This document summarizes what PHAB has learned about how accredited health departments (HDs) are engaging in environmental health-related activities. In particular, it focuses on the reasons that HDs struggled with measures that relate to environmental health. It also includes findings from Section II of accredited HDs’ Annual Reports and an analysis of the community health improvement plans of accredited HDs.

Below is a summary of the distribution of assessments for related measures. These data are for 179 HDs assessed under Version 1.0 and 124 HDs assessed under Version 1.5. Measures were selected because they are relevant to environmental health (for example, they might require or suggest an environmental health example). However, they are broader than environmental health. Therefore, HDs may have been assessed as Not or Slightly Demonstrated on these measures for reasons unrelated to their environmental health work.

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To better understand HDs’ performance on these Measures, PHAB conducted an analysis of the conformity comments of HDs that were assessed as Not or Slightly Demonstrated in at least 5% of the first 303 Site Visit Reports. The results of those analyses are shown below. For each Measure, the most common reasons for the assessment are listed, including the number of HDs for which that reason was indicated. One HD could have multiple reasons listed. The reasons are linked to specific required documentation listed in the PHAB Standards and Measures. For reference, please see: https://www.phaboard.org/wp-content/uploads/2019/01/PHABSM_WEB_LR1.pdf.

**Measure 1.3.1: Data analyzed and public health conclusions drawn**
The most common challenges among HDs assessed as Not or Slightly Demonstrated were deficiencies in documentation of the following:
- Requirement 1c – Analysis and conclusions that have comparison data (21 HDs)
- Requirement 2 – Review and discussion of the data analysis with others (17 HDs)
- Requirement 1b – Description of the analytic process used that is evidence-based with citation (14 HDs)
- Requirement 1 – Conclusions drawn from the data (13 HDs)
- Requirement 1 – Analysis of data (12 HDs)

**Measure 1.3.2: Public health data provided to various audiences on a variety of public health issues**
The most common challenges were deficiencies in documentation of the following:
- Provision of an analytic report or analysis (21 HDs)
- Documentation of sharing/distribution (6 HDs)
- Identification of specific audiences (5 HDs)

**Measure 2.1.1: Protocols for investigation process**
The documentation must address health problems and environmental health hazards. The most common challenges were deficiencies in documentation of the following:
- Requirement 1b – Inclusion of a timeline (11 HDs)
- Requirement 1a – Assignment of responsibilities (10 HDs)
- Within the timeframe of 24 months (9 HDs)
- Requirement 1b – Case investigation steps (8 HDs)
- Requirement 1b – Reporting requirements (8 HDs)

**Measure 2.1.2: Capacity to conduct an investigation of infectious disease**
For state HDs, the measure requires documentation of the capacity to conduct and/or support investigations of multiple diseases simultaneously. (Of the 5 state HDs that were assessed as Not or Slightly Demonstrated, 2 were cited for concerns related to simultaneous investigations.) The most common challenges among HDs assessed as Not or Slightly Demonstrated were:
- Documentation did not align investigation reports with procedures (28 HDs)
- Lack of demonstration of HD’s capacity to respond to outbreak (23 HDs)
- Documentation did not represent an audit or peer review of investigation reports (15 HDs)

**Measure 2.1.3: Capacity to conduct investigations of non-infectious health problems, environmental, and/or occupational public health hazards**
The most common challenge was deficient documentation of the following:
- Completed investigation of a non-infectious health problem or hazard (9 HDs)

**Measure 2.1.4: Collaborative work through established governmental and community partnerships on investigations of reportable diseases, disease outbreaks, and environmental public health issues**
The most common challenges were deficiencies in documentation of the following:
• Requirement 1 – Documentation of contracts/MOAs/MOUs/etc. that established partnerships for the investigation of outbreaks of disease, health care associated infections, or environmental public health concerns (7 HDs)
• Within appropriate timeframes (6 HDs)
• Requirement 1 – Appropriate partners within the HD’s jurisdiction (5 HDs)
• Requirement 1 – Related to disease outbreak or environmental health investigations (5 HDs)
• Requirement 2 – Description of partner roles and responsibilities (5 HDs)

Measure 2.1.5: Monitored timely reporting of notifiable/reportable diseases, lab test results, and investigation results
The most common challenge was deficiencies in documentation of the following:
• Requirement 1 – Tracking log/audit or sufficient evidence of tracking various elements of investigation (10 HDs)

Measure 2.1.6 S: Consultation, technical assistance, and/or information provided to Tribal and local HDs in the state regarding the management of disease outbreaks and environmental public health hazards.
This is a state-only measure with only 3 HDs assessed as ND/SD. No clear patterns emerged.

