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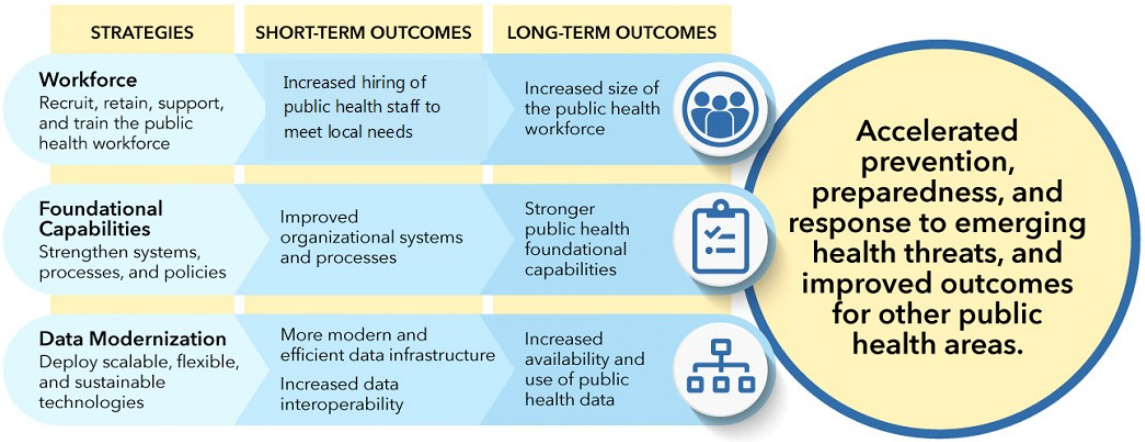
OE22-2203: Strengthening U.S. Public Health Infrastructure, Workforce, and Data Systems Grant

Component A Recipient Performance Measure Guidance Document

Introduction and Purpose of Guidance

On November 29, 2022, the Centers for Disease Control and Prevention (CDC) awarded $3.2 billion to help state, local, and territorial and freely associated public health agencies across the U.S. strengthen their public health workforce and infrastructure through the Public Health Infrastructure Grant (PHIG). This grant provides 107 jurisdictions (Component A recipients) with disease-agnostic funding to support public health infrastructure needs. The three grant strategies are Strategy A1: Workforce; Strategy A2: Foundational Capabilities; and Strategy A3: Data Modernization. The priority short-term outcomes recipients are expected to achieve by the end of the five (5)-year period of performance include: (1) Increased hiring of public health staff to meet local needs and (2) Improved organizational systems and processes, among other outcomes. In the long term, expected outcomes include: (1) Increased size and capabilities of the public health workforce; (2) Stronger public health foundational capabilities; (3) Increased availability and use of public health data; and (4) Improved sharing of lessons learned.



This document provides detailed information on the performance measures, data elements, and rationale for Component A recipient reporting on grant performance measures. This document should be reviewed before reporting and submitting these data to CDC primarily through the Public Health Infrastructure Virtual Engagement (PHIVE) Platform.

For the purposes of this document, Component A recipients are referred to as "recipient agencies." Recipient agencies are defined as: the 107 public health departments in all 50 states, Washington D.C., 8 territories/freely associated states, and 48 large localities (cities serving a population of 400,000 or more and counties serving a population of 2,000,000 or more based on the 2020 U.S. Census) that were awarded funding through this grant.

Throughout this document, important updates to the Reporting Period 4 guidance are highlighted in yellow.

If you have any questions about the grant performance measures or need support calculating and reporting on these measures, please submit a programmatic technical assistance (TA) request through PHIVE.

Use of Measures

The grant performance measures are intended to be used by CDC, recipient agencies, and partners—including PHIG national partners (Component B recipients) and the National Evaluation Team—to:

- Track and report progress consistently across recipient agencies on priority outcomes,
- Inform CDC and PHIG national partners' TA activities, such as site visits, training opportunities, and peer-to-peer sharing activities, to support recipients with advancing their work through this grant,
- Inform CDC and partners on progress and gaps, to ultimately identify actions to improve performance over time, and
- Stimulate discussions between Project Officers and recipients (e.g., What are opportunities for improvements? What are you doing well that you want to share with others?), which may inform current and future grant activity planning (e.g., Work Plan and budget development).

CDC recognizes the limitations of using performance measures to evaluate the scope of work being conducted by recipient agencies, especially considering the flexible nature of this grant, and contextual factors. CDC will leverage other methods of collecting information, via NOFO grant reporting requirements (e.g., work plan updates, annual progress reports, progress calls, and focused evaluation projects), to assess progress and performance robustly.

Measures Summary

There are thirteen (13) performance measures, eight (8) of which are *shared measures* with the Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases Cooperative Agreement (ELC). These measures reflect priority outcomes for the grant. These measures were selected to serve as meaningful markers of program outcomes; to inform actions to drive improvements for achieving intended outcomes; to keep recipient reporting burden low; and to contribute to a meaningful set of measures overall for this grant.

There are two (2) measures for Strategy A1: Workforce, three (3) measures for Strategy A2: Foundational Capabilities, and eight (8) *shared* measures with ELC for Strategy A3: Data Modernization.

- Recipients will monitor and report data to CDC through the PHIVE platform for five (5) measures (A1.1. Hiring; A1.2. Retention; A2.1. Hiring Timeliness; A2.2. Procurement Timeliness; and A2.3. Accreditation Involvement and Readiness).
- The performance measures for Strategy A3: Data Modernization are aligned with select measures for ELC Project C.
    - PHIG has partnered with the ELC HIS program to collect the A3 Performance Measures. Within recipient jurisdictions, representatives from both programs should coordinate to submit data on these shared measures.
    - To reduce reporting burden, recipients will continue to submit data on these measures through the ELC Health Information Systems (HIS) REDCap forms only. *Recipients will not report any data on A3 performance measures in PHIVE.*
    - A3 recipient agencies will be required to complete two activities for A3 performance measure reporting: 1) In REDCap, an A3 representative from the jurisdiction should confirm their review of submitted measure data by checking the box under the “ELC & PHIG Coordination Acknowledgement” box. 2) In PHIVE, the same person should acknowledge their intended coordination with their agency’s ELC representatives to report on the A3 performance measures in REDCap. This person should be familiar with the jurisdiction’s A3 activities and objectives.
    - For expectations on timing of each coordination acknowledgement and performance measure review, see Appendix C.
    - Please note that A3 performance measures and reporting guidance will be updated to align with ELC NOFO CK24-0002 after August 2024.

- CDC will monitor data via the Public Health Workforce Interests and Needs Survey (PH WINS) for one (1) measure (A1.3. Employee Engagement and Satisfaction). PH WINS is a periodic survey administered by the de Beaumont Foundation. Recipients will not report these data directly to CDC.
- A table summarizing key differences among the A1 and A2 performance measures can be found in Appendix D.

Recipient participation in PH WINS, Public Health Accreditation Board (PHAB) Accreditation, and the Association of State and Territorial Health Officials (ASTHO) Profile or the National Association of County and City Health Officials (NACCHO) Profile Surveys is highly encouraged.

Strategy	Topic	Measure	Reporting Frequency	Reporting Location
A1. Workforce	Hiring	A1.1. Number of PHI grant-funded positions filled by job classification and program area	6 months	PHIVE
	Retention	A1.2. Overall agency staff retention rate	12 months	PHIVE
	Employee Engagement and Satisfaction	A1.3. Employee engagement and satisfaction	Not Applicable; monitored via PH WINS data	N/A
A2. Foundational Capabilities	Hiring Timeliness	A2.1. Time-to-fill position	6 months	PHIVE
	Procurement Timeliness	A2.2. Procurement cycle time	6 months	PHIVE
	Accreditation Involvement and Readiness	A2.3. Level of involvement with PHAB accreditation	12 months	PHIVE
A3. Data Modernization[1]	Data Modernization Leadership	A3.1.[2] Dedicated agency staff to lead and coordinate data modernization efforts	3 months	REDCap
	Data Modernization Assessment and	A3.2. Established workforce, data, and health information system capabilities, needs and	3 months	REDCap

[1] A3 measures are aligned with ELC HIS performance measures and should be reported via ELC REDCap. Acknowledgment of PHIG-ELC coordination should occur every 6 months in PHIVE on the PHIG reporting schedule.

[2] Note updated numbering schema for A3 measures from 2023 A3 Supplemental Guidance.

	Planning	opportunities		
	Data Modernization Workforce Capabilities	A3.3. Enhanced workforce capacities and capabilities to accelerate data and health information system modernization	3 months	REDCap
	Use of Shared Services	A3.4. Demonstrated use of shared services to enhance existing systems or data exchange	3 months	REDCap
	Electronic Laboratory Reporting (ELR) Volume	A3.5. Percent of lab report volume received through electronic laboratory reporting (ELR)	12 months	REDCap
	Electronic Test Order and Result (ETOR) Capacity	A3.6. Number of hospitals and public health labs with established electronic test ordering and result (ETOR) reporting using HL7 messages or a web-portal	12 months	REDCap
	ETOR Volume	A3.7. Proportion of test orders and results processed through ETOR at the public health laboratory (PHL)	3 months	REDCap
	ETOR Implementation	A3.8. Systems/programs at the PHL with ETOR interfaces	3 months	REDCap

Summary of Updates to Guidance for Reporting Period 4

The Reporting Period 4 guidance includes some updates from Reporting Period 3. The Table below provides a high-level overview of the major changes.

