NACCHO
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2017 Model Practices

Applicant Information

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Model Practice Title

Please provide the name or title of your practice: *

School Lead Screening Project

Practice Categories

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select all the practice areas that apply.: *

- [ ] Access to Care
- [x] Advocacy and Policy Making
- [ ] Animal Control
- [ ] Coalitions and Partnerships
- [ ] Communications/Public Relations
- [ ] Community Involvement
- [ ] Cultural Competence
- [ ] Emergency Preparedness
- [x] Environmental Health
- [ ] Food Safety
- [ ] Global Climate Change
- [ ] Health Equity
- [ ] HIV/STI
- [ ] Immunization
- [ ] Infectious Disease
- [ ] Informatics
- [ ] Information Technology
- [ ] Injury and Violence Prevention
- [ ] Marketing and Promotion
- [x] Maternal-Child and Adolescent Health
- [x] Organizational Practices
- [ ] Other Infrastructure and Systems
- [x] Organizational Practices
- [ ] Primary Care
- [x] Quality Improvement
- [x] Research and Evaluation
- [ ] Tobacco
- [ ] Vector Control
- [x] Water Quality
- [ ] Workforce

Other::

Is this practice evidence based, if so please explain. :

In designing effective protocols and strong standards, The Detroit Health Department (DHD) relied upon the basic sampling methods outlined in the Environmental Protection Agency's (EPA's) report, "Testing Schools and Childcare Centers for Lead in the Drinking Water," sampling protocols outlined in the EPA's guidance document, "3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance," and the Michigan Department of Environmental Quality's (MDEQ's) actionable limit for lead in water of 15ppb. When determining which of these protocols and standards to use, DHD relied upon those that were the most protective based on scientific evidence. For example, DHD used the EPA protocols and guidance for testing the water in schools and childcare centers rather than the state's protocols for public water supply testing because the EPA guidance recommends using smaller sample containers (250mL) for schools and childcare facilities than the state's protocols for public water systems (1L). This is because a smaller sample is more effective at identifying sources of lead at a water outlet and represents a smaller section of plumbing in the water system. Also, in accordance with EPA guidance, our School Lead Screening Project required that water remain stagnant in the pipes overnight, under circumstances of normal use, and for a minimum of 8 hours. DHD did not rely on MDEQ's protocols, which suggest flushing every outlet for two hours the night before samples are taken. According to the EPA, this practice (known as pre-stagnation flushing) can artificially lower lead levels, resulting in inaccurate test results. New York City used protocols consistent with the MDEQ recommendations and was forced to redo their school water testing after receiving public criticism. Additionally, in designing the project's lead sampling and analysis protocols and procedures, DHD relied heavily on best practices outlined in W.K. Kellogg Foundation's February 2016 commissioned report, "Managing Lead in Drinking Water at Schools and Early Childhood Education Facilities."

Winnable Battles

To keep pace with emerging public health challenges and to address the leading causes of death and disability, CDC initiated an effort called Winnable Battles to achieve measurable impact quickly.Winnable Battles are public health priorities with large-scale impact on health and known effective strategies to address them. Does this practice address any CDC's seven Winnable Battles? If so, please choose from the following:: *

- ☐ Food Safety
- ☐ HIV in the U.S.
- ☐ Nutrition, Physical Activity, and Obesity
- ☐ Tobacco
- ☐ Healthcare-associated Infections
- ☐ Motor Vehicle Injuries
- ☐ Teen Pregnancy
- ☑ None

Overview: Provide a brief summary of the practice in this section (750 Word Maximum)

Your summary must address all the questions below:

- Brief description of LHD- location, demographics of population served in your community
- Describe public health issue
- Goals and objectives of the proposed practice
- How was the practice implemented/activities
- Results/Outcomes (list process milestones and intended/actual outcomes and impacts.
  - Were all of the objectives met?
  - What specific factors led to the success of this practice?
- Public Health impact of practice
- Website for your program, or LHD.

