

**Accreditation Preparation &  
Quality Improvement  
Demonstration Sites Project**

**Final Report**

**Prepared for NACCHO by the City  
of Milford Health Department, CT**

**November 2008**



## **Brief Summary Statement**

The mission of the Milford Health Department (MHD), located in Milford, Connecticut, is to prevent disease and promote a healthier environment for all citizens through provision of quality services. Using the NACCHO LHD Self-Assessment Tool for Accreditation Preparation and Quality Improvement, MHD determined that the focus of its project would be to address Standard I-C—“Conduct or contribute expertise to periodic community health assessments (CHA).” Through funding provided by NACCHO, MHD conducted training on the importance of community health assessments and quality improvement for staff and community stakeholders to increase knowledge of assessment processes and brainstorm potential priority areas for assessment.

## **Background**

The Milford Health Department located in Milford, Connecticut serves a primarily suburban population of approximately 54,000 residents. There are over 35 officials, coordinators and staff at the Milford Health Department who are committed to protecting the health and safety of the residents of Milford. The department is comprised of three major divisions: Environmental Health Services, Community Health and School Health Services. The department collaborates with the other branches of the local and State government and health-related associations to ensure strong communication at the city and community levels.

The mission of the Milford Health Department is to prevent disease and promote a healthier environment for all citizens who work, live, and/or access service(s) in Milford. To this end, MHD concluded that participation in NACCHO's Accreditation Preparation and Quality Improvement Demonstration Sites Project would serve to provide valuable input as to the Department's strengths, as well as areas for improvement. The Board and the staff at the Milford Health Department sought to ensure that the Department has the ability to meet the standards set up within NACCHO's Operational Definition of a Functional Local Health Department and provides quality services to our community. Additionally, with national voluntary accreditation for local health departments anticipated in 2011, the Milford Health Department recognized the importance of conducting a self-assessment to determine whether certain Essential Services required improvement with regards to programs, services, and delivery. Prior to receiving funding from NACCHO, only two staff members—the Health Director and Community Health Coordinator—were familiar with NACCHO's Operational Definition of a Local Health Department and the push for local health departments to obtain national accreditation in the near future. Through participation in the Demonstration Sites project, MHD aimed to develop the capacity for the department to become accredited based on standards established by the Public Health Accreditation Board.

Finally, MHD places great emphasis on the importance of evaluation as it relates to processes and outcomes. MHD recognizes that though the department has several strengths, there is always room for improvement. As a member of a state with a municipality-based public health system, there are often several public health issues competing for staff and financial resources at any given time. MHD hoped that participation in this project would provide renewed energy at providing the core essential services of public health to the residents of Milford.

## **Goals and Objectives**

The primary goal of this project was to identify a priority area of improvement, based on the results of a self-assessment. Based on the results of the assessment, the workgroup decided to address *Standard I-C with the focus of conducting or contributing expertise to periodic community health assessments*. The Milford Health Department had not conducted a Community Health Assessment (CHA) in over ten (10) years. The initial goal statement that was developed was as follows:

The Milford Health Department will conduct a community health assessment to identify the public health needs of those individuals who live, work, or access services in Milford.

As additional brainstorming sessions occurred, it was determined that the original goal was too broad to accomplish within the grant period. The goal was consequently narrowed to the following:

**Goal:** The Milford Health Department will increase the capacity of its staff and key stakeholders to organize and conduct a community health assessment.

The following objectives were established for the project:

**Objective:** By October 31, 2008, the Milford Health Department will conduct training on the importance of community health assessments and quality improvement for staff and community stakeholders to increase knowledge of assessment processes and brainstorm potential priority areas for assessment.

