

The *PACE EH* Demonstration
SITE PROJECT:



Communities
in **Action**



NATIONAL
ASSOCIATION OF
COUNTY & CITY
HEALTH OFFICIALS

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Introduction

In the summer of 2002, the National Association of County and City Health Officials (NACCHO) invited member local public health agencies to compete for funding to support community-based environmental health assessment activities using the methodology developed in the *Protocol for Assessing Community Excellence in Environmental Health (PACE EH)*. Through funding by the National Center for Environmental Health of the Centers for Disease Control and Prevention, eight local public health agencies were awarded \$20,000 each to conduct the 13 Task assessment process over a 12-24 month period beginning in January 2003.

THE *PACE EH* METHODOLOGY

PACE EH is a guidance tool for local public health officials that provides a step-by-step methodology for facilitating a community-based environmental health assessment. The 13-task methodology calls for the development of a community-staffed environmental health assessment team to identify local environmental health priorities, establish relevant indicators, and coordinate significant short and long term interventions. By design, a well-executed *PACE EH* process incorporates both existing environmental health data and community perceptions of issues related to environmental health, and suggests a public forum in which to integrate them. It encourages the development of significant new working relationships between community stakeholders and local public health agencies by providing a venue for community members to help shape and influence the local environmental health agenda. It is a proven methodology that can be used to engage the community and establish responsive, effective, and broadly supported environmental health activities.

THE DEMONSTRATION SITES

The eight local public health agencies selected to demonstrate *PACE EH* vary widely in terms of demographics, organizational structure, community outreach experience, and programmatic capacity. Likewise, the environmental health issues that are beginning to emerge following the first full year of their *PACE EH* work run the gamut from agency infrastructure gaps to ecological degradation, resulting in a broad range of specific human health impacts.

The *PACE EH* work conducted at each site varied in response to a number of administrative and project design factors. The *PACE EH* facilitators at each site have exhibited varying degrees of control over the process to date. In Multnomah County, Oregon, the community environmental health assessment (CEHA) team conducting *PACE EH* is going to great lengths to ensure it is a

THE THIRTEEN TASKS OF *PACE EH*

TASK 1

Assess Agency and Community Capacity

TASK 2

Define and Characterize the Community

TASK 3

Assemble A Community Environmental Health Assessment Team

TASK 4

Define the Objectives of the Assessment

TASK 5

Generate the Environmental Health Issue List

TASK 6

Analyze the Issues with a Systems Framework

TASK 7

Identify Appropriate Community Environmental Health Indicators

TASK 8

Select Standards

TASK 9

Create Issue Profiles

TASK 10

Rank Issues

TASK 11

Set Priorities For Action

TASK 12

Develop Action Plans

TASK 13

Evaluate Progress...And Begin Again

community-driven process that meets community-identified needs. The process facilitators from the Multnomah County Health Department focus primarily on providing meeting space and technical support to the CEHA team. On the other hand, in Muskegon County, Michigan, the local health department facilitators have chosen to establish a relatively more central role for the local public health agency as a leader in both issue identification and eventual intervention. Similarly, *PACE EH* facilitators in Blount County, Tennessee encouraged their CEHA team to analyze existing environmental health data to assist in the identification of issues while existent data was consciously put aside in the identification of community priorities by the CEHA team from Alexandria, Virginia.

More generally, the demonstration sites have adapted the methodology to meet specific local needs. For example, in Mahoning County, Ohio, the CEHA team is strategically building upon previously conducted local health assessment activities. The San Juan Basin [CO] Health Department excised aspects of the *PACE EH* methodology to fit local capacities and timetables. Conversely, the Polk County, Florida CEHA team maintained a relatively more steadfast adherence to timetables as established by the requirements of successfully completing each Task in linear order. The Rock County [WI] Health Department is strengthening its *PACE EH* process by incorporating innovative Geographic Information Systems (GIS) technology to improve the value and clarity of emerging *PACE EH* environmental health data.

The adaptability of the *PACE EH* methodology is both beneficial and by design. It reflects the authors' insistence that the process support from the ground up identification not only of priority environmental health issues but also the very parameters of what is "environmental health" locally. The *PACE EH* guidebook offers a broad definition of "environmental health" and encourages users to work with their CEHA team to develop more specific local definitions, as well as site-specific objectives, goals and visioning. As such, it is to be expected that the demonstration sites would utilize *PACE EH* in variable ways.

SIMILARITIES ACROSS THE DEMONSTRATION SITES

Owing in large part to the interplay between the complex nature of environmental health issues and the variability of budgets and capacities across the demonstration sites, the *PACE EH* methodology supports very different projects. However, despite their variability, there are a number of elements across most, if not all, of the demonstration sites have in common.

Progress

From January 2003 to May 2004, the demonstration sites were relatively uniform in regards to their progress through the methodology.

