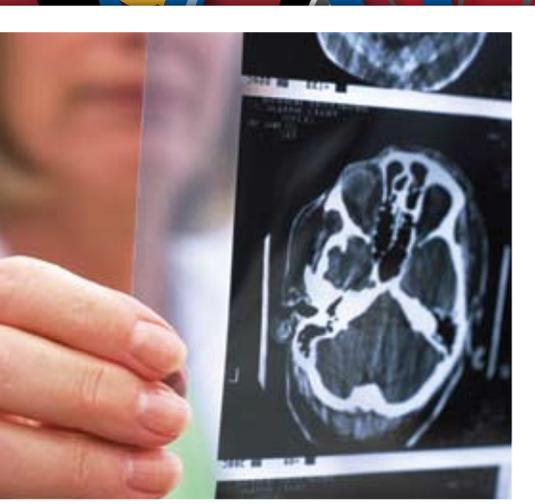


Success Stories
from State
Chronic Disease
Prevention &
Control Programs



Chronic Disease
**PREVENTION
& CONTROL**
It Works!



NATIONAL ASSOCIATION OF
CHRONIC DISEASE DIRECTORS
Promoting Health. Preventing Disease.

Chronic Disease Prevention & Control — It Works!

The biggest public health challenge in the U.S. is no longer infectious diseases – these diseases are far surpassed by chronic diseases such as diabetes, heart disease, stroke, and cancer. In fact, just five chronic diseases – heart disease, cancer, stroke, chronic obstructive pulmonary disease, and diabetes – are responsible for more than 2/3 of all deaths every year.

Disability and diminished quality of life caused by chronic disease creates a large burden, too, and it is borne by all Americans. For example:

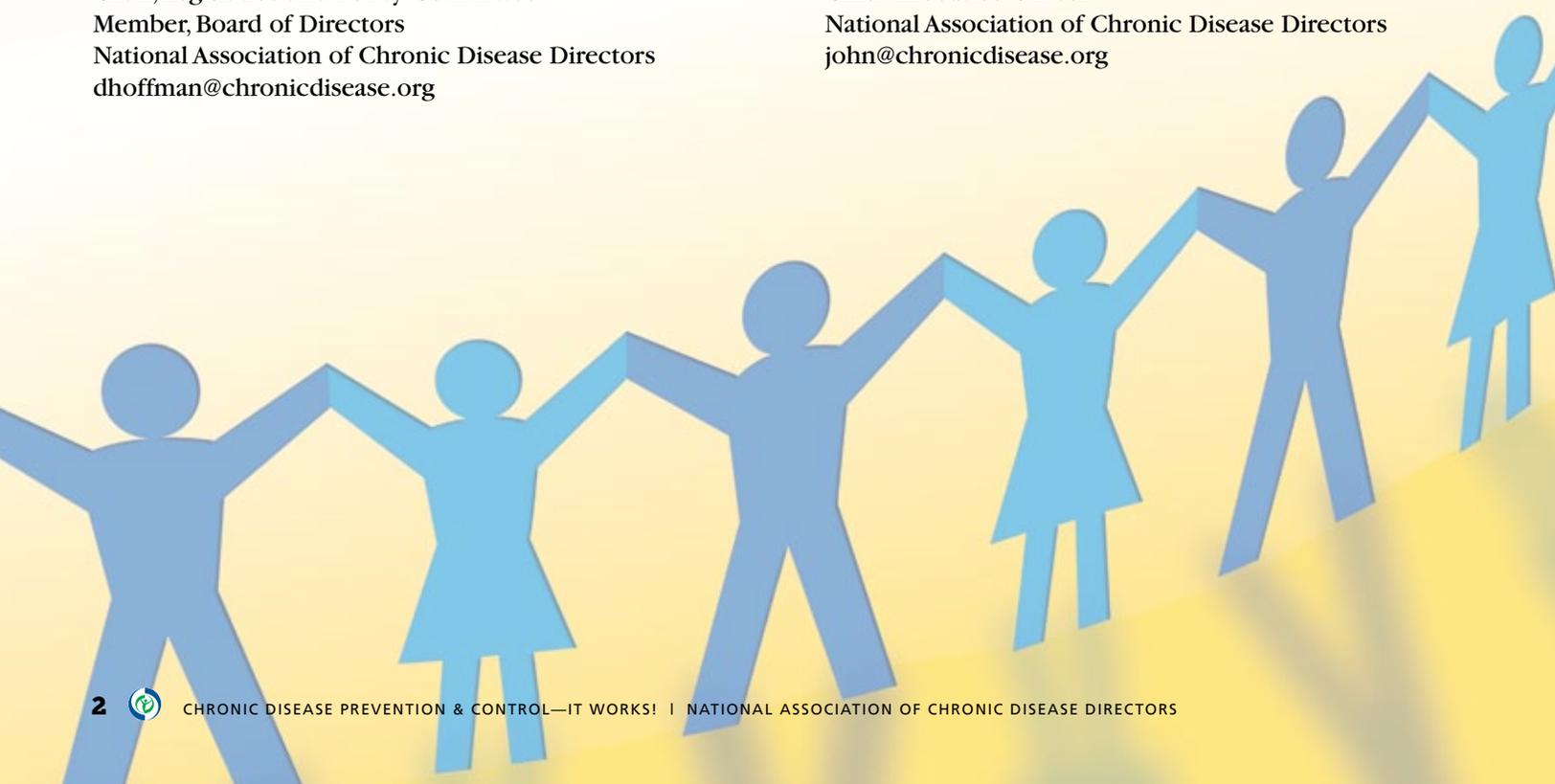
- Arthritis, the number one cause of disability, affects nearly one in three American adults.
- Diabetes, the main cause of kidney failure and new cases of adult blindness, affects 26 million Americans.
- Our nation's health care spending is expected to reach over \$4.3 trillion by the year 2017.

