

PRC

PREVENTION RESEARCH CENTERS

Communities. Connections. Solutions.



Fall 2009

Where
Community
Health Begins

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Community
Health Begins**



The Prevention Research Centers have the unique advantage of connecting

the wisdom of local communities,
the commitment of researchers,
and **the resources** of the CDC

to search for answers to the nation's health problems.

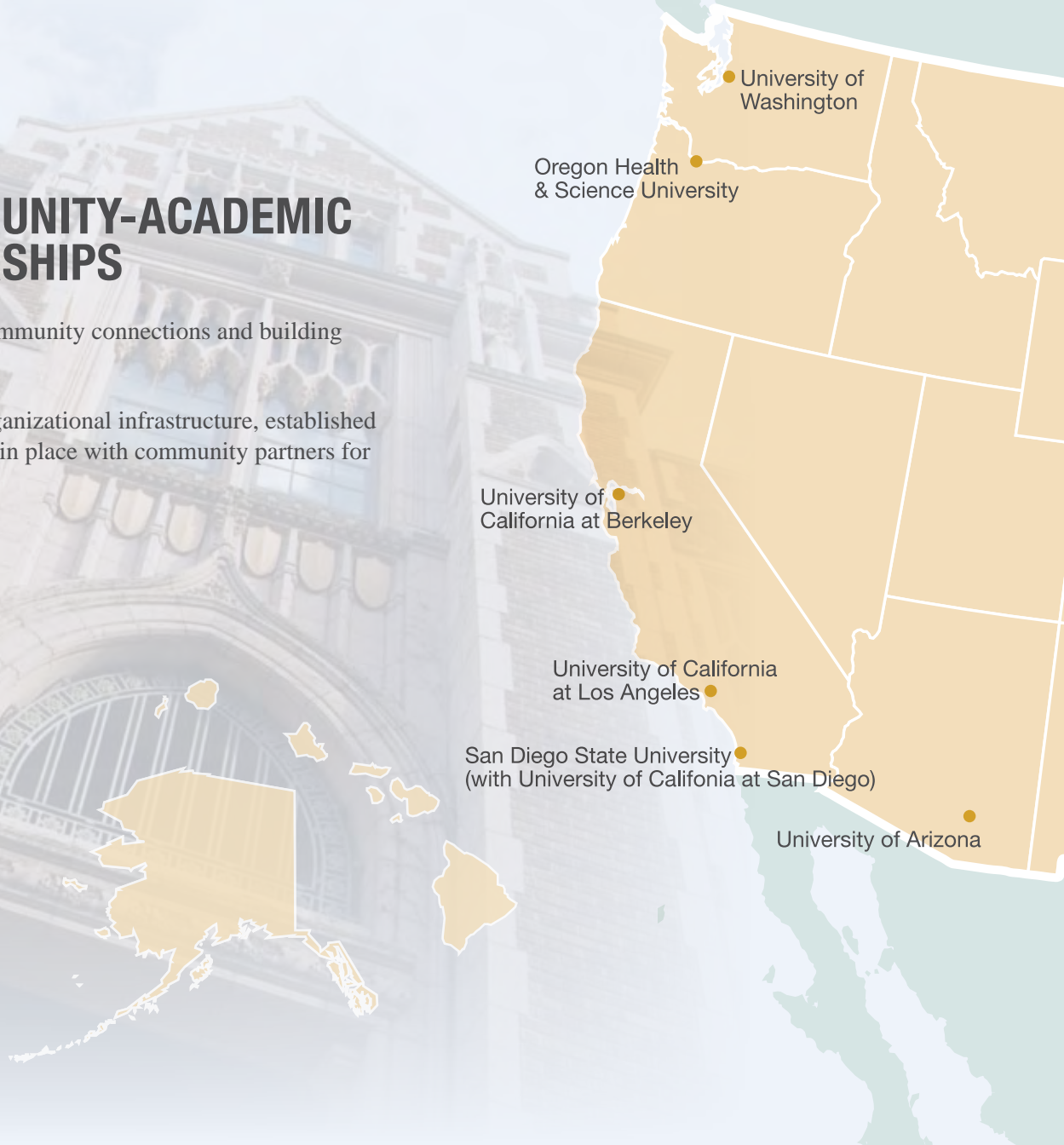
LEADING THROUGH INNOVATION

The Prevention Research Centers (PRCs) develop innovative strategies to promote healthy communities. Each of the 35 centers is located within an academic institution—a school of public health or medicine—and each center works hand-in-hand with an underserved community to identify and address health issues. The focus on collaborating with the community, as both research participants and partners, creates strong relationships, effective research methods, and new disease prevention solutions that enable people to live long, healthy lives.

