

PROJECT NARRATIVE

Summary of funding request: The requested supplemental funding is designed to accelerate our efforts in three key areas of the overall infrastructure project. *Accreditation Readiness:* Move MDPH toward accreditation readiness through an acceleration of our work in assessing accreditation readiness, updating our Community Health Assessment and formulating a State Health Improvement Plan (SHIP) to inform development of an Agency Strategic Plan. *Agency Performance Improvements:* increase efficiency of program operations and use of evidence-based policies and practices through an acceleration of our ongoing enhancement of the web-based Massachusetts Virtual Epidemiologic Network (MAVEN) disease surveillance and case management system, and the integration of blood lead level testing data into MAVEN. *Cross-jurisdictional partnerships and promotion of evidence-based practices:* Improve population health outcomes by increasing the number of proposed regional public health districts receiving planning grants by 6, and providing rapid-cycle implementation grants for up to 2 districts.

Background: The proposed performance improvement activities are designed to support the five strategic priorities of the Massachusetts Department of Public Health (MDPH). MDPH has worked hard in recent years to identify its overarching strategic priorities, allowing us to focus our efforts, identify policy opportunities and improve results. These priorities were developed collaboratively in 2007 and recently updated with input from hundreds of residents, stakeholders and community partners who attended regional meetings around the state. They reflect the issues that define public health in the 21st century, and are closely aligned with the goals and objectives of this Funding Opportunity. In its programs and policies, MDPH is committed to: (a) Ensuring the success of Health Care Reform.¹ (b) Eliminating racial and ethnic health disparities. (c) Promoting wellness and managing chronic disease. (d) Building public health capacity at the local and state levels. (e) Reducing youth violence.

In the wake of the state's landmark health care reform law, Massachusetts has the lowest rate of uninsured residents in the nation. It is a national innovator in such areas as tobacco control, HIV prevention, and strategies to address health equity. But the health of the state's 6.6 million residents is compromised by significant gaps in the public health infrastructure. These include fragmentation and lack of capacity among the state's 351 local health boards, the incomplete reach of key statewide surveillance and monitoring systems, the need for more easily accessible health data to inform policy and practice at both the state and local level, and the need for strengthened performance monitoring and quality improvement, particularly in areas such as foodborne disease, HIV, obesity and health equity, where potentially historic progress is within our grasp.

Objectives: We have three objectives for this supplemental funding, all closely tied to our original infrastructure proposal and designed to be accomplished within the project period:

Objective 1. Accreditation Readiness: Move MDPH toward accreditation readiness through an acceleration of our work in assessing accreditation readiness, updating our Community Health Assessment and formulating a State Health Improvement Plan (SHIP) to inform development of an Agency Strategic Plan, as defined by the Public Health Accreditation Board (PHAB).

Objective 2. Agency Performance Improvements: Increase efficiency of program operations and use of evidence-based policies and practices through an acceleration of our ongoing

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enhancement of the web-based Massachusetts Virtual Epidemiologic Network (MAVEN) disease surveillance and case management system and the integration of new food protection and blood lead level testing modules into MAVEN.

Objective 3. Cross-jurisdictional partnerships and promotion of evidence-based practices:

Transform the Massachusetts local public health infrastructure and improve population health outcomes by increasing the number of regional public health districts receiving planning grants by 6, and providing rapid-cycle implementation grants for up to two districts.

Activity Plan:

1. Desired outcome of each specific infrastructure investment; 2. Key methods and activities:

Objective 1. Accreditation readiness: With the assistance of a skilled contractor (Health Resources in Action), we will take concrete actions to move MDPH toward accreditation readiness. Intended outcome: accelerate readiness to apply for PHAB accreditation.

(a) Baseline assessment of accreditation readiness: Conduct a basic gap analysis to assess the extent to which MDPH meets a minimum accreditation threshold in each of the 11 specified domains. Deliverable: a report will summarize whether there is no, some, or adequate compliance in each domain, and where priority attention and resources should be devoted in order to meet accreditation standards.

(b) Community Health Assessment: Adapt and update the 2010 *Health of Massachusetts* to generate a shorter and more user-friendly document containing the quantitative information that will be most helpful to informing priorities, policies and programs that will shape the development of the SHIP. Data will include key health outcomes, individual and community health behaviors, health disparities, and information on the social determinants of health. Deliverable: a comprehensive and concise Community Health Assessment Report, incorporating both quantitative and qualitative data, to meet PHAB standards.

(c) State Health Improvement Plan: Conduct a qualitative assessment with 14 focus groups from different geographic regions of the state and 20 opinion leader phone interviews. Integrate stakeholder input with data from the Community Health Assessment. Conduct background research and identify health and systems performance improvement goals and objectives for each of the administrative and programmatic PHAB domains. Deliverable: the State Health Improvement Plan.

(d) Massachusetts Community Health Information Profile (MassCHIP): To support development of the Community Health Assessment and State Health Improvement Plan, MDPH will accelerate improvements to MassCHIP, a program of MDPH funded under the original National Public Health Improvement Initiative (NPHII) award which provides a wide range of data reports for users in hospitals, government agencies, universities, health centers, local boards of health and community groups. Deliverable: MassCHIP will integrate 2010 census data into the overall system, update community health indicators in the *Health of Massachusetts* report, and analyze and prepare data reports on perinatal health and other topics.

(e) Strategic Plan: Working with Commonwealth Medicine and utilizing the SHIP and data from an internal SWOT analysis conducted by the commissioner's office in early 2011, MDPH will begin developing an Agency Strategic Plan that formalizes goals and objectives to be achieved by 2015, including performance standards and implementation plans with specific action steps, time frames, persons responsible, and benchmarks for success.

Objective 2. Agency performance improvements: MAVEN is the state’s web-based disease surveillance and case monitoring system. The overall goal is to expand the system to nearly all Massachusetts cities and towns, improving the completeness, timeliness, and accuracy of infectious disease reporting and case management across a range of disease areas, including those managed by the MDPH Bureaus of Health Care Safety and Quality, Infectious Disease and Laboratory Science (State Laboratory). Intended outcome: Use results of strengthened health data analysis to improve efficiency and effectiveness of disease surveillance and response and to inform public health policy, processes, programs, and interventions.