750 Word Maximum

Please use this portion to respond to the questions in the overview section. : *

LHD-location and demographics of people served in community With a per capita income of $14,984, nearly 40% of Detroiters live below the poverty line. Detroit's population is 82.7% Black or African American, 7.8% White, and 6.8% Hispanic or Latino and is inside Wayne County, the second-most segregated county in Michigan. Wayne County also has the worst health outcomes (length of life, quality of life), and health factors (health behaviors, clinical care, social & economic factors, physical environment) in Michigan. Describe the public health issue Detroit is a very old city, with over 93 percent of its homes built before 1978. This means that these houses were built before lead paint was banned, and before "lead-free" plumbing components were required. With lead so well-integrated to our housing stock, it's not surprising then that children in Detroit are four times more likely to have elevated blood lead levels when compared to children in the rest of the state. Small children are most susceptible to the damages of lead because they are still developing. Because of this, it is extremely important that we eliminate every source of lead children may come in contact with. Plumbing installed prior to 1986 may contain lead, and as these components degrade, children are at risk of being exposed to lead through the drinking water in these facilities. Goals and objectives of the proposed practice The main goal of our School Lead Screening Project was to test the drinking water for lead in all of the licensed childcare facilities and schools in Detroit that care for children aged 0-6. Young children absorb four to five times as much lead as adults, and young children, especially those under five years of age, are most susceptible to the adverse effects of lead. Our secondary goal was to use evidence-based methods to inform our recommendations for the remediation of lead. How was the practice implemented? In April 2016, we mailed over 300 packets to schools and childcare facilities across the city with information regarding lead water testing. This packet included the protocol we developed as well as: • A letter to the Head Administrator of the facility, explaining deadlines and why we were testing water for lead; • A sheet of FAQs to be sent home with students, including how parents could have their children tested for lead; • And, a list of contractors, which were State certified as lead abatement risk assessors and could complete the sampling. We then followed up with each facility to make sure they received the letter, checked in with their progress, and continued to remind them to schedule a contractor to sample their water. The contractor would ensure that the samples were sent to EPA approved labs, and then, with the facility's permission, send the lab reports to DHD. Results/Outcomes (list process milestones and intended/actual outcomes and impacts) Our School Lead Screening Project was designed to improve the environmental health for children across the city, and with measurable outcomes, achieved that. Through initial testing, 43 schools found elevated levels of lead in their drinking water and were required to eliminate the identified source. Beyond this primary goal, it also had the effect of greatly increasing the blood lead testing among Detroit children during the summer of 2016. The materials we distributed through schools not only informed parents of the basics of lead exposure but also encouraged parents to have their children tested for lead. This increased rate in blood lead testing was unaccompanied by an increase in search engine traffic (an indicator for public interest and awareness) as was observed following peaks in Flint's news coverage (see graph below). Were all of the objectives met? Yes. All facilities that we contacted had their water sampled and tested for lead. All facilities that had elevated lead levels immediately disabled those water outlets. For those water outlets to be put back into use, plumbing components had to be replaced and the tap had to meet EPA standards. What specific factors led to the success of this practice? Testing was fully optional, but posting participation and testing results online acted as a mechanism of accountability that helped ensure participation. Within six months, all 360 school buildings in the City were compliant. Public health impact Our project used the best guidance available to make sure that every facility's drinking water met state and federal standards for lead content. When it comes to lead, it is especially important to children's safety that every source is eliminated. Program website Detroitmi.gov/schoolwater

Responsiveness and Innovation

A Model Practice must be responsive to a particular local public health problem or concern. An innovative practice must be (1) **new to the field of public health (and not just new to your health department)** OR **(2) a creative use of an existing tool or practice**, including but not limited to use of an Advanced Practice Centers (APC) development tool, The Guide to Community Preventive Services, Healthy People 2020 (HP 2020), Mobilizing for Action through Planning and Partnerships (MAPP), Protocol for Assessing Community Excellence in Environmental Health (PACE EH). Examples of an inventive use of an existing tool or practice are: tailoring to meet the needs of a specific population, adapting from a different discipline, or improving the content.

