Policy and Environmental Change: A Second Look at Public Health Agency Involvement

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Strategic Health Concepts, Inc.

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Introduction

The health of the Nation falls far short of what it should be given the understanding and tools that science has provided us with. Diseases, particularly chronic diseases, continue to impose a terrible burden on the Nation. Far too many people die prematurely or are disabled from causes that are preventable. Many others prematurely die or suffer far more than they should because they were unable or unwilling to take advantage of systems that provide for early disease intervention, quality treatment, and follow up care. The burden of premature death and disability severely affect the psychological, social, and economic vitality of our citizens, families, communities, states and the Nation as a whole.

The problems of premature death and disability are compounded by the fact that certain segments of our population experience far worse health outcomes that do the population as a whole; a trend that appears to be getting worse in many instances. All of this is not to say that progress isn’t being made towards improving the health of the Nation; there has been progress, some of it remarkable. But the truth is that despite the progress made, our best efforts to continue making progress, and the tools at hand, we are simply not measuring up to the full potential we have to be a far healthier Nation.

The last decade and a half has seen a markedly increasing emphasis on policy and environmental change as major strategies for more fully realizing our potential for becoming a far healthier Nation. Policy and environmental changes, more often than not, are accomplished through the collaborative action of multiple organizations within communities where they have been successful. Government entities charged with protecting the public’s health can and have played a wide range of roles as this trend of collaborative action had unfolded. These government entities, which have a wide variety of official titles, are referred to in this report generically as ‘public health agencies’.

The capacity of public health agencies to effectively participate in policy and environmental change has been a priority for the Directors of Health Promotion and Education (DHPE) for some time. In particular, DHPE has been interested in tracking how public agencies fit into the total picture of policy and environmental changes and in identifying and improving the capacity of these agencies to do so.

To that end, in 2001, DHPE (then the Association of State and Territorial Directors of Health Promotion and Public Health Education) commissioned a study to identify the roles public health agencies play in policy and environmental change and to make recommendations regarding improving their capacity to do so. Many of the recommendations resulting from that study have been acted upon by DHPE and other agencies interested in capacity building.

In 2004, DHPE commissioned a follow up study to take a second look at the involvement of public health agencies in policy and environmental change and which included a greater emphasis on ‘how’ policy and environmental changes were accomplished. That study was completed in 2005.

This report reviews the context for studying policy and environmental change related to public
health agency involvement, briefly summarizes the 2001 study, reports the methods and findings of the 2005 study, compares the results of the two studies, and makes recommendations for DHPE and others to consider regarding both continued capacity building and the conduct of future studies.

**Project Scope**

A case statement for public health agency involvement in policy and environmental change was developed for the 2001 study. It is repeated here in abbreviated form since it is applicable for the current study as well:

- Chronic diseases represent persistent public health problems.
- Great gains have been made in addressing these problems through interventions that focus on individual behavior change.
- The next major step forward will come from policy and environmental changes that can impact large segments of the population simultaneously.
- Public health agencies are the primary governmental institutions charged with protecting the health of the public.
- Public health agencies can play many different roles in advancing policy and environmental changes (e.g., providing data, educating the public and policy makers, coordinating efforts, etc.).
- For the most part, traditional public health practices, priorities, staff skills, and resource allocations do not reflect the capacity public health agencies need to aggressively pursue policy and environmental changes.
- Public health agencies make conscious choices about the degree of priority given to chronic disease programs, including policy and environmental changes.
- It is critical that these choices be well-informed decisions based on a solid understanding of best practices and the potential impact of policy and environmental change interventions.

This project looked at two types of public health interventions.

1. **Policies**, which include laws, regulations, and rules (both formal and informal). Examples include:

   a. Laws and regulations that restrict smoking in public places;
   b. Organizational rules that provide time off during work hours for physical activity.
2. **Environmental interventions**; which include changes to the economic, social, or physical environments. Examples include:

   a. Incorporating walking paths and recreation areas into new community development designs;
   b. Making low-fat food options available in cafeterias;
   c. Removing ashtrays from meeting rooms.

These two types of interventions are not mutually exclusive and can occur simultaneously and/or precede each other. Indeed, one of the findings from the current study is that the line between these two types of interventions seems to be increasingly blurred. For example, one case story in the current study involves the passage of a special tax, a policy, from which the revenue generated was devoted to supporting the development of increased physical activity options (e.g., walking trails), an environmental change. The important point is that policies and environmental changes can work together in a mutually supportive fashion. While this report will treat them separately in parts of the analysis, in implementation they may well be combined.

The 2001 and 2005 studies focused on policy and environmental changes related specifically to chronic diseases. It should be noted that most of the case stories collected are policies and environmental changes that impact on risk factors for chronic diseases (i.e., tobacco use, poor nutrition, sedentary lifestyle) which also can impact on health issues other than chronic diseases.

Both the 2001 and 2005 study captured information on the current activities of public health agencies in policy and environmental change. Both studies collected information through on solicitations sent to state public health agencies; although states were encouraged to submit information on local policy and environmental change as well. There is an inherent selection bias in the results based on who chose to respond and what they choose to submit. The results are clearly informative, but are not necessarily representative of what may actually be occurring. Thus, conclusions relative to the numbers and types of interventions occurring should be seen as descriptive rather than definitive. On the other hand, “lessons learned” and other “how to’s” from the various case stories seem to be common across the different policy and environmental change strategies addressed and thus may have more common applicability.

**The 2001 Study**

The 2001 study was a first attempt to look at the state-of-the-practice and was responsive to a major reorientation of public health practice towards greater emphasis on policy and environmental change strategies for chronic disease prevention and control that emerged throughout the 1990’s. Many of the strategies implemented during that period were carried out by coalitions of various not-for-profit health organizations (e.g., the American Lung Association), public health agencies and, in some cases, for-profit organizations with an interest in health outcomes (e.g., hospitals, insurers).
The two primary questions addressed in the initial study were:

1. What roles did public health agencies play in these broader strategies of policy and environmental change?

2. What was the capacity of public health agencies to fulfill these roles and what could be done to enhance that capacity?

Five mechanisms of data collection were used in the 2001 study:

1. A peer-reviewed literature search – some 700 articles were identified of which 58 yielded information relevant to the study.

2. Key informant interviews – with some 29 experts.

3. A review of “fugitive” literature (non peer-reviewed) – yielding 37 useful documents.

4. An Internet search - resulting in 52 relevant sites.

5. A nationwide “snapshot” assessment - based on information received from 40 states and three territories.

A comparison of the type and content of the policy and environmental interventions found in the 2001 study with those in the 2005 study will be presented later in this document.

Findings from the 2001 study:

- Identified critical success factors for the involvement of public health agencies in policy and environmental change work.

- Identified unique issues and barriers facing public health agencies as they engage in policy and environmental change work.

- Identified a wide range of roles and levels of involvement played by public health agencies.

- Were used to make summary conclusions about the state-of-the-practice of public health agency involvement in policy and environmental change.