(a) Accelerate enhancement of MAVEN user functions and expansion of utilization of system to 95% of communities, pursuant to current NPHII objectives.

(b) Food safety: Develop a new module to integrate food borne illness surveillance and rapid response capacity into the MAVEN system. Since 1997, a shared Access database has been used by the state laboratory and the MDPH bureaus of infectious disease and environmental health to record and track food-borne illnesses. The 14-year-old system lacks the ability to identify trends and cannot review timeframes to support timely response during a food-borne illness outbreak. Supplemental funding will modernize our response capacity, facilitating collaboration among MDPH bureaus and external partners to address this critical “winnable battle.”

(c) Children’s Lead Prevention Program: Integrate blood lead level testing data into MAVEN, enabling real time surveillance and public health system response, including pediatric and adult cases. This marks a major improvement in efficiency and integration of best practices. The current system for reporting pediatric blood lead test results is complex and antiquated, and must be replaced because of other IT infrastructure changes already underway. The new system will utilize HL7, the federal standard for data transmission, which is integrated into “meaningful use” objectives of HIT improvements under federal health care reform. This enhancement will also support integration of the lead program into an integrated Healthy Homes and Childhood Lead Poisoning Prevention program, consistent with CDC objectives under that initiative.

Objective 3. Cross-jurisdictional partnerships and promotion of evidence-based practices: Massachusetts has an extremely fragmented local public health system, with 351 separate cities and towns, each with its own Board of Health responsible for assuring access to a comprehensive set of services defined by state law and regulation. Massachusetts Boards of Health are authorized to develop, implement, and enforce health policies, oversee inspections to maintain minimum standards for sanitation in housing and food service, and assure that the basic health needs of their community are being met. With NPHII funding and leveraging resources from other funders, we are seeking to transform the state’s local public health infrastructure and improve population health outcomes by creating new public health districts, through which groups of communities will share staff and cooperate to provide core public health services for residents. MDPH has awarded public health district planning grants to 11 groups of municipalities, out of 18 that submitted proposals in February. Supplemental funding will enable us to: (a) support 6 more of the original applicants, and (b) provide up to 2 rapid cycle implementation grants to districts that are in advanced stages of planning due, for instance, to their participation in the Massachusetts Practice Based Research Network (funded by the Robert Wood Johnson Foundation). Supplemental funds will also allow us to provide legal, financial, evaluation, and other technical assistance to planning grantees and develop workforce qualification guidelines and a performance management protocol for districts already funded. Intended outcomes: The new districts will be created with the goal of ensuring that

municipalities are served by qualified public health professionals. New districts will help prepare member communities for voluntary national accreditation by conducting formal community health assessments using standards protocols. They will enable municipalities to address the mandated responsibilities of Massachusetts Boards of Health, particularly in infectious disease, food safety, and community sanitation. Each new district will also be required to implement tobacco control and/or obesity prevention campaigns, thereby building system capacity to implement evidence-based policies and environmental strategies.

3. Timeline:

Objective	Activity	Time frame
1. Accreditation readiness	<ul style="list-style-type: none"> - Assess accreditation readiness - Update Community Health Assessment - Complete MassCHIP census & data reports - Complete State Health Improvement Plan - Begin development of Strategic Plan 	<ul style="list-style-type: none"> By 6/30/11 By 7/17/11 By 8/15/11 By 9/23/11 By 9/29/11
2. Agency performance improvements	<ul style="list-style-type: none"> - Initial development of MAVEN food borne illness module MAVEN - Initial integration of blood lead level testing data with HL7 into MAVEN 	<ul style="list-style-type: none"> By 8/31/11 By 9/29/11
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Award 6 additional planning grants - Develop district workforce guidelines - Develop district performance mgt. protocol - Award 2 rapid cycle implementation grants 	<ul style="list-style-type: none"> By 6/15/11 By 7/15/11 By 8/31/11 By 9/29/11

4. Key partners and cross-jurisdictional relationships: The project will engage a wide range of partners at the state and local level, including health providers, local boards of health, statewide professional public health associations and residents.

Objective	Partners	Roles
1. Accreditation readiness	<ul style="list-style-type: none"> - Health Resources in Action - UMass Medical School/Commonwealth Medicine - Housing developments, worksites, residents, other key stakeholders 	<ul style="list-style-type: none"> - Contractor to lead implementation - Performance Improvement Management and Strategic Planning - Participants in focus groups and opinion leader interviews
2. Agency performance improvements	<ul style="list-style-type: none"> - Local Boards of Health - Public and private laboratories - Community health centers, hospitals, private medical practices 	<ul style="list-style-type: none"> - Receive training and TA to support their participation in MAVEN - Electronic lab reporting - Expanded reporting from electronic medical records
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Municipalities prioritized as having the greatest needs & capacity to change - Boston Univ. School of Public Health - Institute for Community Health - Mass. Assoc. of Health Boards (NALBOH affiliate) - Health Resources in Action - NACCHO, NEHA, & APHA affiliates and MA assoc. of public health nurses 	<ul style="list-style-type: none"> - Work together to plan and form public health districts - Workforce development - Evaluation - Legal and financial technical assistance - Community Health Assessment trng - Board of Health & other stakeholder engagement; policy development

5. **Staffing:** Funds received under this supplemental proposal will be used for contracted services, rather than additional MDPH staff. MDPH staff funded under the original NPHII award will maintain current responsibilities and support implementation of supplemental objectives in-kind.

6. **Project Management:** NPHII Principle Investigator, Geoff Wilkinson, will be responsible for project management, in coordination with the MDPH Performance Improvement Manager, Monica Valdes Lupi, and appropriate bureau and program directors.

Performance/Work Plan:

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(b) Food safety: Develop a new module to integrate food borne illness surveillance and rapid response capacity into the MAVEN system. Since 1997, a shared Access database has been used by the state laboratory and the MDPH bureaus of infectious disease and environmental health to record and track food-borne illnesses. The 14-year-old system lacks the ability to identify trends and cannot review timeframes to support timely response during a food-borne illness outbreak. Supplemental funding will modernize our response capacity, facilitating collaboration among MDPH bureaus and external partners to address this critical “winnable battle.”