Section	Updates to Guidance

A1.2. Overall agency staff retention rate	Guidance clarifies that: • Recipients will report on a Year 5 target that they aim to achieve by the end of the project period (11/30/2027). For this measure, the value should include the target retention rates for both 1) permanent staff only and 2) permanent and temporary/contract staff.
A2.1. Time-to-fill position	Guidance clarifies that: • Recipients will report on a Year 5 target that they aim to achieve by the end of the project period (11/30/2027). For this measure, the value should include the median number of calendar days to fill position.
A2.2. Procurement cycle time	Guidance clarifies that: • Recipients will report on a Year 5 target that they aim to achieve by the end of the project period (11/30/2027). For this measure, the value should include the median number of calendar days from procurement start date to contract execution.
A2.3. Accreditation Involvement and Readiness	Guidance clarifies that: • Recipients will report on a Year 5 target that they aim to achieve by the end of the project period (11/30/2027). For this measure, the value should include the statement that best reflects the recipient's target involvement with the Public Health Accreditation Board (PHAB) national accreditation program.

Reporting Deadlines and Submission Guidance

The grant Period of Performance is 12/1/2022 – 12/1/2027. This grant follows a reporting period of six (6) months for three measures (A1.1. Hiring; A2.1. Hiring Timeliness; and A2.2. Procurement Timeliness) and a reporting period of twelve (12) months for two measures (A1.2. Retention and A2.3. Accreditation Involvement and Readiness).

Strategy A3 performance measure reporting should occur on the quarterly ELC HIS reporting schedule[3] in REDCap. A3 recipients should coordinate with their agency's ELC representatives to prepare for reporting of A3 performance measures, including data preparation, verification, and submission. Beginning in Reporting Period 2, acknowledgement of coordination between the two programs should occur in PHIVE every six (6) months on the dates below.

The PHIVE reporting portal will be open for performance data submission two months prior to the submission due date. Recipient agencies will submit all A1 and A2 performance measures data via PHIVE. All data submitted through PHIVE are due within 60 days of close of reporting period, on the dates indicated below. The REDCap reporting portal will open one month prior to the submission due date, which is 30 days following the close of the data collection period. See Appendix C for more detail on ELC HIS reporting timelines.

Year	Reporting Period	Dates	Data Submission^ Due Date
Year 1	1	12/1/2022 – 5/31/2023	8/1/2023*
	2	6/1/2023 – 11/30/2023	2/1/2024
Year 2	3	12/1/2023 – 5/31/2024	8/1/2024*
	4	6/1/2024 – 11/30/2024	2/1/2025
Year 3	5	12/1/2024 – 5/31/2025	8/1/2025*
	6	6/1/2025 – 11/30/2025	2/1/2026
Year 4	7	12/1/2025 – 5/31/2026	8/1/2026*
	8	6/1/2026 – 11/30/2026	2/1/2027
Year 5	9	12/1/2026 – 5/31/2027	8/1/2027*
	10	6/1/2027 – 11/30/2027	2/1/2028

^These dates represent the schedule for actions needed in PHIVE. Strategy A3 performance measure data should be submitted and reviewed on the ELC HIS reporting schedule in REDCap. However, acknowledgement of coordination between the two programs should occur in PHIVE on the dates in this table.

[3] See Appendix C: ELC HIS Reporting and PHIVE Acknowledgement Schedule for more detail on ELC REDCap reporting requirements. A3 reporting requirements are subject to change following Reporting Period 2.

*Recipient agencies will report data every twelve (12) months, on dates indicated, for two (2) measures: A1.2. Retention and A2.3 Accreditation Involvement and Readiness.

Recipient agencies will report on the data elements defined in the Guidance section below. For each measure, *except for the A3 measures*, recipients will also respond to the following questions:

1. Are the data provided questionable or low/poor quality? *(Yes/No)*
    a. *Select "yes" if you feel that, for any reason, the data for the performance measure are of poor quality, incomplete, or of uncertain validity. Please tell us if you have serious doubts about whether this measure should be interpreted as accurate for your agency, for this reporting period. If you select "yes," please explain.*
2. Does the data provided adhere to the definitions established by CDC in the performance measures guidance? *(Yes/No)*
3. Describe any data limitations, including reasons unable to report, and steps taken to obtain data and/or improve data quality in the future. If you reported on these data using a definition that was different than provided in CDC's guidance, please describe. (*Open-ended, optional)*
4. Does your PHIG workplan include any activities related to this performance measure? *(Yes/No)*
5. Provide any additional context or information related to this measure. *(Open-ended, optional)*

Within this guidance, text in blue underlined font are hyperlinks. To access the hyperlinked section of the document, press CTRL and click + on the text. ***Bold italic font*** is used to emphasize select key terms.

Guidance

Measure A1.1. Hiring: Number of PHIG-funded positions filled by job classification and program area

Topic	Hiring
Measure	Number of PHIG-funded positions filled by job classification and program area
Definition	Number of PHIG-funded positions filled by job classification and program area at the end of each reporting period, including positions filled since December 2022 with current employees and new hires
Purpose	A sufficient public health workforce within governmental public health agencies is needed to accelerate prevention, preparedness, and response to emerging health threats and improve public health outcomes. Increased hiring and retention of public health staff to meet local needs is an intended outcome of this grant. Types of hiring activities recipients may implement include, among others, expanding recruitment efforts, creating new positions, improving hiring incentives, and creating new hiring mechanisms (with Component B partners' assistance). The intent of this measure is to understand the number of positions supported by funds from this grant within health departments across all three strategies (A1, A2, and A3). This includes positions supported within health departments that have received direct funding, and it also includes positions supported within local health departments (LHDs) that did not receive direct funding from this grant (i.e., LHDs that were distributed funds from this grant from state health department recipients). However, this excludes positions that received incentives or bonuses paid for with PHIG funding. Recipients will report on the number of positions filled by job classification and program area, so CDC can better understand the gaps these positions are supporting (e.g., program-specific vs. cross-cutting). • If recipients need assistance with hiring, PHIG national partner TA providers may work with them to understand key barriers to recruitment or hiring and suggest or provide alternate strategies. • If recipients meet their workforce targets for the grant, PHIG national partner TA providers may work with them to identify lessons learned and disseminate successful strategies for recruiting and hiring staff.
Terms and Definitions	***Position filled****:* The terms of employment have been agreed upon and no one else can occupy that position.

	Total positions filled by job classification and program area: Total number of positions under this grant filled since the beginning of the grant. ***Positions filled with current employees*** by job classification and program area: Number of positions under this grant filled with staff already employed (including full-time, part-time, contractual, and seasonal) at the agency. This should include any internal transfers supported through this grant. ***Positions filled with new hires*** by job classification and program area: Number of positions under this grant filled with new hires. • See Appendix A: Job Classification Categories and Program Areas at the end of this document for a description of the categories and program areas. CDC acknowledges the categories may not be a 1:1 match for all recipients. Please do your best to select the single best category for each position. Use the "Other" category, if needed. ***Year 5 target:*** This is the target value that recipients aim to achieve for this measure by the end of the project period (11/30/2027).
Additional Guidance	Guidance on calculating positions filled: • The Hiring performance measure should reflect the current status at the end of each reporting period (i.e., total number of PHIG-funded positions filled by job classification and program area at the end of each reporting period). • Count all positions filled (full-time, part-time, contractual, and seasonal) **supported by this grant funding during the reporting period**. This should include positions supported with A1, A2, and A3 funding. Do not count all the positions filled within the agency, only those supported by grant funding. o *For state recipients:* include positions filled within LHDs, to whom your agency distributed grant funding (only LHDs who did not receive direct funding from this grant). • Count of positions reported by job classification should equal the count of positions reported by program area (e.g., if 20 total positions are reported for job classification, then 20 total positions should be reported for program area). • If you do not have any positions filled for a given job classification or program area, report "0" for the specific item. **Do not leave a field blank that should be 0.**

	• Count of positions does not include count of turnover (i.e., if a position is supported by grant funds and that staff person leaves, and someone new is hired, this counts as one position). • Include positions fully and/or partially funded (e.g., contractor, consultant, fellow, intern, FTE, etc.). There is no need to estimate full-time equivalent (FTE) percentages. • Include staff transferred from one program/NOFO to this one, i.e., count staff that will be retained by grant once other funding runs out (e.g., ELC, COVID-19 funding). • Do not include any in-kind staff working on this grant. • Do not count staff that **only** received an incentive or retention bonus funded through the grant, but are not funded in positions wholly or partially supported by PHIG. • Do not double count staff if they are working in more than one job classification category or program area. If positions have crossover categories or operate within several of the job classification categories or program areas, select the single best category, i.e., the category the position works on most (>50%) of the time. If it is not possible to categorize a position into a single job classification or program area (for example, if the position includes several program areas, all below 50%), classify the position as "Other."
Data Elements to be Reported	Recipients will enter the following information: 1. Total number of positions filled by job classification and program area (*Number*) a. Recipient agency b. LHDs funded by state recipient (*state recipients only)* c. Year 5 target* *(previously reported to CDC; pre-populated)* i. This value should include targets for LHDs funded by state recipients. ii. The pre-populated value indicates what you have reported to CDC previously. Please revisit these targets and ensure they are still accurate. Update as needed. 2. Positions filled with current employees by job classification and program area (*Number*) a. Recipient agency b. LHDs funded by state recipient (*state recipients only)* 3. Positions filled with new hires by job classification and program area (*Number*) a. Recipient agency b. LHDs funded by state recipient (*state recipients only)* 4. Provide additional comments, including description of "Other" Job Classifications not categorized above. (*Open-ended, Optional)* 5. Provide additional comments, including description of "Other" Program Areas not categorized above. *(Open-ended, Optional)*