State programs and projects such as those highlighted here are applying strategies that work to reduce the chronic disease burden. The Alaska parish nurse project garnered donated services valued at over \$37,000 that helped state residents prevent disability. The Massachusetts stroke registry reduced hospital error rates related to stroke care. Pennsylvania's Active Schools program helped many students achieve a healthy weight and improve their fitness performance. These examples are just the tip of the iceberg – find more success stories under the 'Policy' tab at www.chronicdisease.org.

According to *Prevention for a Healthier America*, a report from Trust for America's Health, the return on investment for public health prevention programs is 96 to 1 in the first two years and 56 to 1 by year five. NACDD builds capacity in states and territories to prevent and control chronic disease – an investment that saves lives, improves quality of life and reduces costs.

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Improving Quality of Life for People with Arthritis

Public Health Issue

- Arthritis is the most common cause of disability. It also may limit the ability of people to effectively manage other chronic diseases, such as diabetes.
- Proven, evidence-based programs can help people with arthritis function better, reducing pain and delaying disability.
- With limited funds to offer these proven programs, state arthritis programs must identify and work with partners able to reach people in need.

State Action

- The Alaska Department of Health partnered with the Alaska Parish Nurse Resource Center at the Providence Medical Center to promote increased access to and use of *Living Well Alaska*, Alaska's name for the evidence-based Stanford Chronic Disease Self-Management Program.
- Service-oriented parish nurses teach chronic disease self-management in the greater community as a way to extend their health ministry beyond church walls.
- The Department of Health provided opportunities for parish nurses to become master trainers and T-trainers; pays for the license required by the program developer, Stanford University; and provides course leader training manuals, data reports, and statewide listserv maintenance.
- The Parish Nurse Resource Center coordinates and provides leader training, assists with evaluation, collects and reports data, and supports parish nurse course leaders through workshop planning, marketing, follow-up and provision of workshop materials.
- Parish nurses teach each 6-week chronic disease self-management workshop, collect pre- and post-workshop data and individual follow-up data and provide follow-up and support to participants from their churches.

impact

This partnership promotes sustained access to a proven-effective arthritis intervention by embedding services within an existing delivery system.

Parish nurses teach more workshops and participants in their classes are more likely to complete most sessions compared to other trained leaders in the state indicating a higher return on the investment of training and program resources.

Alaska state residents with chronic diseases benefitted from over \$37,000 worth of donated parish nurse services (*based on Bureau of Labor Statistics wage data*).

A parish nurse shared this comment about course participants, **“It is amazing to see.... they are really learning how to reinterpret their symptoms and they ‘get it!’**they are making positive changes in their life.”