Forty-one recommendations were made for enhancing the capacity of or supporting increased involvement by public health agencies in policy and environmental change work. These fell into eight categories as noted in Table 1.
Table 1
Categories of Recommendations from the 2001 Study of Public Health Agency Involvement in Policy and Environmental Change Interventions

<table>
<thead>
<tr>
<th>Recommendation Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership development</td>
<td>8</td>
</tr>
<tr>
<td>Explaining the concept of policy and environmental change</td>
<td>6</td>
</tr>
<tr>
<td>strategies</td>
<td></td>
</tr>
<tr>
<td>Sharing experiences and information</td>
<td>2</td>
</tr>
<tr>
<td>Skills development</td>
<td>6</td>
</tr>
<tr>
<td>Funding</td>
<td>5</td>
</tr>
<tr>
<td>Research</td>
<td>10</td>
</tr>
<tr>
<td>Information management</td>
<td>2</td>
</tr>
<tr>
<td>Regional cooperation (transcending state borders)</td>
<td>2</td>
</tr>
</tbody>
</table>

An ASTDHPHPE (now DHPE) advisory group subsequently prioritized these recommendations for implementation purposes into primary recommendations (3), secondary (4), and tertiary (34).

An important conclusion from the 2001 study was the dearth of “how to” information found in the various sources of information. Interestingly, public health personnel are asking for this kind of information to complement a wide range of available information on the scope and content of policy and environmental changes.

One each of the primary and secondary recommendations from the 2001 study noted above addressed this dearth of “how to” information.

- Develop “what to do” models of successful policy and environmental change interventions…
- Develop concrete examples of how policy and environmental change interventions are started and completed. They should contain simple, real-life examples …

These two recommendations greatly influenced the scope and methods of the 2005 follow up study.

The 2005 Study – Scope and Methods

The 2005 study built on the 2001 study in that it provided a degree of comparable information on the level of involvement by public health agencies in policy and environmental change work. It differed from the earlier study in that it used only a case story approach. The primary purposes of this study were to describe the state-of-the-practice as in the 2001 study while gathering more in-depth, “how to” information that would inform decision making about future DHPE and other...
Two case story versions were solicited from state public health agencies:

1. Short case story – in which a structured set of questions was used to provide a 2-4 page summary of the initiative. The structured information requested included:
   a. Title
   b. Description of the policy/environmental change
   c. How the idea for change was generated
   d. Intended outcomes of the change
   e. When the initiative was implemented (or if it was in progress)
   f. Roles the public health agency played
   g. Major partners involved
   h. Public officials who supported the initiative
   i. Tracking of outcomes
   j. Lessons learned
   k. Opposition encountered (added to the protocol after initial submissions were reviewed)

2. Long case story – in which the standard set of information was requested (see above) in a longer, more detailed, and personalized narrative description. These case studies were typically in the 8-12 page range in length. In addition to the standard information requested, submitters of detailed studies were asked to provide information in their narrative on the following topics:
   a. Their agency’s skills for policy and environmental change
   b. Partnerships and support
   c. Key events in the initiative
   d. Funding and resources
   e. Obstacles
   f. Modifications made during the initiative

The study protocol consisted of the following steps:

1. All state and territorial public health agencies were invited to nominate case stories for consideration as short case stories.

2. Nominations were requested in a shortened form of 1-page in length. In addition to submitting the information requested, those submitting nominations were asked to note whether they wanted their nomination to be considered for development as a long case story. Sixty-three nominations were received.
3. Nominations were reviewed by the study team for consistency with the study parameters. If needed, clarifications from those submitting the nominations were requested.

4. Forty nominations were accepted as short case stories and the submitters were given the standard format to submit the information on. In addition, the standard format was expanded to include information on opposition encountered during the policy or environmental change initiative.

5. Thirty-seven short case stories were subsequently accepted for inclusion in the study.

6. Ten nominations were accepted as long case stories and submitters were given the template with the information requested and asked to submit it in narrative style. Long case story submitters were offered $1,000 stipends to help in the preparation of the submission. Most accepted the stipend.

7. Eight long case stories were subsequently accepted for inclusion in the study.

8. The case stories were reviewed by the study team and edited as needed. The short case stories were all put in a standard format. Long case stories were standardized as much as possible without changing their narrative flow.

9. Edited case stories were returned to submitters for review and approval of changes made by the study team.

10. An analysis of the findings was prepared and incorporated into a draft report for DHPE review.

11. This final report was prepared for DHPE based on comments received.

12. The final versions of the case stories were submitted to DHPE for inclusion on their website.

In the course of carrying out the study protocol, some important lessons learned emerged. Among these are:

- Finding the right person(s) at the state public health agencies to solicit a response from was sometimes challenging. Personnel turnover, out-dated mailing lists, and varying levels of responsibility for responses among health agencies compounded the problem of finding knowledgeable and willing people to solicit submissions from.

- The time available for public health agencies to respond to requests for special studies such as these is very limited as increasingly these agencies seem to be asked to do more and more with less and less. The level of stress on the current public health system is extraordinary and
must be factored into future plans for carrying out studies like these.

- The level of effort and time required to solicit and process information similar to that in these studies is extensive and in both 2001 and 2005 was greatly underestimated.

- The number of responses received was far less than the actual number of cases that exist even though extraordinary efforts were made to make the process as simple and user friendly as possible. This means studies using the approach that was used for both the 2001 and 2005 studies will almost always be illustrative snapshots of what is occurring rather than a representative picture. Nevertheless, the results are of great value given this limitation.

- The use of cash incentives ($1,000 per long case study) in the 2005 study undoubtedly helped in soliciting the cases but did not change the time or level of effort involved in actually getting them in hand and processing them.

While it was difficult to solicit a large response in the form of usable case stories, there was strong interest in the subject matter and many people who were not able to submit case stories requested that the information resulting from the study be shared with them.

The study team prepared a separate document describing in detail the issues encountered with implementing the study protocol and with recommendations and options for DHPE to consider for future studies of this type.

**The 2005 Study – Findings**

This section presents the findings from the 2005 study in three parts:

- General Findings from the Short and Long Case Stories
- Additional Findings from the Long Case Stories
- Comparison of Findings from the 2001 and 2005 Studies

**General Findings from the Short and Long Case Stories**

**Respondents**

Forty-five short and long case stories were received from 19 states:

- California
- Maine
- Montana
- Oklahoma
- South Carolina
- Florida
- Missouri
- North Carolina
- Pennsylvania
- Tennessee
- Hawaii
- Mississippi
- North Dakota
- Rhode Island
- Texas
State public health agencies were asked to submit case stories. Nineteen of the case stories were submitted by either a local organization or a state level organization other than the public health agency itself. In one case, a state public health agency and a local organization jointly submitted a case story (the only such joint submission received). This illustrates a healthy willingness on the part of some states to pass on a submission like this to some other group which may have greater awareness of the details and the full scope of the policy or environmental change intervention. The full breakdown of who submitted case stories is as follows:

- State level submissions (29)
  - 27 by the state public health agency
  - 2 by another state level organization

- Local level submissions (17)
  - 6 by a local public health agency
  - 11 by another local level organization

Policy and Environmental Changes Reported

An interesting array of policy and environmental change interventions were addressed in the case stories submitted. These are broken down separately in Table 2.