In 2007, PRCs' research reached an estimated 41 million people in partner communities across the country.

INVESTING IN COMMUNITY-ACADEMIC PARTNERSHIPS

- 5 Developmental Centers are strengthening community connections and building infrastructure as the basis for future research.
- 30 Comprehensive Centers have developed organizational infrastructure, established relationships with a community, and put plans in place with community partners for a core research project.





EMBRACING COMMUNITY DIVERSITY



The PRCs conduct research with communities that are underserved, have low income and education, and have more health risks than the national average.

Characteristics of the PRCs' core communities* include

- A mean per capita income 30% lower than the U.S. average (about \$15,000 vs. \$22,000).
- A higher mean percentage of people aged 25 years or older who lack a high school diploma (33% vs. U.S. average of 20%).
- 63% of students eligible for free or reduced school lunch (vs. U.S. average of 37%).

The PRCs' communities are in diverse locations:

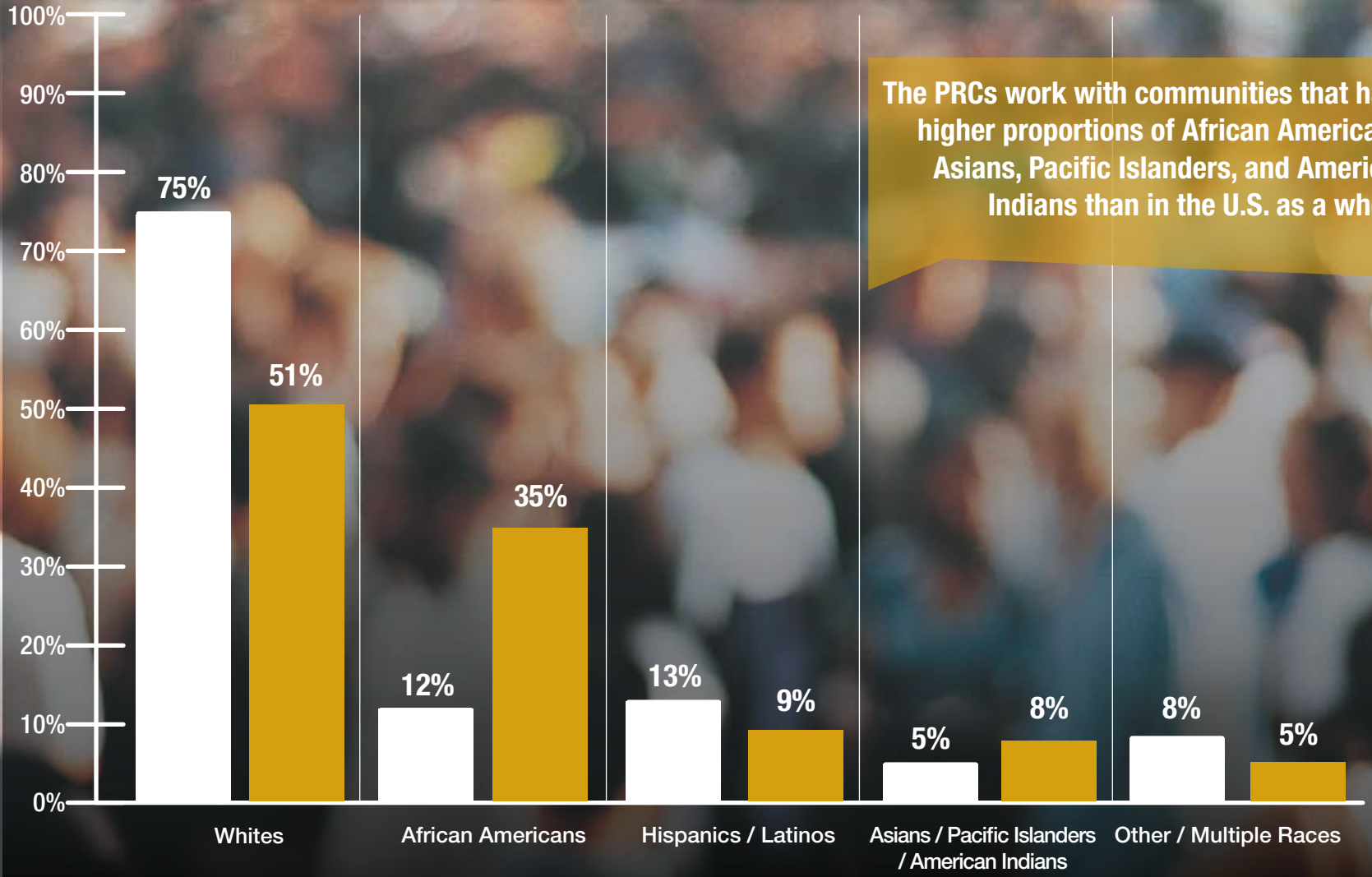
Rural | Inner-city | Tribal | Appalachian | U.S.-Mexico border | Public housing | Prison