- Statement of the problem/public health issue
- What target population is affected by problem (please include relevant demographics)
    - What is the target population size?
    - What percentage did you reach?
- What has been done in the past to address the problem?
- Why is the current/proposed practice better?
- Is current practice innovative? How so/explain?
    - Is it new to the field of public health
      OR
    - Is it a creative use of existing tool or practice:
      What tool or practice did you use in an original way to create your practice? (e.g., APC development tool, The Guide to Community Preventive Services, HP 2020, MAPP, PACE EH, a tool from NACCHO's Toolbox etc.)
- Is the current practice evidence-based? If yes, provide references (Examples of evidence-based guidelines include the Guide to Community Preventive Services, MMWR Recommendations and Reports, National Guideline Clearinghouses, and the USPSTF Recommendations.)

2000 Word Maximum

Please state the Responsiveness and Innovation of your practice (2000 Word Maximum) : *

Statement of the problem/public health issue Lead exposure at a young age can damage a child's brain and nervous system, slow growth and development, and cause learning and behavioral problems such as reduced IQ, ADHD, juvenile delinquency, and criminal behavior. Children may be exposed to lead through a myriad of avenues, including lead contaminated water. Considering children spend much of their day in schools and childcare facilities, it is critical that the water they drink there is safe. Because the Detroit Health Department has access to the facilities for licensing and inspections, we have the opportunity and the responsibility to ensure that the water meets guidelines for lead content, even if this practice has not been mandated in the past. What target population is affected by the problem (Please include relevant demographics) Our target population included children in 153 childcare facilities, 113 charter and private schools, and 94 Detroit Public Schools, which totals 360 facilities. All of these facilities had their water sampled and tested. We were able to reach 100% of our population with every facility participating voluntarily. We targeted childcare facilities and schools because they present a unique situation. According to the EPA, facilities with intermittent water use patterns, such as schools and childcare facilities, may have elevated lead concentrations. This caused by prolonged contact of the water with lead in the solder or pipes. Testing the water in schools is also important because this is where we trust our children to safely spend a large portion of their day, and safe drinking water is a basic requirement for that. Children under the age of 6 in Detroit were most targeted as they are the most susceptible to the damages of lead because they are still developing. In addition nearly 40% of Detroit's population is low-income. Low-income populations are at higher risk of being nutritionally deficient, which is especially troublesome for children going through growth spurts. Although lead is a neurotoxin and is very harmful to human health, our bodies will take in lead as a substitute for calcium. This means that at the time when our bodies most need the proper nutrients, those who are lacking proper nutrition will be the most affected by exposure to lead. What has been done in the past to address the problem? There is no mandatory testing required at the city, state, or federal level, and we were unable to find any record of previous lead water testing done in childcare facilities and schools. To prevent future exposure, we plan to incorporate water testing as a component of the lead hazard assessment for licensing childcare facilities. Why is the current/proposed practice better? The Detroit Health Department's School Lead Screening Project has set the standard for others to follow with respect to voluntary, rigorous school lead testing. It leveraged the most stringent standards and protocols and operated with a high level of accountability that encouraged participation. No federal law exists to mandate lead water testing, and only very recently has a state passed a law requiring school districts to test their schools' water for lead (New York in September 2016). Implementing our project on a larger scale may provide a chance to improve national standards for lead safe water in schools and childcare facilities across the nation. Is current practice innovative? How so? Explain. Previous to our project, these EPA guidelines were never implemented on a scale as large as was done in Detroit. Our project helps bridge the gap between research and the real world, helping to impact the health of our most vulnerable population. Is it a new field of public health OR Is it a creative use of existing tool or practice? The events in Flint, Michigan, reminded us that water can be a vehicle for lead poisoning and alerted the nation to the importance of water testing. Even so, we have not come across another city that has implemented a testing protocol and standard as rigorous and thorough as ours. Our program is something that could have been implemented anywhere else, yet it seems nowhere else has. What tool or practice did you use in an original way to create your practice? Our program took well-researched protocols and best practices from environmental health agencies and implemented them on a citywide scale. What made our program unique is that we were very transparent about our process. Our materials were available online, and were taken directly from the EPA. We also made the participation status of facilities available online, along with their lab results. If the lab results were acceptable, the facility's name was marked in green. If results were elevated, the name was marked in red. If lab results were elevated, facilities were required to come up with a plan to mitigate the lead exposure, based on EPA approved methods. Transparency helped ensure participation, and it can help assure accountability. Is the current practice evidence-based? If yes, provide references We researched state and federal guidelines for the best, most thorough protocols and recommendations available. The EPA has a gold standard protocol that was specifically developed for testing childcare facilities and schools. Coupling this rigorous protocol with strong standards, we implemented what is quite possibly the strongest water-testing program in the United States. 3T's for Reducing Lead in Drinking Water in Schools: https://www.epa.gov/dwreginfo/testing-schools-and-child-care-centers-lead-drinking-water Testing Schools and Child Care Centers for Lead in the Drinking Water: https://www.epa.gov/dwreginfo/testing-schools-and-child-care-centers-lead-drinking-water Please state the responsiveness and innovation of your practice. At a time when the dangers of lead exposure were on everyone's mind, we were able to seize the moment and help implement a program that will have lasting change. And, rather than settling for loose standards, we implemented the best guidance we could find. Given that nowhere else seems to set the same standards for such widely implemented water testing, our project stands out as the standard for others to follow.

LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broad-based involvement and participation of community partners (e.g., government, local residents, business, healthcare, and academia). If the practice is internal to the LHD, it should demonstrate cooperation and participation within the agency (i.e., other LHD staff) and other outside entities, if relevant. An effective implementation strategy includes outlined, actionable steps that are taken to complete the goals and objectives and put the practice into action within the community.

- Goal(s) and objectives of practice
- What did you do to achieve the goals and objectives?
    - Steps taken to implement the program
- Any criteria for who was selected to receive the practice (if applicable)?
- What was the timeframe for the practice
- Were other stakeholders involved? What was their role in the planning and implementation process?

- What does the LHD do to foster collaboration with community stakeholders? Describe the relationship(s) and how it furthers the practice goal(s)

- Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/ budget breakdown.

5000 words maximum

Enter the LHD and Community Collaboration related to your practice (5000 words maximum): *

Goals and objectives of practice The goal of this project was to make sure that every childhood facility in Detroit is providing drinking water that meets state and federal standards. With that goal in mind, the rest of our project was about implementing the best protocol available to find any problems that exist and to solve them in the most effective way possible. What did you do to achieve the goals and objectives? We looked for the best guidance available. Federal guidance had the best protocol, but their action limit for lead content was more permissive than our state's guidance. We took the best of both and combined the most complete protocol with the most rigorous standards. There is no city, state, or federal requirement that schools and daycares in Detroit test their water for lead, yet 100% of the facilities that we reached out to participated in our project. Part of the incentive towards participation was how transparent we were about our process and participation. If a school were to choose against testing their water for lead, that would be indicated on our website. We did not mandate that they test, but public accountability helped nudge them towards participation. Some schools did have elevated lead levels, but they were swift to make corrections to eliminate the lead. As a result, they were seen by both us and the community as being very proactive and responsible. Steps taken to implement the program Our program was funded by a generous donation of $135,000 from the Children's Hospital of Michigan Foundation. This allowed us to pay for a project coordinator as well as to reimburse facilities for their water testing, up to $225. First, we contacted facilities by mail with a packet of information. This packet included a letter to the Head Administrator, an FAQ to be sent home to parents, the EPA protocol for testing water at schools and childcare facilities, and a sample list of contractors in the area that were certified lead risk assessors and were qualified to act as third-party water samplers. Next, we followed up by phone to confirm the facility had received the packet, answer any questions they had, and urge them to make their appointment with a contractor of their choosing as soon as possible. Once we confirmed with the contractor that an appointment was set, we waited for the results to be processed and forwarded to us. If any results are elevated, we would call the Head Administrator, inform them of their elevated lead levels, and tell them to shut down the affected water outlets immediately and provide bottled water to staff and students. The next step for the facility was to sample the rest of the water outlets in their building (if any remained), and to make a plan of long-term EPA approved methods to mitigate the lead exposure. Any criteria for who was selected to receive the practice (if applicable)? We reached out to all of the licensed daycares, Head Starts, Great Start Readiness Programs, as well as the