Demonstration Site	Last Task Report Completed	Team Meeting Schedule/Hrs.	Homework Assignments
Alexandria, Virginia	Task 9	Monthly / 1-2	Yes
Blount County, Tennessee	Task 6	Monthly / 1-2	Yes
Mahoning County, Ohio	Task 10	Monthly / 1-2	Yes
Multnomah County, Oregon	Task 5	Bi-Monthly / 1-2	Yes
Muskegon County, Michigan	Task 8	Monthly / 1-2	Yes
Polk County, Florida	Task 7	Monthly / 1-2	Yes
Rock County, Wisconsin	Task 10	Monthly / 1-2	Yes
San Juan Basin, Colorado	Task 13	Monthly / 1-2	Yes

Over the course of 15 months, all eight sites completed the first three tasks, focused on internal facilitating agency preparation for the *PACE EH* process. 75 percent have completed the second stage of the process (Tasks 4-6) focusing on identification of community environmental health issues. 50 percent have completed the third stage of the process (Tasks 7-9) devoted to researching and describing in detail local priority environmental health issues. And, one of the sites (San Juan Basin [CO] Health Department) has filed all 13 Task Reports.

Primary influences on the overall rate of progression through the methodology include the agreed upon meeting schedule and the amount of work conducted by team members between meetings. Interestingly, the demonstration sites were almost identical in regards to these factors. All but one site (Multnomah County, Oregon) opted for monthly meetings, and all sought to advance their *PACE EH* work through take-home team assignments between meetings. While there were inevitably differences between the amount and type of work assigned outside CEHA team meetings, the consistency in across demonstration site project planning and execution is nevertheless striking.

Further, the relatively small range of difference across site progression rates can be largely explained by process choices and logistical distinctions. For example, The San Juan Basin Health Department began preparing for a community-based environmental health assessment long before it applied for, and received, funding from NACCHO to conduct *PACE EH*. Their ability to move relatively quickly through the methodology reflects extensive community outreach and assessment planning activities prior to the launch of its *PACE EH* initiative.

Likewise, Multnomah County [OR] Health Department's steadfast commitment to empowering the community to envision, develop and implement its own *PACE EH* process without regard to standing departmental environmental health directives has resulted in a project that reasonably sacrifices expediency for inclusion. Facilitating a community assessment process that places a premium on creating and maintaining true community-based leadership and support is time consuming and slows the overall process relative to one in which the health department takes a more direct leadership role.

Isolating the extremes represented by these two demonstration sites indicates a fairly standard rate of progress across *PACE EH* users. Tasks 1-3 take about 3 months to complete assuming the facilitating agency has fairly extensive knowledge about *PACE EH* and established support for undertaking the process by local decision-makers. The ability to move through the first three tasks is also impacted by the perceived standing of the health department in the community. If the facilitating department has a particularly low profile or there is a history of contentious relations between the health department and the community (i.e. as is often the case in communities impacted by known pollutants) the first three tasks can take considerably longer to work through.

Tasks 4-6 show the greatest degree of difference among the demonstration sites, with an average completion time of between 6-12 months. The range is most directly attributable to the method and extent of the issue identification phase (most directly addressed in Task 5). As a general rule of thumb, the more extensive and scientifically rigorous the survey process, the longer data collection and analysis will take. For example, in Blount County, Tennessee, the CEHA team randomly distributed by mail more than 2000 environmental health surveys. Initially, it received only 270 completed surveys and needed approximately 130 more to arrive at statistically significant results. The team had to extend its Task 5 time frame to meet the identified needs of the survey methodology. Whereas, in Mahoning County, Ohio, the team opted to focus on surveys distributed and collected at a local fair. It collected 423 survey responses at that event. The team chose to forgo random sampling in favor of situational surveying. The result was perhaps not as scientifically valid, but relatively quick and data rich nonetheless.

The four demonstration sites that have completed the *PACE EH* methodology through Task 9 indicated that Tasks 7-9 require approximately three to five months to complete, with Task 9 taking the longest. Developing indicators (Task 7) can take relatively longer in projects that tend to be more directly community-driven, simply because many members of the assessment team may lack experience working with indicators and need some technical assistance to become proficient. The degree to which the creation of issue profiles (Task 9) is time consuming is directly related to how the work is parceled out. Sites that placed the burden of issue profile development primarily on the facilitating health agency (e.g. the Alexandria, Virginia and Rock County, Wisconsin projects) tended to move through the task more rapidly. In cases where the entire CEHA team was expected to work on drafting the issue profiles (e.g. San Juan Basin, Colorado), relatively more time was committed for completion of Task 9.

Only one site has completed through Task 13 (San Juan Basin, Colorado). As such, it is premature to establish even an informal timeline for the demonstration sites to complete the final four tasks. However, based on reports to date and recent site visits, NACCHO estimates working from Task 10 through Task 12 will take most of the demonstration sites 3-6 months. The San Juan Basin, Colorado CEHA team completed Tasks 10-12 in four months. It is hard to establish a completion date for Task 13 as it focuses on evaluation of the overall *PACE EH* project, and planning for future iterations. As such, it will likely be an ongoing process for all of the demonstration sites in building up to the launch of another *PACE EH* initiative in the recommended 3-5 years.

THE COMMUNITY ENVIRONMENTAL HEALTH ASSESSMENT TEAMS

There appears to be little correlation across the demonstration sites in regards to the make-up and size of their Community Environmental Health Assessment teams.