### Self-Assessment

In order to identify the area for quality improvement, the Milford Health Department formed an internal accreditation workgroup comprised of the Health Director and Division supervisors including the School Nursing Administrator, Chief of Environmental Health, and Community Health Coordinator. The National Public Health Performance Standards (NPHPS) for Local Health Departments were discussed in a staff meeting before the self-assessment was conducted as a means to ensure that Division supervisors were familiar with the ten essential public health services on which the NACCHO Operational Definition is based. The Milford Health Department Accreditation Workgroup utilized the NACCHO LHD Self-Assessment tool for the self-assessment. The Community Health Coordinator met with each individual on the workgroup to review metrics relevant to their areas. Upon completion of these sessions, the Community Health Coordinator calculated the self-assessment scores and facilitated a discussion regarding the results. Based on the discussion, a consensus was reached regarding priority area(s) to address through a quality improvement (QI) process. Specifically, the group decided to address *Standard I-C with the focus of conducting or contributing expertise to periodic community health assessments*. These results were shared with the City of Milford Board of Health during a monthly Board meeting for comments and discussion. Based on feedback received from the Board, final goal statements were developed and area(s) to address during the QI process were finalized.

### Highlights from Self-Assessment Results

Standard/ Indicator #	Standard and Significance
I.C.1	<p><i>LHD staff have knowledge of standards and process for conducting CHA</i></p> <ul style="list-style-type: none"> <li>This area was identified as an area of weakness based on the self-assessment scores. A CHA had not been conducted during the tenure of the majority of current LHD staff.</li> <li>It was determined that the project would focus on addressing this standard to increase the capacity of the department to conduct a CHA in the near future.</li> </ul>
I.C.4	<p><i>Community stakeholders participate in the assessment process</i></p> <ul style="list-style-type: none"> <li>This area was also one of the lowest scoring areas based on the self assessment.</li> <li>The workgroup decided to address this standard through the QI project by inviting key local policymakers and elected/appointed officials to a training session designed for them. Attendance at this training would be the initial step in engaging this group in the CHA process</li> </ul>
II.A-G	<p><i>Protect people from Health Problems and Health Hazards</i></p> <ul style="list-style-type: none"> <li>MHD was please to find that the department as a whole does well in protecting the public from health risks.</li> <li>MHD scored particularly well in regarding to emergency preparedness planning efforts, as well as coordination with external agencies on investigation and response efforts.</li> </ul>
IX.A.1	<p><i>LHD has data from CHA on health outcomes &amp; risk factors on hand for evaluation.</i></p> <ul style="list-style-type: none"> <li>MHD scored low in this area, as it is closely tied to Standard I.C. By addressing standards I.C.1 and I.C.4 through this project, MHD will increase capacity to achieve this standard.</li> </ul>
X.A.3	<p><i>LHD partners with researchers interested in conducting public health research.</i></p> <ul style="list-style-type: none"> <li>MHD scored well in this area mainly due to strong relationships with local academic public health programs at Southern Connecticut State University and at Yale School of Public Health</li> <li>Though scores were high for this standard, the average score for Essential Service X (Contribute to and Apply the Evidence Base of Public Health) was low. MHD will work with our academic partners in the area of research in the future.</li> </ul>

## Quality Improvement Process

**PLAN:** The MHD Accreditation & QI Workgroup decided to address *Standard I-C with the focus of conducting or contributing expertise to periodic community health assessments*. The Milford Health Department had not conducted a Community Health Assessment (CHA) in over ten (10) years. The Milford Health Department utilized a QI consultant from the Public Health Foundation (PHF) to facilitate the QI process once priority QI areas were selected. Based on feedback and guidance provided by the consultant, members of the Department began planning and implementation activities to address the priority area(s) identified. After working through some brainstorming activities to identify opportunities and threats associated with conducting a community health assessment, it was determined that the original goal was too broad to accomplish within the grant period. The consultant along with key members of the workgroup identify two significant challenges related to the standard—the majority of Milford Health Department staff had limited knowledge of community health assessments and key community stakeholders (i.e. policymakers and local elected/appointed officials) had never been involved in a community health assessment in Milford. (See Appendix B). The scope was consequently narrowed to the following:

**AIM Statement:** By October 31, 2008, the Milford Health Department will conduct training on the importance of community health assessments and quality improvement for staff and community stakeholders to increase knowledge of assessment processes and brainstorm potential priority areas for assessment.

