

# The 2009 National Environmental Public Health Conference: One Model for Planning Green and Healthy Conferences

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## ABSTRACT

The Centers for Disease Control and Prevention's National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry committed to making their 2009 National Environmental Public Health Conference a model for green and healthy conferences. The conference included increased opportunities for physical activity, both as part of conference events and for transportation to the conference. In addition, conference meals were healthy and sustainably sourced. The conference also implemented intuitive, accessible recycling; online scheduling and evaluation to minimize hard-copy materials; and the purchase of carbon offsets to reduce the unwanted environmental impact of the conference. Public health professionals have an opportunity and obligation to support healthy behaviors at their events and to serve as leaders in this area. Facilitating healthy and sustainable choices is in alignment with goals for both public health and broader social issues—such as environmental quality—that have a direct bearing on public health.

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The Centers for Disease Control and Prevention's (CDC's) National Center for Environmental Health (NCEH) and the Agency for Toxic Substances and Disease Registry (ATSDR) committed to making their 2009 National Environmental Public Health Conference (NEPHC) a model for green and healthy conferences. The 2009 conference was the first NEPHC to incorporate green and healthy initiatives. The commitment to make the NEPHC as healthy and sustainable as possible fit naturally with the conference theme of "Healthy People in a Healthy Environment" and with the disciplinary focus of environmental public health itself, which exists at the intersection of human health and the health of the environment. This commitment also supports broader public health goals beyond the specialty of environmental health, such as the Department of Health and Human Services' 2010 Strategic Sustainability Performance Plan.<sup>1</sup> With more than two-thirds of Americans obese or overweight,<sup>2</sup> public health professionals have both an opportunity and obligation to facilitate healthy choices at public health meetings and events. The 2009 NEPHC included increased opportunities for physical activity and meals that were healthy and sustainably sourced. The conference also implemented the following elements to reduce the unwanted environmental impact of the conference and promote health and wellness: intuitive, accessible recycling; online scheduling and evaluation to minimize hard-copy materials; encouraging the use of public transportation; and purchasing carbon offsets.

The commitment to support a healthy and sustainable conference was evident at the very top levels of the organization and among members of the various teams working to organize the NEPHC. A planning subcommittee was established to identify and champion green and healthy options and provide technical assistance to other NEPHC planning committees, the hotel, and the meeting planning contractors to support this initiative. Public health partner organizations also were integral to ensuring the success of this endeavor. Partner input was obtained early in the planning process, which facilitated additional ideas on how to achieve the vision for a green and healthy conference and also increased buy-in for likely changes to the traditional conference format. The NEPHC built upon the ideas put forth by other organizations, such as the Environmental Protection Agency (EPA), in generating ideas for ways to "green" the conference.<sup>3-5</sup>

As part of their efforts to maximize healthy and environmentally sustainable options, the NEPHC organizers recognized that such choices often have the perception of being less convenient. When faced

with these challenges, conference organizers devoted time and resources to identify or create a healthy and environmentally sustainable choice by making it the easier, more convenient, and/or default choice. Changing the context in which decisions are made has more impact than relying on individual efforts.<sup>6</sup> The NEPHC organizers considered opportunities to promote green and healthy choices when selecting the meeting venue, setting the conference schedule, making food and other purchasing decisions for the conference, and pursuing pollution reduction opportunities (Figure 1).

## GREEN AND HEALTHY PRACTICES

### Site selection

Site selection is one of the most important choices that a meeting planner can make. From the outset, meeting organizers placed a priority on finding a venue that was easily accessible via public transit and that shared the NEPHC Planning Committee's commitment to healthy and sustainable practices, such as those exemplified by the Green Hotel Initiative developed by the Coalition for Environmentally Responsible Economies.<sup>7</sup> The hotel selected had won awards for its policies and practices in supporting environmental sustainability and had demonstrated leadership by reducing water usage and wastes both in guestrooms and behind-the-scenes hotel operations. The venue also offered a 24-hour fitness center for hotel guests. The NEPHC organizers selected a hotel that was easily accessible by public transportation and then promoted the use of this option by providing a walking map prominently displayed in the conference booklet and by posting transit directions as the first transportation option on the conference website.<sup>8</sup> These measures provided another opportunity to positively impact both the environment and health.

