ Medical countermeasures include pharmaceutical interventions such as vaccines, antibiotics and antivirals, and antitoxins, as well as non-pharmaceutical interventions such as ventilators, diagnostic equipment, personal protective equipment, and decontamination supplies.

R.5.1. Technical Questions:

1. Does the municipality have a plan relating to procedures and decision-making for receiving and distributing MCMs during a public health emergency?
 - a. Does the plan address logistic concerns related to sending, receiving and distributing medical countermeasures during a public health emergency?
 - b. Does the plan address security concerns that may emerge related to sending, receiving, and distributing MCMs during a shortage?
 - c. Does the plan address concerns surrounding the ethical allocation of MCMs?
2. Have plans for receiving and distributing MCMs been implemented in the response to a real event or tested in a simulation exercise?
 - a. If yes, when was the last time plans were used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?
3. Does the municipality have agreements in place to procure medical countermeasures during a public health emergency?
 - a. If yes, describe.
4. Are there dedicated resources and staffing identified for logistics related to the receipt, tracking, and distribution of MCMs?
5. Has the municipality evaluated plans for receiving and distributing MCMs?
 - a. If yes, when was the last time plans and capacities were used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

R.5.2. Technical Questions:

1. Does the municipality have a plan relating to procedures and decision-making for activating, receiving, and distributing health personnel during a public health emergency?
2. Does the plan address regulatory and licensure concerns of requesting/accepting and receiving health personnel from external sources?
 - a. Does the plan identify training criteria and standards for health personnel who will be received from external sources during a public health emergency?
 - b. Does the plan address liability concerns for using medical personnel during deployment?
 - c. Does the plan address concerns surrounding the ethical allocation of health personnel throughout the municipality?
3. Are other sectors (e.g., security authorities, animal health) included in plans for receiving and distributing personnel during an emergency?
4. Do personnel coordination systems exist?
 - a. Are systems integrated or do separate systems exist for health security hazards (animal health, chemicals, radiation)?
5. Has the municipality evaluated plans for receiving and distributing health personnel?
 - a. If yes, when was the last time plans and capacities were used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

R.6. Risk communication

Rational:

Crisis and emergency risk communication is an essential function for agencies and offices during the response to public health emergencies. Municipalities must establish and maintain clear and consistent communications practices during emergency responses, both internally and externally. To this end, municipalities should create communications plans and infrastructure to communicate rapidly, regularly and transparently internally, with other levels of government, and with affected communities, the public, and the media.

Targets:

- Establish systems for risk communication during public health events and emergencies.
- Establish a coordination platform and mechanisms for internal risk communication.
- Establish a coordination platform and mechanisms for risk communication with external offices and partners.
- Create a strategy for proactive public outreach during public health emergencies.
- Identify a municipal office that will be tasked with communicating with affected communities during a public health emergency.
- Designate a unit or office for addressing local perceptions and misinformation during a public health emergency.

Score	R.6.1. Risk communication systems for public health events and emergencies.
1	Formal government risk communication arrangement does not exist.
2	Formal government arrangements and systems are in place with SOPs, adequate human resource capacity, and multisectoral and multi-stakeholder involvement.
3	Formal government arrangements and systems in place and SOPs and capacities have been evaluated through the response to actual public health events or simulation exercises.

Score	R.6.2. Internal and partner coordination for emergency risk communication.
1	No coordination platform and mechanisms for internal and partner communication exists.
2	A coordination platform and mechanisms for internal and partner communication exists.
3	A coordination platform and mechanisms for internal and partner communication exists and has been evaluated through the response to actual public health events or simulation exercises.

Score	R.6.3. Communication engagement with public and media during emergencies.
1	No municipal unit or office has been identified for public communication.
2	A municipal unit or office exists for public communication and a government spokesperson identified and trained.
3	A municipal unit or office exists for public communication that conducts planned and proactive public outreach on a mix of platforms as appropriate to local preferences.

Score	R.6.4. Communication engagement with affected communities during emergencies.
1	No municipal unit or office has been identified to systematically engage with affected populations for public emergencies.
2	A municipal unit or office has been identified to systematically engage with affected populations for public emergencies.
3	A municipal unit or office has been identified to systematically engage with affected populations for public emergencies and municipality has developed community consultation mechanisms.