Demonstration Site	# Health Dept Staff serving on CEHA Team	Health Dept. Staff is Lead on CEHA Team	# Total Members CEHA Team
Alexandria, VA	1	Yes	15
Blount County, TN	5	Yes	42
Mahoning County, OH	6	Yes	11
Multnomah County, OR	2	No	6*
Muskegon County, MI	3	Yes	27
Polk County, FL	2	Yes	20
Rock County, WI	2	Yes	28
San Juan Basin, CO	2	Yes	24

* The Multnomah County *PACE EH* process utilized three distinct advisory committees. This figure represents the number of individuals tasked specifically with devising the environmental health assessment process.

This can be misleading however, as the teams are largely similar in many important ways. For example, almost across the board, the demonstration site facilitators developed teams that averaged one health department staff member for roughly every ten at-large committee members. It is also striking to note that the CEHA team members were selected from a number of similar organizations at a majority of the sites. Among the most prevalent organizations tapped for service to the *PACE EH* projects were:

- ▶ Regional Environmental Protection Agency offices
- ▶ Departments of Natural Resources
- ▶ Boards of Development and Planning
- ▶ Grassroots Activism groups
- ▶ Academic Institutions
- ▶ Boards of Health
- ▶ Public Works offices
- ▶ Faith-based organizations

To date, the teams have followed roughly identical meeting schedules, averaging once a month for no more than two hours, with occasional brief periods of intensified work, most commonly occurring around the development of indicators and issue profiles (Tasks 7 and 8). Most of the teams have employed consensus decision-making processes to settle debates. And, in most cases, the sponsoring Health Department team members are the primary facilitator(s) of the process, and shoulder the greatest degree of accountability for the development and overall success of the project.

SURVEY TOOL AND ANALYSIS

The *PACE EH* demonstration sites took very similar approaches to the development, distribution, and analysis of community environmental health perception surveys. Most of the sites used fairly simple surveys, and collected information based on both pre-selected environmental health issue lists and open-ended opinion questions designed to allow respondents to identify environmental health issues “in their own words.” Two of the sites also conducted complementary focus group studies in coordination with more general surveys (Alexandria, Virginia and Muskegon, Michigan).

In some cases, demonstration site facilitators chose to build their *PACE EH* project off pre-existing data sources. In Muskegon, Michigan, for example, they used relevant data from previously conducted health profiles, and ongoing community environmental perception surveys developed outside the health department, as a foundation for establishing community environmental health perceptions. They supplemented this data with five focus group sessions designed to establish the environmental health priorities of 60 local citizens with expertise in identifying and addressing local environmental health issues.

Demonstration Site	Surveys Distributed	Surveys Analyzed	Surveys provided List of established Environmental Health Issues	Surveys included Open-Ended Questions
Alexandria, VA	Unknown	475	Yes	Yes
Blount County, TN	2000	252	Yes	Yes
Mahoning County, OH	423	310	Yes	Yes
Multnomah County, OR	To Be Determined	To Be Determined	To Be Determined	To Be Determined
Polk County, FL	391	114	Yes	No
Rock County, WI	300	300	Yes	Yes
San Juan Basin, CO	Unknown	75	Yes	Yes

Nevertheless, most of the demonstration sites opted for small situational survey methodologies. The facilitators sought to capture a cross-section of community members and develop a broad spectrum of opinions regarding local environmental health priorities. Two of the sites sought to generate verifiable random and reliable survey results (Multnomah County, OR and Blount County, TN). And one site facilitator, conducting *PACE EH* in collaboration with a community of about 300 people (Polk County, FL) utilized a door-to-door census of local environmental health perceptions when the return rate of the initial survey was deemed too low to continue.

Regardless of the survey methodology, all the site facilitators reported a general level of satisfaction with Task 5. Across all the sites, this task resulted in a number of positive outcomes.

Those mentioned most frequently include:

- ▶ an appreciation of local knowledge about environmental health;
- ▶ a broadening of the understanding of what constitutes “environmental health;”
- ▶ a recognition of the positive impacts of ongoing local environmental health interventions;
- ▶ relevant local data development regarding environmental health priorities; and
- ▶ capacity development in community outreach

Notably, these benefits are realized regardless of the degree to which employed survey methodologies adhere to scientific standards of validity and reliability.

PRIORITY ENVIRONMENTAL HEALTH ISSUES

The eight *PACE EH* demonstration sites devised locally appropriate survey instruments and methodologies. However, the results of these surveys indicate that the environmental health concerns of the eight target communities are largely similar. Although it is hard to compare the results from one site to another directly, simple analysis across the sites proves that, despite some significant local variation, broad community environmental health priorities tend to be more similar than different.