	*Recipients previously reported the Year 5 target to CDC. These targets will be pre-populated in PHIVE and used to calculate the percent of positions filled based on intended hiring targets for Year 5.
Example Scenario	At of the end of the reporting period, the recipient has filled 6 positions with PHI grant funds; 3 of these positions were filled with new hires and 3 were filled with current employees. The new hires are a Chronic Disease Program Manager, Contracts Specialist, and Community Health Worker (Communicable Disease). The current employees are an Environmental Epidemiologist, Communications Specialist, and Health Educator (working on COVID-19 and Influenza 60% and Maternal and Child Heath 40%). The recipient is a state health department, and LHDs funded through the grant have not yet filled any positions, as of this reporting period. The recipient would report (see Appendix B: Measure A1.1: Hiring – Example Scenario for sample data): 1. Total number of positions filled by job classification and program area (See Appendix B) a. Recipient agency b. LHDs funded by state recipient (*state recipients only)* 2. Positions filled with current employees by job classification and program area (See Appendix B) a. Recipient agency b. LHDs funded by state recipient (*state recipients only)* 3. Positions filled with new hires by job classification and program area (See Appendix B) a. Recipient agency b. LHDs funded by state recipient (*state recipients only)* 4. Provide additional comments, including description of "Other" Job Classifications not categorized above: None 5. Provide additional comments, including description of "Other" Program Areas not categorized above: Health Educator covers two areas, but was only counted in Communicable Disease Control program area because majority of time will be in that role. Additionally, the Communications Specialist was only counted in Communications.
Unit of Measurement	Number of positions
Reporting	6 months

Frequency	
Considerations	• CDC understands that focusing this measure on PHIG-funded positions will not reflect other work with which recipients are engaged to expand and retain their public health workforce. • State recipients that distributed grant funding to LHDs that did not receive direct funding from this grant should also include counts of staff hired by those LHDs supported by funds from this grant and include such staff in their Year 5 targets. • Data from this measure may be compared to recipient-reported data on the total size of overall agency workforce (see Measure A1.2: Retention, data element "A1: Number of staff, including permanent and temporary/contract staff, on last day of reporting period") to assess the total size of the recipient workforce and changes in workforce size over time.

Measure A1.2. Retention: Overall agency staff retention rate

Topic	Retention
Measure	Overall agency staff retention rate
Definition	Retention rate, including permanent and temporary/contract staff • A1 = Number of staff, including permanent and temporary/contract staff, on last day of reporting period • B1 = Number of new hires, including permanent and temporary/contract staff, during reporting period • C1 = Number of staff, including permanent and temporary/contract staff, on Day 1 of reporting period Retention rate for permanent staff only • A2 = Number of permanent staff on last day of reporting period *(Number)* • B2 = Number of new hires (permanent staff only) during reporting period (*Number)* • C2 = Number of permanent staff on Day 1 of reporting period *(Number)*
Purpose	A sufficient public health workforce within governmental public health agencies is needed to accelerate prevention, preparedness, and response to emerging health threats and improve public health outcomes. Data suggests that strategies to increase retention of the public health workforce must be prioritized, given current trends in actual separations of workforce from the state, local, territorial, and freely associated state governmental public health agencies. Public health agencies have reported challenges with retaining skilled workers, particularly among different sub-groups, such as younger staff.[4,5] Increased hiring and retention of public health staff to meet local needs is an intended outcome of this grant. Types of retention activities recipients may implement include, among others, strengthening retention incentives, rewarding creativity and innovation, creating promotional opportunities, improving employee satisfaction and engagement, and transitioning staff from one program NOFO to another one. The intent of this measure is to assess the stability of the public health workforce within

[4] Sellers, K., Leider, J. P., Lamprecht, L., Liss-Levinson, R., & Castrucci, B. C. (2020). Using Public Health Workforce Surveillance Data to Prioritize Retention Efforts for Younger Staff. American journal of preventive medicine, 59(4), 562–569. https://doi.org/10.1016/j.amepre.2020.03.017

[5] Leider, Jonathon P., Brian C. Castrucci, Moriah Robins, Rachel Hare Bork, Michael R. Fraser, Elena Savoia, Rachael Piltch-Loeb, and Howard K. Koh. "The Exodus Of State And Local Public Health Employees: Separations Started Before And Continued Throughout COVID-19." Health Affairs 42, no. 3 (March 2023): 338–48. https://doi.org/10.1377/hlthaff.2022.01251.

	recipient agencies. Following this intent, recipients should include only staff employed within the recipient agency; (if applicable) exclude staff from a larger governmental unit or "super agency." For example, if you operate within a broader Department of Health and Human Services, only include the Division of Public Health in your calculations. This information will help monitor recipients' abilities to maintain, make progress, and/or overcome challenges in retaining their public health workforce and maintaining a functional workforce system. • If recipients need assistance with maintaining and/or improving their staff retention rate, Component B Partner TA providers may work with recipients to understand why staff are leaving and determine approaches to improve retention. • If recipients can maintain and/or improve their staff retention rate, Component B partner TA providers may work with recipients to identify lessons learned and disseminate successful retention strategies.
Terms and Definitions	***Permanent staff:*** Permanent staff are part-time and full-time governmental employees. Permanent staff are regular employees, typically eligible for benefits, and do not have a defined duration of employment. ***Temporary/contract staff:*** Temporary/contract staff have a defined duration of employment. Temporary/contract staff are not typically eligible for benefits through the government agency. Includes limited-term employees (LTEs). ***A1: Number of staff, including permanent and temporary/contract staff,*** on last day of reporting period: Count of total number of staff at the recipient agency, including permanent and temporary/contract staff, on the last day of the reporting period (e.g., May 31, 2024). ***A2: Number of permanent staff*** on last day of reporting period: Count of permanent staff at the recipient agency on the last day of the reporting period (e.g., May 31, 2024). ***B1: Number of new hires, including permanent and temporary/contract staff,*** during reporting period: Count of staff newly hired within the recipient agency, including permanent and temporary/contract staff, during the reporting period (e.g., June 1, 2023, to May 31, 2024). • Staff whose first day of work falls within the reporting period (do not count from when the offer is extended or accepted). • Include staff that were new hires whether they were retained or exited during the reporting period.

	B2: Number of new hires (permanent staff only) during reporting period: Count of permanent staff newly hired within the recipient agency during the reporting period (e.g., June 1, 2023, to May 31, 2024). • Staff whose first day of work falls within the reporting period (do not count from when the offer is extended or accepted). • Include staff that transitioned from temporary/contract positions to permanent positions during the reporting period. • Include staff that were new hires whether they were retained or exited during the reporting period. ***C1: Number of staff, including permanent and temporary/contract staff,*** on Day 1 of reporting period: Count of staff employed at the recipient agency, including permanent and temporary/contract staff, on Day 1 of the reporting period (e.g., June 1, 2023). ***C2: Number of permanent staff*** on Day 1 of reporting period: Count of permanent staff employed at the recipient agency on Day 1 of the reporting period (e.g., June 1, 2023). ***Recipient agency:*** The state, local, territorial, or freely associated state health department or agency awarded funding through this grant. If the health department operates within a larger governmental unit or is part of a "super public health agency" or "umbrella agency," include only the division or department awarded funding. ***Year 5 target:*** This is the target value that recipients aim to achieve for this measure by the end of the project period (11/30/2027).
Additional Guidance	Guidance on types of staff to include: • Enter data for individual persons, not positions. • Include all staff at the recipient agency, not just those funded through this grant. There is no need to estimate full-time equivalent (FTEs) percentages. • **Include only staff employed within the recipient agency; (if applicable) exclude staff from a larger governmental unit or "super agency."** For example, if you operate within a broader Department of Health and Human Services, only include the Division of Public Health in your calculations. • Do not include any volunteers, interns, federal assignees, and Direct Assistance positions. • Do not include seasonal staff.