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Utah

Achieving Comprehensive Worksite Wellness

Public Health Issue

- Only about a third of Utah worksites surveyed in 2005 met the Healthy People 2010 Objective for a comprehensive worksite wellness program.
- The Utah Council for Worksite Health Promotion offered healthy worksite awards but was concerned that best practices in worksite wellness were not captured by the criteria used to judge the awards.

State Action

- The Utah Council for Worksite Health Promotion - Healthy Worksite Award Program acknowledges efforts to facilitate better employee health, enhance productivity, and ensure healthy work environments through recognition for businesses that implement employee health promotion and wellness programs.
- The findings from a worksite survey indicated that worksites needed support in their efforts to achieve a comprehensive worksite wellness program.
- The Heart Disease and Stroke Prevention Program within the Utah Department of Health partnered with the Utah Council for Worksite Health Promotion to require higher standards for worksite wellness award recipients and to make it possible to gather usable data about worksite wellness programs in the state, a high priority.
- Best practices in worksite health and wellness were reviewed to identify gaps in award criteria and new criteria were implemented as a standard for businesses.

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impact

New requirements for the Healthy Worksite Award Program include policy and environmental changes in key areas such as tobacco, nutrition, and physical activity and data collection and reporting of the evaluation of the wellness program in the application.

For example, **worksites must have a lactation policy or facility to qualify for the top award.** This facilitates breastfeeding of infants which is a recommended obesity-prevention strategy.

Varian Medical Systems, a 2008 Silver Healthy Worksite Award winner, has a wellness program in which **employees lost 1700 pounds over 12 months, with many of them achieving a weight loss of 15-20% - a significant benefit to their health.**

Utah now has a more targeted method for achieving a national health objective: “To increase the proportion of worksites that offer a comprehensive employee health promotion program to their employees.”

Better Stroke Care Through Achievement of High Quality Data

Public Health Issue

- “Time Lost Is Brain Lost” is a phrase that summarizes the need for rapid, effective stroke treatment to save lives and prevent disability.
- Stroke registries use data to track and improve the quality of care acute stroke patients get.
- A 2006 Massachusetts assessment showed that one in five data elements reported by registry member hospitals had high discrepancy rates, an indication that assessing the quality of registry data is critical.

State Action

- The Stroke Collaborative Reaching for Excellence (SCORE) is a quality improvement collaborative for hospitals designated as Primary Stroke Service hospitals by the Massachusetts Department of Public Health – those which are licensed to provide emergency stroke services to patients presenting with acute stroke symptoms. Over three fourths of acute care hospitals in Massachusetts participate.
- The Centers for Disease Control and Prevention, Division for Heart Disease and Stroke Prevention funds Massachusetts SCORE as part of the Paul Coverdell National Acute Stroke Registry. The Massachusetts Department of Public Health and the American Stroke Association’s program, *Get with the Guidelines-Stroke* partnered to implement SCORE.
- Accurate and complete data are needed to monitor and improve performance in acute stroke care. An assessment noted discrepancies in data collected such as errors in the documentation of swallow screens recommended to determine stroke-related swallowing problems. Swallow screens had been performed but were invalid because the patient had eaten or received drugs by mouth prior to the screen. Reporting an invalid swallow screen makes it appear the hospital meets the performance measure when it has not.
- Consultants worked with hospitals to clarify errors and give constructive feedback to the hospital staff and to Massachusetts Department of Public Health program staff who used the information to design data training.

impact

Formal chart reviews show that this interactive, non-punitive approach aimed at fostering learning was effective. Results are:

- **Most hospitals reduced their overall error rate**
- **The number of data elements with high discrepancy rates decreased over time.**

This process has national implications for improving the quality of data submitted by the more than 1,900 *Get with the Guidelines-Stroke* hospitals that use the same data collection tool.

This effort not only improved data collection methods, but **led to the recommendation of quality improvement strategies** that have been adopted by many hospitals in the registry for the benefit of patients, such as inclusion of specific reminders in stroke protocols.



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Florida

Self-Management Kiosks Steer Bus Drivers and Other Employees to Better Health



impact

Well over half of Osceola County bus drivers, attendants, and mechanics now regularly monitor their health at kiosks using this low-cost program.

As one employee says, “Because of this, I am on top of my health, checking my blood pressure daily, and keeping my body and weight where it should be. I have lost 4 inches to my waist and 6 pounds.”