(c) Children’s Lead Prevention Program: Integrate blood lead level testing data into MAVEN, enabling real time surveillance and public health system response, including pediatric and adult cases. This marks a major improvement in efficiency and integration of best practices. The current system for reporting pediatric blood lead test results is complex and antiquated, and must be replaced because of other IT infrastructure changes already underway. The new system will utilize HL7, the federal standard for data transmission, which is integrated into “meaningful use” objectives of HIT improvements under federal health care reform. This enhancement will also support integration of the lead program into an integrated Healthy Homes and Childhood Lead Poisoning Prevention program, consistent with CDC objectives under that initiative.

Objective 3. Cross-jurisdictional partnerships and promotion of evidence-based practices: Massachusetts has an extremely fragmented local public health system, with 351 separate cities and towns, each with its own Board of Health responsible for assuring access to a comprehensive set of services defined by state law and regulation. Massachusetts Boards of Health are authorized to develop, implement, and enforce health policies, oversee inspections to maintain minimum standards for sanitation in housing and food service, and assure that the basic health needs of their community are being met. With NPHII funding and leveraging resources from other funders, we are seeking to transform the state’s local public health infrastructure and improve population health outcomes by creating new public health districts, through which groups of communities will share staff and cooperate to provide core public health services for residents. MDPH has awarded public health district planning grants to 11 groups of municipalities, out of 18 that submitted proposals in February. Supplemental funding will enable us to: (a) support 6 more of the original applicants, and (b) provide up to 2 rapid cycle implementation grants to districts that are in advanced stages of planning due, for instance, to their participation in the Massachusetts Practice Based Research Network (funded by the Robert Wood Johnson Foundation). Supplemental funds will also allow us to provide legal, financial, evaluation, and other technical assistance to planning grantees and develop workforce qualification guidelines and a performance management protocol for districts already funded. Intended outcomes: The new districts will be created with the goal of ensuring that

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3. Timeline:

Objective	Activity	Time frame
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3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Award 6 additional planning grants - Develop district workforce guidelines - Develop district performance mgt. protocol - Award 2 rapid cycle implementation grants 	<ul style="list-style-type: none"> By 6/15/11 By 7/15/11 By 8/31/11 By 9/29/11

4. Key partners and cross-jurisdictional relationships: The project will engage a wide range of partners at the state and local level, including health providers, local boards of health, statewide professional public health associations and residents.

Objective	Partners	Roles
1. Accreditation readiness	<ul style="list-style-type: none"> - Health Resources in Action - UMass Medical School/Commonwealth Medicine - Housing developments, worksites, residents, other key stakeholders 	<ul style="list-style-type: none"> - Contractor to lead implementation - Performance Improvement Management and Strategic Planning - Participants in focus groups and opinion leader interviews
2. Agency performance improvements	<ul style="list-style-type: none"> - Local Boards of Health - Public and private laboratories - Community health centers, hospitals, private medical practices 	<ul style="list-style-type: none"> - Receive training and TA to support their participation in MAVEN - Electronic lab reporting - Expanded reporting from electronic medical records
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Municipalities prioritized as having the greatest needs & capacity to change - Boston Univ. School of Public Health - Institute for Community Health - Mass. Assoc. of Health Boards (NALBOH affiliate) - Health Resources in Action - NACCHO, NEHA, & APHA affiliates and MA assoc. of public health nurses 	<ul style="list-style-type: none"> - Work together to plan and form public health districts - Workforce development - Evaluation - Legal and financial technical assistance - Community Health Assessment trng - Board of Health & other stakeholder engagement; policy development

5. **Staffing:** Funds received under this supplemental proposal will be used for contracted services, rather than additional MDPH staff. MDPH staff funded under the original NPHII award will maintain current responsibilities and support implementation of supplemental objectives in-kind.

6. **Project Management:** NPHII Principle Investigator, Geoff Wilkinson, will be responsible for project management, in coordination with the MDPH Performance Improvement Manager, Monica Valdes Lupi, and appropriate bureau and program directors.

Performance/Work Plan:

Objective	Process Indicators	Outcome Indicators
1. Accreditation readiness	<ul style="list-style-type: none"> - Assess accreditation readiness - Update Community Health Assessment - Complete MassCHIP census & data reports - Complete State Health Improvement Plan - Begin development of Strategic Plan 	MDPH will be ready to apply for PHAB accreditation. <i>Data source:</i> documentation of accreditation application process
2. Agency performance improvements	<ul style="list-style-type: none"> - Accelerate implementation of system expansion - Initial development of MAVEN food borne illness module in MAVEN - Initial integration of blood lead level testing data with HL7 into MAVEN 	<ul style="list-style-type: none"> - Increased number of municipalities from original schedule. <i>Data Source:</i> MAVEN roster - Improved ability to track and respond to foodborne illness. <i>Data source:</i> program data from MDPH Food Protection Program - Improved ability to track blood level tests and refer children and families for treatment and environmental interventions. <i>Data source:</i> MDPH Childhood Lead Poisoning Prevention Program
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Award 6 additional planning grants - Develop district workforce guidelines - Develop district performance mgt. protocol - Award 2 rapid cycle implementation grants 	<ul style="list-style-type: none"> - 6 additional districts better able to complete community health assessments using nationally recognized protocols - 2 additional districts implement plans to promote evidence-based practices <p><i>Data source:</i> Evaluation being conducted by Institute for Community Health (described in original in NPHII grant)</p>

PROJECT NARRATIVE

Summary of funding request: The requested supplemental funding is designed to accelerate our efforts in three key areas of the overall infrastructure project. *Accreditation Readiness:* Move MDPH toward accreditation readiness through an acceleration of our work in assessing accreditation readiness, updating our Community Health Assessment and formulating a State Health Improvement Plan (SHIP) to inform development of an Agency Strategic Plan. *Agency Performance Improvements:* increase efficiency of program operations and use of evidence-based policies and practices through an acceleration of our ongoing enhancement of the web-based Massachusetts Virtual Epidemiologic Network (MAVEN) disease surveillance and case management system, and the integration of blood lead level testing data into MAVEN. *Cross-jurisdictional partnerships and promotion of evidence-based practices:* Improve population health outcomes by increasing the number of proposed regional public health districts receiving planning grants by 6, and providing rapid-cycle implementation grants for up to 2 districts.