In working closely with our QI consultant, Kathleen Edwards of the Public Health Foundation, it was determined that a one-day onsite training would be designed to relay the importance of CHAs and QI activities to three groups—in-house MHD staff, key stakeholders to include local policymakers and elected/appointed officials, and school nurses (MHD staff physically housed in 19 different schools within Milford). Pre- and post-tests could be utilized to measure increased knowledge of MHD staff (in-house and school nurses) regarding QI and CHAs. Additionally, program participants would be notified of the plan to conduct a CHA within the following year. Training participants, particularly local policymakers and elected/appoint officials, were asked to submit brainstorms of priority areas to be included in the CHA to the Community Health Coordinator within 30 days of the training.

The following improvement theories were constructed:

1. If 100% of the Milford Health Department staff was trained regarding the importance of Community Health Assessments, then staff would be more likely to provide input regarding during the planning process for implementation of the CHA.
2. If at least 75% of local policymakers and elected/appointed officials invited to a training session on Quality Improvement (QI) and CHAs attended the training, then these stakeholders would be engaged and vested in providing input during the planning process for implementation of the CHA.
3. If staff, local policymakers, and elected/appointed officials who attended the training provided brainstorms regarding potential priority assessment areas for the CHA during the month following the training, then the success of the training in engaging stakeholders in the process could be measured.
4. If more than 75% of staff demonstrated an increase in knowledge regarding QI and CHAs after the training, then the training was successful.

Through guidance from the QI consultant, it was determined that implementation of solutions resulted in improvement if the following were achieved and documented:

1. 100% of Milford Health Department attended the training.
2. 75% of MHD staff demonstrated an increase in knowledge as determined by pre- and post-tests.
3. 75% of invited local policymakers and elected/appointed officials attended the training.
4. 50% of those policymakers and officials who attended the training provided input regarding priority assessment areas during the 30 days following the training.

**DO:** The workgroup determined that one-day onsite training would be conducted on October 2, 2008. The QI consultant, Kathleen Edwards of the Public Health Foundation, would serve as facilitator for the training. The table below provides a description of roles and responsibilities of QI team members as well as program participants.

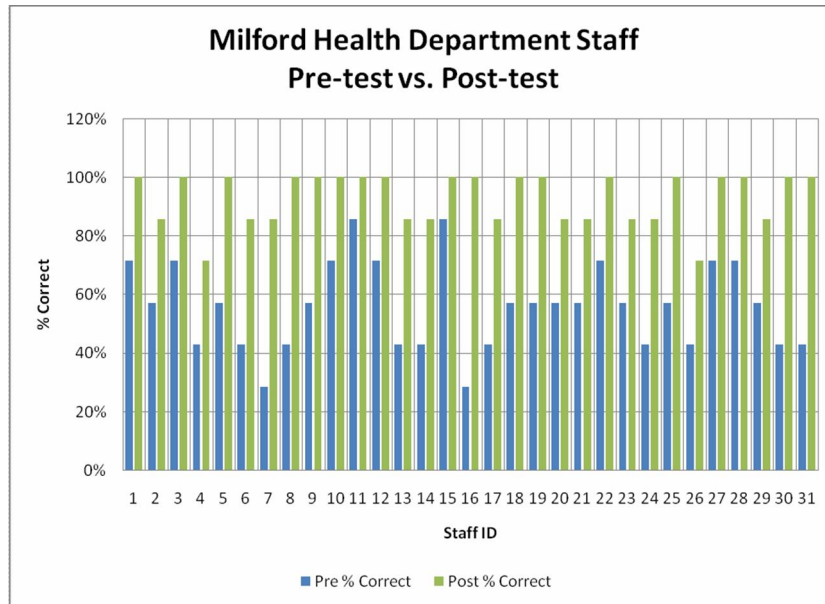
<b>Name/Group</b>	<b>Role</b>	<b>Responsibility</b>	<b>Timeline</b>
A.Dennis McBride, MD, MPH	Health Director	To provide a charge to the three groups throughout the day regarding expectations for the day.	October 2, 2008
Deepa D. Joseph, MPH	Community Health Coordinator	To work with QI consultant to develop agenda for training, pre- and post-test questions, invitation letter for local officials, and overall coordination of the training. Analysis of results. (See Appendix C & Appendix D)	Ongoing
Joan Cagginello, RN, MS	Nursing Administrator	Participate in the in-house portion of the training. Communicate importance of the training to school nursing staff. Solicit input from nursing staff following training regarding priority areas for assessment.	October 2, 2008- November 30, 2008
Laura Miller, RS	Chief of Environmental Health	Participate in the in-house portion of the training. Communicate importance of the training to environmental health staff. Solicit input from environmental health staff following training regarding priority areas for assessment.	October 2, 2008- November 30, 2008
Kathleen Edwards, PhD	Consultant	To develop training curriculum and provide assistance to Community Health Coordinator in developing agenda, pre/post tests, etc.	Ongoing
In-house Staff (13) & School Nurses (22)		To actively participate in the training and provide input regarding QI & CHA. To take the pre- and post-tests.	October 2, 2008
Local policymakers & elected/appointed officials (16)		To attend 1-hour session and provide input regarding priority CHA areas.	October 2, 2008- November 2, 2008