### Green and healthy purchasing choices

Conferences incorporate many purchasing decisions that have implications for improved public health and pollution reduction, such as decisions about food. In addition to providing healthier fare, such as vegetarian choices and organic items, venue staff obtained commitments from food vendors to purchase locally grown foods as much as possible. This practice is in alignment with strategies outlined in the Common Community Measures for Obesity Prevention Project, which recommends increasing availability of healthy foods, including through mechanisms to purchase food from local farms.<sup>9</sup> Food was served on china with metal

**Figure 1. Checklist for planning a “green” and healthy meeting**

Select a meeting venue with demonstrated leadership in green and healthy initiatives

- Location on a major public transportation line
- Within walking distance to restaurants and other attractions
- Energy and water conservation efforts
- Single stream recycling
- Healthy local, sustainable restaurant menus
- Composting
- Eco-friendly construction and landscaping
- 24-hour fitness center
- Smoke-free facility

Incorporate green and healthy purchasing decisions

- Organic, healthy, and locally produced seasonal food
- Serve food and beverages from large, reusable containers rather than individually packaged servings
- Purchase carbon offsets
- Conference giveaway chosen during preconference registration includes choice of organic cotton bag or reusable aluminum water bottle or attendees could choose to take nothing

Facilitate intuitive and accessible recycling

- Recycling bins for paper, plastic, glass, and aluminum that are larger and more numerous than waste bins
- Collect conference name tags and conference bags for recycling at end of conference

Reduce amount of paper waste generated

- Online systems for registration, abstract submission, and evaluation
- Free wireless Internet access and computer kiosks during the conference
- On-site guides to answer attendee questions
- Print on alternative fiber (bagasse and bamboo) and post-consumer fiber when hard-copy materials are necessary

Encourage exhibitors to support a green and healthy exhibition

- Healthy snacks instead of candy
- Electronic media to display information
- Organic, biodegradable, recycled and/or recyclable promotional items
- Minimize shipping materials to the event and use recyclable packing materials when shipping is necessary
- Select paper products made from post-consumer recycled content
- Send information to attendees electronically after the conference

Provide opportunities for attendees to be physically active

- Morning yoga sessions and mobile workshops

flatware or on compostable plates, and condiments were served in larger containers, not as individually packaged servings, to minimize solid waste.

**Waste reduction**

Organizers took several steps to reduce or eliminate waste generated by the conference. The organizers made recycling opportunities readily apparent and accessible to conference participants to make recycling the default choice over traditional disposal. Recycling bins for paper, plastic, glass, and aluminum were larger and more numerous than waste bins, and signs indicated where to deposit recycled goods. Similarly, organizers reduced the amount of hard-copy materials by offering a conference book containing minimal printed information (maps, session titles and tracks, welcome letter, and schedule of activities) on alternative fiber and post-consumer fiber. The NEPHC Planning Committee realized that transitioning away from paper-based mechanisms involved publicizing creative, convenient alternatives. Free wireless access was provided

for conference participants to access the conference schedule as well as to take notes on their laptops during a presentation. In addition, four computer kiosks with printers were available to enable attendees to access the Internet at any time and to access the online schedule, even if they did not bring their own laptops. Additionally, the NEPHC Planning Committee provided helpful guides to answer attendee questions. Nearly 50 college student volunteers were trained as ambassadors and attended the conference for free in exchange for their services. Conference exhibitors were also encouraged to promote health and wellness and further reduce the environmental footprint of the conference when planning their exhibits.