SITE SPECIFIC ENVIRONMENTAL HEALTH PRIORITY ISSUES (GENERALIZED)								
	Alex., VA	Blount Co., TN	Mahoning Co., OH	Multnomah Co., OR	Muskegon Co., MI	Polk Co., FL	Rock Co., WI	San Juan Basin, CO
Air Quality	✓	✓	✓	✓	✓	✓	✓	
Water Quality	✓	✓	✓	✓	✓		✓	✓
Solid Waste			✓	✓	✓		✓	✓
Land Use		✓	✓		✓		✓	
Housing				✓	✓	✓	✓	
Zoonosis						✓	✓	✓
Food Safety	✓						✓	
Crime						✓		
Accidents				✓				

As the table illustrates, the demonstration sites tended to identify largely similar environmental health issues across their communities. Although, in some cases, site-specific issues were generalized to fit broader categories (e.g. drinking water and recreational water were collapsed into “water quality”) the overall concurrence of issues across the sites is nevertheless striking. Air quality was a priority concern at 100% of the sites. Water quality was a priority concern at 87.5% of the sites. Solid waste, including specific issues such as recycling, hazardous waste, and Brownfield’s, was identified at 62.5% of the sites. Land use was identified at 50% of the sites. Housing issues, incorporating lead and asthma concerns, were identified as a priority in 50% of the sites as well. Zoonosis appeared as a priority area in 37.5% of the sites. Finally, the issue of food safety is identified at 25% of the sites.

Notably, outside these seven priority issues, only two other environmental health issues emerge as top priorities across any of the sites. The two, crime and accidents, are further anomalous in that only very rarely can they be causally linked to environmental factors.

UTILIZING A SYSTEMS FRAMEWORK

Task 6 of the *PACE EH* methodology, *Analyze the Issues with a Systems Framework*, is offered to serve three primary purposes. First, users can take the often extensive list of environmental health issues uncovered through community surveys in Task 5 and provide a logical means for aggregating and merging seemingly disparate environmental health issues into more comprehensive and representative categories.

Second, it demonstrates to the CEHA team the holistic nature of environmental health impacts. By leading the team through a series of exercises that graphically displays the interconnectedness of local environmental health impacts, it encourages future team focus on addressing the core problems rather than focusing on specific symptoms.

Finally, it provides a platform from which to launch indicator development. *PACE EH* suggests that valuable local environmental health indicators can be identified by the degree to which they clarify gaps in knowledge illustrated through the contextualization process offered in Task 6. In short, on an issue by issue basis, missing pieces of the framework are ripe areas for indicator development.

However, the demonstration sites significantly altered or ignored the sixth task of the *PACE EH* methodology with enough frequency to establish a pattern. Of all the tasks developed in the methodology, Task 6 has served to most confuse or frustrate the *PACE EH* demonstration site facilitators. Of the seven sites reporting on Task 6, six described it as problematic.

One site (Arlington, Virginia) chose not to conduct Task 6 at all, finding it more productive to move forward into Task 7 directly from collected surveys.

One site (Polk County, Florida) found they did not need to do Task 6, as they had few enough priority issues that further contextualization was not required. This is, in part, likely a result of the very small community approach they took to conducting *PACE EH*. By focusing on a small population and geographic area, the Polk County facilitators greatly reduced the gross number of environmental health issues identified in surveys, thereby reducing the need to aggregate the issues further in order to move forward.

Three sites (Mahoning, Ohio, Rock County, Wisconsin and San Juan Basin, Colorado) significantly modified Task 6 to better fit the needs of their respective CEHA teams. Interestingly, the primary modification of all three sites was a simplification of the framework offered in Task 6 of *PACE EH* into relatively basic questions for priority environmental health issues' concerning whom in the community is most impacted and how are the issues manifested in the community.

Two sites (Blount County, Tennessee and Muskegon, Michigan) completed Task 6 as it was designed in the *PACE EH* methodology. However, the CEHA team in Muskegon, Michigan reported afterward that they felt the guidebook directions for Task 6 were unnecessarily and restrictively complex, and that their needs would have been better served by a simplified process for contextualizing the priority environmental health issues.

ENVIRONMENTAL HEALTH INDICATORS

Owing to the fairly consistent adaptations of Task 6 across the demonstration sites, few followed the specific directions the *PACE EH* guidebook provided on indicator development. The guidebook encouraged users to identify the gaps in knowledge around priority local environmental health issues and construct indicators that specifically target them. The appropriate indicators would provide quantitative measures of the qualitative relationships mapped in Task 6. Six of the eight demonstration sites have reported completing their indicator development process.

However, in the process of simplifying Task 6, the majority of the demonstration sites also inadvertently adapted Task 7: *Develop Locally Appropriate Indicators* such that chosen indicators are primarily the result of reliance on locally appropriate expertise and chosen through consensus CEHA team work. Very few of the demonstration sites focused their indicator development on the degree to which any chosen indicator served to “complete” a “systems framework” model begun in Task 6. Put simply, the demonstration sites developed indicators that reflected priority issues, but rarely not focused on an indicator development process that would elevate one indicator over another with regard to its applicability within a systems framework.

All six demonstration sites that completed Task 7 reported previous tasks provided the background knowledge to logically and strategically establish viable local indicators, but none of the six used issue frameworks as a blueprint for identifying “best” potential indicators.

