Survey Expands in 2014
SHOW kicked off its seventh year of data collection in July of 2014 with a number of important changes.

SHOW for All Ages
For the first time in the survey, Wisconsin residents of all ages will be invited to participate. In the past, the survey has included only those between 21-74 years of age. “Adding kids and elders is an important growth for us,” co-director Dr. Javier Nieto shared. “SHOW will now be able to help monitor the health of all age groups of residents in the state.”

Measuring Physical Activity and Sleep
Beginning this year, participants will wear portable monitors that measure their activity and movements for a full week as part of their health assessments. These monitors (called “accelerometers” or “actigraphs”) will measure physical activity and sleep patterns.

“We’re putting a lot of effort into gathering an accurate picture of physical activity and sleep habits,” explains Dr. Kristen Malecki, co-director of SHOW. “Our activity levels and the quality of our sleep can have an important impact on our health, so this new SHOW resource will be very valuable for health research.”

Pictures of County Health
SHOW has also designed a new approach to data collection that will measure health at the county level, while still providing an overall picture of the health of the entire state.

“We’ll be visiting ten counties between 2014 and 2016, and hope to recruit at least 250 people from each county,” staff biostatistician Andy Bersh explains. “The combined data from the ten counties will continue to provide SHOW a picture of health at a statewide level. At the same time, we will be able to learn much more about specific health issues in each of the randomly selected counties.”

SHOW visited Wood, Dane and Racine counties in 2014 and plans to work in La Crosse, Milwaukee, Ozaukee and Polk counties in 2015.

740,000 Wisconsin Residents May Face Food Insecurity
UW researchers used SHOW data to measure food insecurity across Wisconsin. The study was published in the August 2014 issue of the Wisconsin Medical Journal.

Food insecurity is a public health concern affecting millions of Americans, which can lead to chronic nutritional deficiencies and potentially serious health consequences. Families are food insecure when they don’t have reliable access to enough affordable and nutritious foods.

“Far from being exclusively an urban issue, SHOW’s data suggest that a concern about not having enough to eat also affects a significant portion of the population in all areas of the state,” says Dr. Javier Nieto, senior author of the study. This finding is important for understanding the underlying factors that may contribute to food insecurity. Poverty affects people in urban, suburban, and rural areas alike, and is strongly associated with food insecurity.

“I think there’s some commonly held notions that if someone lives in a rural area, they are in an agricultural community and will have access to healthy foods,” says Natalie Guerrero, the MD/PhD student who led the study. “The data suggests that this may not be necessarily true.”

Addressing the Issue
Wisconsin residents, local policy-makers, and healthcare providers alike will play a fundamental role in addressing the issue of food insecurity throughout the state. “One key piece in addressing food insecurity is to put forth policy that supports sustainable, locally-produced food, and also increases the acceptance of food stamps,” says Guerrero.

Considering the health consequences of food insecurity, Guerrero suggests that healthcare providers assess their patients’ risk of food insecurity as part of standard care. “Food insecurity is associated with a less healthy diet, higher risk of obesity, and decreased mental health, so it’s important for healthcare professionals to consider the long-term outcomes that can result from their patients being food insecure.”

SHOW researchers plan to continue to look for hidden hunger in Wisconsin. Studies are currently underway to explore how food insecurity impacts health, and to measure food access and availability in neighborhoods throughout the state.

- by Mackenzie Andropolis

SHOW is funded by the Wisconsin Partnership Program, which represents a far-reaching commitment by the UW School of Medicine and Public Health to greatly improve the health of people in Wisconsin for years to come.

Learn more about SHOW at www.show.wisc.edu or by calling us toll free at (888) 433-7469.
Healthy Caregiving

Researcher Dr. Kristin Litzelman, of the University of Wisconsin-Madison and the National Cancer Institute, recently used SHOW data and DNA samples to study health patterns among caregivers in Wisconsin. Caregivers are people who provide regular unpaid care to family members or friends with a long-term illness or disability. The study team, led by Dr. Litzelman and senior researcher Dr. Whitney Witt, examined data on SHOW participants’ perception of their own quality of life and markers of aging in the DNA (telomere length) of Wisconsin caregivers.

Researchers found that caregiver strain was associated with quality of life. Caregivers reporting higher levels of strain also reported lower quality of life than caregivers reporting lower levels of strain. The study also discovered that caregivers who reported moderate amounts of life stress tended to have less cellular aging (shown in DNA as longer telomeres) than caregivers who reported lower levels of life stress. This finding may indicate that moderate levels of life stress are beneficial for health, possibly increasing resiliency. The study also found that caregivers who provided care for a person younger than 25 years old had more cellular aging than those who were caring for older people.

“One takeaway from these findings,” Litzelman suggests, “is that we should be asking about caregiver strain in the clinical setting, and we should also be asking about other stresses. Stress and strain can influence health outcomes and can affect physical and mental quality of life.”

Green Space in Neighborhoods May Boost Mental Health

If you enjoy spending time with nature, you are not alone: UW SHOW researchers recently discovered that Wisconsin residents who live in neighborhoods with more green space report feeling less depressed, anxious and stressed. Living near nature seems to help alleviate mental stress and restore focus.

Dr. Kirsten Beyer, of the Medical College of Wisconsin in Milwaukee, led the research team with support from Dr. Kristen Malecki, co-director of SHOW. The team compared SHOW mental health data with satellite imaging of tree-cover density in the neighborhoods where participants live.

“Across neighborhoods of Wisconsin, from the north woods to the cities, the results are the same,” says Malecki. “Higher levels of green space are associated with lower symptoms of anxiety, depression and stress.” The findings from this study suggest that “greening” may be a simple and effective way for city planners to improve overall mental wellness and reduce neighborhood health disparities. “Green space might be a really cost-effective, easy way to make people happier in those environments,” Beyer points out. “It has all sorts of other benefits, too, such as reducing carbon emissions and cleaning the air. The next step for this research is to look at whether the type of natural space makes a difference.”

Researchers plan to evaluate whether individuals surrounded by blue space, such as large bodies of water, also experience similar health benefits as those observed among people who live in green areas. - by Mackenzie Andropolis