	• If you did not hire any new staff during the reporting period, report "0" for that item. **Do not leave a field blank that should be 0.**
Data Elements to be Reported	Recipients will enter the following information: A1. Number of staff, including permanent and temporary/contract staff, on last day of reporting period *(Number)* A2. Number of permanent staff on last day of reporting period *(Number)* B1. Number of new hires, including permanent and temporary/contract staff, during reporting period *(Number)* B2. Number of new hires (permanent staff only) during reporting period (*Number)* C1. Number of staff, including permanent and temporary/contract staff, on Day 1 of reporting period *(Number)* C2. Number of permanent staff on Day 1 of reporting period *(Number)* Year 5 target: This value should include target retention rates for both 1) permanent staff only and 2) permanent and temporary/contract staff. Recipients will enter data for A1, A2, B1, B2, C1, and C2 in PHIVE. The system will calculate two retention rates: one for staff including temporary staff and contractors (A1-B1)/C1) and one for permanent staff only (A2-B2)/C2.
Example Scenario	***Retention rate for staff, including permanent and temporary/contract staff****.* The reporting period is from June 1, 2023 to May 31, 2024. The recipient agency employs 100 staff (including staff in temporary/contract positions) on May 31, 2024 (A1). Between June 1, 2023, and May 31, 2024, 10 of those staff were hired, including temporary/contract staff (B1). There were 120 staff (including temporary/contract staff) employed by the agency on June 1 (C1). The retention rate is (A1-B1)/C1*100, or in this example, (100-10)/120: 0.75*100 = 75%. *Note: Recipient will not need to calculate the rate. Rates will be calculated automatically in PHIVE.* ***Retention rate for permanent staff****.* The reporting period is from June 1, 2023, to May 31, 2024. The recipient agency employs 80 permanent staff on May 31, 2023 (A2). Between June 1, 2023, and May 31, 2024, 5 of those staff were hired (B2). There were 90 permanent staff employed by the agency on June 1 (C2). The retention rate is (A2-B2)/C2*100, or in this example, (80-5)/90: 0.75*100 = 83.3%. *Note: Recipient will not need to calculate the rate. Rates will be calculated automatically in PHIVE.*
Unit of Measurement	Number of staff (rates will be calculated automatically in PHIVE)

Reporting Frequency	12 months
Considerations	• CDC understands other factors may influence the retention rate within a recipient agency. This includes contextual factors external to the agency (such as COVID-19), factors internal to the agency (such as organizational culture), or differences in activities described in recipient Work Plans related to use of this grant funding. For example, state recipients may pass along funding to LHDs to support retention of staff at the local level but not use grant funds to support retention within their agency. Recipients will be able to provide additional context that may inform the interpretation of the retention rate. • CDC understands that there may be a significant number of temporary/contract response workers hired during COVID that may leave agencies in the next year and a half. Thus, we are asking for data that both includes and excludes temporary/contract staff to better understand the impact of the drop in this funding and the role of this grant in supporting and sustaining these staff, if any. • CDC is not collecting information from recipients on staff retention by sub-group because the identification of sub-groups to monitor will be different based on each health department's priorities and the communities they serve. Suggested sub-groups for additional analysis and monitoring may include but are not limited to race/ethnicity, agency leadership and management vs. non-management, and age. • Data reported for "A1: Number of staff, including permanent and temporary/contract staff, on last day of reporting period" is assumed to represent the total size of overall recipient agency workforce and will be used by CDC to assess the total size of the recipient workforce and changes in workforce size over time.

Measure A2.1. Hiring Timeliness: Time-to-fill position

Topic	Hiring Timeliness
Measure	Time-to-fill position
Definition	Median number of calendar days from the date the job description was posted for hiring to date of first day of work (for all employees that started at the recipient agency during the reporting period).
Purpose	Improved organizational systems and processes, through strengthened workforce systems, processes, and/or policy improvements, is an intended outcome of this grant. Specifically, improving the timeliness for filling a position can improve public health agencies' ability to attract and retain higher quality candidates, improve productivity, and reduce costs. Recipients may be working to improve human resources (HR) processes by upgrading their HR systems (hardware and software); developing policies or tools to improve the management of human resources; and working on improving recruitment and retention strategies, among others. The intent of this measure is to monitor and understand the ability of recipients to maintain, make progress, and/or overcome challenges in filling job positions in a timely manner. • If recipients need assistance with improving time to fill positions, PHIG national partner TA providers may work with recipients to understand how to help improve processes and/or develop interim hiring strategies to fill positions more efficiently. • If recipients can fill positions efficiently, in a manner appropriate for their jurisdictions' needs, PHIG national partner TA providers can work with recipients to identify and disseminate successful hiring strategies and lessons learned.
Terms and Definitions	***Job description posted*:** Date job opening is posted. ***First day of work*:** Date of first day of work for employee. ***Median*:** The middle value in a set of data. ***Year 5 target:*** This is the target value that recipients aim to achieve for this measure by the end of the project period (11/30/2027).
Additional Guidance	Guidance on types of job positions to include: • Include job positions for all employees that started at the recipient agency. • Include all agency staff, not just those funded through this grant, employed by the

	agency. This includes permanent (full-time or part-time) and temporary/contract staff. • Include job positions for staff that accept an offer for an internal transfer from within the agency. • Do not include positions outsourced or contracted out to a vendor. • Do not include positions filled by LHDs indirectly funded by state recipients. <u>Guidance on job offers to include:</u> • Include all employees that started at the agency between the dates of the first and last day of the reporting period (e.g., June 1, 2023, to November 30, 2023). o Include only staff employed within the recipient agency; (if applicable) exclude staff from a larger governmental unit or "super agency." For example, if you operate within a broader Department of Health and Human Services, only include the Division of Public Health in your calculations. • The date the job description is posted can be prior to the start of the reporting period. • Only include instances where there is a clear start date for the job posting. If a job description was not posted or it is not possible to calculate the time-to-fill position, then this employee can be excluded. • If the position had multiple job postings (e.g., posted across different platforms or a position where the posting was removed and reposted), use the earliest date the job was posted as the start date for this measure. <u>Guidance on calculating the median and minimum number of calendar days:</u> • Use the number of **calendar** days, not working days to calculate days to fill position • Determine the number of calendar days (from date job description was posted to date of employee's first day of work) for all employees that started at the recipient agency during the reporting period from smallest to largest. All job offers accepted at any point of the reporting period should be included, regardless of whether the job description was posted prior to the reporting period. • The midpoint value is the median. For an even number of observations (i.e., employees that started at the agency) the median will be the average (i.e., mean) of the two middle values. • The minimum number of calendar days to fill position should be greater than 0 days

Data Elements to be Reported	Recipients will enter the following information: 1. Median number of calendar days to fill position *(Number)* 2. Minimum number of calendar days to fill position *(Number)* 3. Maximum number of calendar days to fill position *(Number)*[6] 4. Number of employees the data are based on *(Number)* 5. Year 5 target for median number of calendar days to fill position *(Number)*
Example Scenario	The agency hired 9 new employees this reporting period. The number of calendar days from the date the job description was posted to the start date for each employee was: 15, 30, 33, 40, 41, 45, 60, 65, 80 days. The time to fill position is 41 days. The recipient will report: 1. Median number of calendar days to fill position: 41 days 2. Minimum number of calendar days to fill position: 15 days 3. Maximum number of calendar days to fill position: 80 days 4. Number of employees the data are based on: 9 employees
Unit of Measurement	Number of days
Reporting Frequency	6 months
Considerations	• Timeliness of hiring can be affected in multiple phases of the hiring process (e.g., writing the job description, securing funding, HR staff posting the position opening, gaining leadership approval, sending an offer letter); however, CDC is asking for the first time point at which a position is posted for the ease of having a consistent start time for this measure. • Several factors may affect the time between a candidate accepting the offer and their first day of work (e.g., time needed for the candidate to transition from a previous job, office closure during the holidays). Recipients will have the opportunity to provide additional contextual information for job postings where there might have been extenuating circumstances. • CDC understands there may be a limited number of qualified potential applicants for some positions, that there is a high demand for some open positions in the general job market (e.g., nurses), and that the department of health may have limited purview over some hiring processes. Recipients will have the opportunity to provide additional contextual information.

[6] CDC acknowledges that recipients may have postings that are continuously open. Please include these postings in this data element if possible and feel free to include additional context around the reported number of days. CDC and partners are considering the context of continuously open postings when reviewing the range of days.