Background: The proposed performance improvement activities are designed to support the five strategic priorities of the Massachusetts Department of Public Health (MDPH). MDPH has worked hard in recent years to identify its overarching strategic priorities, allowing us to focus our efforts, identify policy opportunities and improve results. These priorities were developed collaboratively in 2007 and recently updated with input from hundreds of residents, stakeholders and community partners who attended regional meetings around the state. They reflect the issues that define public health in the 21st century, and are closely aligned with the goals and objectives of this Funding Opportunity. In its programs and policies, MDPH is committed to: (a) Ensuring the success of Health Care Reform.¹ (b) Eliminating racial and ethnic health disparities. (c) Promoting wellness and managing chronic disease. (d) Building public health capacity at the local and state levels. (e) Reducing youth violence.

In the wake of the state's landmark health care reform law, Massachusetts has the lowest rate of uninsured residents in the nation. It is a national innovator in such areas as tobacco control, HIV prevention, and strategies to address health equity. But the health of the state's 6.6 million residents is compromised by significant gaps in the public health infrastructure. These include fragmentation and lack of capacity among the state's 351 local health boards, the incomplete reach of key statewide surveillance and monitoring systems, the need for more easily accessible health data to inform policy and practice at both the state and local level, and the need for strengthened performance monitoring and quality improvement, particularly in areas such as foodborne disease, HIV, obesity and health equity, where potentially historic progress is within our grasp.

Objectives: We have three objectives for this supplemental funding, all closely tied to our original infrastructure proposal and designed to be accomplished within the project period:

Objective 1. Accreditation Readiness: Move MDPH toward accreditation readiness through an acceleration of our work in assessing accreditation readiness, updating our Community Health Assessment and formulating a State Health Improvement Plan (SHIP) to inform development of an Agency Strategic Plan, as defined by the Public Health Accreditation Board (PHAB).

Objective 2. Agency Performance Improvements: Increase efficiency of program operations and use of evidence-based policies and practices through an acceleration of our ongoing

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enhancement of the web-based Massachusetts Virtual Epidemiologic Network (MAVEN) disease surveillance and case management system and the integration of new food protection and blood lead level testing modules into MAVEN.

Objective 3. Cross-jurisdictional partnerships and promotion of evidence-based practices:

Transform the Massachusetts local public health infrastructure and improve population health outcomes by increasing the number of regional public health districts receiving planning grants by 6, and providing rapid-cycle implementation grants for up to two districts.

Activity Plan:

1. Desired outcome of each specific infrastructure investment; 2. Key methods and activities:

Objective 1. Accreditation readiness: With the assistance of a skilled contractor (Health Resources in Action), we will take concrete actions to move MDPH toward accreditation readiness. Intended outcome: accelerate readiness to apply for PHAB accreditation.

(a) Baseline assessment of accreditation readiness: Conduct a basic gap analysis to assess the extent to which MDPH meets a minimum accreditation threshold in each of the 11 specified domains. Deliverable: a report will summarize whether there is no, some, or adequate compliance in each domain, and where priority attention and resources should be devoted in order to meet accreditation standards.

(b) Community Health Assessment: Adapt and update the 2010 *Health of Massachusetts* to generate a shorter and more user-friendly document containing the quantitative information that will be most helpful to informing priorities, policies and programs that will shape the development of the SHIP. Data will include key health outcomes, individual and community health behaviors, health disparities, and information on the social determinants of health. Deliverable: a comprehensive and concise Community Health Assessment Report, incorporating both quantitative and qualitative data, to meet PHAB standards.

(c) State Health Improvement Plan: Conduct a qualitative assessment with 14 focus groups from different geographic regions of the state and 20 opinion leader phone interviews. Integrate stakeholder input with data from the Community Health Assessment. Conduct background research and identify health and systems performance improvement goals and objectives for each of the administrative and programmatic PHAB domains. Deliverable: the State Health Improvement Plan.

(d) Massachusetts Community Health Information Profile (MassCHIP): To support development of the Community Health Assessment and State Health Improvement Plan, MDPH will accelerate improvements to MassCHIP, a program of MDPH funded under the original National Public Health Improvement Initiative (NPHII) award which provides a wide range of data reports for users in hospitals, government agencies, universities, health centers, local boards of health and community groups. Deliverable: MassCHIP will integrate 2010 census data into the overall system, update community health indicators in the *Health of Massachusetts* report, and analyze and prepare data reports on perinatal health and other topics.

(e) Strategic Plan: Working with Commonwealth Medicine and utilizing the SHIP and data from an internal SWOT analysis conducted by the commissioner's office in early 2011, MDPH will begin developing an Agency Strategic Plan that formalizes goals and objectives to be achieved by 2015, including performance standards and implementation plans with specific action steps, time frames, persons responsible, and benchmarks for success.

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5. **Staffing:** Funds received under this supplemental proposal will be used for contracted services, rather than additional MDPH staff. MDPH staff funded under the original NPHII award will maintain current responsibilities and support implementation of supplemental objectives in-kind.