Score	R.6.5. Addressing perceptions, risky behaviors and misinformation.
1	No municipal unit or office has been identified to systematically gather information on local perceptions, risky behaviors and misinformation.
2	A municipal unit or office has been identified to systematically gather information on local perceptions, risky behaviors and misinformation.
3	A municipal unit or office has been identified to systematically gather information on local perceptions, risky behaviors and misinformation and is used for guiding the response to public health emergencies.

Contextual Questions:

1. Do communication coordination platform and mechanisms exist at the national-level?
2. Are there any factors (e.g., legislation, SOPs, etc.) that could hinder communication efforts during the response to a public health emergency?
3. What methods of communication could be effective for communicating with the public during a public health emergency (e.g., television, radio, email, automated telephone messaging, text messaging, web-based messaging, social media, printed materials, etc.)
4. What are common languages or dialects spoken in the municipality?

R.6.1. Technical Questions:

1. Is risk communication considered in the response plan used by the municipality?
 - a. Are roles and responsibilities for communication clearly outlined in the response plan?
 - b. Which government entities/agencies have the lead for risk communication for different types of health security hazards?
 - c. Is there an agreement internal to the agency for the clearance of public messaging?
2. Are there communications personnel or government departments that respond to public information needs during emergencies?
 - a. Is there permanent staff dedicated to risk communication during emergencies?
 - b. Is there surge staff dedicated to risk communication during emergencies?
3. Are there shared communication plans, agreements and/or SOPs between other response sectors and stakeholders?
 - a. Are security and law enforcement considered?
 - b. Are hospitals and other human health sectors considered?
 - c. Are government agencies, such as ministries of defense, agriculture, and the environment considered?

4. Has the municipality evaluated risk communication plans following the response to a real event or tested them in a simulation exercise?

- a. If yes, when was the last time plans used or tested?
- b. If yes, were the plans reviewed or updated based on this experience?

R.6.2. Technical Questions:

1. Is there a mechanism to coordinate internal communication within municipal offices during an emergency?

- a. Is this mechanism outlined in SOPs, MOUs, or other official guidelines?

2. Is there a mechanism to coordinate external communication with national stakeholders and response agencies during an emergency?

- a. Is this mechanism outlined in SOPs, MOUs, or other official guidelines?

3. Is there a mechanism to coordinate external communication with the hospital and health care sector during an emergency?

- a. Is this mechanism outlined in SOPs, MOUs, or other official guidelines?

4. Is there a mechanism to coordinate external communication with the private sector during an emergency?

- a. Is this mechanism outlined in SOPs, MOUs, or other official guidelines?

5. Have these mechanisms been evaluated following the response to a real event or tested in a simulation exercise?

- a. If yes, when was the last time mechanisms were used or tested?
- b. If yes, were the mechanisms reviewed or updated based on this experience?

R.6.3. Technical Questions:

1. Are there established mechanisms for communicating with the public, civil society organizations, and the media during an emergency?

- a. Are mechanisms outlined in SOPs, MOUs, or other official guidelines?

2. Is there a communication strategy that proactively reaches out to a variety of media platforms (e.g., newspapers, radio, television, social media, Internet) for targeting communication messages to specific audiences?

- a. Is there a communication team dedicated to media and social media outreach that coordinates with partners?

- b. Is there a fast-track process for clearing media and social media communications?

3. Does the municipality use mobile and e-mail systems to provide updates during an emergency?

4. Is public health messaging adapted according to the geographic location, language, and media preference?

- a. Is information provided in local languages as needed by the audience?

5. Are target audience analyses conducted to better understand audience language, trusted information resources and preferred communication channels?

R.6.4. Technical Questions:

1. Is there a social mobilization, health promotion or community engagement department, team or working group that is used for emergency response?

2. Is the social mobilization, health promotion or community engagement department or team/working group integrated within the overall health response and linked to the media department/team/focal person and coordinated with key partners?
3. Are there established mechanisms to reach out to affected or at-risk populations during public health emergencies?
4. Is there an ongoing and functioning feedback loop between affected or at-risk populations and response agencies?
5. Are baseline social data on factors that may influence the population's risk available?
 - a. Does data include the mapping of languages?
 - b. Does data include living conditions?
 - c. Does data include religious and/or cultural practices?
 - d. Does data include trusted channels of communication?