Over 600 Transportation Department employees participated in blood pressure education in one year and at a single kiosk employees checked blood pressure over 2,500 times in seven months.

Collecting employee health data on wellness efforts can demonstrate how education, monitoring and health promotion can help lower health care costs.

Public Health Issue

- People with high blood pressure have a higher risk for heart disease and stroke.
- In just one year the cost of treating high blood pressure jumped 65% for Osceola County School District’s employee health care insurance. Some of the highest risk employees work in the transportation department which employs many older adults.
- Bus drivers have added incentive to monitor health risks since bus drivers in Osceola County, Florida must keep blood pressure under control or jeopardize their commercial driver’s license, putting their livelihood at risk.

State Action

- With a state grant and working with an insurance company partner, the school district started an employee wellness program and installed health self-management kiosks at bus depots where employees can measure their blood pressure, weight, and body mass index and record blood sugar and physical activity levels.
- The kiosks alert employees to results indicating a higher risk and allow them to set health goals and track improvements related to the health changes they make. Drivers can print out records to share with their doctor. To ensure privacy, administrators cannot see individual data, only the combined data for all participating employees.
- On-site classes in cooking, fitness, and chronic disease self-management are offered as part of the employee wellness program. These educational efforts are augmented by the Novo Nordisk *DriversHealth.com* Web site which is specially tailored to the health needs of drivers.

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Better Measurement for Better Blood Pressure Control



Public Health Issue

- High blood pressure is a very common medical problem in the U.S. and in Michigan.
- Health care practitioners often fail to follow national guidelines for blood pressure measurement – their average error is 10 mm of mercury – yet these measurements determine an individual's disease risk and guide the interventions to prevent serious chronic diseases such as stroke, diabetes, kidney and heart disease.
- Practitioners have limited opportunities to review and update critical blood pressure measurement skills or to advance their knowledge of up-to-date treatment interventions.

State Action

- The Michigan Heart Disease and Stroke Prevention Program developed a blood pressure measurement training program, engaging a well-known training organization and a team of experts. Michigan is one of 42 programs funded under the CDC National Heart Disease and Stroke Prevention Program.
- The goal of this self-paced, interactive, comprehensive training program called *Blood Pressure Measurement Quality Improvement Program* is to improve the accuracy of blood pressure measurement by Michigan health care practitioners.

impact

Well over three fourths of the program's participants say they're better able to measure blood pressure after participating in the training.

Almost half of participants said information from the program improved the care they gave a patient in a clinical situation.

Training program users say:

"I was not familiar with the specifics of taking blood pressure before utilizing this."

"Used throughout the institution – noted improved quality of blood pressure in many sites in our organization."

Michigan nurses can now partially fulfill a licensing requirement through this program which is approved by the Michigan Nurses Association as a continuing nursing education activity.

More than 1,000 health workers including physician assistants and nurses in several medical care systems have participated in this cost-efficient and successful training program.

The program was adopted as part of the *Michigan Core Curriculum on Hypertension* developed in partnership with the National Kidney Foundation of Michigan.

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Wisconsin

Promoting the Importance of Screening for Diabetic Kidney Disease to Those At Risk

Public Health Issue

- Diabetes is a major cause of chronic kidney disease in the United States.
- Early detection of diabetic kidney disease and careful blood sugar and blood pressure control can slow progression of kidney damage and reduce the risk of developing end-stage kidney disease that requires costly dialysis or transplant.
- Screening for and treating diabetic kidney disease can delay its progression and is cost effective.

State Action

- The Wisconsin Diabetes Prevention and Control Program partnered with the Wisconsin Lions Foundation to create *The Links to Chronic Kidney Disease: Diabetes, High Blood Pressure, and Family History*, an educational DVD for people at risk of chronic kidney disease.
- These two groups and another partner, National Kidney Foundation of Wisconsin, joined forces to educate at-risk individuals in communities across Wisconsin about diabetic kidney disease and the need for testing through programs providing an overview of chronic kidney disease, a preview of the DVD (available in English and Spanish), and shared testimonials from local DVD “stars.”
- Each of the 190 community members attending received a complimentary DVD to enable them to share the information with family and friends.

