



SHOW Reviews a Productive 2011

As SHOW begins a new year, we are very pleased to report on a number of important accomplishments in 2011.

Over 900 adults from throughout the state joined SHOW in 2011. This brings the SHOW cohort to nearly 2,500 people. As more people participate, SHOW's ability to examine the data and identify meaningful information expands. As the sample increases we are able to identify potential health issues and solutions for improving health across the state.

For example, SHOW's data has been used to explore the factors that explain why some Wisconsin residents have lower levels of Vitamin D, an important chemical to prevent bone loss and other diseases in older people. We are also studying whether people with chronic conditions are taking medicine appropriately, and looking at whether or not Wisconsin's statewide smoking ban makes a difference in exposure to smoke. In addition, we have a number of ongoing studies looking at how the changing economics in the state and employment rates may be impacting health of residents.

The State Department of Health Services (DHS) is using SHOW's data to better understand and reduce levels of obesity. SHOW data is helping leaders and organizers to identify opportunities to reduce obesity rates and to improve health in the state.

SHOW has partnered with organizations throughout the state, helping them to conduct community specific research. Highlights from these research partnerships are included throughout this newsletter.

SHOW builds Wisconsin's first bio-bank for public health research

With SHOW, the University of Wisconsin has established a one-of-a-kind public health biological sample bank. Many of SHOW's participants agree to donate blood and DNA samples, which are stored to support future research. Biological samples are often collected from people who regularly see their doctor or health care professionals, but there are very few biobanks that are like SHOW, built with samples from the general population.

SHOW Sheds Light: Preventing Heart Disease in Wisconsin and the Use of Aspirin Among Adults

Researchers from the Marshfield Clinic and the University of Wisconsin partnered to learn more about how adults in Wisconsin are using aspirin to prevent heart disease. The findings are soon to be published in *The Journal of Family Practice*.

Aspirin therapy is recommended by doctors to prevent heart disease in some populations of adults who are at high risk. However, regular doses of aspirin thin the blood, which may lead to bleeding events, so it is not recommended for everyone. In the medical world, little is known about who takes aspirin regularly for this use.

Using SHOW data, researchers found that aspirin is generally underused in Wisconsin by those who might benefit from it, and overused by those where the risk of harmful events outweigh the potential protection. Participants who were older or female were more likely to take aspirin regularly than younger or male participants. Regular aspirin use was greater among older participants than younger participants, and lower among non-White or Hispanic participants relative to White participants.

According to these findings, researchers recommend that regular screenings may be needed to assess who would benefit from taking aspirin, particularly for middle-aged males at risk for heart disease. In addition, better public education may be needed to inform people about the risks of medically inappropriate aspirin use.

Participants who provide their biological samples are contributing to scientific discovery for years to come. SHOW bio-samples are de-identified, processed and separated into smaller amounts for long-term storage and future research. Blood and urine are stored at the University of Wisconsin and DNA is processed and stored at Prevention Genetics in Marshfield, WI.

The new bio-bank is a powerful resource, especially when used in combination with SHOW's extensive data sets. SHOW collects a wide variety of data from each participant — including

SHOW Data

Aspirin Utilization in Wisconsin Population*

- 32%** SHOW participants recommended for aspirin therapy based on health characteristics
- 69%** SHOW participants recommended for aspirin therapy who do not take aspirin regularly
- 68%** SHOW participants not recommended for aspirin therapy
- 18%** SHOW participants not recommended for aspirin therapy who take aspirin regularly

Despite general trends of increased aspirin use among U.S. adults in recent years, aspirin use in the SHOW study seemed to be lower than 2005-2008 state and national estimates of aspirin use for primary cardiovascular disease prevention. At the same time, aspirin use among the SHOW cohort is nearly 20% higher than previous estimates of overall aspirin use in Wisconsin 20 years ago.

*Figures based on 831 SHOW Participants 2008-2010, 35-74 years of age with no personal history of cardiovascular disease at the time of survey.



environmental factors, family health history, personal health habits, and physical measurements. With SHOW, these factors can be studied in combination with bio-sample testing, allowing for deep research into countless health issues. This is done while preserving the confidentiality of the information.

In years to come, the bio-samples will help research across the nation. Health research findings have the potential to help prevent common disease and improve the health of individuals and populations. With SHOW's bio-bank, this research and health improvement is made stronger in Wisconsin.

SHOW works with Milwaukee Lindsay Heights Neighborhood Health Alliance

The Lindsay Heights Neighborhood Health Alliance (LHNHA) partnered with the SHOW team to conduct a pilot study to gather information about health status and health needs in the community. The pilot study was the first step towards building a larger community-academic partnership.