Measure 2.2.1: Protocols for containment/mitigation of public health problems and environmental public health hazards
The most common challenges were deficiencies in documentation of the following:
• Protocols that address prophylaxis/biologics (14 HDs)
• Protocols that address clinical management (12 HDs)
• Protocols that address disease-specific mitigation and containment (11 HDs)
• Protocols that address the process for exercising legal authority for disease control (11 HDs)
• Protocols that address contact management (11 HDs)

Measure 2.2.2: A process for determining when the All Hazards EOP will be implemented
The most common challenges were deficiencies in documentation of the following:
• Providing protocols that addressed All Hazards Emergency Operations Plan activation in the following circumstances:
  o Requirement 1 – infectious disease outbreaks (25 HDs)
  o Requirement 2 – environmental public health issues (24 HDs)
  o Requirement 3 – cluster evaluations (22 HDs)
• Providing any protocols that addressed the following circumstances
  o Requirement 2 – environmental public health issues (21 HDs)
  o Requirement 3 – cluster evaluations (20 HDs)
  o Requirement 1 – infectious disease outbreaks (15 HDs)

Measure 2.2.3: Complete After Action Reports (AARs)
The most common challenges were deficiencies in documentation of the following:
• Requirement 1 – Documentation of a protocol describing the processes used to determine when events rise to the significance of requiring an AAR (11 HDs)
• Requirement 2 – List of events comprehensive of outbreaks and environmental public health risks (8 HDs)
• Requirement 2 – List of events including indication of which required an AAR (8 HDs)
Measure 2.3.1: Provisions for the health department’s 24/7 emergency access to epidemiological and environmental public health resources capable of providing rapid detection, investigation, and containment/mitigation of public health problems and environmental public health hazards

The most common challenges were deficiencies in documentation of the following:

- Requirement 1 – 24/7 access (4 HDs)
- Requirement 3 – Defined access to resources within contracts/MOUs (4 HDs)
- Requirement 2 – Sufficient call down list for contacting epidemiological and environmental public health resources (3 HDs)
- Requirement 3 – List of contracts/MOUs (3 HDs)

Measure 2.3.2: 24/7 access to laboratory resources capable of providing rapid detection, investigation and containment of health problems and environmental public health hazards

The most common challenges were deficiencies in documentation of the following:

- Requirement 3 – Inclusion of a comprehensive scope of specimens (5 HDs)
- Requirement 2 – Inclusion of contracts/MOUs with laboratories to provide support services (4 HDs)

Measure 2.3.3: Access to laboratory and other support personnel and infrastructure capable of providing surge capacity

The most common challenges were deficiencies in documentation of the following:

- Requirement 2 – Staffing lists indicating specific staffing needed for a surge response and how the HD will fill those needs (24 HDs)
- Requirement 2 – Demonstration of how the staff will access the staffing list (22 HDs)
- Requirement 1 – Documentation of pre-identified support personnel to provide surge capacity (20 HDs)
- Requirement 5 – Contracts or MOAs/MOUs for additional staff capacity for surge situations (12 HDs)
- Requirement 1 – Surge capacity protocol (11 HDs)
- Requirement 4 – Training/exercise schedule for surge personnel (11 HDs)

Measure 2.3.4: Collaboration among Tribal, state, and local health departments to build capacity and share resources to address Tribal, state, and local efforts to provide for rapid detection, investigation, and containment/mitigation of public health problems and environmental public health hazards

The most common challenges were deficiencies in documentation of the following:

- Requirement 1 – Evidence of sharing resources or building capacity (4 HDs)
- Requirement 2 – Demonstration of working with other agencies (4 HDs)

Measure 6.1.1: Laws reviewed in order to determine the need for revisions

The most common challenges were deficiencies in documentation of the following:

- Requirement 1c – Documentation of stakeholder input on proposed and/or reviewed laws (43 HDs)
- Requirement 1b – Documentation of model public health laws, checklists, templates and/or exercises in reviewing laws (40 HDs)
- Requirement 1a – Documentation demonstrating evaluation of laws for consistency with public health evidence-based and/or promising practices (38 HDs)

Version 1.5 introduced the requirement to evaluate the impact of the law on health equity.