Measure A2.2. Procurement Timeliness: Procurement cycle time

Topic	Procurement Timeliness
Measure	Procurement cycle time
Definition	Median number of calendar days from date the required documentation/information is received by the unit within the health department responsible for procurement review and approval and the date contract is fully executed (i.e., all parties have signed the contract).
Purpose	Improved organizational systems and processes by addressing human resources, financial management, contract, and procurement services is an intended outcome of this grant. This measure focuses on the ability of health departments to have ready and timely access to available resources by examining the timeliness of their procurement process.[7] Many recipients are implementing improvements to their procurement services including, but not limited to, streamlining their procurement process; developing and/or updating their practices and policies; conducting trainings; hiring more procurement and financial staff; and upgrading their procurement systems. Procurement is a vital business function encompassing a range of activities for an organization to obtain goods, services, and works. The purpose of procurement is to obtain competitive prices while delivering the most value. Government procurement, or public procurement, is the formal process by which the government acquires the goods and services it needs by purchasing from businesses. Procurement of equipment, supplies, and services refers to the policies, procedures, and actions taken by the health department to obtain the necessary equipment, supplies, and services that may be needed to carry out both its regular agency functions and those functions that may be needed during times of emergencies, disasters, or outbreaks. This includes contracting for professional public health services. Timeliness in the approval and execution of procurement actions is a key element of administration. The intent of this measure is to understand the extent to which recipients have improved their overall procurement process by assessing the timeliness of an agency’s procurement cycle

[7] Procurement of equipment, supplies, and services refers to the policies, procedures, and actions taken by the health department to obtain the necessary equipment and supplies that may be needed to carry out both its regular agency functions and those functions that may be needed during times of emergencies, disasters, or outbreaks. This area includes contracting for public health services.

	time. Monitoring procurement cycle time can help indicate where there might be improvements or opportunities in the public health system's ability to spend money more efficiently. It is also an opportunity to show the need for continued funding and investments in public health infrastructure. • If recipients are interested in obtaining assistance with procurement processes, Component B Partner TA providers may conduct site visits, facilitate opportunities for peer-to-peer visits and/or peer-to-peer group learning collaboratives, and work with recipients to understand how to help improve processes. • If recipients can maintain and/or make improvements to this process in a manner that is meaningful to their jurisdictions' needs, Component B Partner TA providers may work with recipients to identify lessons learned and disseminate successful strategies for improving this process. We learned through our pilot project that many recipients are not currently tracking data related to procurement timeliness. This grant provides an opportunity for jurisdictions to take their first steps toward developing or improving their systematic data collection and reporting processes. We encourage recipients to collaborate across programmatic and administrative areas to improve systems and capacity to capture data. We do not expect perfection, and we encourage grantees to describe their processes—successes and challenges—using the open-ended fields during data submission.
Terms and Definitions	***Procurement start date*:** Date the required documentation/information is received by the unit within the health department responsible for procurement review and approval. ***Contract execution*:** The end date for the measure is the date all relevant parties sign the contract, and the contract is finalized. ***Median*:** The middle value in a set of data. ***Year 5 target:*** This is the target value that recipients aim to achieve for this measure by the end of the project period (11/30/2027).
Additional Guidance	Guidance on procurements to include: • Include procurements conducted utilizing federal funds, or as a result of a federal award. o For local health department recipients, include funds received through state health department that originated from federal grants or awards. • Include new procurements executed between the first and last date of the reporting

period. The start date may be prior to the start of the reporting period.
- Include only procurements executed within the recipient agency; (if applicable) exclude procurements executed within the larger governmental unit or "super agency." For example, if you operate within a broader Department of Health and Human Services, only include the Division of Public Health in your calculations.

<u>Guidance on procurements to exclude:</u>
- Do not include:
  - Procurements that were approved but ultimately cancelled
  - Verbal agreements or memoranda of understanding (MOUs)
  - Data sharing agreements/agreements to protect public health information
  - Information Technology (IT) procurements
  - Procurements under $10,000.
  - For state public health agencies only, in addition to the above, also exclude:
    - Procurements or bids handled by agencies external to the health department, from which the health department is able to execute a purchase order
    - Subawards/grants awarded to local health departments

<u>Guidance on including purchase orders</u>:
- Revisit your site's definition of procurement and include/exclude purchase orders appropriately.
- Including purchase orders in your calculation is optional. Answer the question "Does your jurisdiction include purchase orders in your calculation for this measure?" with "Yes" if your calculation includes purchase orders, or "No" if it does not.
- Purchase orders may or may not include equipment like electronic devices (e.g., laptops, tablets), software, hardware, and other tech solutions. If these are typically considered part of your procurement, please include them in your tracking. If they are not, do not include them.

<u>Guidance on calculating the median number of calendar days:</u>
- Determine the number of calendar days (from date of approval to move forward with the procurement to date the contract was executed), for each contract with vendors and

	external organizations, from smallest to largest. All contracts **executed during the reporting period** should be included, regardless of whether the process was initiated during or prior to the reporting period. • The midpoint value is the median. For an even number of observations (i.e., number of executed contracts) the median will be the average (i.e., mean) of the two middle values. **A sampling option will be available for this measure beginning in Reporting Period 3. If you are interested in implementing the sampling methodology, submit a TA request in PHIVE for more information.**
Data Elements to be Reported	Recipients will share the following information*: 1. Median number of calendar days from procurement start date to contract execution *(Number)* 2. Minimum number of calendar days from procurement start date to contract execution *(Number)* 3. Maximum number of calendar days from procurement start to contract execution *(Number)* 4. Number of procurements the data are based on *(Number)* *If using the sampling method, report the number of procurements included in your sample.* 5. Year 5 target for median number of calendar days from procurement start date to contract execution *(Number)* 6. Does your jurisdiction include purchase orders in your calculation for this measure? *(Yes/No)* 7. Please indicate whether you sampled a subset of procurements using the sampling method provided by CDC for this reporting period. a. Yes: Check the box b. No: Do not check the box 8. In the data limitations field, recipients may also provide more information on the types of procurements included or excluded for this measure (including use of a dollar threshold to exclude certain types of procurements); the start and end point used for reporting on this measure if they do not align with CDC's definition; and systems used to track this information or explanation of manual processes used to report on this measure (*Open-*

	ended) **An Excel template is included as an optional tool to help sites track and calculate Procurement Timeliness. This is not required, and recipients who use it do not need to submit a copy to CDC. Please submit a PHIVE TA Request to obtain this template.*
Example Scenario	The agency executed 4 contracts during this reporting period. The number of calendar days from the date of approval to move forward with procurement to the date of execution of the contract was: 88, 129, 150, and 230 days. The procurement cycle time is 139.5 days. Recipient will report: 1. Median number of calendar days from procurement start date to contract execution: 139.5 days 2. Minimum number of calendar days from procurement start date to contract execution: 88 days 3. Maximum number of calendar days from procurement start date to contract execution: 230 days 4. Number of procurements the data are based on: 4 procurements
Unit of Measurement	Number of days
Reporting Frequency	6 months
Considerations	The scope is limited to federal awards to help minimize burden on recipient reporting, to maximize understanding of barriers and challenges that impact spend down of federal funds, and to help advocate for additional investments to support federal grantees. Additionally, CDC understands there may be bottlenecks during various phases of approval to move forward with procurement and contract execution that are outside of the recipient agency's purview. CDC is interested in understanding the time between approval to move forward with procurement and execution, including those bottlenecks. CDC understands some of these bottlenecks may be due to the time other entities, outside of the recipient agency (i.e., other offices, bureaus, departments, etc.), spend on activities, such as review and approval. Recipients will have the opportunity to provide additional contextual information.

Measure A2.3. Accreditation Involvement and Readiness: Level of involvement with Public Health Accreditation Board (PHAB) accreditation

Topic	Accreditation Involvement and Readiness
Measure	Level of involvement with PHAB Accreditation
Definition	Accreditation status and involvement in the Public Health Accreditation Board (PHAB) accreditation program.
Purpose	Improved health department quality, accountability, and performance based on standards and measures is an intended outcome of this grant. By formally engaging in PHAB accreditation, health departments are assessed against Standards and Measures aligned with the Essential Public Health Services (EPHS) and the Foundational Public Health Services' (FPHS) eight foundational capabilities for a strong public health infrastructure. One way to measure progress towards implementation of foundational capabilities and delivery of EPHS is to assess the accreditation status of recipient agencies and level of involvement in the PHAB accreditation program. The intent of this measure is to track recipients' current involvement in the PHAB accreditation program. CDC will use this information to help understand how recipients are strengthening their foundational capabilities toward a stronger public health infrastructure. CDC will also use this information to monitor changes in accreditation status and involvement in the PHAB accreditation program over the project period of the grant.
Terms and Definitions	***Public Health Accreditation Board (PHAB):*** The independent accrediting body for state, local, and territorial and freely associated health agencies. ***Accreditation status:*** The accreditation status of the recipient agency in the PHAB accreditation program. • ***Accredited***: recipient agency is currently accredited by PHAB (received and maintained a status of initial accreditation from PHAB and has not yet received a reaccreditation decision). • ***Reaccredited***: recipient agency is currently reaccredited by PHAB (received a status of continued accreditation from PHAB and currently maintains its accreditation status). • ***Not accredited***: recipient agency is not currently accredited by PHAB. ***Year 5 target:*** This is the target value that recipients aim to achieve for this measure by the end of the project period (11/30/2027).
Data	Recipient agencies will answer the following question.