Three community members were hired for the project to help in recruiting neighborhood residents and conducting the pilot. Forty-eight residents participated. They answered questions about health and lifestyle, agreed to a physical exam including height, weight, and blood pressure, and provided blood and urine samples.

LHNHA residents will use the SHOW data to identify areas for further evaluation and to design community-based programs to improve health and wellness in the neighborhood.

Services may include increasing economic resources, improving access to healthy foods, supporting education and providing improved access to health care.

Community Advisory Board helps SHOW to connect in Milwaukee

In 2010, the Social Development Commission and the Center for Urban Population Health worked with SHOW to establish a Community Advisory Board (CAB) made up of members of the African American community of Milwaukee. The group was started and led by Ella Dunbar, of the Social Development Commission, and Dr. Loren Galvão, of the Center for Urban Population Health.

Eight members staffed this committee; John Gee, Charlene Harris, Samuel Holland, Nancy Hunt, Darrell Stone, Shoniecia Taylor, Irene Williams and Howard Wright.

The CAB members met monthly for a year to learn about public health research and to advise SHOW about how to give research findings back to the public in useful and meaningful ways that can lead to action for improving health.



CAB members shared top concerns about community health. In order of importance, the following issues arose:

- Alcohol and substance abuse
- High blood pressure
- Dental issues
- Mental health issues
- Depression
- Diabetes
- Obesity
- Premature births
- Housing/foreclosures
- Stress

CAB members stressed the inter-relatedness of these issues. They also shared that information is more meaningful when combined with stories about individual lives.

“We are very thankful for the time that the CAB group gave to our survey. Their insight will help us greatly as we use the SHOW data to help to understand and address real health needs in Milwaukee and around Wisconsin,” SHOW Director, Dr. Javier Nieto, shared.

La Crosse & Wood Counties “Get Active”

SHOW partnered with the La Crosse and Wood County health departments and the Wisconsin Department of Health Services to help with a public health project called “Get Active.” The goal of the work is to improve public health by encouraging greater access to healthy food and physical activity.

In both counties, SHOW conducted a survey measuring health of adults in the community before and after the “Get Active” program started.

SHOW measured neighborhoods in La Crosse to see if there are features that help to support physical activity. They measured access to sidewalks and bike paths, neighborhood safety, and nearness of libraries, gyms, stores, etc. SHOW also rated stores and restaurants for healthy and affordable food choices.

With SHOW’s data in hand, the counties learn more about ways to continue fighting obesity and improve community health.

Assessing Social, Built and Nutrition Environments in Wisconsin Communities

The Wisconsin Assessment of the Social and Built Environment (WASABE) is a tool developed by researchers at the UW to measure features of the social and built environment that support healthy living. This last year, SHOW completed the WASABE assessment for all SHOW households selected in the 2010 survey.

While in neighborhoods to collect WASABE data, SHOW also completed the Nutrition Environment Measures Survey (NEMS). The nutrition study measured the availability and costs of healthy food items compared to unhealthy food items in grocery stores, convenience stores, and restaurants. Additionally, SHOW conducted customer interviews in restaurants and food stores in Stevens Point and Waupaca, in partnership with the Assessing the Nutrition Environment in Wisconsin Communities (ANEWC) project.

All of these projects provide an objective view of neighborhood resources that can be combined with a wide variety of additional SHOW data. SHOW staff are now working to analyze these data and will be providing results to communities and other decision-makers during 2012. The information that has been collected will shed light on how local environments impact community health. With this information in hand, officials, community organizations, and health care providers can make improvements that address community needs.

Oral Health Screening

SHOW just finished a study in partnership with the Oral Health Program through the Wisconsin Division of Public Health. Over a two-year period, SHOW completed a dental screening of Wisconsin adults, collecting important information about cavities and other oral health problems in participants.

This is the first time this type of screening data has been collected in the Wisconsin adult population.

Participant Experiences

The SHOW program is grateful for the wonderful Wisconsinites who have agreed to participate in this important research. Here are what some SHOW participants are saying:

“I found the entire thing interesting. I am glad I decided to do the survey. I now know my levels on many different things.”

“I was proud that WI was doing this research and was happy to participate.”

“Everyone was wonderful and made me feel very comfortable. It was nice to see that the lady who first came to my apartment was the one to do my exam, and the man who came to my apartment was on site at the exam as well. Made me feel really at ease knowing that I wasn’t starting all over with ‘strangers.’”