public, private, and charter elementary schools in Detroit. We wanted to reach every facility in the city that cared for children six years old and younger. What was the timeframe for the practice? We contacted facilities in April with all of the materials that they would need to complete testing and a due date of June 15. Given the rush of demand on the contractors and then the surge in samples to be processed by the labs, there were delays, and lab results ended up coming in much later than June 15. Still, the deadline pushed facilities to commit to action sooner rather than later. Were other stakeholders involved? What was their role in the planning and implementation process? Children's Hospital of Michigan Foundation helped provided the funding necessary for this project. Communication with third-party water samplers was essential to the project, and early conversations with these contractors helped to better inform both parties and make sure we were on the same page. Some of them had very strong background in water analysis and environmental health, and their participation was an asset. Collaborating with them helped us to clarify our plans and ensure that the project was ready to move forward. Childcare facilities and schools were the most important stakeholders. Their agreement to partake in and order the lead water testing was essential to our implementation, and, without them, our success would not have been possible. What does the LHD do to foster collaboration with community stakeholders? Early on, we made many phone calls to our stakeholders to explain exactly what was happening and why. Having a short list of nearby contractors that were able to fulfill the water sampling helped to simplify the process and reduce stress. Describe the relationships and how it furthers the practice goals. Relationships with the contractors were important. Once they sampled the water at a school or childcare facility, the contractor was our main contact. They provided their insight as environmental experts in the field and were critical in helping to give additional support and validation to the EPA recommendations. Further, this project has helped to forge longterm, lasting relationships with schools. Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/budget breakdown. Our program benefitted from a generous grant of $135,000 from the Children's Hospital Foundation of Michigan. The ways in which we allocated that funding are outlined in the budget overview below. Budget Overview CATEGORY EXPENDITURES AGREEMENT Current Period Agreement YTD Budget Balance 1 Salaries & Wages $24,038.50 $24,038.50 $26,000.00 $1,961.50 2 Fringe Benefits $10,873.94 $10,873.94 $11,000.00 $126.06 3 Travel $0.00 $0.00 $0.00 $0.00 4 Supplies & Materials $30.00 $30.00 $1,000.00 $970.00 5 Contractual (Sub-Contracts) $81,570.00 $81,570.00 $89,450.00 $7,880.00 6 Equipment $0.00 $0.00 $0.00 $0.00 7 Other Expenses $796.98 $796.98 $800.00 $3.02 8 TOTAL DIRECT $117,309.42 $117,309.42 $128,250.00 $10,940.59 9 Indirect Costs: Rate: 5% $5,865.47 $5,866.20 $6,750.00 $883.80 10 Other Cost Distributions: 11 TOTAL EXPENDITURES $123,175.62 $123,175.62 $135,000.00 $11,824.38 12 Less: Fees & Collections 13 FUNDS REQUIRED $123,175.62 $123,175.62 $135,000.00 $11,824.38 Enter the LHD and Community Collaboration related to your practice The School Lead Screening Project encouraged collaboration and resource sharing between DHD, Detroit schools, childcare facilities, water testing labs, third-party contractors, foundations, and state and federal regulatory agencies. All 360 schools and childcare facilities collaborated with DHD to test their water outlets for lead. Water testing labs and third-party contractors also collaborated with DHD to test for lead in the water according to best practice protocols. Finally, DHD shared data and best practices that emerged from the project with representatives from the Michigan Department of Environmental Quality (MDEQ), advocates working to remediate lead in Flint schools, a representative from EPA Region 5, and a member of the National Association of State Boards of Education, who later invited DHD to present the Project at their annual conference in Kansas City.