R.6.5. Technical Questions:

1. Is there a plan to monitor, detect, and address people's perceptions, unfounded beliefs, misinformation, and disinformation?
2. Is there a unit or office responsible for addressing people's perceptions, unfounded beliefs, misinformation, and disinformation?
3. Is communication feedback, including on perceptions and misinformation, considered as a means of implementing an effective response?
4. Are communication responses to address people's perceptions, unfounded beliefs, misinformation, and disinformation reviewed to identify best practices?

R.7. Human resource management

Rational:

During the response to a public health emergency, it is common for people to converge on the site, seeking to help with the response effort. This can include security authorities – who may be obligated to assist in responding to the event – or volunteers who wish to aid response efforts. However, experiences in responding to emergencies have emphasized the need to plan ahead for better coordination and management of these individuals. To this end, a municipality that has planned for the management and coordination of security authorities and volunteers will be better prepared for a public health emergency.

Targets:

- Establish a system for activating, managing, and coordinating security authorities during a public health emergency.
- Establish a system for credentialing, notifying, managing, and coordinating volunteers during a public health emergency.
- Exercise systems for managing and coordinating these response human resources.

Score	R.7.1. Systems are in place for managing and coordinating public health and security authorities.
1	No system exists for activating and notifying security authorities during public health emergencies.
2	A system exists for activating and notifying security authorities during public health emergencies.
3	A system exists for activating and notifying security authorities during public health emergencies and this system has been evaluated through the response to actual public health events or simulation exercises.

Score	R.7.2. Systems are in place for managing and coordinating volunteers during a public health emergency.
1	No system exists for coordinating the credentialing, verification, recruitment, activation, and notification of volunteers during public health emergencies.
2	A system exists for coordinating the credentialing, verification, recruitment, activation, and notification of volunteers during public health emergencies.
3	A system exists for coordinating volunteers during public health emergencies and this system has been evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. Are there MoUs or other formal agreements between public health and security authority entities (e.g., law enforcement, border control, customs enforcement, food safety inspection, radiological safety, chemical safety) at the national level?
2. How are potential biological, chemical and radiological events that may have deliberate motives identified in the country?
3. Are public health experts involved in national emergency responses linked to the BWC?
4. Describe how the national government is connected to INTERPOL.

R.7.1. Technical Questions:

1. Are there MoUs or other formal agreements between public health and security authority entities (e.g., law enforcement, border control, customs enforcement, food safety inspection, radiological safety, chemical safety) at the municipal level?
2. Are there SOPs or formal agreements in place for a joint/shared risk assessment during events of public health and security significance?
3. Have trainings been conducted jointly including for both public health and security authorities on topics related to information sharing and joint investigations/responses?
4. Are there SOPs or agreements in place for coordination of a joint response to public health and other emergencies where both public health and security authorities have operational safety and health security responsibilities (e.g., points of entry)?
5. Is there a functional mechanism for collaboration and timely and systematic information exchange between public health and law enforcement agencies in case of deliberate and/or accidental events?

R.7.2. Technical Questions:

1. Are opportunities for information sharing or training regularly provided to civil society develop surge capacity potential that could be used during a public health emergency?
 - a. Do these opportunities result in any type of credentialing?
2. Does the municipality have a mechanism for recruiting volunteers during a public health emergency?
3. Does the municipality have a mechanism for activating volunteers during a public health emergency?
 - a. Does the municipality participate in a volunteer health professional registry program?
4. Does the municipality have a mechanism for coordinating volunteers during a public health emergency?
5. Have mechanisms focused on coordinating volunteers been evaluated following the response to a real event or tested in a simulation exercise?
 - a. If yes, when was the last time mechanisms used or tested?
 - b. If yes, were the mechanisms updated based on this experience?