AGE GROUP	0 – 3 Years	4 – 11 Years	12 – 19 Years	20 – 49 Years	50 + Years
# CORE PROJECTS	2	8	29	24	24

Many research projects include more than one age group—for example, research for the health of children or adolescents often involves their parents as well.

*All data are estimates from 2007.

Racial and Ethnic Distribution of the United States and PRCs' Core Communities



The PRCs work with communities that have higher proportions of African Americans, Asians, Pacific Islanders, and American Indians than in the U.S. as a whole.

United States
Core Research Communities

DEVELOPING STRONG RESEARCH CONNECTIONS

Every PRC has many partners across sectors that collaborate on studies to bring about health change.

Each center is guided by one or more **community advisory committees** that help create and deliver interventions, strengthen ties, and increase the likelihood that successful interventions will be adopted and continued.

Working Together

Teenagers who live in inner cities are at increased risk for injury and chronic disease from violence, stress, and sexually transmitted disease. The PRCs at Johns Hopkins University and the University of Minnesota have youth advisory committees that make adolescents partners in decisions about their own health and that of their peers.

Centers partner with as many **organizations, agencies, and institutions** as it takes to study and bring about health change.

Community Involvement

Residents in urban areas often must rely on convenience stores as their main source of food, which limits their food choices to few fruits and vegetables and many high-calorie snacks. The PRCs at Case Western University and Tulane University are both working in urban neighborhoods to help residents increase the availability of fresh produce and improve their nutrition. Their partners include city and county governments, community centers, community gardens, convenience stores, farmers' markets, grocery stores, health officials, and schools.



A Spectrum of Service

The PRCs rely on public health departments and associations to build on research goals.

Agency Collaboration

19 academic institutions help link the National Institutes of Health and CDC by housing both Clinical and Translational Science Awards (CTSA) as well as PRCs. CTSA and PRCs often work together on dissemination research, encouraging synergy between clinical and public health perspectives.

National

The University of Washington PRC partners with the American Cancer Society to encourage businesses to promote work site health and wellness programs.

State

The Saint Louis University PRC works with the Missouri state health department to increase the adoption of evidence-based physical activity and healthy eating programs across the state.

Local

The University of Maryland PRC connects with local health departments in a program to prevent HIV infection and sexually transmitted disease.

CREATING EMPOWERED COMMUNITIES

Since its inception ten years ago, the **National Community Committee (NCC)** has become a catalyst in changing the way researchers and community members interact to study and advance health practice and policy. The NCC comprises community representatives from the PRCs' individual community advisory committees.

By enhancing communication between partners, the NCC has helped facilitate a solid connection between researchers and communities based on trust. This collaboration has resulted in good relationships and has opened doors so that researchers can join in difficult conversations about race, poverty, inequality, and other social factors that influence health.



A dirt path winds through a dense, lush green forest. The path is made of brown earth and is flanked by vibrant green foliage and trees. The sunlight filters through the leaves, creating a dappled light effect on the path. The overall scene is peaceful and natural.

By empowering communities, the NCC helps create the path for positive change.

The NCC's vision remains that communities and researchers have equitable partnerships to

- Define local health priorities.
- Make recommendations for prevention research agendas.
- Teach fellow community members about research.
- Educate communities about new health findings.
- Increase community capacity for spreading prevention strategies.
- Advocate for city and state health policies.