### Table 2
Policy and Environmental Change Interventions Addressed in the 2001 Study

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Number Addressing Policy</th>
<th>Number Addressing Environmental Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco control</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Nutrition</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Oral health</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Physical activity</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>1 each</td>
<td>0</td>
</tr>
<tr>
<td>Seat belts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus idling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma inhalers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Community engagement

In all, 26 policy-related case stories and 17 environmental change case stories were included in the study. In addition (and not included in the above table), there was one case story included that was both a policy change and an environmental change (a bed/occupancy tax that was used to support increased/enhanced recreational opportunities). And one case story was included that developed a tracking system for local policies. While not an intervention per se, a decision was made to include this story since the creation of such a system was intended to provide for more effective and timely policy analysis and development in the future.

Within these broad categories of interventions, there were a wide range of different policies and environmental change initiatives. Examples include:

- Tobacco control
  - Clean indoor air ordinances
  - Investment fund divestiture of tobacco stocks
  - Tobacco-free beaches
  - Tobacco-free campuses

- Nutrition
  - Healthy snacks at events
  - Healthy fundraising (no selling of junk foods)
  - Healthy and culturally relevant food curricula
  - Resolution supporting healthy foods and beverages in schools
  - Healthy choices in vending machines
  - Providing fruit and vegetable samples

- Physical activity
  - Walking trails
    - For schools
    - In communities
  - Exercise options embedded in regular school curricula
  - Gardens

- Other
  - Oral health eligibility guidelines changes
  - Community engagement policies


Level of Society Intended to be Impacted

Of obvious importance is at what level of society are the policy and environmental changes intended to impact; which may be different from who submitted the case stories (see above). The case stories in this study show that the intended impact points were as follows:

- State level impact (10)
- City/county/organization impact (21)
- Individual school/school district impact (14)

Bearing in mind the issue of the representativeness of these case stories, it is fascinating that of 45 case stories submitted, 35 of them cover policies and environmental changes that impact at a local or organizational level, rather than at the state level. And, at least one of the state level impact stories was actually a statewide replication of a local policy which had proven successful. This supports the idea that much change in this country begins locally and has implications, discussed later, for what is done to support capacity building for policy and environmental change locally.

What Initiated the Policy or Environmental Change

A number of factors were cited as the catalyst for the policies and environmental changes illustrated in the case stories. These are not mutually exclusive and a number of the case stories noted multiple reasons why a particular initiative came into being. These included

- The change being an add-on or an extension of previous efforts.
- The existence of compelling data to support change.
- Change in the environment/attitudes as a result of another policy.
- Peer/constituent pressure for change.
- Seed money/funding available to support the initiative.
- A group, or an organization, and/or committed individual on a mission to effect a change they believe strongly in.

Worth noting here are those cases in which a policy or environmental change gets started because of other work being done (1st bullet above) or because attitudes or the environment has changed as a result of previous policy or environmental changes (3rd bullet above). There is now sufficient experience in policy and environmental change work to begin to see these kinds of impacts which may not have been foreseen or expected when the initial work began.

Roles Played by Public Health Agencies
As was the case in the 2001 study, public health agencies played a wide variety of and multiple roles in support of policy and environmental changes. The reported roles are presented here in descending order of mention among the case stories:

- Resources (funding, donations, staff time, other in-kind resources)
- Education (forums, materials, campaigns)
- Partnering/collaborating (strategizing together, coordinating action, helping link to resources, maintaining partnerships)
- Technical assistance (training, planning, skills development)
- Providing information (data, information on potential impact of interventions)
- Program development, management, facilitation
- Assessment and evaluation
- Key leadership
- Providing regulatory language
- Marketing and public relations

This list is similar to that reported in the 2001 study. The implications of this list presented in descending order of mention, is that public health agencies are much more often behind the scenes in policy and environmental changes that out in front. In some cases, this may be necessitated by legal restrictions and/or it may be the result of a traditionally conservative view of the role of public health agencies generally in such initiatives.

**Major Partners**

It is not surprising that a wide array of major partners were identified given the range of policy and environmental changes contained in the case stories. On the other hand, the degree to which the reported major partners in these case stories extends beyond the “usual suspects” in public health is encouraging. Major partners included:

- Elected officials (state, local, school)
- School districts (superintendents, administrators, teachers, school nurses)
- Other state agencies (Education, Parks, Aging, Environment, Conservation, Highways)
- National agencies (ACS, AHA, ALA, DHHS, USDA)
- Local public health agencies; local clinical organizations
- Coalitions, community based organizations, clubs, etc.
- Private companies (grocery stores, banks, concrete companies, quarries, landscaping firms, baseball teams)

**Opposition**

The question of opposition to the policy and environmental change initiatives was added after the original submissions. Some of the submitters did not reply to this additional question.
Of the 45 total submissions, 33 addressed the question of opposition with the following results:

- Opposition encountered:
  - No – 17
  - No formal opposition; but disagreements arose – 4
  - Formal opposition – 12

- Formal opposition by topic:
  - Nutrition – 3
  - Tobacco – 6
  - Physical activity – 2
  - Seat belts – 1

- Results of countering formal opposition:
  - Overcame – 6
  - Compromised – 5
  - Lost – 1
  - Ignored – 1

About 1/3 of the policy/environmental change initiatives encountered some type of formal opposition. It is not surprising that ½ of those related to tobacco control efforts. Very encouraging is the finding that only one of the 12 cases stories where formal opposition occurred resulted in a defeat. That one was related to a school policy. This has implications for capacity building in terms of preparing to anticipate opposition, determining what strategies to employ when opposition is encountered, and when to compromise and when not to. Special note should be made of the one case where the opposition was “ignored”. In this case, city officials opposed a proposed change to the point that they refused to approve grant applications to support the effort submitted through the city. The community response was to ignore city complaints and continue the initiative by setting up a separate 501(c)(3) through which the resources needed for the project could be received and managed – a strategy that proved successful.

