**Kirkpatrick Level 2 (Learning)**

**Evaluation Tool Matrix**

# **instructions for use**

* Evaluators within the [Preparedness and Emergency Response Learning Centers (PERLC) network](http://www.phf.org/programs/preparednessresponse/evaluationrepository/Pages/PERLC_Network.aspx) are expected to use the evaluation matrix to develop appropriate tools to assess learning (Level 2) for each program delivery.
* As appropriate for the knowledge, skills, and attitudes (KSA) Domain levels addressed and included in the objectives of the learning project, evaluators should determine how best to measure learning (Level 2).
* Evaluators are encouraged to utilize items (tests, exercises); format (multiple choice, simulation); and modes of delivery (in person, online) that best suit their Learning Projects’ purposes in order for assessment tools to best measure the purpose of the trainings and learning objectives across domain levels.
* Utilizing the matrix as a guide, evaluators can tailor assessments to most effectively and efficiently measure learning across KSA Domain levels.

# **Evaluation tool matrix**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| EVALUATION TOOL | EXAMPLES | MODES OF DELIVERY | WHEN DOES EVALUATION OCCUR | APPLICABLE CATEGORY | KSA |
| QUIZZES and TESTS | Multiple Choice, True/False, Open-Ended Response, Matching, Short Answer, Essay | Paper-Based, Online/Web-Based, Verbal, Audience Response System (ARS) | Pre-/Post-Training, Incrementally during training (ideal for ARS) | K | [DOMAIN 1](#Domain1) |
| [DOMAIN 2](#Domain2) |
| [DOMAIN 3](#Domain3) |
| [DOMAIN 4](#Domain4) |
| PERCEPTIONS and FEEDBACK | Surveys, Polls, Questionnaires, Essay | Paper-Based, Online/Web-Based, Verbal, Audience Response System (ARS) | Pre-/Post-Training, Incrementally during training (ideal for ARS) | A | [DOMAIN 1](#Domain1) |
| [DOMAIN 2](#Domain2) |
| [DOMAIN 3](#Domain3) |
| [DOMAIN 4](#Domain4) |
| PROBLEM-/SITUATION-BASED EXERCISES | Table Top Exercises, Case Scenarios, Case Studies | Paper-Based, Online/Web-Based, Verbal, Audience Response System (ARS), PPT, Videos | Pre-/Post-Training | KSA | [DOMAIN 1](#Domain1) |
| [DOMAIN 2](#Domain2) |
| [DOMAIN 3](#Domain3) |
| [DOMAIN 4](#Domain4) |
| PERFORMANCE-BASED ACTIVITIES | Workbooks/Activity Sheets, Templates, Role-Playing, Checklists | Paper-Based, Online/Web-Based | Pre-/Post-Training, Incrementally during training | KS | [DOMAIN 1](#Domain1) |
| [DOMAIN 2](#Domain2) |
| [DOMAIN 3](#Domain3) |
| [DOMAIN 4](#Domain4) |
| GAME-BASED ACTIVITIES | Trivia, Simulations | Paper-Based, Online/Web-Based, Verbal, Audience Response System (ARS), PPT, Videos | Pre-/Post-Training, Incrementally during training | K | [DOMAIN 1](#Domain1) |
| [DOMAIN 2](#Domain2) |
| [DOMAIN 3](#Domain3) |
| [DOMAIN 4](#Domain4) |
| PROJECT-BASED ACTIVITIES | Mock/Real * MODEL Analysis/Development
* POLICY Analysis/Development
* PLAN Analysis/Development
 | Paper-Based, Online/Web-Based | Pre-/Post-Training | KSA | [DOMAIN 1](#Domain1) |
| [DOMAIN 2](#Domain2) |
| [DOMAIN 3](#Domain3) |
| [DOMAIN 4](#Domain4) |