SOURCES EMPLOYED FOR SELECTING STANDARDS

The majority of the demonstration sites reported difficulties related to the lack of high quality sources through which to compare and contrast chosen indicators. Most sites employed a combination of existing standards from *Healthy People 2010* and team identified standards for issues that were deemed not adequately represented in *Healthy People 2010*.

Environmental health standards related to urban sprawl and decreasing green spaces were the ones most commonly identified by the demonstration sites as lacking in *Healthy People 2010*.

A number of the sites relied on current Environmental Protection Agency standards, especially those affecting air and water quality issues. Another popular source of standards for air and water quality issues was regional Departments of Natural Resources materials.

Interestingly, two sites reported that their CEHA teams were reluctant to take the lead in this stage of the process, and looked to the facilitators for an increased leadership role in the identification of standards. In fact, at one site (Alexandria, Virginia) the CEHA team entrusted Task 8 in its entirety to the project facilitators at the local health agency. The project coordinator conducted all the research and briefed the CEHA for review and approval of the selected standards.

Across the six sites reporting on Task 8, the chosen standards largely are written in the professional language of health and environmental agencies, and reflect, one suspects, a fairly consistent reliance on project coordinators to move the team through this part of the *PACE EH* methodology.

ISSUE PROFILES

Four of the eight demonstration sites have submitted technical reports for Task 9: *Create Issue Profiles*. These issue profiles are summarized reports that highlight each teams research to date about priority local environmental health issues. All four sites closely adhered to the methodology for this task, and created their issue profiles using the sample template included in the guidebook.

Demonstration Site	Number of Issue Profiles
Alexandria, VA	8
Mahoning County, OH	3
Rock County, WI	32
San Juan Basin, CO	4

The only major distinction among the four reporting sites was the degree to which the issue profiles served to aggregate specific environmental health priorities under broad topic areas. Three of the four (Alexandria, Virginia, Mahoning County, Ohio and San Juan Basin, Colorado) developed fairly broad issue profiles that served to encapsulate a number of sub-topics within a more general environmental health area (e.g. air, land or water). The issue profiles are the finished products that summarize a completed process.

The Rock County, Wisconsin team chose instead to develop very specific issue profiles for each of the priority issues across a number of broader topical areas. This approach was a natural extension of their decision to work each issue completely through Tasks 6 – 9 before moving on to the next priority issue. In a sense, their team process served to establish a coordinated methodology for developing consensus issue profiles by focusing on a specific environmental health priority from survey results all the way through profile development within a single team meeting. Distinct from the other three sites, the relatively large numbers of profiles are the “rough drafts” detailing the teams collective work, not as much a summary of a finished product.

CURRENT STATUS – TAKING THE PULSE

Only three of the *PACE EH* demonstration sites have entered into the last stage of their community-based environmental health assessment. It is, thus, premature to report any general patterns the demonstration sites may have established around these specific tasks. However, some interesting developments are occurring at each of the three sites that have begun the final ranking and prioritizing of their identified environmental health issues.

Mahoning County, Ohio facilitators have chosen to eliminate Tasks 10 and 11 and maintain the ranking and prioritizing methodology it informally established through analysis of survey results. The Mahoning CEHA team developed three working groups to focus on the priority areas identified through community surveys, and has decided each group represents a specific priority area that will be responsible for developing issue specific action plans.

Rock County, Wisconsin facilitators are closely following the *PACE EH* methodology for ranking and prioritizing, but have decided to simplify the sample tools and expand the range of scores available to team members evaluating relative rank and priority.

The San Juan Basin, Colorado team reports that they decided to move away from quantifying relative rank and priority. It's initial ranking exercises demonstrated a general lack of distinction among the issues, all of which scored nearly identically. Further, the team felt it had established enough base knowledge and cohesiveness that ranking and prioritizing was more appropriately done through discussion and debate.

NACCHO will continue to follow the work of the *PACE EH* demonstration sites closely in the coming years.



NOTES FROM THE FIELD: SITE SPECIFIC ADAPTATIONS

ALEXANDRIA, VIRGINIA

Utilizing the *PACE EH* Peer Assistance Network

From the initial task of deciding whether Alexandria had the capability and resources to conduct an assessment to the development of action plans, the information from the previous *PACE EH* sites benefited the decision-making process. Before Alexandria Health Department took on *PACE EH*, it consulted adjacent Arlington County Health Department, an established *PACE EH* site. During initial meeting the Arlington County facilitators were able to articulate benefits it received from doing the assessment and how much work would be involved. This provided the Alexandria Health Department a third party view point when soliciting the support from the Health Director and City Council. Arlington County also participated in Alexandria's "Kick Off" meeting, where it provided an objective third party view of the assessment process, benefits accrued to its community and an idea of how it would serve to benefit Alexandrians.

Arlington County *PACE EH* representatives played a key role in the initial community assessment team meetings, especially during the planning stages. They provided the Alexandria team with information on what methods and tools they utilized to obtain their community perspective. The Alexandria team used this information to build a foundation for its assessment. The team reviewed Arlington's survey along with several other examples from the guidebook to develop a survey. Alexandria's survey was a compilation of several of these examples. In addition, Alexandria's community assessment team decided to follow some of Arlington's methodology for collecting survey responses.