**Incorporating physical activity into conference events**

Nearly two-thirds of Americans are overweight or obese,<sup>2</sup> which increases risk for a range of public health problems, including coronary heart disease, type 2 diabetes, some cancers, stroke, and other problems.<sup>10</sup>

In addition to selecting a site with a fitness center and within walking distance of public transportation and destinations, the NEPHC organizers also arranged for free morning yoga classes for conference participants. Offering yoga provided another way to help attendees obtain their recommended physical activity for the day,<sup>11</sup> something often hard to do while traveling. In addition, opportunities for physical activity were included in the conference through the innovative use of mobile workshops that provided attendees the opportunity to leave the meeting venue and experience a local public health issue through first-hand experience. Organizing these workshops provided opportunities to build partnerships between federal agency staff and representatives of local organizations, such as local governments, nonprofit organizations, and universities, and provided conference attendees with opportunities to learn and network in a different environment.

### TRANSFERABILITY

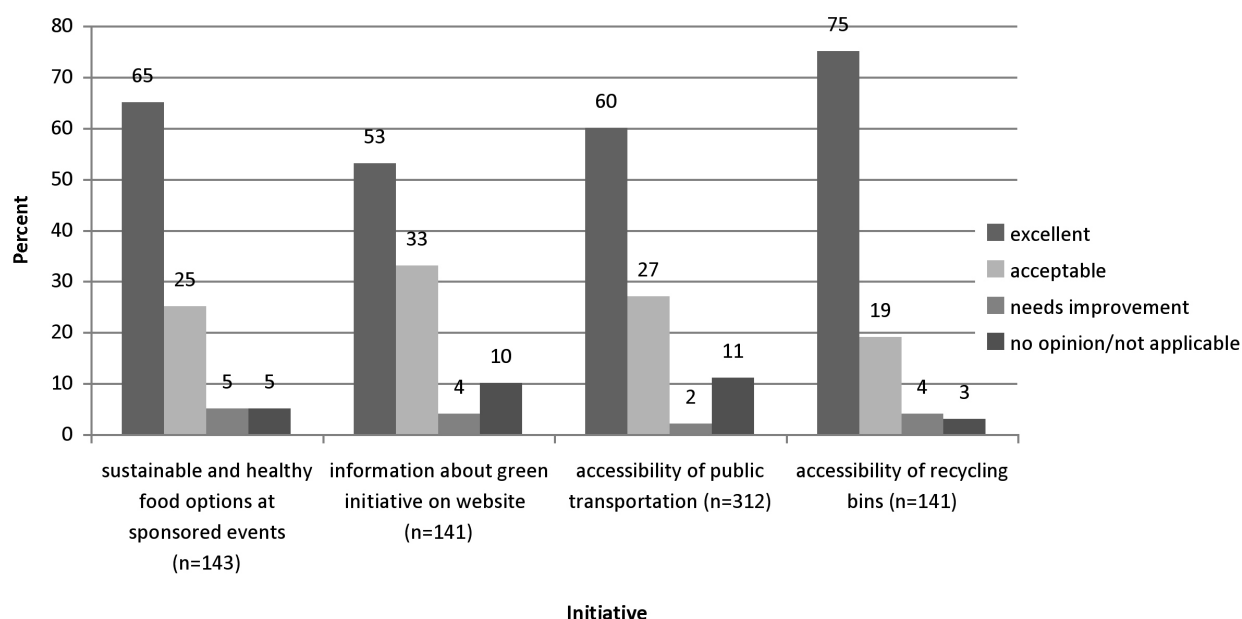
Since the 2009 NEPHC, members of that conference Planning Committee have undertaken several activities to transfer the lessons learned about how to improve the health benefits and environmental sustainability of conferences, including developing a checklist for other organizations to use in planning a conference

with the health of the public and environment in mind (Figure 1). Members of the 2009 NEPHC Organizing Committee established a new workgroup within CDC's Go Green, Get Healthy Initiative to share best practices within CDC/ATSDR on how to improve the environmental health of government meetings and conferences. The 2009 NEPHC organizers also provide technical assistance to other CDC offices, as well as to state-based public health organizations, and teach courses on the topic at Health and Human Services University. These examples illustrate how the 2009 NEPHC is serving as a model and leader for other public health organizations.