**Public Health Preparedness and Response Knowledge, Skills, and Attitudes (KSAs)**

**By Core Competencies**

|  |  |  |  |
| --- | --- | --- | --- |
| **DOMAIN 1: MODEL LEADERSHIP** | **KNOWLEDGE** | **SKILL** | **ATTITUDE** |
| **1.1 Solve problems under emergency conditions.** |  |  |  |
| **Recognize** emergency conditions and the resulting problems. |  |  |  |
| **Summarize** the means, methods, and processes for solving the problem.  |  |  |  |
| **Explain** how different personality types impact performance during emergency situations. |  |  |  |
| **Recognize** the ethical and moral implications of decisions made through a chain of command. |  |  |  |
| **Evaluate** the level of hazard or risk.  |  |  |  |
| **Prioritize** problems based on level of hazard and degree of risk.  |  |  |  |
| **Analyze** dysfunctions within a public health emergency response system.  |  |  |  |
| **Prioritize** problems based on severity, urgency, and solubility. |  |  |  |
| **Assess** information, resources and procedures necessary to address the problems in emergency situations. |  |  |  |
| **Implement** action to solve the problem(s) in a timely fashion. |  |  |  |
| **Differentiate** the consequences of specific decisions. |  |  |  |
| **Refer** problems that fall outside his or her scope of authority to the appropriate person in the chain of command. |  |  |  |
| **Assure** responsibility for responding when needed in the event of a public health emergency. |  |  |  |
| **Assume** responsibility for taking specific actions that further organizational mission or population health in the presence of a public health emergency. |  |  |  |
| **Maintain** awareness of one’s own tolerance for risk. |  |  |  |
| **1.2 Manage behaviors associated with emotional responses in self and others.** |  |  |  |
| **Distinguish** between the possible signs of personal stress, burn-out and vicarious trauma. |  |  |  |
| **Describe** the importance of mitigating acute distress and fostering adaptive functioning and coping. |  |  |  |
| **Discuss** the elements of self-care principles and practices. |  |  |  |
| **Describe** mechanisms of liaison and advocacy and knowledge of referral resources. |  |  |  |
| **Apply** techniques for maintaining awareness of possible signs of personal stress, burn-out, and vicarious trauma. |  |  |  |
| **Apply** intervention techniques to support emotional health needs. |  |  |  |
| **Demonstrate** personal behavioral techniques for mitigating acute distress and fostering adaptive functioning and coping. |  |  |  |
|  |  |  |
| **Use** self-care principles and practices to mitigate potential adverse effects. |  |  |  |
| **Evaluate** the emotional support needs of others. |  |  |  |
| **Assess** individuals requiring immediate care.  |  |  |  |
| **Distinguish** between well-functioning, distress and dysfunctional emotional responses.  |  |  |  |
|  | **KNOWLEDGE** | **SKILL** | **ATTITUDE** |
| **Distinguish** between the types of referrals needed for intensive care.**Act** as a liaison and advocate.  |  |  |  |
| **Develop** a willingness to support the emotional health of others.  |  |  |  |
| **Maintain** willingness to be an active listener. |  |  |  |
| **Maintain** a non-judgmental and respectful manner. |  |  |  |
| **1.3 Facilitate collaboration with internal and external emergency response partners.** |  |  |  |
| **Compare** the roles of relevant internal and external emergency response partners (including, but not limited to, agencies, organizations, authorities, elected leaders and stakeholders).  |  |  |  |
| **Develop** partnerships among internal and external emergency response partners.  |  |  |  |
| **Develop** collaborative emergency response plans and/or policies with appropriate internal and external emergency response partners.  |  |  |  |
| **Apply** communication strategies to effectively communicate with internal and external response partners.  |  |  |  |
| **Maintain** agreements (e.g., Mutual Aid Agreements [MAA]s, Emergency Management Assistance Compacts [EMACs], Memorandum of Understanding [MOUs) with external emergency response partners to secure and provide assistance and resources in all phases of emergency preparedness and response.) |  |  |  |
| **1.4 Maintain situational awareness.**  |  |  |  |
| **Explain** the importance of a shared mental model in the development of a coordinated response to an emergency. |  |  |  |
| **Analyze** information regarding the status, attributes, and dynamics of relevant factors impacting response activities. |  |  |  |
| **Classify** key resources used for problem solving in the specific type of incident and the immediate needs of victims. |  |  |  |
| **Recognize** critical elements impacting situational awareness. |  |  |  |
| **Distinguish** between critical and non-critical elements of the emergency.  |  |  |  |
| **Prioritize** actions to recover situational awareness. |  |  |  |
| **Use** information and resources that identify changes in the situation and/or response.  |  |  |  |
| **Detect** cues that the situation may be rapidly changing.  |  |  |  |
| **Create** steps for evaluating the success of actions taken during an emergency situation. |  |  |  |
| **Develop** a method for realigning response actions as crisis events evolve. |  |  |  |
| **Communicate** methods for aligning response actions to leaders and team. |  |  |  |