**Evaluation**

The case story templates asked submitters to identify the intended outcomes of their policy and environmental change and their plans/activities for tracking those outcomes. A review of the reported outcomes and the types of tracking methods resulted in the following breakdown:

- Types of evaluation/tracking reported
  - Both outcome and process evaluations – 16
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- Process evaluations only, qualitative evaluation, and/or indirect monitoring in place – 21
- No evaluation reported – 5
- Specific evaluation plan identified, to be implemented – 1
- Not applicable – 2

· Types of information being collected
  - Policy enactment and/or environmental change completed
  - Baseline data (e.g., public attitudes and support, etc.)
  - Process data during the initiative (e.g., number of meetings of coalition, media coverage, etc.)
  - Post-policy enactment or environmental change implementation processes and intermediate outcomes (e.g., proportion of people complying with a policy, number of people using new services/facilities, proportion of people covered by the new policy, etc.)
  - Health/disease/risk factor outcomes

It is encouraging that the majority of cases have some active evaluation underway. The specific methods being employed range from a few simple types of data collection (e.g., small user intercept surveys) to sophisticated surveys and secondary data analysis. To some extent the selection of methods depends on the availability of resources and expertise. Nevertheless, there is a high level of awareness among this group regarding the use and need for evaluation and they seem to be making serious attempts to fulfill that need and show progress towards and achievement of outcomes.

Lessons Learned

Some of the richest information contained in the case stories comes from the submitters own perceptions of important lessons they and their colleagues learned. The case stories are, for the most part, remarkably candid in presenting their experiences, positive and negative, and what they learned from them. This is particularly useful in that the findings from the 2001 review of published and unpublished documentation showed almost no discussion of lessons learned, and very little describing negative things that happened. The case stories should prove very useful to public health practitioners in this respect.

For purposes of this report, a number of these lessons learned can be summarized as follows:

- Perseverance is important. A number of these case stories illustrate the point that sometimes multiple attempts must be made (maybe over a number of years) before a policy is enacted or an environmental change approved. Defeat doesn’t always mean defeat forever.
The need for flexibility during an initiative is critical. Public health agency staff and other advocates must be prepared to find other opportunities and solutions when things go wrong. Initial strategies may change as additional stakeholders become involved, which often occurs with such initiatives. And, there is a need to be prepared to address compromises should they arise.

Policy and environmental changes do change behavior. It is exciting to see in some of these case stories demonstrated behavior change in individuals. Another sign of success though is that as one policy or environmental change effort is successful, it encourages and creates pressure for others to try it also. And, once one group has a policy or environmental change success, their own motivation to pursue additional ones increases.

Proposed changes cannot be verbal or non-binding in most cases. There must be some form of tangible commitment such as the changes appearing in organizational plans, or in memorandum of understanding, and other documents.

Ongoing, purposeful communication throughout the effort is essential. The case stories include examples of the benefit of good communication as well as the heavy price of doing it poorly.

Always check with others around the country who have tried changes similar to those being contemplated. One-on-one conversations with other who have been there will help solidify ideas and strategies and point out the potential pitfalls that might be encountered.

Champions are critical to success. Someone (or several someone’s) has to be the human face of a change.

Speaking with one voice among the advocates/stakeholders as policies and environmental changes are being considered is essential.

Anticipate opposition and be fully prepared for it. Look for the weaknesses in your own position and either correct them or be prepared to defend them strongly.

Passionate supporters are not always patient with process. Yet much of policy and environmental change success has to do with effective process. There is a need to manage expectations and passions and balance them with process to achieve success.

Some of the skills required for policy and environmental change work are different than those required for program development and management work. This means paying attention to the skill sets available to those doing the work and being prepared
to fill the gaps through training and/or recruiting additional stakeholders.

· A strong person to lead the effort on a day-to-day basis can be extremely valuable in keeping things moving and providing a focal point for communication and problem solving.

· Many environmental and policy change initiatives address issues with an impact on business or on how businesses operate. Developing arguments from/with a business perspective can help win important support and/or avoid an important source of opposition.

· Identifying exactly who can make the policy or environmental change desired and what their views are and strategizing how to convince them to support your effort can dramatically increase the chances of success. Convincing people to support you that can’t affect the change you want is a waste of time.

· Feedback to decision makers and the community on the results of the policy or environmental change helps them feel appreciated and secure about decisions they have made and enhances their commitment to staying with them should opposition later arise.

· When working with multiple organizations that represent certain constituents (e.g., labor unions, schools), it is important to realize that they may not hold the same views as others like them on the policy or environmental change that is proposed.

· In some cases, piloting initiatives (e.g., in one school; one community, etc.) can provide data to support more widespread adoption.

Additional Findings from the Long Case Stories

As noted earlier, several additional types of information were collected with the long case stories only. A summary of the findings from these is presented below. It should be noted that these details are highly specific to the individual case stories and as such are difficult to summarize outside of the context of the actual story. With that in mind, we have made some general summary for each category and highlighted some of more interesting ideas presented. The full benefit of these stories (and the short case stories as well) will be derived from reading those applicable to specific policy or environmental changes being contemplated.

Skills of Public Health Agencies

Four of the case stories did not address specific public health agency skills that were important to the project. The other four commented on the following as important:
· The presence of a long-standing, credible staff and the equally long-standing support of a series of health officers and governors.
· Community granting expertise.
· The ability to contract out for specific skills (e.g., evaluation, media) while maintaining operational leadership within the public health agency.
· Organizational skills to help plan the initiative and move it along.

Partners and Collaborations

Most of the comments on partnerships mirror those reported earlier in the findings. All the long case stories reported multiple partnerships and some gave detailed information on specific partners. A couple of points made are worth further mention:

· Two of the groups noted the importance of specific public-private partnerships to their success. For example, the relationship of a grocery chain to a statewide health coalition led to incredible exposure of their customers to health information and shelf-food tagging of healthy items.
· Another case story noted how their coalition work on walking trails built off of and gained support from an existing Turning Point project and an Active Living Initiative which included a broad-based community initiative spearheaded by the Chamber of Commerce. This concept of embedding targeted policy and environmental changes in broader community initiatives will be discussed further in the conclusions section.
· While coalitions may come together representing many organizations in a community, there is still a need for and great value in finding ways for the coalition to continually interact with and engage the wider community in its work. One case story illustrates this by telling how its project coalition held community meetings to discuss plans and gain wider community input and support.

Key Events/Timelines

As would be expected, there was a wide range of timelines and key events associated with the long case stories. No attempt to summarize the key events is made here because they are very specific and unique to each of the stories.

As to timelines, one project noted multiple key events without a timeline. For the remaining seven case stories:

· The shortest timeline reported was 8 months from idea inception to reporting results of a policy in place. This was a highly successful project, but the submitter notes that with more advance time to plan, an even stronger outcome might have been achieved.
Two initiatives had 2-year timelines.

One had a 4-year timeline. Interestingly, this project had built in grant solicitation to secure needed funding. At the 2-year mark, the group received three grants in a two month period to help it achieve success over the subsequent two years.

Two initiatives reported that their projects involved longer term implementation and thus their timelines are “open-ended”. It would appear that they view their projects as constant works in progress and not as “events” with a finite end date. For some environmental change projects such as parks improvements, this is an approach well worth considering.

The longest initiative period was one that actually began in 1985. Between then and 1997, the submitter reported multiple failures and a few minor successes in enacting secondhand smoke laws at the state level. Then in 2001 one of the counties passed a secondhand smoke law and within two years each county in the state had followed suit. This story illustrates two points made earlier: the need for persistence until the goal is achieved; and the need to see failures/defeats in the context of a string of events from which one learns and keeps trying again until success is achieved.