During the latter part of the process, the Arlington representatives played a supportive role. As the Alexandria CEHA team learned the fundamentals of ranking and prioritizing the issues, an Arlington representative was present for the team to question and to assist in keeping them on track. This was valuable to the Alexandria team, and inspired confidence in the direction and mechanics of their project.



BLOUNT COUNTY, TENNESSEE

Extensive Survey Implementation and Analysis

In the summer of 2002, the Blount County Environmental Health Action Team (EHAT) developed and administered a *PACE EH* survey, to identify environmental health issues of concern to residents of Blount County. The survey was adapted from a previous tool used by the Northern Kentucky District Health Department, an earlier *PACE EH* site.

The survey, including cover letter and return envelope, was distributed to 2,000 random household addresses in the county. A mailing list was purchased and used to assure weighted distribution among all county zip codes, according to population size. A graduate student working on his Masters degree in Public Health at a local university analyzed the returned surveys using EpiInfo 2000 software.

The value of such extensive, and relatively expensive, survey distribution and analysis was readily observed at the initial survey results presentation. EHAT members embraced and “owned” the results and committed to work on the top six issues identified by their fellow residents: outdoor air quality, safe drinking water, surface water quality, loss of rural land, ground water quality and urban development. The team decided to meet the following week, and formed three subgroups: Air Quality, Land Use (to address loss of rural land and urban development) and Water Quality (to address safe drinking water, surface and ground water). These subgroups, inspired by results from the community survey process, are the springboard for the vast majority of *PACE EH* work, including action planning and implementation.



MAHONING COUNTY, OHIO

Partnering with Regional Environmental Protection Agency Representatives

The Mahoning County *PACE EH* facilitators enjoyed the commitment, resources and expertise of very active and involved regional Environmental Protection Agency officials as members of their CEHA team. The U.S. EPA Region 5 Cleveland Office, located in Westlake Ohio, serves the Northeast Ohio region using a Community-Based Environmental Protection (CBEP) approach. A CBEP approach helps EPA get the best environmental results by collaborating with other federal agencies, state and local governments, tribes, businesses, organizations, and individuals to solve environmental problems.

The U.S. EPA Region 5 Cleveland Office works in partnership with the Ohio EPA. The Ohio EPA introduced the Mahoning *PACE EH* project to the Cleveland Regional Office, and suggested they join the Steering Committee as a way to build relationships and networking across the state. The U.S. EPA staff became involved in the project in the spring of 2003. Staff attended and participated in commission and steering committee meetings. U.S. EPA staff also served as a resource for the Indoor Air Work Group, and participated in their monthly meetings.

Early in the *PACE EH* process, EPA staff delivered a presentation on the Cleveland Clean Air Century Campaign (CCACC) to the commission and the steering committee. The CCACC began as an EPA pilot project in March 2001, with the establishment of a working group of community leaders representing Cleveland's neighborhoods, businesses and environmental, educational, and governmental organizations. The background, membership, activities, goals and lessons learned were shared with the Mahoning *PACE EH* Commission.

There were significant secondary benefits derived from the new partnership relationships realized between the participants who served on the Steering Committee, Commission, break-out Work Groups, and the external partners who became involved in helping to implement *PACE EH* action plans. Participating representatives from the Ohio EPA, U.S. EPA, and Eastgate Council of Governments (U.S. EPA 208 Designated Planning Agency for the Mahoning/Trumbull county area) developed close relationships with the county health districts that could serve as a bridge to work on future quality of life issues that affect the region.

Both U.S. EPA and Ohio EPA served as a key resource for technical literature in connection with three public health issues selected by the Commission for Action Plans: protection of water supplies, urban sprawl, and indoor air pollution. Ohio EPA provided a copy of the completed Source Water Protection Plan (SWAP) for each of the community water supplies in the region and provided presentations on the topics of SWAPs and the possible use of pre-existing Water Quality Management Plans (WQMPs) as a tool to address both the protection of water supplies and urban sprawl issues. U.S. EPA provided access to numerous fact sheets related to indoor air pollution.



MUSKEGON COUNTY, MICHIGAN

Building and Utilizing a Successful *PACE EH* Team

Developing an inventory of environmental interest groups in the community is extremely important before beginning *PACE EH*. Groups that are directly involved with environmental protection as well as groups that might benefit from gaining a greater understanding of environmental issues, such as local government officials, community developers, economic planners, regulatory agencies, educators, and minority group organizations, should also be included on the list. Identifying these organizations will take time and research, but is well worth the initial investment.

In any community, identifying potential stakeholders will require asking questions, compiling names, and making contact by phone or in person. While this may at first seem like an intimidating task, most groups are very interested in local government participation, not because they need guidance, but because they feel their voices are being heard among policy makers. Depending on the sponsoring organization's historic reputation in the community, it may require time and effort to develop trust among the local constituency but honesty, persistence, reliability, and understanding will eventually crumble most barriers.