Being that a CHA was never conducted in Milford during the tenure of current MHD staff, much of the process was new to staff and key stakeholders. Additionally, MHD staff was unfamiliar with QI tools such as Fishbone Diagrams, Affinity Diagrams and Gantt Charts. These tools were utilized to move discussion forward and engage staff and stakeholders in the CHA planning process. Improvement theories were evaluated through the use of pre- and post-test, as well as brainstorm worksheets submitted by participants during the month following the training.

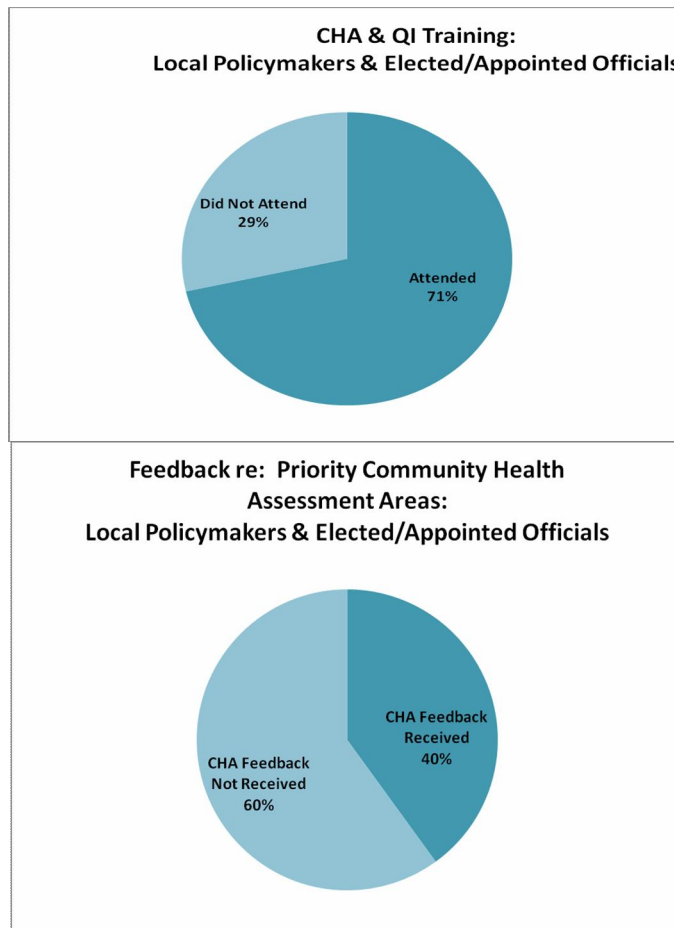
The primary obstacle for developing and implementation of the training involved accommodation of varying schedules among staff and stakeholders. The structure for the day was dictated largely by availability and commitments of those who were being invited to participate. Though 100% attendance was a goal, it could not be achieved across the board due to competing commitments.