Funding and Other Resources

Only two case stories presented actual budget numbers. One noted $102,000 in grants and the other $350,000 in donations in hand with an additional $1 million still needed to complete the project as planned. The rest reported receiving monies from various sources (e.g., Preventive Services Block Grant; private donations) without amounts indicated and almost all noted significant in-kind contributions to their efforts from partners and the communities involved. One very interesting story related to a community trails system that began construction using a state grant. As that money was used, the organizers began sponsoring walking contests which were also used as fundraisers. A series of these fundraising contests have provided money to keep the project going and continue development of the trails.

Obstacles Encountered

Each of the case stories reports its own unique obstacles. Together, these are examples of issues that should be considered and planned for, if appropriate, for any policy or environmental change initiative being contemplated. The reported obstacles included:

- Time – time is needed to adequately prepare for and execute an effective initiative. Sometimes an optimal amount of time may be available. At other times it may not; and when it isn’t there is a need to fully understand and address the issues that may arise from the lack of adequate time.
- Organized opposition – for tobacco control initiatives there is a well-defined and organized opposition. Knowing it is there isn’t sufficient alone for countering its influence. For non-tobacco interventions, a more or less organized opposition may arise. For example, a local business community may object to a proposed policy and a strategy for dealing with such
opposition will need to be formed.

- Legal action - with policy and environmental change interventions, there is always the specter of litigation as an expression of opposition.
- Competing campaigns – one of the case stories addressed the health labeling of food items on new menus at multiple restaurants. At the same time that a campaign to encourage use of these menus was launched, other restaurants in the area were promoting low-carb menus, thus diluting the effect of the planned campaign.
- Unfair advantage – one case story included a public-private partnership involving a particular grocery store chain. There was some concern within the public health agency that selecting only one chain to work with was inherently unfair. This opposition was very real, but overcome.
- Poor public image – two of the case stories noted the need for a better public image for what they were trying to achieve.
- Bureaucracy - two projects noted that for projects requiring compliance with state and local regulations and permits, navigating through the bureaucracy can be daunting. One of those projects specifically noted a situation in which multiple agencies couldn’t agree on who among them had jurisdiction.
- Money - was mentioned several times as a major obstacle.

**Modifications**

Of interest for this study was the degree to which the proposed policies or environmental changes were modified during the course of their enactment/approval. Only two of the eight case stories indicated any modification. One of those modifications was internally imposed. A project to build walking trails expanded its scope when the organizers realized that building trails was not an end in itself but would have to be embedded in a larger, community walking program. The other project was modified by external forces. With a failed effort to enact a strong, statewide secondhand smoke law, counties took up the task on their own. As a result, while ordinances were successfully enacted, there is variability in the laws and the loopholes that resulted from different compromises made locally.

**Comparison of Findings from the 2001 and 2005 Studies**

From the study descriptions above it is readily apparent that these are not comparable studies. They had a similar scope of interest but different methods and a different level of detail on information requested. Moreover, neither study can be considered representative in a scientific sense. That said, there were a few common data points between the two studies and it is worth examining what those may tell us about the state-of-the-practice:

- Both studies allow us to look at reports regarding critical success factors in policy and environmental change work. The results indicate very little difference between the two studies with one exception. In the 2005 study there was an emphasis on documenting
evaluation results that was not as evident in the 2001 study. It makes sense that success factors generally would be the same. It also makes sense that documenting evaluation results might be more evident in the 2005 study either because, as noted, this group of case stories showed a relatively high level of understanding and involvement in evaluating their efforts or because as policy and environmental change have become more prevalent, we are starting to see more examples of evaluation data actually available to be reported on.

· While the 2005 study provides much more detail on the specific barriers/obstacles encountered by public health agencies involved in this type of work, the types of barriers reported are similar between the two studies. Again, there is an exception to this general statement. In the 2001 study there were multiple references to confusion over the line between lobbying and advocacy/education. That same level of anxiety or confusion is not evident in the 2005 study. This may be because in the intervening time period, people have grappled with these distinctions and have better defined their roles accordingly. For example, one case story candidly notes that the actual lobbying effort for a policy was carried out by community groups so as to shield the public health agency from attack on this point. It may also be because these detailed case studies were, with one exception, stories of successful policy or environmental change interventions and whatever confusion they may have had on this distinction was decided long ago at the beginning of the project and is no longer salient enough to be reported.

· The focus of the policy and environmental changes addressed in the two studies are very similar. It is no surprise that tobacco use, poor eating habits, and sedentary lifestyle dominate the landscape of policy and environmental change. The beauty of this kind of work though is that the methods of enacting policy or making environmental change are readily adaptable to other topics as public interest in them grows (e.g., the currently increasing emphasis on obesity reduction initiatives had prompted a somewhat expanded view of physical activity and nutrition interventions).

· The roles described by public health agencies are very similar between the two studies. Interestingly though, in the 2005 study there is only minimal reference to public health agencies playing a role in actually drafting policies and legislation. There appears to be increasing involvement of public health agencies in policy efforts but a gravitation in terms of roles played towards more behind the scenes work rather than out-front leadership. This raises an important question, perhaps worth future study, as to how public health agencies can adequately fulfill their responsibility to protect the public’s health without actively proposing solutions to health problems, including specific policies and legislation. It would be interesting to know, for example, the degree to which public health agencies at the state and local level (separate answers for each) currently engage in drafting policy and legislation as a sanctioned part of their duties.
**Discussion and Recommendations**

This study collected information in narrative form for the most part, which presents its own challenges for analysis. In this section of the report, a summary drawn from looking across the stories is discussed along with recommendations where appropriate. The recommendations are based on the opinions and experiences of the study team only. This section is divided into two parts:

- A discussion and recommendations related to policy and environmental change; and
- Recommendations related to future studies of this type.

**Discussion and Recommendations Related to Policy and Environmental Change**

For ease of review, this summary review is broken up into several sections:

1. General

   It would appear from the current study that policy and environmental change work is alive and well. Public health agencies are actively participating in these efforts and fulfilling a wide variety of roles depending on circumstances.

   While no direct information was collected on this, the perception of the study team is that the tone of information received between the 2001 and 2005 studies implies that public health agencies may be much more comfortable and at ease generally with this type of work now. There were far fewer expressions of anxiety or role confusion from what we see in the 2005 responses.

   Fewer states responded to the call for information in 2005 than in 2001. This may be because the call for information in 2005 required more detail input than in 2001. It may also be because, as noted, public health agencies appear to have much more to do with fewer resources today than they did in 2001. It is important to note that while fewer states responded many of those provided more than one case story for consideration. This implies a willingness to share experiences and interest in the subject of policy and environmental change.