R.8. Recovery and rehabilitation

Rational:

Although assistance from higher-level governments may be available, local governments typically organize the logistics and bear the cost of the initial recovery efforts following emergencies. There is an inherent tension between the need for municipalities to recover from public health emergencies quickly and to recover as safely and sustainably as possible. Planning for recovery and rehabilitation assists in prioritizing recovery operations, ensures that sufficient resources are in place, helps the municipality revive normal functions, restores the local economy, and empowers citizens to rebuild their livelihoods. Municipal planning for recovery should occur before a public health emergency occurs, and should be a multisectoral process done in collaboration with the public, the private sector, and different levels of government as appropriate.

Targets:

- Establish a plan for recovery and rehabilitation before a public health emergency occurs.
- Define triggers for demobilizing and evaluating public health emergency operations.
- Exercise recovery and rehabilitation plans.

Score	R.8.1. A multisectoral recovery plan is established and functional to guide recovery operations and efforts following an event or emergency.
1	No municipal recovery plan exists for guiding operations and efforts following a public health event.
2	A municipal recovery plan exists for guiding operations and efforts following a public health event.
3	A municipal recovery plan exists and has been evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. Does a recovery and rehabilitation plan exist at the national-level?

R.8.1. Technical Questions:

1. Does the municipality have a plan for recovery and rehabilitation following public health emergencies?
 - a. If yes, what sectors were consulted while drafting the plan?
 - b. If yes, does the plan identify critical recovery functions?
 - c. If yes, does the plan identify partner organizations?
 - d. If yes, does the plan assign responsibilities to municipal authorities or offices?
 - e. If yes, how are recovery and rehabilitation efforts monitored?
2. Is there an organizational chart documenting structure and role definitions at each relevant municipal office?
3. Does the municipality have a plan for the continuity of operations throughout the recovery and rehabilitation efforts?
 - a. If yes, what social services are included in the plan?
4. Are there defined triggers for demobilizing and evaluating public health emergency operations?



- a. If yes, are after-action reports generated as a means of documenting lessons learned and best practices?
 - b. If yes, what is done with stockpiled medical materials?
5. Has the municipality implemented recovery and rehabilitation plans in a real event or tested them in a simulation exercise?
- a. If yes, when was the last time plans used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

OTHER HEALTH SECURITY CONSIDERATIONS

O.1. Points of entry

Rational:

In our globalized world, municipalities often act as transportation hubs for people, animals, and goods. Because of this, various health security threats including human and animal diseases, vectors for disease, infectious agents, chemical hazards, and radiological hazards can pass through these ports. To minimize these risks, municipalities should ensure that there are established plans and capacities for detecting and responding to health security threats in these environments.

Targets:

- Establish multisectoral plans for responding to health security threats at points of entry.
- Ensure that capacities exist for responding to health security threats at points of entry.
- Exercise plans and capacities for responding to health security threats at points of entry.

Score	O.1.1. Effective public health response at points of entry.
1	Public health emergency contingency plans for responding to health security threats at municipal points of entry do not exist.
2	Public health emergency contingency plans exist for responding to health security threats occurring at municipal points of entry.
3	Public health emergency contingency plans exist for responding to health security threats occurring at municipal points of entry exist and have been evaluated through the response to actual public health events or simulation exercises.

Score	O.1.2. Health security capacities are established and implemented at points of entry.
1	The municipality has not established capacities for responding to public health emergencies at points of entry.
2	The municipality has established capacities for responding to public health emergencies at points of entry.
3	The municipality has established capacities for responding to public health emergencies at points of entry and capacities have been evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. How many points of entry (e.g., airports, seaports, train stations, etc.) are there in the municipality?
2. Is there relevant legislation and/or policies for the provision of health services at points of entry?

O.1.1. Technical Questions:

1. Does the municipality have a plan for responding to public health emergencies occurring at airports?
 - a. If yes, what sectors were consulted while drafting the plan?
 - b. If yes, does the plan assign responsibilities to municipal authorities or offices?
2. Does the municipality have a plan for responding to public health emergencies occurring at seaports?
 - a. If yes, what sectors were consulted while drafting the plan?
 - b. If yes, does the plan assign responsibilities to municipal authorities or offices?
3. Does the municipality have a plan for responding to public health emergencies occurring at train stations?
 - a. If yes, what sectors were consulted while drafting the plan?
 - b. If yes, does the plan assign responsibilities to municipal authorities or offices?
4. Does the municipality maintain a list of emergency phone numbers and other contact information for individuals and offices that might be involved in the response to a public health emergency at points of entry?