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impact

Evaluation on the day of the program and four months later shows that of those responding:

- **Over 80% strongly agreed they increased their awareness of chronic kidney disease;** their knowledge of how diabetes and family history are linked to chronic kidney disease and that the program provided important information
- **79% strongly agreed personal testimonials helped them understand importance of getting tested for chronic kidney disease**
- **35% of respondents asked their health care providers to test them for chronic kidney disease.** Those who hadn't asked to be tested said it was because they hadn't seen their health care provider
- **68% shared the DVD with family and friends, widening the reach of the information**



Public Health Problem

- About a third of Pennsylvania schoolchildren are overweight or obese.
- This overwhelming rate of obesity means that 1 in 3 Pennsylvania babies will likely develop diabetes in their lifetime.
- Opportunities for students to be physically active throughout the school day have diminished due to time and resource pressures caused by mandates such as No Child Left Behind.

State Action

- The Pennsylvania Department of Health partnered with the Department of Education to develop the *Active Schools* program. Grants of \$5,000 were awarded to forty middle schools to implement evidence-based physical activity programs that help children meet the federal guideline for moderate to vigorous daily physical activity.
- Statewide foundations provided a two-to-one match for federal funds, allowing schools to receive a total of \$15,000 each.
- Schools chose from a list of evidence-based programs, such as HOPSports, Project Fit America and Coordinated Approach to Child Health to structure their own program and then committed to engaging students in at least thirty minutes of moderate to vigorous physical activity every school day.
- Success of the *Active Schools* program was measured using fitness assessments for each student participating in the program which were completed by participating schools.

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impact

Assessments on almost 6000 participating students shows students' improved weight status:

- One fourth of the overweight students achieved a healthy weight
- About 16% of obese students reduced their body mass index, indicating lower body fat
- 25 obese students lost enough weight to move into the healthy weight category
- Students improved their scores and/or performance on fitness measures
- Twice as many students reached healthy weight compared to those who gained weight over the same time period

“I remember when there was a time it was like pulling teeth to get our students to want to move and now they are eager to break a sweat. I think it is great to see our students looking forward to exercise,” said a physical education teacher at one school.

New Mexico

Creating Healthy New Mexico Communities

Public Health Problem

- The population in and around the village of Cuba, New Mexico is primarily Hispanic with smaller percentages of American Indians and non-Hispanic Whites.
- Hispanics of Mexican origin and American Indians have higher rates of obesity and diabetes making healthy diet and physical activity even more important for their long-term health.
- Cuba is located in a beautiful natural walking and hiking environment but is not considered pedestrian friendly.

State Action

- A collaborative effort between the New Mexico Department of Health Healthy Communities Program and the Step-into-Cuba Alliance, a community initiative of the Nacimiento Community Foundation is implementing population-level strategies to promote physical activity that are recommended by the Guide to Community Preventive Services using funding for walkability enhancement from the Center for Disease Control and Prevention Healthy Communities Program. Robert Wood Johnson Foundation funding garnered by the University of New Mexico's Prevention Research Center is helping the Alliance implement additional strategies related to other aspects of the built environment and to conduct assessment and evaluation.
- The New Mexico Health Department Healthy Communities Program promotes walking groups and healthy nutrition, the Prescription Trails program and collaborates with partners to address diabetes, tobacco use, and secondhand smoke outreach in multi-unit housing.

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impact

There are now three easy walking trails within the village - in a local park, near the medical clinic and near the library. Two more advanced trails are under construction and an additional trail site has been identified.

The Alliance implemented or has proposed two new crosswalks to enhance safe walking for residents on a major road that bisects the village and completed five pedestrian enhancement projects.

Twenty local residents received a 'walking prescription' from their physician this year under the Prescription Trails program and about sixty people took advantage of walking groups.

Six local worksites now have wellness programs offering walking and stretching sessions, healthy nutrition and smoking cessation. "Point of Decision" prompt signs are being installed near worksites to encourage walking.