**CHECK:** Approximately 89% of the Milford Health Department staff, including in-house staff and school nurses, attended the training on October 2, 2008. The day was divided into 3 major sections— in-house staff session, local policymaker session, and school nurses session. Positive feedback was provided from participants with regards to the content of the training and the information gained. Pre- and post-tests were administered to all Milford Health Department staff in attendance at the training. 100% of MHD staff demonstrated an increase in knowledge based on the percentage of correct

answers for pre- and post-tests. Of those staff members, 71% demonstrated an increase in knowledge of 50% or more.



Several policymakers and elected/appointed officials were invited to attend a one-hour session designed specifically to meet their needs. Invited officials included all members of the Milford Board of Health, the Mayor, local State Representatives and Senators including the Speaker of the House, Judge of Probate, Board of Education members, and Board of Alderman liaisons to the Health Department. 79% of invited local policymakers and elected/appointed officials attended the training. The discussion that occurred during the session was rich with information regarding CHAs and 100% of participants agreed that the Milford Health Department should conduct a CHA in Milford in the near future. Participants in this session were requested to send the Community Health Coordinator input regarding priority areas of concern to be addressed through the CHA within 30 days of the training. Forty percent (40%) of those in attendance submitted input in writing within the 30 day period. (See Appendix E).



Implementation of this training session provided an approach to engaging staff and community stakeholders in the CHA process by providing a basic foundation of knowledge to these partners. This approach served to fill a gap in a significant manner, as the majority of participants had never had exposure to such a process and indicated that it was beneficial. Additionally, 100% of participants indicated that they will remain engaged and assist throughout the CHA process. Though the results for MHD staff were expected, the results from local policymakers and elected/appointed officials were more positive than anticipated. Though approximately 20% of those invited did not attend, those individuals indicated that they wanted to be informed of what occurred and want to be involved in any future meetings around this topic. Consequently, an additional improvement which came out of the discussions throughout the day is the development of a Gantt chart to map out the project timeline for the CHA project (See Appendix F).

**ACT:** The training process increased the knowledge of Milford Health Department staff regarding Community Health Assessments and has encouraged them to provide input regarding the process. Additionally, the training provided a means for engaging key stakeholders in the process by soliciting their input.

As all program participants expressed interest in remaining involved in future activities surrounding accreditation preparation and quality improvement, the Milford Health Department has developed a timeline with identified next steps in the CHA process. This timeline will be shared with program participants, who will have the opportunity to become involved with various identified activities. This process was invaluable in essentially beginning discussions with staff and key stakeholders and will continue to be utilized as a tool in the future.

## Results

Participation in Round 2 of the Demonstration Sites Project for Accreditation and Quality Improvement has resulted in several positive outcomes. Specifically, through implementation of the training session regarding CHAs and QI, the capacity of the MHD to conduct a CHA has been increased. Several of the indicators of improvement were achieved and progress is indicated below:

1. **100% of Milford Health Department attended the training.** Approximately 89% of MHD staff attended the training. Those who were unable to attend were out ill or had conflicting meetings that had already been scheduled prior to the training date. Those who were not able to attend were debriefed by the Community Health Coordinator after the training.
2. **75% of MHD staff demonstrated an increase in knowledge as determined by pre- and post-tests.** All MHD staff in attendance (100%) demonstrated an increase in knowledge, as per pre- and post-test results. Moreover, 71% demonstrated an increase in knowledge of 50% or more.
3. **75% of invited local policymakers and elected/appointed officials attended the training.** 71% of all invited local policymakers and elected/appointed officials attended the training. Of those who did not attend, 75% were unable to attend due to previously scheduled meetings and/or election-related events. 75% of those who were unable to attend also expressed interest to be included in future meetings and requested updates on progress in the month following the training.
4. **50% of those policymakers and officials who attended the training provided input regarding priority assessment areas during the 30 days following the training.** Feedback regarding priority areas to be included in the CHA was received from 40% of those local policymakers and elected/appointed officials within 30 days of the training. An additional 20% have contacted the Community Health Coordinator to advise that feedback is forthcoming.