| **Cooperate** with others to resolve discrepancies or misperceptions regarding elements impacting situational awareness. |  |  |  |
| **Detect** loss of situational awareness. |  |  |  |
| **Develop** strategies to minimize distracters impacting situational awareness. |  |  |  |
| **Apply** techniques that aid in recovery of situational awareness. |  |  |  |
| **Distinguish** between existing and future needs in response environments. |  |  |  |
| **Demonstrate** the ability to communicate oral and written information impacting situational awareness in a clear, concise, and accurate manner. |  |  |  |
|  | **KNOWLEDGE** | **SKILL** | **ATTITUDE** |
| **1.5 Demonstrate respect for all persons and cultures.** |  |  |  |
| **Describe** cultural differences that might impact all phases of emergency preparedness and response. |  |  |  |
| **Demonstrate** the ability to incorporate factors of diversity in all phases of emergency preparedness and response. |  |  |  |
| **Apply** principles of cross-cultural communication, equity, social justice, and respect for persons.  |  |  |  |
| **Develop** partnerships with key stakeholders from diverse populations. |  |  |  |
| **Develop** cross cultural strategies to address emergency situations and disseminate information. |  |  |  |
| **Assess** the needs of vulnerable populations into all levels of emergency preparedness and response. |  |  |  |
| **Recognize** the benefits of diverse perspectives within the public health workforce. |  |  |  |
| **1.6 Act within the scope of one’s legal authority.** |  |  |  |
| **Identify** the legal powers, duties and restraints associated with the scope of one’s legal authority. |  |  |  |
| **Apply** appropriate public health authority to minimize adverse outcomes (e.g., persons, property, etc.). |  |  |  |
| **Access** the emergency preparedness and response policies and procedures of one’s own organization.  |  |  |  |
| **Respond** legally and consistently within the values and mission of the public health organization. |  |  |  |
| **Document** appropriate information relative to the application of the law. |  |  |  |
| **DOMAIN 2: COMMUNICATE AND MANAGE INFORMATION** |  |  |  |
| **2.1 Manage information related to an emergency** |  |  |  |
| **Interpret** procedures in emergency operations plan related to information management |  |  |  |
| **Distinguish** the roles of staff involved in collecting and disseminating information for audiences (e.g., self, coordinator, public information officer, technology/IT departments) |  |  |  |
| **Compare** the different types of routine and urgent information management |  |  |  |
| **Verify** information sources are credible |  |  |  |
| **Classify** information for internal and external audiences |  |  |  |
| **Demonstrate** composure when dealing with managing information |  |  |  |
| **2.2 Use principles of crisis and risk communication** |  |  |  |
| **Differentiate** between the responsibilities of a receiver, transmitter and translator during events (before, during and after) |  |  |  |
| **Differentiate** between crisis communication and emergency risk communication. |  |  |  |
| **Deliver** messages using the guidelines for crisis and risk communication. |  |  |  |
| **Classify** the general tenets in crisis and emergency risk communication principles. |  |  |  |
| **Summarize** CDC recommended guidelines on crisis and risk communication regarding the development and of delivery messages. |  |  |  |
| **Differentiate** between the mental and emotional factors that might create barriers to communication (e.g., reception & interpretation). |  |  |  |
| **Distinguish** between the needs of the diverse audiences within the community. |  |  |  |
|  | **KNOWLEDGE** | **SKILL** | **ATTITUDE** |
| **Identify** subject matter experts within the community who can help with delivering messages. |  |  |  |
| **Employ** communication responsibilities for an event (before, during and after).**Utilize** credible sources in relaying risk messages.**Use** consistent names, acronyms and pronunciation in oral and written communications. |  |  |  |
| **Encourage** inclusion of diverse populations in planning messages. |  |  |  |
| **Maintain** diverse community partners to assist with communicating preparedness planning and population specific messages. |  |  |  |
| **Participate** in multi-agency coordination activities to identify pre-event and event Crisis and Emergency Risk Communication (CERC) materials, related to one’s subject matter expertise. |  |  |  |
| **Verify** information sources are credible |  |  |  |
| **Maintain** empathy when communicating during a crisis. |  |  |  |
| **Value** cultural sensitivity as essential to communicating to diverse populations. |  |  |  |
| **2.3 Report information potentially relevant to the identification and control of an emergency through the chain of command** |  |  |  |
| **Interpret** the learner’s role in emergency identification and control as outlined in relevant Emergency All-Hazards Plans. |  |  |  |
| **Communicate** within the organization’s defined command structure (i.e. report up, communicate down). |  |  |  |
| **Assess** relevant emergency situational information coming into the agency. |  |  |  |