Evaluation

Evaluation assesses the value of the practice and the potential worth it has to other LHDs and the populations they serve. It is also an effective means to assess the credibility of the practice. Evaluation helps public health practice maintain standards and improve practice. Two types of evaluation are **process** and **outcome**. Process evaluation assesses the effectiveness of the steps taken to achieve the desired practice outcomes. Outcome evaluation summarizes the results of the practice efforts. Results may be long-term, such as an improvement in health status, or short-term, such as an improvement in knowledge/awareness, a policy change, an increase in numbers reached, etc. Results may be quantitative (empirical data such as percentages or numerical counts) and/or qualitative (e.g., focus group results, in-depth interviews, or anecdotal evidence).

- What did you find out? To what extent were your objectives achieved? Please re-state your objectives.
- Did you evaluate your practice?
    - List any primary data sources, who collected the data, and how (if applicable)
    - List any secondary data sources used (if applicable)
    - List performance measures used. Include process and outcome measures as appropriate.
    - Describe how results were analyzed
    - Were any modifications made to the practice as a result of the data findings?

2000 Words Maximum

Please enter the evaluation results of your practice (2000 Words Maximum): *

Lead is a dangerous substance. Exposure, even in small amounts is dangerous and hazardous to health, especially of young children. Lead exposure causes permanent damage, so it is essential that we find and eliminate the sources of lead that can interact with children. Preventing permanent damage to the development of a child is one of the most worthwhile causes that we can put our work into, both morally, and from a cost-savings point of view. So, with a model for school lead screening, other local health departments can implement similar programs as was done in our neighboring city, Grosse Pointe. What did you find out? Given the age of our city's infrastructure and that this level of testing had never been completed in our city (meaning we had no similar data), we were not clear of what the results of this testing would reveal. Results showed that 88% of our facilities had water that met EPA standards after remaining stagnant in the pipes overnight. And of those who had elevated levels of lead, 100% immediately shut down those water outlets and committed to long-lasting solutions to reducing lead exposure to children. The biggest lesson from this project was how eager and willing childcare leaders are to find and address lead hazards. Our project presented people with simple, effective solutions to help children, and our participants jumped at the chance. Already, Grosse Pointe (a neighboring city of Detroit) has implemented our program for testing the water at their 15 schools. Did you evaluate your practice? List and primary data sources, who collected data, and how (if applicable) Water samples were collected by third-party contractors and then sent to EPA approved drinking water laboratories. Lab results were then sent to our Project Coordinator at the Detroit Health Department, reviewed, and added to our internal and published database for this project. List performance measures used. Include process and outcome measures as appropriate. Our goals were outcome-based. Our goal was to have the water tested at every licensed facility in the city with children six years old and younger (which we accomplished). Once a facility's water was tested, our next objective was to respond immediately to any hazards that were detected, starting with turning off the water outlets with elevated lead levels. In all facilities, the response to a detected lead hazard was swift and compliant with recommendations. More can be found at www.detroitmi.gov/schoolwater. Describe how results were analyzed Water samples were collected by third-party contractors and processed at an EPA approved lab. Lead levels that were at or above 15ppb were considered as elevated, and immediate action was required by the facility. Our findings are published online, as above. Were any modifications made to the practice as a result of the data findings? The deadlines that we set at the beginning had to be relaxed and pushed back, but the standards that we set for test results were maintained. Please enter the evaluation results of your practice. 100% participation is outstanding. Stakeholder participation and response was amazing. With clear expectations and a worthwhile cause, this project was well designed and well implemented. We encourage others to duplicate our process.