O.1.2. Technical Questions:

1. Have functional mechanisms for responding to public health events or emergencies at points of entry been established?
 - a. Are these mechanisms outlined in MOUs, SOPs, or other official agreements that clearly state the roles and responsibilities of all relevant organizations?
2. Do points of entry have capacities to apply recommended health measures related to travelers?
 - a. Are systems in place for the safe referral and transfer of sick travelers to appropriate medical facilities?
 - b. Are these systems outlined in MoUs, SOPs, or other official agreements between relevant sectors?
3. Does the municipality have trained personnel for the inspection of commercial shipments available at designated points of entry?
 - a. If not, is there a mechanism or procedure for outsourcing this work?
4. Do points of entry have capacities to apply measures to disinfect, decontaminate or otherwise treat baggage, cargo, containers, conveyances, goods or postal parcels?
5. Has the municipality evaluated the effectiveness of plans and/or capacities in responding to public health events at points of entry?
 - a. If yes, when was the last time plans and/or capacities were used or tested?
 - b. If yes, were the plans and/or capacities were reviewed or updated based on this experience?

O.2. Mass gathering events

Rational:

Municipalities host thousands of mass gatherings and special events every year.¹⁶ Mass gathering events can pose risks to health security because of the inherent vulnerability associated with them – namely that the effects of public health emergencies become amplified when they occur during a mass gathering. This can overwhelm public health systems and compromise the integrity and availability of basic services. Furthermore, an unfortunate reality of today’s world is that these types of events can be considered potential terrorist targets due to large concentrations of people, increased media attention, and potentially the symbolic nature of the event. For these reasons, local authorities must account for the public health and medical issues presented by mass gathering events and maintain multisectoral contingency response plans.

Targets:

- Establish multisectoral plans for responding to public health emergencies at mass gathering events.
- Create or enhance municipal mechanisms for implementing plans.
- Exercise plans that consider health security concerns at mass gathering events.

Score	O.2.1. Multisectoral plan is established for public health events or emergencies occurring at mass gathering events.
1	Multisectoral municipal plans for responding to public health emergencies occurring at mass gathering events do not exist.
2	Multisectoral municipal plans for responding to public health emergencies occurring at mass gathering events exist.
3	Multisectoral municipal plans for responding to public health emergencies occurring at mass gathering events exist and have been evaluated through the response to actual public health events or simulation exercises.

Score	O.2.2. Mechanisms for the response to public health events or emergencies during mass gathering events are established and functional.
1	The municipality does not have mechanisms in place for responding to public health emergencies during mass gathering events
2	Municipal mechanisms are in place for responding to public health emergencies that are supported by standard operating procedures.
3	Municipal mechanisms are in place and the performance has been evaluated through the response to actual public health events or simulation exercises.

Contextual Questions:

1. Are there any mass gathering events held within the municipality on a consistent (weekly, monthly, annually, etc.) basis?
2. Has the municipality responded to any previous public health emergencies?

¹⁶ Examples of mass gathering events can include: sporting events, festivals, parades, conventions, dedications, memorials and high-profile occasions.



O.2.1. Technical Questions:

1. Does the municipality have a plan for responding to public health emergencies occurring at mass gathering events?
 - a. If yes, what sectors were consulted while drafting the plan?
 - b. If yes, does the plan identify any partner organizations?
 - c. If yes, does the plan assign responsibilities to municipal authorities or offices?
2. Does the municipality have an established chain of command for incident communications?
3. Does the municipality maintain a list of emergency phone numbers and other contact information for individuals and offices that might be involved in the response to a public health emergency at a mass gathering event?
4. Has the municipality evaluated public health mass gathering plans in a real event or tested them in a simulation exercise?
 - a. If yes, when was the last time plans used or tested?
 - b. If yes, were the plans reviewed or updated based on this experience?