| **Alert** appropriate staff to unusual events based on identified trigger points and/or thresholds as outlined in the [Communications Annex](http://www.phf.org/programs/preparednessresponse/evaluationrepository/Documents/Communications_Annex.pdf). |  |  |  |
| **Communicate** relevant information to personnel in a timely fashion. |  |  |  |
| **Repor**t the roles of team members in an Incidence Command Structure. |  |  |  |
| **2.4 Collect data according to protocol** |  |  |  |
| **Identify** key local resources of data. |  |  |  |
| **Identify** the barriers to communicating when interviewing diverse populations. |  |  |  |
| **Point** out the importance of threats to validity including various forms of bias. |  |  |  |
| **Use** standardized protocol to collect data. |  |  |  |
| **Distinguish** among strategies for properly documenting the data collection process. |  |  |  |
| **Differentiate** between primary and secondary data. |  |  |  |
| **Organize** data accurately into database or statistical package. |  |  |  |
| **Distinguish** between different types of electronic information sources. |  |  |  |
| **Utilize** primary and secondary data collection methods to inform preparedness and emergency responses scenarios. |  |  |  |
| **Value** the confidentiality of interviewee information. |  |  |  |
| **Appreciate** how strongly held personal beliefs and convictions might impact the validity and acceptance of data collected. |  |  |  |
|  | **KNOWLEDGE** | **SKILL** | **ATTITUDE** |
| **2.5 Manage the recording and/or transcription of data according to protocol** |  |  |  |
| **Compare** agency procedures for handling Freedom of Information Act requests. |  |  |  |
| **Interpret** the responsibilities and expectations of data entry personnel. |  |  |  |
| **Categorize** common data and management issues. |  |  |  |
| **Explain** the importance of data for informing scientific, ethical, economic, and political discussion of public health response issues. |  |  |  |
| **Demonstrate** practices for securing and stabilizing data storage. |  |  |  |
| **Apply** data entry quality control procedures that ensure accuracy and reliability. |  |  |  |
| **Prepare** a list of cases of affected individuals (e.g., disease, emergency care, disaster victims and fatalities) with specified variables (line listing). |  |  |  |
| **Analyze** public health threat data. |  |  |  |
| **Use** descriptive techniques to summarize public health data. |  |  |  |
| **Adhere** to relevant ethics guidelines, state and federal laws regarding data collection, management and dissemination. |  |  |  |
| **DOMAIN 3: PLAN FOR AND IMPROVE PRACTICE** |  |  |  |
| **3.1 Contribute expertise to a community hazard vulnerability analysis (HVA).** |  |  |  |
| **Differentiate** the major components of a hazard vulnerability analysis. |  |  |  |
| **Interpret** the relevance of subject matter expertise to the HVA development process. |  |  |  |
| **Distinguish** an agency's role in addressing the public health consequences from HVA events. |  |  |  |
| **Use** subject matter expertise in the development of the HVA assessment. |  |  |  |
| **Justify** the importance of using data and information contributed to the HVA development. |  |  |  |
| **Compare** the role of subject matter expertise to HVA external partners and community needs. |  |  |  |
| **Assess** the impact of HVA on an agency's operational functions. |  |  |  |
| **Value** expertise of others in developing an HVA. |  |  |  |
| **Volunteer** in community HVA development process. |  |  |  |
| **Endorse** the use of HVAs an important tool for community preparedness. |  |  |  |
| **3.2 Contribute expertise to the development of emergency plans.** |  |  |  |
| **Summarize** roles and responsibilities of public health mid-level workers during an emergency and ICS. |  |  |  |
| **Discuss** the importance of planning for the psychological needs for a community during a disaster. |  |  |  |
| **Justify** the rationale for using a team approach to emergency planning. |  |  |  |
| **Differentiate** between the stages of an emergency plan. |  |  |  |
| **Assess** the relationship of exercises in emergency planning. |  |  |  |
| **Categorize** local populations at risk for broad-scale health emergencies. |  |  |  |
| **Select** methods for evaluating and improving preparedness and/or response related to your area of expertise. |  |  |  |
|  | **KNOWLEDGE** | **SKILL** | **ATTITUDE** |
| **Justify** the role of Hazard Vulnerability Assessments (HVAs) and Continuity of Operations (COOPs) in emergency planning. |  |  |  |
| **Express** the importance of routine review of emergency plans. |  |  |  |
| **Recognize** the value in having an incident command structure during an emergency situation. |  |  |  |
| **Value** creating preparedness partnerships within community organizations. |  |  |  |
| **3.3 Participate in improving the organization's capacities (including, but not limited to programs, plans, policies, laws, and workforce training).** |  |  |  |
| **Describe** the key role of public health workers in an emergency response. |  |  |  |
| **Differentiate** between public health emergency response legislation, regulations, and organizational policies. |  |  |  |
| **Adapt** skill sets to meet the needs during an emergency response situation. |  |  |  |
| **Apply** knowledge and skills gained through participation in emergency preparedness and response activities to improve organization's capacities. |  |  |  |