APPLYING A PREVENTION RESEARCH MODEL

Prevention research looks at personal and community factors that interact and contribute to chronic illnesses such as heart disease or cancer. By discovering the best ways to promote healthy communities and healthy behaviors, prevention researchers and their partners create new strategies that reduce the risks for illness or disability.

1. Assess community health needs and define the health problems; collect and analyze data from surveys, focus groups, advisory boards, and coalitions.

2. Gain a solid understanding of the problem and barriers to its solution.

3. Decide on the most promising intervention.

- Review scientific literature for interventions effective in similar communities.
- Create new intervention or adapt previous program to fit community needs.
- Develop strategies to broaden programs effective in controlled settings for new environments.

4. Pilot-test the intervention with members of intended audience to ensure that all intervention components and delivery are culturally relevant, valid, and reliable.

The PRC at Ohio State University is gathering input from community members to create a survey that identifies challenges parents face in managing their children's weight.

The PRC at Boston University is testing whether Resident Health Advocates are effective as peer leaders in increasing public housing residents' screening for hypertension, diabetes, and dental disease. The screenings are low cost and offered by a mobile van that travels to public housing communities.

The PRC at the University of Washington is conducting a dissemination study of interventions focusing on health concerns of the aging. Researchers are working with local and national partners to determine the best practices for increasing the adoption of interventions to increase physical activity and decrease depression in older adults.

→ **5.** Deliver and test the intervention in a selected group, a subset of the population.

If the intervention *does not* seem effective, the researchers may report the lessons learned and make changes for further testing.

If the intervention is effective, the researchers move to the next step.

→ **6.** Test the effectiveness of the intervention in a large population in a true-to-life setting. Determine if it produces meaningful public health impact.

If the intervention is effective, the researchers move to the next step.

→ **7.** Conduct dissemination research. Determine how effective interventions can be sustained and adopted in multiple communities.

→ **8.** Communicate about the research. Share information about methods and outcomes of the intervention and its dissemination with researchers, practitioners, and communities.

MODELING STRONG VALUES

Strengthening Community Bonds through Program Sustainability

The principles of community-based participatory research, which the PRCs support, endorse long-term processes and a commitment to sustainability that extend beyond a single research project or funding period. The PRCs' five-year funding cycle promotes their ability to form lasting bonds with communities. In a national evaluation, interview respondents said the long-term funding facilitates good relationships between research centers and communities.

Partners in Harlem

The Columbia University PRC has built a strong partnership with organizations and residents in Harlem, New York, that has enabled the center to address issues such as asthma, oral health, HIV infection, adolescent health, and hypertension in a complex community for more than ten years.

Building Capacity for Lasting Change

Communities are often strengthened by the research process. Residents are empowered to continue the programs and make lasting changes in their schools, homes, and lives.

Threads of HOPE

For women in rural counties of eastern North Carolina, prolonged stress from unemployment and low income, and high rates of obesity increased their risk for chronic diseases and discouraged them about making positive changes. Fifteen years of community-researcher collaboration (University of North Carolina at Chapel Hill PRC) enabled the development of a small-business enterprise, Threads of HOPE, modeled on microenterprises in developing countries. Women who participate in the community-owned business receive a living wage, training in textile production and business management, health insurance, a chance to pursue higher education, and exposure to health promotion interventions.

Leveraging Funds to Work Hard for Prevention

For every \$1 received, each PRC generates up to \$7 of additional research money, yielding over \$62 million in additional funds (on average). This additional funding comes from divisions of CDC, the National Institutes of Health, and other federal departments (such as education and agriculture); state and local health agencies; foundations; professional associations; the private sector; and other sources.

Dollars in millions

35
30
25
20
15
10
5
0

Number of PRCs

35
30
25
20
15
10
5
0

1990

1995

2000

2005

The number of PRCs has grown from 3 to 35, and core funding has increased since 1986.

Number of PRCs Core Funding



PROVIDING EXPERT GUIDANCE

Training Outreach

The PRCs' integration with communities and academic centers make them an excellent training ground for public health practitioners, advocates, and students. Training topics include research methods, evaluation, and community-specific health concerns.

In 2007, PRCs implemented 99 training programs that trained 4,777 people, including 707 students.