   There is a need for continued tracking and sharing of experiences that states and localities are having with policy and environmental change strategies. Later in this report some recommendations specific to the case story approach used in this study are made. However, there is also a need to look beyond this approach for other ways in which to capture and share these experiences on a routine, regular
and systematic basis.

The nature of the interventions reported and the details provided, particularly with the long case stories, shows a good level of sophistication regarding policy and environmental change strategies and how to implement them. They also show a willingness to be introspective and learn from their experiences. All of this suggests that the cadre of knowledgeable and experienced public health workers in policy and environmental change is growing and becoming stronger as it does.

**Recommendation 1A** – A study is needed of the public health workforce to determine individual (as opposed to organizational) experience with and knowledge of policy and environmental change work. The purpose of such a study would be to determine the capacity of the current workforce for this type of work and to identify needs/gaps that could be filled through short-term training approaches (workshops, web-based training) as well as longer-term approaches such as enhanced training through professional schools (e.g., schools of public health).

As noted earlier, the line between policy and environmental change is becoming increasingly blurred. For example, one case story is about the creation of internal guidelines for how programs are to relate to communities in their planning and implementation of their efforts. Are internal guidelines such as these ‘policies’ with an intent to enforce or are they changes to the social (in this case workplace) environment to encourage change, a more optional approach? To make it even more complicated, are legislative ‘resolutions’ considered ‘policies’ or, again, changes to the social environment designed to encourage rather than dictate behaviors? In some respects a protracted semantic debate about this probably would not be useful and may even be counterproductive. On the other hand, it is probably worth beginning to think about what impact these blurring distinctions may have on the willingness of public health agencies to participate in policy and environmental change work and the types of roles they can and are willing to play.

**Recommendation 1B** – Determine whether there is a need for revisiting the definitions of ‘policy’ and ‘environmental change’ and whether such a revisiting would be helpful or confusing at this time. It is suggested that some existing advisory body with familiarity with these issues address this rather than initiating an open debate or discussion.

2. State and/or Local Action
One of the more interesting findings of the 2005 study is the number of local or individual organizational policies and environmental case stories that were submitted. This number is intriguing given that state staff were the initial point of contact in soliciting submissions. The implications of this are that there is good recognition by states of the importance of local level interventions, successful local level interventions are occurring, and states are participating in and otherwise supporting such initiatives.

**Recommendation 2** – A more complete understanding of the interaction between state and local communities in terms of policy and environmental change interventions is needed. The purpose of such a review would be to determine training and technical assistance gaps/needs that state and/or localities have that would enhance their efforts and allow them to be more mutually supportive. Such a review might also explore the current the nature of state and local relationships to determine the extent to which modifying operating policies and procedures at both levels might enhance the effectiveness of their policy and environmental change efforts. While it is important to obtain information from states that already have working relationships with localities, it would also be important to review those where such relationships don’t exist or are marginal. This issue is one of building both state and local policy and environmental change capacity to work both separately and together.

3. Planning for and During Enactment/Approval

The case stories show a wide array of partnerships actively working together on policy and environmental change interventions. The numbers and types of partners reported is extremely encouraging and demonstrates the wide range of community support that exists for these kinds of interventions. As encouraging, are those case stories where we see new and unique partners becoming engaged (e.g., quarries and landscaping firms, restaurant associations, etc.). Coalitions have long sought to expand membership to groups other than the usual health agencies that participate. There is recognition that such expansions are useful and may be even critically necessary. What is less clear is how to effectively form and sustain the relationships with new and unique partners.

**Recommendation 3A** – Document and widely disseminate information on unique, new partnerships including critical success factors and lessons learned. This could be in the form of ‘How to Work With…’ guides.

Several case stories noted the opportunity to use the results of current data collection as a means for stimulating policy and environmental change. In one
example, results from the School Health Index were used to stimulate change. Data on communities is both systematically and periodically collected on a wide variety of issues relevant to chronic disease control (e.g., HEDIS reports; BRFSS results). Being aware of and using timely results from these reports may accelerate efforts to implement policy and environmental change efforts. In looking at community data sources, it is also useful to look beyond ‘health’ data sources. One case story reported using parks and recreation department user profiles.

**Recommendation 3B** – Compile a list of ongoing data sources and timing that are specifically relevant to key policy and environmental change interventions that impact on chronic diseases. These should include data resources useful at both state and local levels.

Some policy and environmental change interventions related to chronic disease were reported as embedded in broader community development policies and environmental change efforts. It makes sense to try and see how our chronic disease efforts might fit into initiatives that communities are already interested in and supportive of. For example, the building of a new baseball stadium which was being billed as ‘family friendly’ provided an opportunity to influence baseball management to set aside smoke-free areas and markedly limit areas where smoking was permitted. Many communities are engaged in developing park and land use policies that can be piggybacked on to assure safe and encouraging opportunities for physical activity.

**Recommendation 3C** – Compile a matrix of generally popular community development and improvement issues/policies and illustrate how major chronic disease policy and environmental change strategies might fit into them. This should include identifying the mutual benefits that piggybacking might result in.

Where it is feasible, small pilot projects that are successful encourage policy makers to consider broader changes. In some cases, policy makers may even be unwilling to consider broad changes without a pilot study. The 2005 study contained a couple of examples where small pilots (e.g., a single school) resulted in broader implementation.

**Recommendation 3D** – Create sample protocols for simple pilot projects that might be carried out for major chronic disease policy and environmental changes.

This study clearly illustrates that compromises are an integral part of policy and
environmental change work. The issue is determining when compromise should be considered and what might be compromised and what should never be compromised. For example, a number of clean indoor air ordinances have had to deal with multiple attempts to change the scope and boundaries of proposed legislation. There is a need to have some discussion and planning around compromise before being confronted with the actual need to decide on compromising or not.

**Recommendation 3E** – Provide training opportunities on the ‘art of compromise’ for people engaged in public health policy and environmental change work.

**Recommendation 3F** – Provide a sample protocol to guide a coalition through the process of reaching agreement on what constitutes acceptable and unacceptable compromise for a policy or environmental change intervention they are considering.

4. Post-Enactment/Approval

Once policy and environmental changes are enacted or approved, there is a need to remain vigilant to attempts to reverse and/or water them down later. For example, a city council passed a tobacco-free city ordinance. That ordinance was then challenged legally; forcing the city to eventually hold a public referendum that, fortunately, upheld the original ordinance. There can be a tendency in this kind of work to focus more on the enactment and approval process for a policy or environmental change and not think or plan so much for what happens after a policy is enacted.

Once case story targeted a policy related to beaches in a county. However, the implementation of that policy after county approval required city-by-city action. This illustrates not only the potential complexity of policy implementation across jurisdictional lines, but the need for thorough planning for implementing policies and environmental changes once enacted.

**Recommendation 4** – Develop a checklist or tool to help coalitions generally plan for post-enactment/approval work, including monitoring implementation of the policies, anticipating and preparing for possible challenges, and how to be vigilant in watching for both challenges and failures in implementation.