- Of 31 HDs assessed as Slightly or Not Demonstrated under Version 1.5, 15 didn’t document consideration of health equity
Measure 6.1.2: Information provided to the governing entity and/or elected/appointed officials concerning needed updates/amendments to current laws and/or proposed new laws
The most common challenge was:
- Documentation submitted did not represent a written review/recommendation of existing or proposed laws (23 HDs)

Measure 6.2.1: Department knowledge maintained and public health laws applied in a consistent manner
The most common challenges were:
- Requirement 1 – Training not about enforceable laws (13 HDs)
- Requirement 2 – Documentation does not address consistent application of public health laws (12 HDs)
- Requirement 1 – Evidence of who completed training incomplete/missing (6 HDs)

Measure 6.3.4: Patterns or trends identified in compliance from enforcement activities and complaints
The most common challenges were incomplete/missing documentation of the following:
- Requirement 1 – Documentation of trends of complaints, enforcement activities, or compliance (50 HDs)
- Requirement 1 – Summary of enforcement activities or compliance (34 HDs)
- Requirement 2 – Documentation of debriefings or other evaluations on enforcement (26 HDs)
- Requirement 2 – Evaluation/debrief that includes process improvements (19 HDs)
- Requirement 1 – Summary or tally of complaints (16 HDs)
- Requirement 1 – Inclusion of an annual report/summary (14 HDs)
- Requirement 2 – Documentation of enforcement activities (12 HDs)

Measure 6.3.5: Coordinated notification of violations to the public, when required, and coordinated sharing of information among appropriate agencies about enforcement activities, follow-up activities, and trends or patterns
The most common challenges among HDs assessed as Not or Slightly Demonstrated fell into two major categories:
- Deficiencies in protocols for communication or application of those protocols
  - Requirement 1 – Protocols for notifying the public of enforcement activities (25 HDs)
  - Requirement 3 – Examples of notification of enforcement activities that tie back to protocols provided (16 HDs)
  - Requirement 1 – Protocol that addresses interagency communication (15 HDs)
- Documentation provided does not address enforcement activities:
  - Requirement 1 – Communication protocol for interagency notifications (20 HDs)
  - Requirement 2 – Protocol for notifying the public of enforcement activities (14 HDs)
  - Requirement 3 – Examples of notification of enforcement activities (14 HDs)

Annual Reports
Annual Reports (AR) were also reviewed to identify activities that HDs selected to report on in the “Emerging Issues” section. A total of 349 ARs submitted by 192 HDs that had completed at least one Annual Report by December 2018 were reviewed.

HDS were able to check a box to indicate if they were doing work related to climate change. Approximately 30% of the health departments providing annual reports from 2018 checked that box. Among the HDs that are working on climate change, 17 described their work in more detail. Their
efforts focused on a range of topics including: drought, flooding, pollutants, vector control, health and extreme weather. Common activities include:

- Conducting vector control
- Conducting surveillance and data collection/analysis (e.g., greenhouse gas inventory)
- Developing plans
- Convening committees/tasks forces
- Planning for increased use of renewable energy
- Providing health education
- Identifying vulnerable populations (e.g., using Social Vulnerability Index and Medical Vulnerability Index)

Below are other commonly reported activities:

- Zika: 9 ARs, including activities related to surveillance, education, vector control, protection of blood supply, development of a state zika pregnancy registry, and incident command structure
- Food safety: 5 ARs, including several activities related to mobile/special event food vendors
- Health impact assessments: 5 ARs, including activities related to a brownfield site, retail mall, mining, and an animal feeding operation

Other ARs described work related to lead, septic tanks, tattoo/body piercing establishments, and Highly Pathogenic Avian Influenza (HPAI) virus.

Community Health Improvement Plans

PHAB also analyzed 314 community health improvement plans (CHIPs) of state and local HDs (plus the local HDs that were accredited as part of the centralized integrated system) accredited as of December 2018. The analysis identified CHIP objectives that relate to environmental health. The most common categories are listed below with an indication of what percentage of CHIPs had at least one objective in each topic:

- Access to exercise opportunities, including community walkability/bikeability and access to public transit (38%)
- Air quality, including smoke free policies (22%)
- Aging housing stock/lead (8%)
- Other conservation (7%)