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Performance/Work Plan:

Objective	Process Indicators	Outcome Indicators
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2. Agency performance improvements	<ul style="list-style-type: none"> - Accelerate implementation of system expansion - Initial development of MAVEN food borne illness module in MAVEN - Initial integration of blood lead level testing data with HL7 into MAVEN 	<ul style="list-style-type: none"> - Increased number of municipalities from original schedule. <i>Data Source:</i> MAVEN roster - Improved ability to track and respond to foodborne illness. <i>Data source:</i> program data from MDPH Food Protection Program - Improved ability to track blood level tests and refer children and families for treatment and environmental interventions. <i>Data source:</i> MDPH Childhood Lead Poisoning Prevention Program
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Award 6 additional planning grants - Develop district workforce guidelines - Develop district performance mgt. protocol - Award 2 rapid cycle implementation grants 	<ul style="list-style-type: none"> - 6 additional districts better able to complete community health assessments using nationally recognized protocols - 2 additional districts implement plans to promote evidence-based practices <p><i>Data source:</i> Evaluation being conducted by Institute for Community Health (described in original in NPHII grant)</p>

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Background: The proposed performance improvement activities are designed to support the five strategic priorities of the Massachusetts Department of Public Health (MDPH). MDPH has worked hard in recent years to identify its overarching strategic priorities, allowing us to focus our efforts, identify policy opportunities and improve results. These priorities were developed collaboratively in 2007 and recently updated with input from hundreds of residents, stakeholders and community partners who attended regional meetings around the state. They reflect the issues that define public health in the 21st century, and are closely aligned with the goals and objectives of this Funding Opportunity. In its programs and policies, MDPH is committed to: (a) Ensuring the success of Health Care Reform.¹ (b) Eliminating racial and ethnic health disparities. (c) Promoting wellness and managing chronic disease. (d) Building public health capacity at the local and state levels. (e) Reducing youth violence.

In the wake of the state's landmark health care reform law, Massachusetts has the lowest rate of uninsured residents in the nation. It is a national innovator in such areas as tobacco control, HIV prevention, and strategies to address health equity. But the health of the state's 6.6 million residents is compromised by significant gaps in the public health infrastructure. These include fragmentation and lack of capacity among the state's 351 local health boards, the incomplete reach of key statewide surveillance and monitoring systems, the need for more easily accessible health data to inform policy and practice at both the state and local level, and the need for strengthened performance monitoring and quality improvement, particularly in areas such as foodborne disease, HIV, obesity and health equity, where potentially historic progress is within our grasp.

Objectives: We have three objectives for this supplemental funding, all closely tied to our original infrastructure proposal and designed to be accomplished within the project period:

Objective 1. Accreditation Readiness: Move MDPH toward accreditation readiness through an acceleration of our work in assessing accreditation readiness, updating our Community Health Assessment and formulating a State Health Improvement Plan (SHIP) to inform development of an Agency Strategic Plan, as defined by the Public Health Accreditation Board (PHAB).

Objective 2. Agency Performance Improvements: Increase efficiency of program operations and use of evidence-based policies and practices through an acceleration of our ongoing

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enhancement of the web-based Massachusetts Virtual Epidemiologic Network (MAVEN) disease surveillance and case management system and the integration of new food protection and blood lead level testing modules into MAVEN.

Objective 3. Cross-jurisdictional partnerships and promotion of evidence-based practices:

Transform the Massachusetts local public health infrastructure and improve population health outcomes by increasing the number of regional public health districts receiving planning grants by 6, and providing rapid-cycle implementation grants for up to two districts.

Activity Plan:

1. Desired outcome of each specific infrastructure investment; 2. Key methods and activities:

Objective 1. Accreditation readiness: With the assistance of a skilled contractor (Health Resources in Action), we will take concrete actions to move MDPH toward accreditation readiness. Intended outcome: accelerate readiness to apply for PHAB accreditation.

(a) Baseline assessment of accreditation readiness: Conduct a basic gap analysis to assess the extent to which MDPH meets a minimum accreditation threshold in each of the 11 specified domains. Deliverable: a report will summarize whether there is no, some, or adequate compliance in each domain, and where priority attention and resources should be devoted in order to meet accreditation standards.

(b) Community Health Assessment: Adapt and update the 2010 *Health of Massachusetts* to generate a shorter and more user-friendly document containing the quantitative information that will be most helpful to informing priorities, policies and programs that will shape the development of the SHIP. Data will include key health outcomes, individual and community health behaviors, health disparities, and information on the social determinants of health. Deliverable: a comprehensive and concise Community Health Assessment Report, incorporating both quantitative and qualitative data, to meet PHAB standards.

(c) State Health Improvement Plan: Conduct a qualitative assessment with 14 focus groups from different geographic regions of the state and 20 opinion leader phone interviews. Integrate stakeholder input with data from the Community Health Assessment. Conduct background research and identify health and systems performance improvement goals and objectives for each of the administrative and programmatic PHAB domains. Deliverable: the State Health Improvement Plan.

(d) Massachusetts Community Health Information Profile (MassCHIP): To support development of the Community Health Assessment and State Health Improvement Plan, MDPH will accelerate improvements to MassCHIP, a program of MDPH funded under the original National Public Health Improvement Initiative (NPHII) award which provides a wide range of data reports for users in hospitals, government agencies, universities, health centers, local boards of health and community groups. Deliverable: MassCHIP will integrate 2010 census data into the overall system, update community health indicators in the *Health of Massachusetts* report, and analyze and prepare data reports on perinatal health and other topics.

(e) Strategic Plan: Working with Commonwealth Medicine and utilizing the SHIP and data from an internal SWOT analysis conducted by the commissioner's office in early 2011, MDPH will begin developing an Agency Strategic Plan that formalizes goals and objectives to be achieved by 2015, including performance standards and implementation plans with specific action steps, time frames, persons responsible, and benchmarks for success.

Objective 2. Agency performance improvements: MAVEN is the state’s web-based disease surveillance and case monitoring system. The overall goal is to expand the system to nearly all Massachusetts cities and towns, improving the completeness, timeliness, and accuracy of infectious disease reporting and case management across a range of disease areas, including those managed by the MDPH Bureaus of Health Care Safety and Quality, Infectious Disease and Laboratory Science (State Laboratory). Intended outcome: Use results of strengthened health data analysis to improve efficiency and effectiveness of disease surveillance and response and to inform public health policy, processes, programs, and interventions.

(a) Accelerate enhancement of MAVEN user functions and expansion of utilization of system to 95% of communities, pursuant to current NPHII objectives.