5. Defining Success
For the most part, the 2005 case stories showed a high level of interest in evaluation and demonstrated a wide range evaluation methods used. This shows that the concept of evaluation is pretty much embedded in the psyche of those who are working on policy and environmental change programs. The case stories also show a capacity for identifying program outcomes in advance that extend beyond the ultimate disease outcomes that the policy or environmental change is intended to impact on. This capacity is extremely helpful in developing evaluation plans that can show the decision makers and the public the degree to which these policy changes are achieving what they intended. In cases where organized opposition exists and may work to repeal or add limits to previous policies or environmental change initiatives, evaluation results can help to counter arguments they raise.

It is important that these kinds of stories with results become a part of the formal/published literature so that others can see the successes that are occurring and learn from the experiences of people who have been there. This has traditionally been difficult because those who have the knowledge of what has transpired are practicing public health professionals who have little spare time and are already faced with extraordinary demands on what time they do have. The difficulty encountered in getting even the short case stories for this study submitted is symptomatic of this issue. The payment of stipends helped with the long case stories to some degree, with some using those funds to hire writers to gather and document the information requested (others used the funds to augment their program budgets).

**Recommendation 5A** – Aggressively encourage public health practitioners to formally report the results of their policy and environmental change efforts and provide tangible forms of support to help them do so. The study team sees the need for some kind of ‘campaign’ to let public health practitioners know there is need to tell these stories in a timely fashion starting now. One approach to start doing that might be to review the case stories submitted for 2005 and specifically encourage the submitters to formally publish them. Another might be to sponsor a monograph focused not on the theory of policy and environmental change, but on its practice and results achieved. Appropriate 2005 case stories and others could be included (although short case stories would have to be turned into article format with greater details provided). The idea of providing tangible support is not limited to the stipend approach used in the 2005 study. Other types of support would be to engage ‘story tellers’ who could develop articles by interviewing those who did the work and the documentation they produced in the course of doing it. Another form
of tangible support might be to encourage universities (especially those with public health training programs) to take up the task of locating these kinds of stories and helping write them and/or get them into the literature. On a sour note, the need for getting these kinds of stories which provide both ‘how to’ information and results is not a new need nor a new call to action. In the absence of an organized effort to make this happen and tangible means of supporting such an effort, it is unlikely that anything different will happen.

While one problem rests with the time (and perhaps inclination) of public health practitioners to tell their stories, there is also a barrier in that stories that discuss the detailed “how to’s” are not necessarily looked upon with favor by many of the reputable published sources. Moreover, public health practitioners often don’t set out to do their work as if it were a scientific research project, with the result that their evaluations may not be perceived as being of the same quality of those produced by academic institutions. This issue surfaced during the 2001 study and resulted in one of the priority recommendations (Level II). It is repeated here as a recommendation with some modification.

**Recommendation 5B** – Identify key journals and other information sources and advocate with them for inclusion of more articles on policy and environmental change work, including detailed ‘how to’ and ‘lessons learned’ type information. This might be done by asking them to publish special issues that address the subject and/or making a special call to public health practitioners for such material. In doing so, the reach of call must get to the local level as well as hitting the states.

It is important to keep in mind that the enactment of a policy or an environmental change ultimately is not the outcome we desire. Policies and environmental changes are intended to stimulate behaviors and other changes that will positively affect the public’s health. Thus, getting a baseball park to restrict smoking, is intended to protect people from secondhand smoke and even encourage quitting, thus leading to reductions in the health effects of tobacco use. Similarly, the development of walking trails is intended to stimulate their use for physical activity and, in turn, helping to reduce health effects that result from or are exacerbated by sedentary lifestyles. It is important for those working on policy and environmental changes to carefully outline the chain of events from the activities they engage in to the policies and environmental changes they achieve and on to how these, in turn, change behaviors consistent with changing health outcomes. Some use the term ‘logic models’ to describe this approach. For evaluation purposes, at each step in the logic model, there is an opportunity to measure ‘success’. The outcomes and evaluation information from the 2005
case stories seem to indicate that this concept is well understood and being practiced by some.

**Recommendation 5C** – Identify existing resources that contain guidance on specific outcomes of relevance to the major chronic disease-related policy and environmental change interventions being pursued and encourage public health practitioners to access them when planning their initiatives and evaluation approaches.

Another intriguing finding from the 2005 study came from a number of case stories in which the outcomes of the policy and environmental change effort included things that wouldn’t necessarily have been anticipated in a logic model developed at the outset of an initiative. It is important for evaluation plans allow for the flexibility to capture and document unforeseen outcomes as well as intended outcomes. Some examples from the 2005 case stories include:

i. What was intended as a small environmental change quickly became something much bigger. In order to provide some healthy snack options a few items were brought into a workplace and made available for purchase. The concept was so popular, that the number and types of options were markedly increased in a short period of time.

ii. Policy changes in one area can lead to opportunistic environmental changes in others. In one community, land use policy was changed to allow for public use of vacant lands. This led to the development of gardens, parks and trails, thus providing several new options for healthier lifestyles.

iii. Policy changes can result in enhanced implementation. In one community, a policy designating a trails system mobilized the community to come up with trail plans that were of much better quality than originally considered.

iv. Policies and environmental changes can become mutually reinforcing. For example, one school created a gardening project. The vegetables that came from the garden were later used to provide some healthy options for the school’s snack program.

v. Policies and environmental changes intended for health purposes may result in other, positive community outcomes. One rural community created a new park intended to increase physical activity, which it did. That park also became a popular place for regular social gatherings where
there were few other options available.

vi. Sometimes policy work results in an unexpected chain of events that leads to policies with a broader scope than originally envisioned. Below is an example of such a chain of events:

1. A local campus within a university system decided to become tobacco free.
2. The university system decided to remove the authority to make such decisions from local campuses.
3. The backlash from this decision prompted a new policy affirming the authority of local campuses to make such decisions.
4. The initial outcome of the new policy was that multiple campuses became tobacco free.
5. As a result of awareness and activism created by the original revocation of authority, some campuses also prohibited sales of tobacco products on campus and tobacco industry sponsorship of camps events.

Recommendation 5D – Develop guidance that assists public health practitioners to routinely address unexpected outcomes in its evaluation plans. This guidance might include simple processes to help evaluators speculate on the types of unexpected outcomes one might see and to look for them. It should also include ideas on how to look for and adequately document outcomes that only came to light after the fact.

There is one other issue related to evaluation of policies. This is offered based on the experiences of the study team and did not arise from the case stories collected. We have been told numerous times that a major problem with some policies is the issue of enforcement. That is, policies passed often fail to address enforcement or do not speak to the authority or resources needed to assure compliance. We also hear that even when authority for enforcement is designated, the enforcement of health related policies may have a very low priority with the designated enforcement agency.

Recommendation 5E – Develop guidance for addressing enforcement outcomes as part of the evaluation process. This should include options for monitoring enforcement results and tracking the related activities of enforcement agencies.