### IMPACT

It is difficult to directly measure the health and environmental benefits of the 2009 NEPHC. However, the healthy and sustainable practices employed by this conference did have a positive impact on the overall health and environment of the attendees. Evaluation data from conference attendees show that they supported the health and sustainability efforts made by the NEPHC Planning Committee (Figure 2). The majority of respondents rated the following attributes as excellent: accessibility of public transportation ( $n=187/312$ ); accessibility of recycling bins ( $n=107/141$ ); and sustainable and healthy food options at sponsored events ( $n=143$ ).

**Figure 2. Participant ratings of the 2009 NEPHC initiatives**



NEPHC = National Environmental Public Health Conference

( $n=93/143$ ). Additionally, more than 80% of the respondents felt the condensed conference program provided adequate information on daily schedules, hotel map, etc. (total  $n=312$ ); 65% of the attendees preferred not having a full conference program (total  $n=311$ ); and almost 70% of the attendees used the free wireless Internet service provided during the conference (total  $n=133$ ). Of the 1,220 people who attended the conference, approximately 25% of the attendees recycled their name badges, and 14% of the attendees chose not to take a conference giveaway. While there is room for improvement, these numbers represent a baseline for which to compare the health and environmental impact of future NEPHCs.

While some negative environmental impacts did occur from some attendees coming to the conference via air or automobile, the NEPHC organizers sought to minimize the environmental impact of other actions associated with the conference. Positive environmental impacts included energy savings, pollution reduction, and conservation of natural resources by recycling,<sup>12</sup> purchasing carbon offsets for those traveling to the conference;<sup>13</sup> reducing printed materials,<sup>14</sup> and promoting the use of refillable aluminum bottles and glasses from water pitchers instead of offering plastic bottled beverages during conference breaks and lunches.<sup>14,15</sup> The 2009 conference used 1.4 trees to provide minimal printed information and used online tools for managing most aspects of the conference. As a result of these improvements, more than 11 trees were saved compared with the 2006 NEPHC.<sup>16</sup> Additionally, because alternative and post-consumer fibers were used, no virgin paper and, therefore, no “new” trees were used to print conference books.

Using public transportation to get to the conference and mobile workshops provided opportunities for both physical activity and reduced carbon emissions compared with alternatives. Morning yoga sessions were attended by approximately 35 people each day they were offered and helped attendees meet the adult *2008 Physical Activity Guidelines for Americans* of engaging in muscle-strengthening activities on two or more days a week.<sup>11</sup> Benefits of physical activity include a reduced risk of cardiovascular disease and some cancers, strengthened bones and muscles, and improved mental health.<sup>10</sup> Although the 2009 NEPHC was unable to collect information on the number of people who used public transportation, we suggest that future NEPHC evaluations collect this information so that increases in the use of public transportation can be measured.

## CONCLUSION

A major priority of the 2009 NEPHC was to incorporate “green” and healthy planning and sustainability when making decisions about the conference. Tangible benefits of the conference included healthier food and exercise options, the purchase of carbon offsets, significant decreases in printed materials compared with the 2006 conference, and increased reliance on public transportation for travel to the hotel, airport, and mobile workshops. Furthermore, the healthy and sustainable measures undertaken by the 2009 NEPHC planning committee contributed to energy savings, pollution reduction, and conservation of natural resources, all of which help lessen global warming and protect human health from climate change.

While it is difficult to document a direct reduction in health risk as a result of one meeting, it is nonetheless also clear that facilitating healthy and sustainable choices is in alignment with public health goals and contributes to achieving goals for broader social issues—such as environmental quality—that also have a direct bearing on public health. Organizers for the 2009 NEPHC demonstrated that public health meetings can—and should—be implemented with these goals in mind.

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The authors thank Julie Fishman for reviewing the manuscript.

The findings and conclusions in this article are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention or the Agency for Toxic Substances and Disease Registry.

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