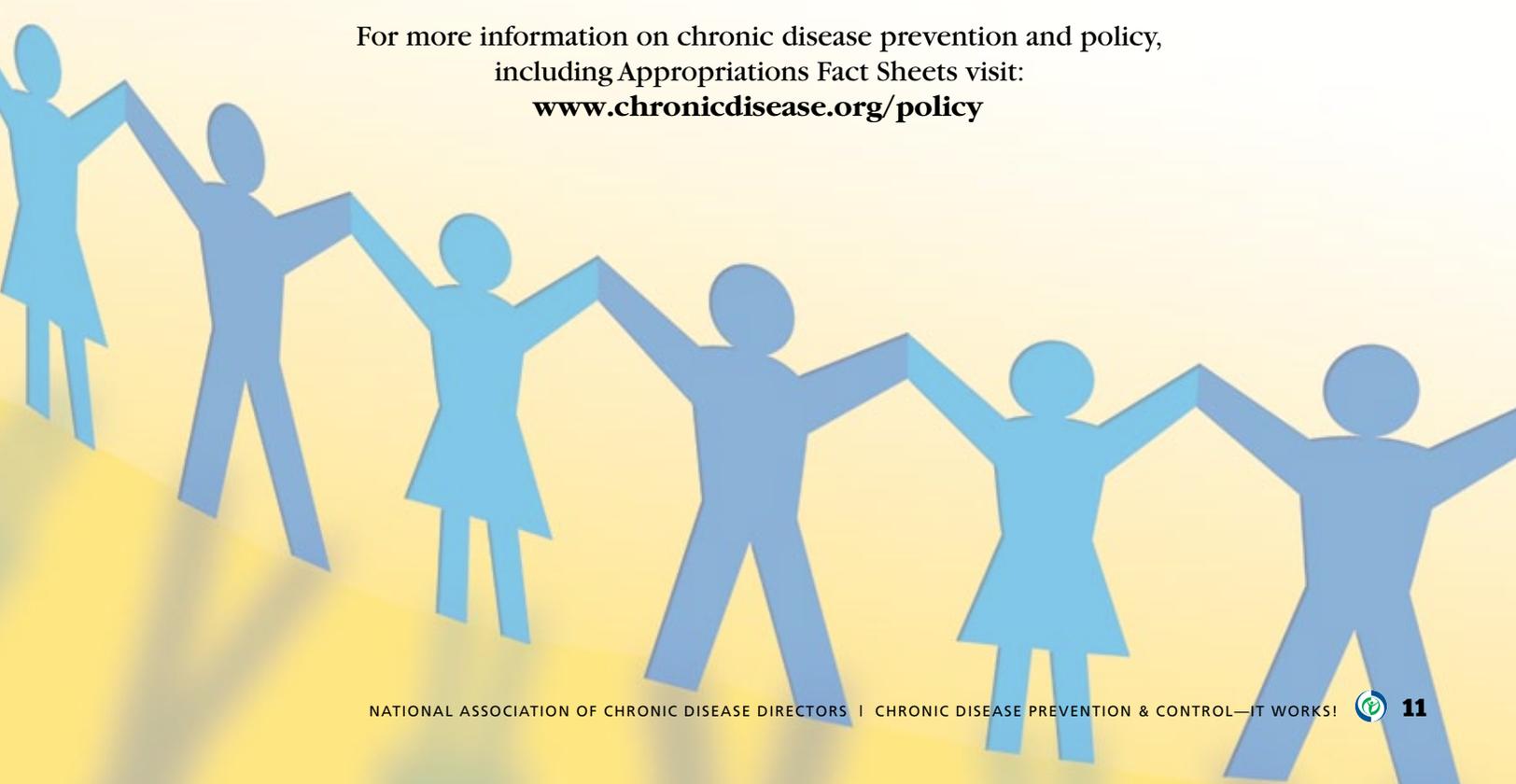
The library's pedometer lending program is under way and residents are checking out pedometers to track their walking.

The National Association of Chronic Disease Directors (NACDD) is a non-profit public health organization for chronic disease program directors of every state and U.S. territory. Founded in 1988, NACDD connects more than 1,400 members to advocate for preventive policies and programs, encourage knowledge sharing and develop partnerships for health promotion. Since its founding NACDD has been a national leader in mobilizing efforts to reduce chronic diseases and their associated risk factors through state and community-based prevention strategies.

National Association of Chronic Disease Directors policy goals include:

- Establishment of adequately funded chronic disease prevention and control programs in every state and territory
- Support for budget requests of the Campaign for Public Health and Research to Prevention Coalition to support CDC's chronic disease prevention and control programs
- Essential growth of new and existing state-based programs that address chronic diseases, risk factors, comprehensive and integrated approaches to chronic disease prevention and control.

For more information on chronic disease prevention and policy,
including Appropriations Fact Sheets visit:
www.chronicdisease.org/policy





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