| **Apply** organizational policies and plans during an emergency response. |  |  |  |
| **Prioritize** critical emergency preparedness responsibilities in one's own program. |  |  |  |
| **Apply** mitigation strategies to one's own organization during an emergency response. |  |  |  |
| **Implement** recommendations identified in After Action Reviews. |  |  |  |
| **DOMAIN 4: PROTECT WORKER HEALTH AND SAFETY** |  |  |  |
| **4.1 Maintain Personal/Family Emergency Preparedness Plans** |  |  |  |
| **Describe** essential elements of a personal/family emergency preparedness plan. |  |  |  |
| **Create** a standard household inventory list to maintain personal/family's ability to function during an emergency. |  |  |  |
| **Assess** your family's special needs during an emergency. |  |  |  |
| **Create** a family emergency plan to include resources, supplies, and contacts. |  |  |  |
| **Create** a checklist of family basic needs, special needs, and life-saving medications or assistive devices for household members with sensory and/or functional/developmental disabilities. |  |  |  |
| **Categorize** the known or potential emergencies. |  |  |  |
| **Assemble** an in-house family emergency supplies and go-kit. |  |  |  |
| **4.2 Employ Protective Behaviors According To Changing Conditions, Personal Limitations, And Threats** |  |  |  |
| **Discuss** the need to protect worker health and safety in emergencies and disasters. |  |  |  |
| **Describe** the relationship between protective measures, behaviors, and reduction of worker risk of injury or illness. |  |  |  |
| **Describe** the hierarchy of control measures. |  |  |  |
| **Describe** how the selection of control measures may evolve as conditions change. |  |  |  |
| **Summarize** organizational roles and responsibilities related to worker health and safety. |  |  |  |
| **Discuss** public health worker's role and responsibilities in designing, implementing, and evaluating engineering, administrative, work practice, and PPE control measures. |  |  |  |
|  | **KNOWLEDGE** | **SKILL** | **ATTITUDE** |
| **Categorize** potential threats and emergencies.**Promote** taking protective actions in response to current and changing threats. |  |  |  |
| **Organize** a system for reporting injuries, illnesses, and potential emergency harmful exposures to protect workers. |  |  |  |
| **Apply** decontaminate procedures if necessary during the emergency or disaster response. |  |  |  |
| **Employ** practices to minimize exposures to agents and hazards during an emergency. |  |  |  |
| **Construct** a plan for monitoring personal physical and psychological responses to emergency situations. |  |  |  |
| **Exhibit** personal hygiene practices that minimize exposure to chemical, biological, or radiological agents that may be present during emergencies and disasters. |  |  |  |
| **Demonstrate** proper use and maintenance of assigned personal protective equipment in an emergency. |  |  |  |
| **Demonstrate** correct donning of chemical protective clothing, respiratory protection, protective eyewear, protective footwear, hearing protection, gloves, and other assigned PPE. |  |  |  |
| **Apply** the proper methods to maintain, store, decontaminate, and dispose of different types of PPE. |  |  |  |
| **4.3 Report Unresolved Threats To Physical And Mental Health Through The Chain Of Command** |  |  |  |
| **Discuss** the types of physical hazards and resulting injuries one might encounter while performing their role during emergency planning and response. |  |  |  |
| **Recognize** the signs and symptoms of fatigue, mental distress, and unresolved physical injury. |  |  |  |
| **Identify** how and to whom one should report unresolved physical and mental health threats. |  |  |  |
| **Report** unresolved physical and/or mental health threats through the chain of command. |  |  |  |
| **Distinguish** between potential threats to physical and mental well-being in the response environment. |  |  |  |
| **Recognize** the importance of reporting unresolved physical and/or mental health threats. |  |  |  |

# **LIMITATIONS AND CONSIDERATIONS**

* Geographic, culturally specific issues should be considered; manner in which and by whom these issues are addressed should be considered.
* Emergency-specific issues should be considered (e.g., chemical spill vs. pandemic).
* Public health system organization varies state to state, as do relationships with other entities. Consider differences in infrastructure and service availability.
* Availability of staff time to participate in a team project could be limited.
* Problem-specific training should consider a minimum level of evaluation that could be used across topics. Scoring rubrics may need to be developed.
* Need to have permission to access and review debriefing documents.
* In terms of maintaining personal/family emergency preparedness plans, not everyone has children. Some standard needs to be accepted for basic requirements for emergency kits and plans.
* Role-specific duties are incredibly varied from position to position and health department to health department.
* In terms of reporting unresolved threats through chain of command of threats to physical and mental health, the KSAs assume a base knowledge of mental health (psychological first aid/self-care), and Incident Command System knowledge.