(b) Food safety: Develop a new module to integrate food borne illness surveillance and rapid response capacity into the MAVEN system. Since 1997, a shared Access database has been used by the state laboratory and the MDPH bureaus of infectious disease and environmental health to record and track food-borne illnesses. The 14-year-old system lacks the ability to identify trends and cannot review timeframes to support timely response during a food-borne illness outbreak. Supplemental funding will modernize our response capacity, facilitating collaboration among MDPH bureaus and external partners to address this critical “winnable battle.”

(c) Children’s Lead Prevention Program: Integrate blood lead level testing data into MAVEN, enabling real time surveillance and public health system response, including pediatric and adult cases. This marks a major improvement in efficiency and integration of best practices. The current system for reporting pediatric blood lead test results is complex and antiquated, and must be replaced because of other IT infrastructure changes already underway. The new system will utilize HL7, the federal standard for data transmission, which is integrated into “meaningful use” objectives of HIT improvements under federal health care reform. This enhancement will also support integration of the lead program into an integrated Healthy Homes and Childhood Lead Poisoning Prevention program, consistent with CDC objectives under that initiative.

Objective 3. Cross-jurisdictional partnerships and promotion of evidence-based practices: Massachusetts has an extremely fragmented local public health system, with 351 separate cities and towns, each with its own Board of Health responsible for assuring access to a comprehensive set of services defined by state law and regulation. Massachusetts Boards of Health are authorized to develop, implement, and enforce health policies, oversee inspections to maintain minimum standards for sanitation in housing and food service, and assure that the basic health needs of their community are being met. With NPHII funding and leveraging resources from other funders, we are seeking to transform the state’s local public health infrastructure and improve population health outcomes by creating new public health districts, through which groups of communities will share staff and cooperate to provide core public health services for residents. MDPH has awarded public health district planning grants to 11 groups of municipalities, out of 18 that submitted proposals in February. Supplemental funding will enable us to: (a) support 6 more of the original applicants, and (b) provide up to 2 rapid cycle implementation grants to districts that are in advanced stages of planning due, for instance, to their participation in the Massachusetts Practice Based Research Network (funded by the Robert Wood Johnson Foundation). Supplemental funds will also allow us to provide legal, financial, evaluation, and other technical assistance to planning grantees and develop workforce qualification guidelines and a performance management protocol for districts already funded. Intended outcomes: The new districts will be created with the goal of ensuring that

municipalities are served by qualified public health professionals. New districts will help prepare member communities for voluntary national accreditation by conducting formal community health assessments using standards protocols. They will enable municipalities to address the mandated responsibilities of Massachusetts Boards of Health, particularly in infectious disease, food safety, and community sanitation. Each new district will also be required to implement tobacco control and/or obesity prevention campaigns, thereby building system capacity to implement evidence-based policies and environmental strategies.

3. Timeline:

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4. Key partners and cross-jurisdictional relationships: The project will engage a wide range of partners at the state and local level, including health providers, local boards of health, statewide professional public health associations and residents.

Objective	Partners	Roles
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Transform the Massachusetts local public health infrastructure and improve population health outcomes by increasing the number of regional public health districts receiving planning grants by 6, and providing rapid-cycle implementation grants for up to two districts.

Activity Plan:

1. Desired outcome of each specific infrastructure investment; 2. Key methods and activities:

Objective 1. Accreditation readiness: With the assistance of a skilled contractor (Health Resources in Action), we will take concrete actions to move MDPH toward accreditation readiness. Intended outcome: accelerate readiness to apply for PHAB accreditation.

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(b) Community Health Assessment: Adapt and update the 2010 *Health of Massachusetts* to generate a shorter and more user-friendly document containing the quantitative information that will be most helpful to informing priorities, policies and programs that will shape the development of the SHIP. Data will include key health outcomes, individual and community health behaviors, health disparities, and information on the social determinants of health. Deliverable: a comprehensive and concise Community Health Assessment Report, incorporating both quantitative and qualitative data, to meet PHAB standards.

(c) State Health Improvement Plan: Conduct a qualitative assessment with 14 focus groups from different geographic regions of the state and 20 opinion leader phone interviews. Integrate stakeholder input with data from the Community Health Assessment. Conduct background research and identify health and systems performance improvement goals and objectives for each of the administrative and programmatic PHAB domains. Deliverable: the State Health Improvement Plan.

(d) Massachusetts Community Health Information Profile (MassCHIP): To support development of the Community Health Assessment and State Health Improvement Plan, MDPH will accelerate improvements to MassCHIP, a program of MDPH funded under the original National Public Health Improvement Initiative (NPHII) award which provides a wide range of data reports for users in hospitals, government agencies, universities, health centers, local boards of health and community groups. Deliverable: MassCHIP will integrate 2010 census data into the overall system, update community health indicators in the *Health of Massachusetts* report, and analyze and prepare data reports on perinatal health and other topics.

(e) Strategic Plan: Working with Commonwealth Medicine and utilizing the SHIP and data from an internal SWOT analysis conducted by the commissioner's office in early 2011, MDPH will begin developing an Agency Strategic Plan that formalizes goals and objectives to be achieved by 2015, including performance standards and implementation plans with specific action steps, time frames, persons responsible, and benchmarks for success.

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(a) Accelerate enhancement of MAVEN user functions and expansion of utilization of system to 95% of communities, pursuant to current NPHII objectives.

(b) Food safety: Develop a new module to integrate food borne illness surveillance and rapid response capacity into the MAVEN system. Since 1997, a shared Access database has been used by the state laboratory and the MDPH bureaus of infectious disease and environmental health to record and track food-borne illnesses. The 14-year-old system lacks the ability to identify trends and cannot review timeframes to support timely response during a food-borne illness outbreak. Supplemental funding will modernize our response capacity, facilitating collaboration among MDPH bureaus and external partners to address this critical “winnable battle.”