O.2.2. Technical Questions:

1. Have functional mechanisms for the response to public health events or emergencies during mass gathering events been established?
 - a. Are these mechanisms outlined in MOUs, SOPs, or other official agreements that clearly state the roles and responsibilities of all relevant organizations?
2. Have mechanisms for coordinating with private-sector or civil society actors during the response to a public health emergency at a mass gathering event been established?
3. Have mechanisms for multisectoral collaboration with other relevant sectors for public health concerns at mass gathering events been established?
4. Has the municipality evaluated the mechanisms for responding to public health emergencies at mass gathering events in a real event or in a simulation exercise?
 - a. If yes, when was the last time mechanisms were used or tested?
 - b. If yes, were the mechanisms reviewed or updated based on this experience?

O.3. Specific hazard surveillance and response plans

Rational:

Other specific health security hazards – such as chemical, radiological and nuclear events and emergencies – hold potentially devastating consequences for people and the environment. These incidents can result from deliberate actions, such as warfare and terrorism, or accidents. However, regardless of origin, municipalities must be prepared to detect and respond to these threats as a means of ensuring the health and security of their jurisdictions.

Targets:

- Establish functional mechanisms for detecting and responding to chemical events or emergencies.
- Establish functional mechanisms for detecting and responding to radiological emergencies.
- Provide budgetary support for efforts to detect and respond to specific health security hazards.

Score	O.3.1. Mechanisms are established and implemented for detecting and responding to chemical events or emergencies.
1	No mechanisms are in place for the detection and response to chemical events or emergencies.
2	Municipal guidelines, policies, or standard operating procedures on surveillance, assessment and management of chemical events, intoxication and poisoning are available.
3	Municipal guidelines, policies, or standard operating procedures exist for chemical events and capacities are supported by budgets.

Score	O.3.2. Mechanisms are established and implemented for detecting and responding to radiological and nuclear emergencies.
1	No mechanisms are in place for the detection and response to radiological emergencies.
2	Municipal guidelines, policies, or standard operating procedures on surveillance, assessment and management of radiological events, intoxication and poisoning are available.
3	Municipal guidelines, policies, or standard operating procedures exist for radiological events and capacities are supported by municipal budgets.

Contextual Questions:

1. Are there national policies, strategies or plans available for the detection, assessment, response and recovery after chemical events or emergencies?
2. Is the country involved in any international chemical/toxicological networks (e.g. INTOX)?
3. Is there a chemical database or data bank available (e.g. INCHEM)?
4. Are there national policies, strategies or plans available for the detection, assessment, response and recovery after radiological and nuclear emergencies?
5. Is the country involved in any global expert networks (e.g., WHO's Radiation Emergency Medical Preparedness and Assistance Network (REMPAN) or the International Atomic Energy Agency Response Assistance Network (RANET))?

O.3.1. Technical Questions:

1. Does the municipality have policies, strategies or plans available for the detection, assessment, response and recovery after chemical events or emergencies?
 - a. Are these implemented?
 - b. In the event of a public health emergency of chemical origin, could a budget be mobilized to meet additional demands?
2. Is there a mechanism for chemical incident surveillance in the municipality?
 - a. Is there an authority/agency/office with primary responsibility for chemical surveillance?
 - b. Is there an efficient information flow in chemical surveillance/monitoring?
3. Is there a mechanism for environmental monitoring with regard to chemical hazards?
4. Is there a mechanism for monitoring of consumer products with regard to chemical hazards?
5. Are there multisectoral coordination mechanisms with regard to chemical safety and events?

O.3.2. Technical Questions:

1. Does the municipality have policies, strategies or plans available for the detection, assessment, response and recovery after radiological or nuclear emergencies?
 - a. Are these implemented?
 - b. In the event of a public health emergency of radiological or nuclear origin, could a budget be mobilized to meet additional demands?
 - c. Have plans for the transport of radioactive materials, and waste management including those from hospitals and medical services been established?
2. Is there a mechanism for radiation surveillance in the municipality?
 - a. Is there an authority/agency/office with primary responsibility for radiation surveillance?
 - b. Is there an efficient information flow in radiation surveillance?
3. Is there a mechanism for environmental monitoring with regard to radiological hazards?
4. Is there a mechanism for monitoring of consumer products with regard to radiological hazards?
5. Are there multisectoral coordination mechanisms with regard to radiological and nuclear emergencies?
 - a. Are these mechanisms outlined in MOUs, SOPs, or other official agreements?