Elements to be Reported	Please select the statement that best reflects your agency's involvement with the Public Health Accreditation Board (PHAB) national accreditation program *(select one)* 1. Accredited: My agency has achieved initial accreditation and plans to, or is in the process of, applying for reaccreditation (this includes those working on an ACAR for reaccreditation) 2. Accredited: My agency has achieved initial accreditation but does not plan to apply for reaccreditation 3. Accredited: My agency has achieved initial accreditation but is undecided about intent to apply for reaccreditation 4. Reaccredited: My agency has achieved reaccreditation and plans to maintain our accreditation status in the future 5. Reaccredited: My agency has achieved reaccreditation but will not maintain our accreditation status in the future 6. Reaccredited: My agency has achieved reaccreditation and is undecided (or does not know) whether we will maintain our accreditation status in the future 7. Not accredited: My agency achieved accreditation but is no longer accredited (e.g., didn't apply for or receive reaccreditation or did not maintain accreditation status) 8. Not accredited: My agency is not planning or preparing to apply for accreditation 9. Not accredited: My agency intends to apply and is working to meet the standards (including working on required plans and processes or addressing other gaps) 10. Not accredited: My agency has registered for the PHAB Readiness and Training process 11. Not accredited: My agency is working towards accreditation using the Pathways Recognition Program 12. Not accredited: My agency has applied and is in the accreditation process (i.e., submitting documentation, awaiting site visit, completed site visit, working on an ACAR, or pending accreditation status decision) 13. Not accredited: My agency is undecided about intent to apply for accreditation Year 5 target: This value should include the statement that best reflects your agency's target involvement with the Public Health Accreditation Board (PHAB) national accreditation program (select one). Additional Guidance: • State recipients are not required to provide information on the accreditation status of LHDs in their state; however, recipients may provide this or other contextual information, if interested, in the open-ended question - Provide any additional context or information related to this measure.

	• Include only accreditation through PHAB.
Unit of Measurement	N/A
Reporting Frequency	12 months
Considerations	• CDC understands that recipient agencies have different levels of capacity to pursue accreditation. Participation in PHAB accreditation is highly encouraged.

Measure A3.1. Dedicated agency staff to lead and coordinate data modernization efforts

Topic	Data Modernization Leadership
Measure	Dedicated agency staff to lead and coordinate data modernization efforts
Definition	Presence of Agency Data Modernization Director (i.e., hired, onboarded).
Purpose	This measure will help to assess the ways in which recipients are building workforce capacity within the public health agency to support data modernization. Specifically, this measure will indicate the presence of dedicated agency staff to lead and coordinate data modernization efforts. Centralized leadership and cross-agency coordination are components of a strong foundation for data modernization activity planning and implementation.
Data Elements to be Reported	1. Does the jurisdiction have Data Modernization Initiative (DMI) lead in place? *(Yes/No)* a. Provide the Position Title (Please use this field to indicate whether this is a data modernization director or equivalent.) *(Open-ended)* b. Upload an organizational chart indicating the location of the DMI lead and supporting staff. *(Upload)* 2. Describe efforts to coordinate and collaborate across units, programs, and functions to assess, plan, and implement data modernization activities. *(Open-ended)*
Unit of Measurement	Position of DMI Director
Reporting Frequency	Quarterly via ELC HIS REDCap. A3.1 is the same as ELC Measure C2.1.
Considerations	• This measure applies to all A3 recipients. Data collection and submission should be coordinated with ELC representatives. • This measure is intended to assess whether the agency has a data modernization **director** in place. This will be assessed through data elements 1a (position title) and 1b (organizational chart).

Measure A3.2. Established workforce, data, and health information system capabilities, needs and opportunities

Topic	Data Modernization Assessment and Planning
Measure	Established workforce, data, and health information system capabilities, needs and opportunities
Definition	Agency's completion or update of 1) data modernization assessment, 2) data modernization plan, and 3) data modernization workforce development plan.
Purpose	This measure will indicate the extent to which a recipient has undertaken assessment and reporting of the agency's current capacity, gaps, and opportunities to modernize the public health data infrastructure and workforce. Assessment and planning are critical for prioritizing data modernization activities.
Terms and Definitions	***Completed:*** A data modernization is considered "completed" if it has been developed, reviewed, or updated by the agency in the past two years. If an assessment was completed prior to this time and has not been updated or reviewed, please select "No" for Question 1 and answer the follow-up question.
Data Elements to be Reported	1. Has a data modernization assessment been completed? *(Single-select)* a. Yes, completed the CDC Public Health Data Modernization Assessment b. Yes, completed an approved equivalent tool c. No i. If no, have you previously completed a Data Modernization Assessment? *(Yes/No/N/A)* d. Upload DMI Assessment supporting documents including key findings and opportunities (optional). *(Upload)* 2. Was a data modernization plan developed based on the results of the assessment? *(Single-select)* a. Yes b. No c. Planning d. Submit the final data modernization plan into REDCap. (Upload Data Modernization Plan supporting documents.) *(Upload)* 3. Was a workforce development plan developed based on the results of the assessment? *(Single-select)* a. Yes b. No

	c. Planning d. Submit the final workforce development plan into REDCap. Upload Workforce Development Plan supporting documents (optional). *(Upload)*
Unit of Measurement	Completion or update of 1) data modernization assessment, 2) data modernization plan, and 3) data modernization workforce development plan
Reporting Frequency	Quarterly via ELC HIS REDCap. A3.2 is the same as ELC Measure C2.2.
Considerations	• This measure applies to all A3 recipients. Data collection and submission should be coordinated with ELC representatives. • For jurisdictions that have recently completed a data modernization assessment (approximately within the past 2 years), previous assessments (e.g., as completed as part of ELC Project C2) should be reviewed and updated as needed.

Measure A3.3. Enhanced workforce capacities and capabilities to accelerate data and health information system modernization

Topic	Data Modernization Workforce Capabilities
Measure	Enhanced workforce capacities and capabilities to accelerate data and health information system modernization
Definition	Details of trainings attended by agency staff or hosted by the agency to address data modernization workforce capabilities. Data modernization competencies addressed by non-training workforce activities.
Purpose	This measure will help to assess the ways in which recipients are building workforce capacity within the public health agency to support data modernization. Specifically, this measure will indicate the non-recruitment workforce activities undertaken to build the competencies and skills of agency staff in data modernization.
Data Elements to be Reported	1. List the trainings attended or hosted in Tab 1 of the C2.3 and C2.4 spreadsheet (available in REDCap). For each training, please include the following elements. *(Upload)* a. Competency area b. Date of training c. Title of training or workshop d. Describe how the skills learned in this training or workshop applied to your work e. Intended audience and/or attendees f. Additional comments (Please use this field to indicate estimated change in proficiency level among attendees due to this training opportunity). 2. Competencies addressed through other workforce activities such as peer-to-peer learning, workforce enhancement through fellows, technical assistance, or shared consultative services. *(Multi-select)* a. Data Exchange Interoperability and Standards b. IT Platforms Systems and Software c. Data Governance d. Data Operations e. Data Security f. Data Policy and Ethics g. Research and Evaluation Design h. Statistical, Geospatial, and Qualitative Analysis i. Programming and Scripting

	j. Exploratory Analysis k. Data Visualization l. Data Synthesis and Dissemination m. Predictive Analytics n. Data Collection and Storage o. Data Quality Management
Unit of Measurement	Trainings attended or hosted; competencies addressed
Reporting Frequency	Quarterly via ELC HIS REDCap. A3.3 is the same as ELC Measure C2.3.
Considerations	This measure applies to all A3 recipients. Data collection and submission should be coordinated with ELC representatives.

Measure A3.4. Demonstrated use of shared services to enhance existing systems or data exchange

Topic	Use of Shared Services
Measure	Demonstrated use of shared services to enhance existing systems or data exchange
Definition	The shared services utilized by the recipient agency for data exchange or information system functionality.
Purpose	Leveraging shared services can optimize efficiency and accelerate data modernization. This measure will assess the extent to which recipients have enhanced their capabilities and capacity for data science and health information systems using shared services.
Data Elements to be Reported	1. Has your jurisdiction utilized shared services to support data exchange or information system functionality? *(Yes/No)* 2. Completed C2.3 and C2.4 Measures spreadsheet (available in REDCap). For each shared service, please include the following elements. *(Upload)* a. Specific Shared Service b. Status c. Year Implemented d. Host of Shared Service e. Program Areas Using Shared Service (internal or external) f. How Shared Service is Used g. If you've implemented a new service, or expanded an existing service what was the problem you were trying to solve? h. What were the impacts observed from implementing the new or expanded shared service? 3. Are there any successes you have experienced while identifying and/or using shared services? *(Open-ended)* 4. What challenges or barriers have you encountered while identifying and/or using shared services? *(Open-ended)* 5. What technical assistance needs do you have to help identify and/or use shared services? *(Open-ended)*
Unit of Measurement	Shared services utilized for data exchange or information system functionality
Reporting Frequency	Quarterly via ELC HIS REDCap. A3.4 is the same as ELC Measure C2.4.

Considerations	This measure applies to all A3 recipients. Data collection and submission should be coordinated with ELC representatives.

Measure A3.5. Percent of lab report volume received through electronic laboratory reporting (ELR)

Topic	Electronic Laboratory Reporting (ELR) Volume
Measure	Percent of lab report volume received through ELR
Definition	Of all lab reports received, the percent received through ELR.
Purpose	This measure will help the program understand the extent to which the states are making progress with increasing ELR volume in their jurisdictions. Monitoring their progress closely will help the program identify challenges and barriers with program implementation and/or the functionality of the system. The program will provide technical assistance and programmatic interventions based on the information gathered from this measure.
Data Elements to be Reported	1. Percent of laboratory report volume received through ELR (self-report) a. Numerator: Number of lab reports received through ELR *(Number)* b. Denominator: Number of lab reports received (all formats) *(Number)* 2. Please explain any changes in ELR volume *(Open-ended)*
Unit of Measurement	Number of received lab reports
Reporting Frequency	Annually via ELC HIS REDCap. A3.5 is the same as ELC Measure C1.1.
Considerations	• This measure applies to all A3 recipients. Data collection and submission should be coordinated with ELC representatives. • Recommended Data Source: Surveillance system, ELR processing messaging environment, ELR repository, paper-based records • Percent of laboratory report volume received through ELR for the calendar year. • ELR formats include 2.3.1/z ELR, 2.5.1 ELR, Other ELR format, or Web Entry.