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Objective 3. Cross-jurisdictional partnerships and promotion of evidence-based practices: Massachusetts has an extremely fragmented local public health system, with 351 separate cities and towns, each with its own Board of Health responsible for assuring access to a comprehensive set of services defined by state law and regulation. Massachusetts Boards of Health are authorized to develop, implement, and enforce health policies, oversee inspections to maintain minimum standards for sanitation in housing and food service, and assure that the basic health needs of their community are being met. With NPHII funding and leveraging resources from other funders, we are seeking to transform the state’s local public health infrastructure and improve population health outcomes by creating new public health districts, through which groups of communities will share staff and cooperate to provide core public health services for residents. MDPH has awarded public health district planning grants to 11 groups of municipalities, out of 18 that submitted proposals in February. Supplemental funding will enable us to: (a) support 6 more of the original applicants, and (b) provide up to 2 rapid cycle implementation grants to districts that are in advanced stages of planning due, for instance, to their participation in the Massachusetts Practice Based Research Network (funded by the Robert Wood Johnson Foundation). Supplemental funds will also allow us to provide legal, financial, evaluation, and other technical assistance to planning grantees and develop workforce qualification guidelines and a performance management protocol for districts already funded. Intended outcomes: The new districts will be created with the goal of ensuring that

municipalities are served by qualified public health professionals. New districts will help prepare member communities for voluntary national accreditation by conducting formal community health assessments using standards protocols. They will enable municipalities to address the mandated responsibilities of Massachusetts Boards of Health, particularly in infectious disease, food safety, and community sanitation. Each new district will also be required to implement tobacco control and/or obesity prevention campaigns, thereby building system capacity to implement evidence-based policies and environmental strategies.

3. Timeline:

Objective	Activity	Time frame
1. Accreditation readiness	<ul style="list-style-type: none"> - Assess accreditation readiness - Update Community Health Assessment - Complete MassCHIP census & data reports - Complete State Health Improvement Plan - Begin development of Strategic Plan 	<ul style="list-style-type: none"> By 6/30/11 By 7/17/11 By 8/15/11 By 9/23/11 By 9/29/11
2. Agency performance improvements	<ul style="list-style-type: none"> - Initial development of MAVEN food borne illness module MAVEN - Initial integration of blood lead level testing data with HL7 into MAVEN 	<ul style="list-style-type: none"> By 8/31/11 By 9/29/11
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Award 6 additional planning grants - Develop district workforce guidelines - Develop district performance mgt. protocol - Award 2 rapid cycle implementation grants 	<ul style="list-style-type: none"> By 6/15/11 By 7/15/11 By 8/31/11 By 9/29/11

4. Key partners and cross-jurisdictional relationships: The project will engage a wide range of partners at the state and local level, including health providers, local boards of health, statewide professional public health associations and residents.

Objective	Partners	Roles
1. Accreditation readiness	<ul style="list-style-type: none"> - Health Resources in Action - UMass Medical School/Commonwealth Medicine - Housing developments, worksites, residents, other key stakeholders 	<ul style="list-style-type: none"> - Contractor to lead implementation - Performance Improvement Management and Strategic Planning - Participants in focus groups and opinion leader interviews
2. Agency performance improvements	<ul style="list-style-type: none"> - Local Boards of Health - Public and private laboratories - Community health centers, hospitals, private medical practices 	<ul style="list-style-type: none"> - Receive training and TA to support their participation in MAVEN - Electronic lab reporting - Expanded reporting from electronic medical records
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Municipalities prioritized as having the greatest needs & capacity to change - Boston Univ. School of Public Health - Institute for Community Health - Mass. Assoc. of Health Boards (NALBOH affiliate) - Health Resources in Action - NACCHO, NEHA, & APHA affiliates and MA assoc. of public health nurses 	<ul style="list-style-type: none"> - Work together to plan and form public health districts - Workforce development - Evaluation - Legal and financial technical assistance - Community Health Assessment trng - Board of Health & other stakeholder engagement; policy development

5. **Staffing:** Funds received under this supplemental proposal will be used for contracted services, rather than additional MDPH staff. MDPH staff funded under the original NPHII award will maintain current responsibilities and support implementation of supplemental objectives in-kind.

6. **Project Management:** NPHII Principle Investigator, Geoff Wilkinson, will be responsible for project management, in coordination with the MDPH Performance Improvement Manager, Monica Valdes Lupi, and appropriate bureau and program directors.

Performance/Work Plan:

Objective	Process Indicators	Outcome Indicators
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2. Agency performance improvements	<ul style="list-style-type: none"> - Accelerate implementation of system expansion - Initial development of MAVEN food borne illness module in MAVEN - Initial integration of blood lead level testing data with HL7 into MAVEN 	<ul style="list-style-type: none"> - Increased number of municipalities from original schedule. <i>Data Source:</i> MAVEN roster - Improved ability to track and respond to foodborne illness. <i>Data source:</i> program data from MDPH Food Protection Program - Improved ability to track blood level tests and refer children and families for treatment and environmental interventions. <i>Data source:</i> MDPH Childhood Lead Poisoning Prevention Program
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Award 6 additional planning grants - Develop district workforce guidelines - Develop district performance mgt. protocol - Award 2 rapid cycle implementation grants 	<ul style="list-style-type: none"> - 6 additional districts better able to complete community health assessments using nationally recognized protocols - 2 additional districts implement plans to promote evidence-based practices <p><i>Data source:</i> Evaluation being conducted by Institute for Community Health (described in original in NPHII grant)</p>

PROJECT NARRATIVE

Summary of funding request: The requested supplemental funding is designed to accelerate our efforts in three key areas of the overall infrastructure project. *Accreditation Readiness:* Move MDPH toward accreditation readiness through an acceleration of our work in assessing accreditation readiness, updating our Community Health Assessment and formulating a State Health Improvement Plan (SHIP) to inform development of an Agency Strategic Plan. *Agency Performance Improvements:* increase efficiency of program operations and use of evidence-based policies and practices through an acceleration of our ongoing enhancement of the web-based Massachusetts Virtual Epidemiologic Network (MAVEN) disease surveillance and case management system, and the integration of blood lead level testing data into MAVEN. *Cross-jurisdictional partnerships and promotion of evidence-based practices:* Improve population health outcomes by increasing the number of proposed regional public health districts receiving planning grants by 6, and providing rapid-cycle implementation grants for up to 2 districts.