6. Attitudes
Public health practitioners are by nature and training often people who are seen as working for the public good and trying hard to build consensus and minimize confrontation. Policy work and, to a lesser extent perhaps, environmental work can, however, sometimes be adversarial in nature. When that happens, public health practitioners may find themselves at unusual odds with the public and even their own public health agency and government leadership. The attitudes with which these practitioners approach policy and environmental change work are important to its success. The 2005 case stories illustrate two points with regards to attitude:

i. There is a need for persistence and perseverance in this type of work. Defeat of a policy or failure to secure an environmental change can be seen either as a deciding event, or as one more step (albeit unpleasant) along the road to success. Two case stories illustrate this. One was an initiative in which a policy was introduced each year for six years until successfully enacted. The other involved a failed attempt that was resurrected and attempted again 4 years later and succeeded.

ii. The second point has do with courage. Sometimes it is necessary to stand up for what is being proposed in a strong and visible way. In one state there was a pre-emption provision in place that prohibited local communities from passing laws with stronger provisions that state law called for. In this case story, the city council wanted to have a law stronger than the state law. So they took the bold stand of asking the state to repeal its pre-emption provision, and then went ahead and passed a more stringent law anyway.

**Recommendation 6** – Conduct a review of public health training programs to determine existing programs that address the skills and attitudes of public health practitioners when working on policy and environmental change interventions and make recommendations for additional training and technical assistance approaches that may be needed.

7. Future Directions

Most of the case stories in this study address policies and environmental changes intended to impact on the underlying risk factors associated with chronic diseases. Based on the observations of the study team, increasing attention is being paid to policy and environmental change strategies that impact on access to preventive and clinical health care services, access to and utilization of emerging technology for both preventive and clinical application, and to address health
disparities. Examples of these include issues related to Medicare and Medicaid eligibility and benefits changes, the potential widespread availability of an HPV vaccine, and increasing pressure to assure the cultural competencies of health care professionals. Many of these may be more relevant at the national and state levels, but some have direct implications for policy and environmental change at the local level as well. Very importantly, these types of issues cut across and impact multiple chronic diseases. We believe that the current trend of risk- and disease-specific policy and environmental change work will continue. We also believe that the issues noted above will increasingly come into play and place demands on communities and public health practitioners to address them. In fact, one of the case stories addressed an initiative related to oral health eligibility guidelines.

**Recommendation 7** – Convene a ‘think tank’ group to consider the future directions that policy and environmental change might take and to identify needs and approaches for orientation, training, and technical assistance that might be required for public health practitioners.

**Recommendations Related to Future Studies**

On a purely observational basis, the reactions to the published 2001 study monograph and those of submitters for the 2005 study seems to indicate a strong and persistence interest in information that can be gained from studies like these. We believe there is value in looking at different approaches (including the one used in this study) for collecting and making available information on policy and environmental change experiences.

**Recommendation 8** – Identify alternative approaches for collecting and making available information on policy and environmental change experiences. These alternatives should include careful consideration of the pros, cons and resource requirements of each. They should also look at both periodic and ongoing methods for data collection. The lessons learned regarding the conduct of the 2005 study (see earlier in this report) should be considered where applicable as should the general protocol as presented below in Recommendation 9.

While the two previous studies differed somewhat in content, the general protocol for implementing them was similar and should be considered in implementing future studies of this type. Portions of this protocol may also be applicable to other approaches for future studies.

**Recommendation 9** – Consider the following general protocol for collecting policy and environmental change experiences using a case story approach:
• Agree on study purposes and scope – for both studies DHPE designated an advisory group that was very helpful in outlining the study purposes and protocols. The previous studies defined the content of the study as focused primarily on chronic diseases. The issues of expanding the scope beyond chronic diseases came up to a limited degree during the initial study but was somewhat more intensive during discussions of the second study. Arguments for expanding the scope in the future will probably continue to arise.

• Develop the data collection format and protocol – this often took several iterations before consensus was reached. One issue that came up in both studies was deciding who to actually submit the request for participation to. Possibilities included DHPE members and Chronic Disease Directors members, a few of whom belong to both organizations. Other considerations are directors of specific chronic disease programs/sections (e.g., tobacco control; obesity prevention). It has also been suggested that submitting requests through the state ASTHO member would be appropriate. This choice remains problematic because the degree to which these various people are aware of the full scope of policy and environmental change activities in the agency and even the degree to which they communicate well with each other is variable from state to state. Compounding this issue is the fact that turnover in any of these positions can be relatively high. Thus whatever address lists are used are always outdated and require personal follow-up to find at least a few of the current incumbents. In addition, there has been a desire to include information on what local public health agencies and territories are doing related to policy and environmental change work, but no solution for gathering this information efficiently has been identified to date. An effort was made to get at this need in the initial study but was not considered successful as it used the state agency as the key informant for local agencies. The second study was more successful in collecting information on local initiatives, but not as a result of any conscious approach in the protocol. The second study attempted to gather information from territories but was not successful.

• Solicit and vet initial information – even with explicit information about the scope of the study, a sizeable number of ideas/cases are submitted that are out-of-scope. There remains some confusion in the field over what constitutes an intervention that is a policy or environmental change or one that is simply programmatic (e.g., a public awareness campaign). This confusion is understandable given that the same techniques might be used (e.g., a media campaign might be part of generating support for a policy initiative or it might be intended to solicit participation in some disease screening program). In the second study, potential submitters were asked to answer five 1-sentence questions to help identify those cases in- and out-of-scope. There was also a
need to go back to the submitter in a number of cases for additional clarification before making a final determination. This procedure is highly recommended for future studies.

· Solicit and review full information from those whose studies are identified as in-scope. Submitters are provided with the full data collection instrument/format. Submissions are reviewed for completeness and clarity and clarifying questions are asked. In both previous studies, clarifying information was required in a sizeable number of instances.

· Follow up with non-responders – a significant amount of time can be spent in contacting people who are interested in submitting but unable to meet a particular deadline. Great flexibility in deadline setting is needed; although at some point it is also necessary to decide to move on with what is in hand.

· Edit submissions and request approval of changes from the original submitter.

· Carry out the analysis of the combined responses – including comparisons with previous studies where appropriate.

· Draft recommendations and obtain input – an advisory body can be very helpful at this stage in the process.

· Draft a report of findings and obtain input.

· Finalize and submit the report – additional submissions of electronic versions of case studies may also be required.

· Prepare articles, presentations, and workshops and be prepared to respond to inquires after the report is issued.

**Concluding Remarks**

The importance of policy and environmental change strategies is unequivocal. The need for continued capacity building among public health agency leadership and staff and other groups that advocate for such changes is also unequivocal. This study (and the 2001 study) shows a high degree of interest, commitment, creativity and success among those relating their experiences with this kind of work. Studies that capture the implementation details and lessons learned from the experiences of those working on policy and environmental changes are essential to keeping the field vibrant, motivated and challenged to achieve even greater successes.