Measure A3.6. Number of hospitals and public health labs with established electronic test ordering and result (ETOR) reporting using HL7 messages or a web-portal

Topic	Electronic Test Order and Result (ETOR) Capacity
Measure	Number of hospitals and public health labs with established electronic test ordering and result (ETOR) reporting using HL7 messages or a web-portal
Definition	Number of hospitals with established ETOR using HL7 or a web-portal. Number of public health labs with established ETOR using HL7 or a web portal.
Purpose	The capacity for requesting, sending, and receiving electronic test orders and results (ETOR) enables public health laboratories (PHLs) to do their work more efficiently as data is reported faster. This measure will help the program understand the extent to which the jurisdictions have the capacity to request, send, or receive ETOR feeds for various conditions and pathogens using HL7 messages or a web-interface. This information will inform programmatic strategies and technical assistance efforts as the program works to improve PHL's capacity for data exchange.
Data Elements to be Reported	1. Number of hospitals with established electronic test ordering and reporting (ETOR) using HL7 *(Number)* 2. Number of public health labs with established electronic test ordering and reporting (ETOR) using HL7 *(Number)* 3. Number of hospitals with established electronic test ordering and reporting (ETOR) using a web-portal *(Number)* 4. Number of public health labs with established electronic test ordering and reporting (ETOR) using a web-portal *(Number)*
Unit of Measurement	Number of hospitals; number of public health labs
Reporting Frequency	Annually via ELC HIS REDCap. A3.6 is the same as ELC Measure C1.2.
Considerations	• This measure applies to all A3 recipients. Data collection and submission should be coordinated with ELC representatives. • Recommended Data Source: Data should be obtained from the public health laboratories and hospitals

Measure A3.7. Proportion of test orders and results processed through ETOR at the public health laboratory (PHL)

Topic	ETOR Volume
Measure	Proportion of test orders and results processed through Electronic Test Orders and Result Reporting (ETOR) at the PHL
Definition	Of all test orders received by the PHL, the proportion received through ETOR. Of all test results sent by the PHL, proportion sent through ETOR.
Purpose	The percentage of test orders received and results sent through ETOR may provide an understanding of the ETOR capabilities of the laboratory. Volume growth over time is a metric of increased adoption of ETOR. Because ETOR for orders and results may occur independently, collecting the measures separately is needed.
Terms and Definitions	• This measure only applies to tests conducted at the public health laboratory. • ***Number of all test orders/results:*** This includes all test orders/results exchanged by the laboratory through all mechanisms (e.g., paper form, PDF Form, Email, through phone, mail, web portal, direct or indirect integration ETOR). • ***Number of test orders/results sent through ETOR:*** Includes all orders received and results sent by the laboratory through a web portal, direct or indirect integration ETOR. • ***Web Portal:*** A portal that provides test submitters with a secure, web-based system to manually submit test orders, upload files, track progress, and access results. • ***Direct ETOR solution:*** A solution that is characterized by a direct link between an electronic health record (EHR) and a laboratory information management system (LIMS). In this approach, the EHR and LIMS must be configured to communicate in a common format and vocabulary. • ***Indirect ETOR solution:*** A solution that links an EHR and a LIMS via a centralized middle solution (i.e. an intermediary) which allows each system to maintain its native format. The intermediary manages the translation between them and reduces point to point connections.
Data Elements to be Reported	1. Proportion of test orders processed through Electronic Test Orders and Results (ETOR) at the PHL a. Numerator: Number of test orders received by the PHL through ETOR *(Number)* b. Denominator: Number of all test orders received by the PHL *(Number)* 2. Proportion of test results processed through Electronic Test Orders and Results (ETOR) at

	the PHL a. Numerator: Number of test results sent through ETOR by the PHL *(Number)* b. Denominator: Number of all test results sent by the PHL *(Number)*
Unit of Measurement	Test orders received; test results sent
Reporting Frequency	Quarterly via ELC HIS REDCap. A3.7 is the same as ELC Measure E.15.
Considerations	• This measure only applies to the following recipients: All states, NYC, DC, Philadelphia, Houston, and Los Angeles County. • Data collection and submission should be coordinated with ELC representatives.

Measure A3.8. Systems/programs at the PHL with ETOR interfaces

Topic	ETOR Implementation
Measure	Systems/programs at the PHL with ETOR interfaces
Definition	The public health laboratory's systems and/or programs actively using ETOR with any healthcare provider.
Purpose	The number of different laboratory programs/systems connected electronically with healthcare providers indicates the amount of process automation within the laboratory and the complexity of the ETOR systems within the laboratory.
Terms and Definitions	• This measure only applies to systems/programs within the public health laboratory. Please list systems/programs if ETOR has been established with at least one healthcare provider. • Systems/programs: This could be based on how the public health laboratory is categorized administratively or based on how LIMS implementations are divided. For example, Infectious Disease Program, Microbiology Laboratory, Newborn Screening Laboratory, Pathology Laboratory. Each PHL could have an individual method of categorizing. • Healthcare providers: Hospitals, Hospital systems, Physicians' offices, or other entities receiving services from the public health laboratory. • Completed ETOR interface: At least one submitter is exchanging orders, results, or both through a web portal, direct or indirect ETOR with the respective program.
Data Elements to be Reported	1. List of systems and/or programs within your public health laboratory that have completed implementing or are currently using ETOR interfaces with any healthcare provider. *(Open-ended)*
Unit of Measurement	Public health laboratory systems and/or programs
Reporting Frequency	Quarterly via ELC HIS REDCap. A3.8 is the same as ELC Measure E.16.
Considerations	• This measure only applies to the following recipients: All states, NYC, DC, Philadelphia, Houston, and Los Angeles County. • Data collection and submission should be coordinated with ELC representatives.

Appendix A: Job Classification Categories and Program Areas

The information provided below is relevant to Measure A1.1: Hiring (Number of PHIG-funded positions filled by job classification and program area). Job classification and program area categories are derived from categories from the Foundational Public Health Services, and the NACCHO Profile and PH WINS survey instruments.

Job Classification Categories:

1. **Agency leadership and management**: Department/Bureau Director, Deputy Director, Public Health Agency Director, Program Director, Health Officer.
2. **Program manager**: Public Health Program Manager.
3. **Business, improvement, and financial operations staff**: Attorney or Legal Counsel, Business Support – Accountant/Fiscal, Business Support Services – Administrator, Business Support Services – Coordinator, Grants or Contracts Specialist, Human Resources Personnel, Other Business Support Services, Community Health Planner, Quality Improvement Worker, Training Developer/Manager, Workforce Development Staff. May include positions focused on accreditation and performance improvement.
4. **Office and administrative support staff**: Clerical Personnel -Administrative Assistant, Clerical Personnel - Secretary, Customer Service/Support Professional, Custodian, Other Facilities or Operations Worker, Implementation Specialist, Medical/Vital Records Staff.
5. **Information technology and data system staff**: Information Systems Manager/Information Technology Specialist, IT Support Staff, Public Health Informatics Specialist, Informatics staff, Web Developer/Computer Programmer.
6. **Public information, communications, and policy staff**: Public Information Specialist, Policy Analyst, Communications specialist, Web Content Writer/Content Developer.
7. **Laboratory workers**: Laboratory Technician, Laboratory Quality Control Worker, Laboratory Scientist/Medical Technologist, Laboratory Aide or Assistant.
8. **Epidemiologists, statisticians, data scientists, other data analysts**: Epidemiologist, Population Health Specialist, Statistician, Economist, Data or Research Analyst, Data Scientist, Program Evaluator.
9. **Behavioral health and social services staff**: Behavioral Health Professional, Disease Intervention Specialist/Contact Tracer, Peer Counselor, Health Navigator, Social Worker/Social Services Professional.
10. **Community health workers and health educators**: Health Educator, Community Health Worker.
11. **Public health physician, nurse and other clinicians or healthcare providers**: Nursing and Home Health Aide, Nutritionist or Dietitian, Other Oral Health Professional, Other Nurse -Clinical Services, Physician Assistant, Public Health Dentist, Public Health/Preventive Medicine Physician, Registered Nurse -Public Health or Community Health Nurse, Registered Nurse -Unspecified, Pharmacist, Licensed practical or vocational nurse, Nurse Practitioner Emergency Medical Technician/Advanced Emergency Medical,

Technician/Paramedic, Emergency Medical Services Worker, Other Health Professional/Clinical Support Staff, Physical/Occupational/Rehabilitation Therapist, Public Health Veterinarian.