Background: The proposed performance improvement activities are designed to support the five strategic priorities of the Massachusetts Department of Public Health (MDPH). MDPH has worked hard in recent years to identify its overarching strategic priorities, allowing us to focus our efforts, identify policy opportunities and improve results. These priorities were developed collaboratively in 2007 and recently updated with input from hundreds of residents, stakeholders and community partners who attended regional meetings around the state. They reflect the issues that define public health in the 21st century, and are closely aligned with the goals and objectives of this Funding Opportunity. In its programs and policies, MDPH is committed to: (a) Ensuring the success of Health Care Reform.¹ (b) Eliminating racial and ethnic health disparities. (c) Promoting wellness and managing chronic disease. (d) Building public health capacity at the local and state levels. (e) Reducing youth violence.

In the wake of the state's landmark health care reform law, Massachusetts has the lowest rate of uninsured residents in the nation. It is a national innovator in such areas as tobacco control, HIV prevention, and strategies to address health equity. But the health of the state's 6.6 million residents is compromised by significant gaps in the public health infrastructure. These include fragmentation and lack of capacity among the state's 351 local health boards, the incomplete reach of key statewide surveillance and monitoring systems, the need for more easily accessible health data to inform policy and practice at both the state and local level, and the need for strengthened performance monitoring and quality improvement, particularly in areas such as foodborne disease, HIV, obesity and health equity, where potentially historic progress is within our grasp.

Objectives: We have three objectives for this supplemental funding, all closely tied to our original infrastructure proposal and designed to be accomplished within the project period:

Objective 1. Accreditation Readiness: Move MDPH toward accreditation readiness through an acceleration of our work in assessing accreditation readiness, updating our Community Health Assessment and formulating a State Health Improvement Plan (SHIP) to inform development of an Agency Strategic Plan, as defined by the Public Health Accreditation Board (PHAB).

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enhancement of the web-based Massachusetts Virtual Epidemiologic Network (MAVEN) disease surveillance and case management system and the integration of new food protection and blood lead level testing modules into MAVEN.

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3. Timeline:

Objective	Activity	Time frame
1. Accreditation readiness	<ul style="list-style-type: none"> - Assess accreditation readiness - Update Community Health Assessment - Complete MassCHIP census & data reports - Complete State Health Improvement Plan - Begin development of Strategic Plan 	<ul style="list-style-type: none"> By 6/30/11 By 7/17/11 By 8/15/11 By 9/23/11 By 9/29/11
2. Agency performance improvements	<ul style="list-style-type: none"> - Initial development of MAVEN food borne illness module MAVEN - Initial integration of blood lead level testing data with HL7 into MAVEN 	<ul style="list-style-type: none"> By 8/31/11 By 9/29/11
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Award 6 additional planning grants - Develop district workforce guidelines - Develop district performance mgt. protocol - Award 2 rapid cycle implementation grants 	<ul style="list-style-type: none"> By 6/15/11 By 7/15/11 By 8/31/11 By 9/29/11

4. Key partners and cross-jurisdictional relationships: The project will engage a wide range of partners at the state and local level, including health providers, local boards of health, statewide professional public health associations and residents.

Objective	Partners	Roles
1. Accreditation readiness	<ul style="list-style-type: none"> - Health Resources in Action - UMass Medical School/Commonwealth Medicine - Housing developments, worksites, residents, other key stakeholders 	<ul style="list-style-type: none"> - Contractor to lead implementation - Performance Improvement Management and Strategic Planning - Participants in focus groups and opinion leader interviews
2. Agency performance improvements	<ul style="list-style-type: none"> - Local Boards of Health - Public and private laboratories - Community health centers, hospitals, private medical practices 	<ul style="list-style-type: none"> - Receive training and TA to support their participation in MAVEN - Electronic lab reporting - Expanded reporting from electronic medical records
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Municipalities prioritized as having the greatest needs & capacity to change - Boston Univ. School of Public Health - Institute for Community Health - Mass. Assoc. of Health Boards (NALBOH affiliate) - Health Resources in Action - NACCHO, NEHA, & APHA affiliates and MA assoc. of public health nurses 	<ul style="list-style-type: none"> - Work together to plan and form public health districts - Workforce development - Evaluation - Legal and financial technical assistance - Community Health Assessment trng - Board of Health & other stakeholder engagement; policy development

5. **Staffing:** Funds received under this supplemental proposal will be used for contracted services, rather than additional MDPH staff. MDPH staff funded under the original NPHII award will maintain current responsibilities and support implementation of supplemental objectives in-kind.

6. **Project Management:** NPHII Principle Investigator, Geoff Wilkinson, will be responsible for project management, in coordination with the MDPH Performance Improvement Manager, Monica Valdes Lupi, and appropriate bureau and program directors.

Performance/Work Plan:

Objective	Process Indicators	Outcome Indicators
1. Accreditation readiness	<ul style="list-style-type: none"> - Assess accreditation readiness - Update Community Health Assessment - Complete MassCHIP census & data reports - Complete State Health Improvement Plan - Begin development of Strategic Plan 	MDPH will be ready to apply for PHAB accreditation. <i>Data source:</i> documentation of accreditation application process
2. Agency performance improvements	<ul style="list-style-type: none"> - Accelerate implementation of system expansion - Initial development of MAVEN food borne illness module in MAVEN - Initial integration of blood lead level testing data with HL7 into MAVEN 	<ul style="list-style-type: none"> - Increased number of municipalities from original schedule. <i>Data Source:</i> MAVEN roster - Improved ability to track and respond to foodborne illness. <i>Data source:</i> program data from MDPH Food Protection Program - Improved ability to track blood level tests and refer children and families for treatment and environmental interventions. <i>Data source:</i> MDPH Childhood Lead Poisoning Prevention Program
3. Cross-jurisdictional collaboration and promotion of evidence-based practices	<ul style="list-style-type: none"> - Award 6 additional planning grants - Develop district workforce guidelines - Develop district performance mgt. protocol - Award 2 rapid cycle implementation grants 	<ul style="list-style-type: none"> - 6 additional districts better able to complete community health assessments using nationally recognized protocols - 2 additional districts implement plans to promote evidence-based practices <p><i>Data source:</i> Evaluation being conducted by Institute for Community Health (described in original in NPHII grant)</p>