Unfortunately, many potentially valuable organizations to a *PACE EH* project do not completely understand their potential value to a *PACE EH* process. In Muskegon County, groups that were not directly involved in "environmental endeavors" did not immediately see the connection between their organization and the health of the environment. When officially asked to join the team these types of organizations will often say, "We are not experts on environmental issues and have nothing to offer." This is never true. As a "bottom up" or "grass roots" type of assessment, contributors to *PACE EH* will eventually come to understand their impact on the project and the importance of their point of view for developing a representative and reliable assessment of community environmental health issues.

To ensure community participants to the *PACE EH* project are giving to, and getting from, the team's work as much as possible:

- ▶ Always treat all opinions at the table with respect regardless of contrary personal beliefs or educational experiences;
- ▶ Ask questions to elicit fully and understand team members' points of view;
- ▶ Remember that the team members have varied backgrounds and that not all members will understand environmental "jargon." Keep conversations simple;
- ▶ Keep meetings light, casual and fun. People tend to be most comfortable in these types of environments; and
- ▶ Use creativity to complete tasks. Keep the team interested and participating.



MULTNOMAH COUNTY, OREGON

Trusting the Community to Lead

“Trust” is a concept often used to define and establish relationships. “Community” signifies the unique qualities present when a geographic collection of individuals establish a social identity representative of, but greater than, the personalities that constitute it. A combination of both as a focus on collaborative partnerships personifies the orientation and success of the Multnomah County *PACE EH* Community Coalition, a blossoming union of agencies, government, non-profit groups and community organizations intent on exploring and revitalizing the need and participation of communities in the Portland Metro area around environmental issues that impact their health.

Since 2002, the coalition has organized community partners, generated excitement and possibilities for groundbreaking collaborative work, fought diligently for resources, laughed and cried, organized a steering committee and a community assessment team comprised of diverse partners and residents. In so doing, the coalition has addressed, and largely rewritten, a long-amassed history of “uncooperative government” coupled with “apathetic community” perceptions.

The coalition has used the *PACE EH* methodology to establish data identifying five environmental justice communities across the near 600,000 population of Multnomah County, hired community connectors to facilitate, connect, and organize both community and coalition partners, completed an ambitious community health assessment for an initial pilot project (in the culturally diverse and compromised North and Northeast Portland area). Ongoing efforts build upon focus groups, door-to-door surveys and informal gatherings around key environmental health issues in multi-family housing units. The coalition has created a community newsletter, a web-based “events and alert” list, and a local *PACE EH* website.

The assessment team will present coalition recommendations and findings at future community meetings where it will look for approval on current and future community action plans from community residents, a process that mirrors the one undertaken for every major decision of the Coalition to date.



“Trust” has brought together a collaborative union strongly centered on the rudimentary foundations of environmental justice. “Community” has come forward to participate and demonstrate an active and concerned voice around the health and concerns of the environment in which they live. “Trust” has resulted in the lead partner of the local *PACE EH* work, the Multnomah County Health Department, relinquishing control in the process and assessment in favor of a coalition effort focused on the voice and concerns of the effected citizens. Constantly deepening interdependencies between the development of trust and the recognition of community are not simple to achieve, but are vital in bringing about valued and lasting change.

In Multnomah County, developing a community of trust through *PACE EH* is serving to replace long assumed feelings of apathy and lack of concern between citizens and governing institutions with collaborations founded on hope and possibilities.



POLK COUNTY, FLORIDA

PACE EH in a Small Community

The central importance of community is the guiding principle of the Polk County *PACE EH* experience. Local *PACE EH* facilitators rely on the enduring bonds between people and their environs to establish a meaningful dialogue to assess and improve local environmental health.

The *PACE EH* facilitators in Polk County decided to concentrate their efforts in one quite small community and extend the project to neighboring communities gradually. They initially conducted *PACE EH* in the Combee Settlement, with a population of approximately 5,000. The majority of Combee Settlement's community residents have lived for more than 20 years within this small community. They identified a number of benefits related to their small-scale focus.

CEHA team recruitment and survey implementation were simplified by the ability to clearly and confidently identify and engage the target community. The costs of survey implementation and analysis are lessened when the sheer number of respondents is reduced. The *PACE EH* facilitator was even able to administer a number of surveys on a door-to-door basis, something unlikely to be feasible in a more populous community.

Community self-perception tends to be relatively homogeneous. Community participation tends not to be marred by pre-existing animosity or structured "turf" battles between representatives of agencies or groups defined in counter-distinction to one another.

Further, due to Combee Settlement's history as a community wracked by neglect, economic deprivation, and relative isolation, the *PACE EH* process directly benefited a community demonstrably in need and support interventions with clear and immediate value. The facilitators acknowledge that the relatively smaller scale of the work led to manageable implementation costs, rapid positive change, and visible successes ripe for publicity. All of which will contribute to increased support for more extensive *PACE EH* work throughout the county in the coming years. Starting small is proving to be just the foundation for growing large.