Sustainability

Sustainability is determined by the availability of adequate resources. In addition, the practice should be designed so that the stakeholders are invested in its maintenance and to ensure it is sustained after initial development (*NACCHO acknowledges that fiscal challenges may limit the feasibility of a practice's continuation.*)

- Lessons learned in relation to practice
- Lessons learned in relation to partner collaboration (if applicable)
- Did you do a cost/benefit analysis? If so, describe.
- Is there sufficient stakeholder commitment to sustain the practice?
    - Describe sustainability plans

1500 Words Maximum

Please enter the sustainability of your practice (2000 Words Maximum): *

Michigan licensing rules state that childcare facilities built before 1978 must undergo a lead hazard risk assessment completed by a certified lead risk assessor. (And in Detroit, the vast majority of buildings were constructed prior to this year.) Under Michigan guidelines, paint, dust, and soil must be tested for a lead hazard risk assessment, but water testing is optional. In the future, we will require lead water testing, similar to the protocol discussed here, to be included as a part of the licensing process for childcare facilities in Detroit. Lessons learned in relation to practice We learned that having a single point of contact at each of the facilities was extremely helpful for ensuring program completion. To test the 94 Detroit Public Schools, we only had to communicate with one person. Reaching out to the childcare facilities and charter schools required much more effort because there more multiple points of contact. There were also lessons learned in data management, communication, and project coordination. Implementing this project required a lot of reaching out, follow-up, and process improvements. Our staff developed strong data management proficiency as they handled the thousands of data inputs, our phone calls and scripts became far more efficient, and we developed skills that have already carried over well to other projects. Finally, transparency was critical to childcare centers accountable. Our publication of the results allowed us to communicate seamlessly with the community, and to leverage their feedback to encourage schools and daycares to participate. Lessons learned in relations to partner collaboration (if applicable) At the beginning of this project, these processes were new to everyone. We as a health department had to quickly become experts on the processes and protocols and had to understand not only each step of the process, but also the reasoning behind it. When schools and childcare facilities began reaching out to third-party contractors to sample their water, the contractors called to talk with us and go over the procedures. Some of the contractors were environmental engineers who had years of experience sampling water and analyzing water systems, and had a lot of information to share with us. Because they were not familiar with the specific guidelines the EPA made for these facilities, we were also able to help point out what aspects of this process would be different for them. The childcare facilities tended to be very enthusiastic about getting the testing completed, but they were often busy and could be forgetful. To ensure their participation, the process needed to be as easy as possible, removing the burden of responsibility as much as possible. Did you do a cost/benefit analysis? If so, describe. Yes, we incorporated a cost/benefit approach into our determination of the proper corrective actions schools should make once test results were received. Lead is a dangerous substance. Exposure, even in small amounts is dangerous and hazardous to health, especially for young children. Lead exposure causes permanent damage, so it is essential that we find and eliminate the sources of lead that can interact with children. Preventing permanent damage to the development of a child is one of the most worthwhile causes that we can put our work into, both morally, and from a cost-savings point of view. With this in mind, the cost of replacing plumbing components pales in comparison. Therefore because the upfront cost of eliminating a source of lead is just replacing a faucet, we determined that this was the corrective action schools should make if test results revealed unsafe levels of lead in the water. Is there sufficient stakeholder commitment to sustain this practice? There is sufficient stakeholder commitment to sustain this practice. Every facility was committed to providing their children with lead-safe water, and 100% of the facilities participated in our program voluntarily. The contractors in our area are now familiar with EPA protocols for testing childcare facilities and schools and are well equipped to provide these services in the future. Describe sustainability plans We are in the process of incorporating this program as a component of our childcare facility licensing process. This initial iteration of the program allowed us to focus on the details of implementation, which will facilitate testing in the future. Please enter the sustainability of your practice After a successful initial implementation of our program, it will soon be incorporated into our regular evaluation of whether schools and childcare facilities are lead-safe.

Additional Information

How did you hear about the Model Practices Program:: *

- ☐ I am a previous Model Practices applicant
- ☐ At a Conference
- ☐ NACCHO Website
- ☐ Public Health Dispatch
- ☐ Colleague in my LHD
- ☐ Model Practices brochure
- ☐ NACCHO Exhibit Booth
- ☐ NACCHO Connect
- ☐ Colleague from another public health agency
- ☑ E-Mail from NACCHO
- ☐ NACCHO Exchange