12. **Preparedness staff**: Emergency Preparedness/Management Worker.
13. **Environmental health workers**: Environmental Health Worker, Environmental Health Technician, Environmental Health Physicist, Environmental Health Scientist, Environmental Engineer.
14. **Animal control and compliance/inspection staff**: Licensure/Regulation/Enforcement Worker, Sanitarian or Inspector, Animal Control Worker, Disability claims/benefits examiner or adjudicator, Medical Examiner.
15. **Other**: Student, Professional or Scientific, Interns, Fellows, Other (not categorized)

If positions have crossover categories or operate within several of the job classification categories, select the category that this position will work on most (>50%) of the time. **Do not double-count staff if they are working in more than one category.**

Job Program Areas (Aligned with the Foundational Public Health Services)

1. **Access to and Linkage with Clinical Care:** Clinical Services (excluding TB, STD, family planning), Emergency Medical Services, Immunizations - clinical, Immunizations - non-clinical, Mental Health, Oral Health/Clinical Dental Services, School Health, Substance Abuse, including tobacco control programs
2. **Accountability and Performance Management:** Accreditation coordinators, QI staff, performance management leads
3. **Assessment and Surveillance:** Community Health Assessment/Planning, Disability services, including disability determinations, Enforcement/Inspection/Licensing/Certification of Facilities, Epidemiology Surveillance, Informatics, Medical Examiner, Public Health Genetics, Public Health Laboratory, Vital Records
4. **Chronic Disease and Injury Prevention:** Non-Communicable Disease/Chronic Disease, Health Promotion/Wellness, Injury/Violence Prevention
5. **Communicable Disease Control:** COVID-19 Response, Communicable Disease - HIV, Communicable Disease - Influenza, Communicable Disease - STD, Communicable Disease - Tuberculosis, Communicable Disease - Viral Hepatitis, Other Communicable Disease
6. **Communications**
7. **Community Partnership Development:** Community Health Assessment/Planning
8. **Emergency Preparedness and Response:** All Hazards
9. **Environmental Public Health:** Environmental Health, Animal Control
10. **Maternal, Child and Family Health:** Children and Youth with Special Health Care Needs, Maternal and Child Health - Family Planning, Maternal and Child Health - WIC

11. **Organizational Competencies:** Leadership & Governance; Information Technology Services; Workforce Development & Human Resources; Financial Management, Contract, & Procurement Services, including Facilities and Operations; Legal Services & Analysis
12. **Policy Development and Support**
13. **Other:** Opportunity for optimal health to be achieved by everyone, Other (not categorized)

If positions have crossover categories or operate within several of the program areas, select the category that this position will work on most (>50%) of the time. **Do not double-count staff if they are working in more than one category.**

Appendix B: Measure A1.1: Hiring – Example Scenario

At of the end of this reporting period, the recipient has filled 6 positions with PHIG funds; 3 of these positions were filled with new hires and 3 were filled with current employees. The new hires are a Chronic Disease Program Manager, Contracts Specialist, and Community Health Worker (Communicable Disease). The current employees are an Environmental Epidemiologist, Communications Specialist, and Health Educator (working on COVID-19 and Influenza 60% and Maternal and Child Heath 40%). The recipient is a state health department, but LHDs funded through the grant have not yet filled any positions, as of this reporting period.

The tables below provide examples of the data a recipient would report for this measure. These tables are not how data will be entered in PHIVE but could serve as an approach for tracking this information by recipients.

Job Classification Categories – Example Scenario

	1. Total number of PHIG-funded positions filled (as of 5/31/2024)		2. Number of positions filled with current employees		3. Number of positions filled with new hires	
	Recipient agency	LHDs funded by state recipient	Recipient agency	LHDs funded by state recipient	Recipient agency	LHDs funded by state recipient
1. Agency leadership and management	0	0	0	0	0	0
2. Program manager	1	0	0	0	1	0
3. Business, improvement, and financial operations staff	1	0	0	0	1	0
4. Office and administrative support staff	0	0	0	0	0	0
5. Information technology and data system staff	0	0	0	0	0	0
6. Public information and public policy staff	1	0	1	0	0	0
7. Laboratory workers	0	0	0	0	0	0
8. Epidemiologists, statisticians, data scientists,	0	0	0	0	0	0

and other data analysts						
9. Behavioral health and social services staff	0	0	0	0	0	0
10. Community health workers and health educators	2	0	1	0	1	0
11. Public health physician, nurse, and other health care providers	0	0	0	0	0	0
12. Preparedness staff	0	0	0	0	0	0
13. Environmental health workers	1	0	1	0	0	0
14. Animal control and compliance/inspection staff	0	0	0	0	0	0
15. Other	0	0	0	0	0	0
Total	6	0	3	0	3	0

Job Program Areas

	1. Total number of PHIG-funded positions filled (as of 5/31/2024)		2. Number of positions filled with current employees		3. Number of positions filled with new hires	
	Recipient agency	LHDs funded by state recipient	Recipient agency	LHDs funded by state recipient	Recipient agency	LHDs funded by state recipient
1. Access to and Linkage with Clinical Care	0	0	0	0	0	0
2. Emergency Preparedness and Response	0	0	0	0	0	0
3. Accountability and Performance Management	0	0	0	0	0	0
4. Assessment and	0	0	0	0	0	0

Surveillance						
5. Chronic Disease and Injury Prevention	1	0	0	0	1	0
6. Communicable Disease Control	2	0	1	0	1	0
7. Communications	1	0	1	0	0	0
8. Community Partnership Development	0	0	0	0	0	0
9. Environmental Public Health	1	0	1	0	0	0
10. Maternal, Child, and Family Health	0	0	0	0	0	0
11. Organizational Competencies	1	0	0	0	1	0
12. Policy Development and Support	0	0	0	0	0	0
13. Other	0	0	0	0	0	0
Total	6	0	3	0	3	0

Appendix C: ELC HIS Reporting and PHIVE Acknowledgement Schedule

The performance measures for Strategy A3: Data Modernization are aligned with select measures for the Epidemiology and Laboratory Capacity (ELC) Project C.

- To reduce reporting burden, recipients will continue to submit data on these measures through the ELC Health Information Systems (HIS) REDCap forms on the quarterly ELC HIS reporting schedule in REDCap. All measure data should be reported in the REDCap project titled "ELC Health Information Systems Monitoring 2023-2024 (C1, C2)."
- A3 recipient agencies will be required to 1) confirm their review of submitted measures in REDCap and 2) acknowledge their coordination with their agency's ELC representatives to report on the A3 performance measures in REDCap. Beginning in Reporting Period 2, this acknowledgement should be completed in PHIVE every six (6) months along with the submission of performance measure data for Strategies A1 and A2.
- Please note that A3 performance measures and reporting guidance will be updated to align with ELC NOFO CK24-0002 after August 2024.

The table below details the ELC HIS reporting schedule and the corresponding dates for acknowledgement of coordination in PHIVE for Reporting Periods 2 and 3.

PHIVE Acknowledgement	ELC HIS Performance Measure Submission Deadline (REDCap)
February 1, 2024	**November 30, 2023** (Dates of work covered: August 1, 2023 - October 31, 2023)
	February 28, 2024 (Dates of work covered: November 1, 2023 - January 31, 2024)
August 1, 2024	**May 31, 2024** (Dates of work covered: February 1, 2024 - April 30, 2024)
	August 31, 2024 (Dates of work covered: May 1, 2024 - July 31, 2024)

Appendix D: A1/A2 Performance Measures Summary Table

Measure	Time Frame	PHIG only or agency-wide?	Type of Staff and/or Data Included and Excluded (if applicable)
A1.1 Number of PHIG-funded positions filled by current (i.e., internal to agency before PHIG) and new (i.e., external to agency at any point during PHIG) staff	Current status (i.e., position count) at end of reporting period	PHIG only (filled by job classification and program area)	**Include**: Full-time, part-time, contractual, seasonal, and internal transfer staff, LHD positions funded by state PHIG recipients **Do not include**: In-kind staff, those who only received an incentive/retention bonus but are not funded by PHIG
A1.2 Overall agency staff retention rate	Only specific reporting period (RP4: 6/1/2023-11/30/2024)	Agency-wide (if recipient is part of a super agency, only include data for the health department)	**Include**: Permanent only (full- or part-time) and all staff (including temporary/contract) **Do not include**: Volunteers, interns, federal assignees, Direct Assistance or seasonal staff, LHD positions funded by state PHIG recipients
A2.1 Time-to-fill position	Only specific reporting period (RP3: 6/1/2023-11/30/2024)	Agency-wide (if recipient is part of a super agency, only include data for the health department)	**Include**: Permanent (full- or part-time) and temporary/contract staff **Do not include**: LHD positions funded by state PHIG recipients
A2.2 Procurement cycle time	Only specific reporting period (RP3: 6/1/2023-11/30/2024)	Agency-wide (if recipient is part of a super agency, only include data for the health department)	**Include**: All procurements agency-wide, including purchase orders if normally included **Do not include**: Procurements related to IT, under $10,000, or from LHDs funded by state PHIG recipients (e.g., grants, subawards)
A2.3 Level of involvement	Current status at	Agency-wide	N/A

with PHAB accreditation	end of reporting period		