ROCK COUNTY, WISCONSIN

Adapting the Methodology to fit Local Needs (Tasks 6 – 9)

The Rock County *PACE EH* project for the most part followed the guidelines established in the *PACE EH* document; however they did alter the sequence to fit the needs of the local project and the committee members. Tasks 1 – 5 were conducted sequentially. However, Tasks 6 – 9 were completed for each of the approximately 30 priority environmental health issues on an issue by issue basis. In other words, the committee chose to focus on an identified priority issue (i.e. Water Quality), develop appropriate indicators for it, identify relevant standards, and complete an issue profile, before beginning the process again on the next priority issue (i.e. Air Quality). Typically they were able to address in a single *PACE EH* meeting, Tasks 6 - 9 for any given issue.

The Rock County *PACE EH* committee did this because they found that it expedited their overall *PACE EH* work while simultaneously invigorating the committee by organizing project work fairly consistently around the introduction and development of a “new” environmental health topic each meeting. The Rock County *PACE EH* facilitators also found that this alteration allowed them to take strategic advantage of key project volunteers. Committee members with expertise in specific environmental health issue areas were able to commit to a much smaller window of time (sometimes a little as a single meeting) and still contribute fully to the tasks central to defining and establishing the key components of a given environmental health issue.

The Rock County *PACE EH* facilitators also found that conducting Tasks 6 – 9 in this manner allowed them to develop a more complete picture of quite broad environmental health issues before possibly prematurely marking any for elimination. As a result they did not have to narrow their over 30 priority environmental health issues until after working through the research and analysis represented by Tasks 6 – 9. They also found, probably because they maintained a clear and precise focus on each issue through all four of the tasks devoted to research and analysis, the committee had begun considering potential action steps prior to upcoming tasks, such as ranking and prioritizing.



Benefits related to Conducting Tasks 6-9 on an Issue-by-Issue Basis:

- ▶ Maintains team focus on one environmental health issue at a time
- ▶ Able to narrow and focus time for guest speakers to contribute
- ▶ Works well for committee members who are not able to commit to every meeting, but still want to be involved.
- ▶ Meetings were manageable, only covering 1 (or 2) issues per meeting
- ▶ May reduce the overall length of a *PACE EH* project
- ▶ Focus on a single issue from data formulation to profile creation
- ▶ This adaptation supports thinking ahead and lends itself to formulating ‘potential action steps ‘ for each issue

A specific obstacle the Rock County *PACE EH* team identified related to their adaptation of Tasks 6 – 9 is that a fairly long period of project time is going to pass between beginning the cyclical approach to research and analysis of the issues and beginning to establish a smaller subset of environmental health issues through ranking and prioritizing. In other words, more environmental health issues will be possible priorities for a longer period of time. For the Rock County team, this recognition resulted in a decision to establish a “review” of upcoming Tasks 10 - 12 for each issue carried through the *PACE EH* methodology.

The adaptations the Rock County *PACE EH* team made are a reminder that the *PACE EH* methodology offers a great deal of flexibility. The facilitators envisioned how the process would work best for their committee to accomplish community goals. Grouping Tasks 6 – 9 on an issue-by-issue basis better served variable time commitments of team members, limited availability of local environmental health experts, meeting facilitation, and laid the foundation for reliable ranking and prioritizing exercises.



SAN JUAN BASIN, COLORADO

Completing *PACE EH* in less than 12 months

The CEHA team in San Juan Basin designed its *PACE EH* process to be completed within a minimal time frame. The facilitators from the San Juan Basin Health Department, drawing on extensive experience working with community members on a number of environmental health advisory committees, organized *PACE EH* work through existing community environmental health interest networks. Previously conducted community assessments greatly reduced the time and expertise normally required for facilitators to work through the first four tasks of the *PACE EH* methodology.

One of the primary facilitators of the San Juan *PACE EH* process was also fortunate to be well versed in community-based participatory research methods. Having this skill set “in-house” filled a need that many other *PACE EH* sites had to either find or develop simultaneously with specific *PACE EH* work.

The coordinators found that establishing the *PACE EH* project as a short-term (9-month) priority allowed them to retain CEHA team membership while holding to a strict work-intensive team meeting schedule. The relatively short time frame ensured that volunteers always “saw the light at the end of the tunnel.” Their commitment was increased because the project requirements were well established and did not require an open-ended or seemingly endless slate of monthly meetings.

Another tactic the facilitators used to ensure the *PACE EH* process was as truncated as possible was to establish for each crucial team member an alternate who could be called on to fill the role of any team member that was not able to attend a specific meeting, or complete a specific assignment. The use of alternates guaranteed that the process was not waylaid by the unavoidable and persistent problem of team member’s unpredictable conflicting meeting schedules.

A rapid *PACE EH* project was further encouraged by a great deal of attention to establishing, and adhering to, strict meeting times and schedules. The time of team members was respected and their willingness to serve was further honored through clear and concise channels of communication between facilitators and volunteers. The effort made by the facilitators to ease as much as possible the logistics of a *PACE EH* project (e.g. meals, meeting agendas, project communications, etc.) supported the development of content within this highly efficient *PACE EH* project.



THE *PACE EH* WORK DESCRIBED IN THIS DOCUMENT IS BEING FACILITATED BY THE FOLLOWING LOCAL PUBLIC HEALTH AGENCIES:

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