Additional results of the project include renewed energy and enthusiasm on behalf of MHD staff to understand and evaluate the public health needs of the residents of Milford. Specifically, staff in each division has initiated division meetings focused on brainstorming additional priority areas for assessment. Also, two staff members from the Environmental Health Division have attended a training specific to national environmental health performance standards and are incorporating those areas into the CHA process.

Finally, as previously mentioned, the majority of MHD staff had never utilized QI tools in their public health work. Through this training, staff was able to practically learn how to apply QI tools to their routine work activities. QI tools that were utilized during the training include fishbone diagrams, brainstorming, and Gantt charts.

## Lessons Learned

Participation in Round 2 of NACCHO's Accreditation Preparation & Quality Improvement Demonstration Sites Project has afforded the MHD to begin the work of preparing for accreditation in 2011. The self-assessment tool provided a comprehensive strategy to evaluate activities associated with the 10 Essential Services of Public Health. As most staff members were not familiar with the National Performance Standards Program at the beginning of this project, it was extremely valuable to review the standards with members of the QI team prior to completing the self assessment.

Also, as part of the self-assessment process, the Community Health Coordinator met with each division head to discuss standards relevant to their area of expertise. This process was an important piece to the self-assessment as it allowed for additional clarification of items prior to completion of the self assessment. Facilitating discussions within each area separately also assisted with encouraging overall staff buy-in into the whole QI process. Consequently, by the time the one-day training was conducted, all MHD staff had some background into the process and had begun thinking about how they would fit into the CHA process.

In terms of identifying one area for QI for the purposes of the grant, demonstration sites must keep grant timelines in mind. Analysis of self-assessment scores can lead QI team members to enthusiastically seek to address several areas for improvement. It is only through working closely with our QI consultant that MHD was able to narrow our scope to meet the goals of the grant within the prescribed time period.

Lessons learned specific to the training process implemented through participation in this project are as follows:

- Though pre- and post-tests were administered on the day of the training, it would be informative to administer a training evaluation to determine attitudes toward implementation of CHA in the near future. Specifically, though 100% of staff verbally stated they would like to remain involved in the CHA process, their certainty in being able to do so was not measured.

- Engaging key stakeholders during this training, specifically local & state legislators along with the Mayor, was invaluable. The input provided during and after the training will serve to encourage greater community participation as we continue planning & implementation for the CHA.

## **Next Steps**

Through this project, the MHD developed a Gantt chart which provides a timeline for conducting a CHA in Milford. (See Appendix F) In order to accomplish the tasks identified, MHD staff will work internally to continue to identify priority assessment areas as well as develop a community profile based on existing data. Also, the Community Health Coordinator has submitted a proposal to work with graduate students from the Yale School of Public Health to develop a CHA tool to be administered within the community. MHD will partner with local academic institutions and community-based agencies to assist with data analysis of the CHA, as well as to identify priority health concerns to be addressed based on CHA results.

Through completion of this project along with implementation of next steps described above, MHD will be more prepared for accreditation in 2011. Particularly, MHD has and will continue to build its capacity to meet all requirements of Essential Services I, IX, and X through these completed and planned activities.

## **Conclusions**

As a result of receiving funding through this grant, MHD successfully implemented a QI process using the Plan-Do-Check-Act model. This model, though informally implemented, had never been formally utilized. However, through use of QI tools provided in *The Public Health Memory Jogger II*, MHD staff increased knowledge of how to apply tools to improve the quality of public health services for our residents. This process enabled MHD staff to market the importance of public health programs and services to key stakeholders in the community and has engaged them in future activities. Consequently, participation in Round 2 of the Demonstration Sites Project not only served to benefit MHD staff, but also key community officials and the city of Milford at large.

## **Appendices**

***Appendix A: Storyboard Template***

***Appendix B: Fishbone Diagram***

***Appendix C: Training Agenda***

***Appendix D: Pre- and Post-Tests***

***Appendix E: Brainstorming Worksheet***

***Appendix F: Gantt Chart***