Several PRCs train researchers and practitioners in Latin American and Caribbean countries through the Pan American Health Organization's CARMEN School. Subjects include evidence-based public health and social marketing.

In collaboration with the Association of Schools of Public Health, PRCs offer a minority fellowship program. Doctoral-level students of ethnic or racial minority origin are selected for two years of training and guided research at a PRC. Since 2002, 38 fellows have participated.

Technical Assistance

PRCs provide both technical assistance and training to health departments, agencies, and national nonprofit organizations. The centers design evaluation protocols and develop research tools for specific needs.

In October 2000 the Maine Center for Disease Control & Prevention asked the Harvard University PRC to create a satellite center in Maine. In collaboration with the Maine Department of Education and higher education system as well as state government, community, clinical, and institutional entities, the center provides evidence-based strategies, training and technical assistance, and evaluation support to communities and organizations in the state, including Healthy Maine Partnerships—the school-community coalitions supported by state tobacco settlement funds and the Maine Office of Substance Abuse.

“Access to a national brain trust facilitates good work, adoption of best practices, and exchange of innovation.” –PRC researcher

Networking

The PRCs collaborate across disciplines and across centers. Thematic research networks harness the combined knowledge and skills across centers and allow for simultaneously testing approaches in different settings.

Cancer is the second leading cause of death in the United States, and over one million new cases are diagnosed each year.



Cancer Prevention and Control Research Network

8 centers are working to speed the adoption of effective cancer prevention and control strategies in communities.

More than 36 million Americans are older than 65, and this number will reach more than 70 million during the next 25 years.



Healthy Aging Network

7 centers are researching factors associated with healthy aging, including the maintenance of physical, mental, and social well-being and function.

Epilepsy affects an estimated 2.5 million people in the United States and each year accounts for \$15.5 billion in direct and indirect medical costs.



Managing Epilepsy Well Network

4 centers are increasing the number of tested epilepsy self-management programs available to increase quality of life for people with epilepsy.

In 2007 less than half of American adults engaged in enough physical activity to provide health benefits.



Physical Activity Policy Research Network

5 centers are identifying policy, environmental, social, and individual factors that affect participation in physical activity.

More than two-thirds of adults and one-third of children in America are obese or at risk for obesity.



Nutrition and Obesity Policy Research Network

5 centers are studying environmental and policy changes that can increase physical activity, improve nutrition, and expand access to fruits and vegetables.

REALIZING SOLUTIONS: Highlights from PRCs

Community Interventions

Talking Parents, Healthy Teens teaches parents skills for healthy communication with their adolescent children. Participants reported improved ability to communicate about sex, and a randomized controlled study showed effectiveness of the intervention continued after program completion.

Program to Encourage Active, Rewarding Lives for Seniors (PEARLS) significantly decreased depression and improved functional and emotional well-being in older adults.

The **Maine Youth Overweight Collaborative** trains medical providers to monitor children's weight and counsel children and families about maintaining a healthy weight. The aim is to train all physicians in Maine so that addressing children's weight becomes routine clinical practice.

The **Cognitive-Behavioral Therapy Intervention for Trauma in Schools** (CBITS) significantly decreases symptoms of post-traumatic stress disorder, depression, and psychosocial dysfunction.

Dissemination Projects

Not on Tobacco, a smoking cessation program for youth, has reached more than 150,000 teens in 48 states. A Web-based technical assistance tool launched in February 2009 by the American Lung Association is increasing the program's reach.

Coordinated Approach to Child Health (CATCH), a childhood overweight program, has been adopted by more than 1,500 schools in Texas as well as schools in 7 other states.

EnhanceFitness, an exercise program for older adults, has more than 5,900 seniors enrolled at 315 sites in 26 states.

Planet Health, a school-based nutrition and physical activity program for middle school students, has distributed more than 2,000 curricula in 48 states.

Each year, PRCs make a substantial contribution to the scientific evidence base by publishing in peer-reviewed journals. In 2007, the researchers generated more than 340 peer-reviewed publications, presentations, and other products.



REALIZING SOLUTIONS: Highlights from PRCs



Health Policy Changes

Research on the benefits of healthy eating led to the creation of state and local policies in **Louisiana**. The state's Healthy Food Retail Act provides grants and loans to supermarkets, farmers' markets, and other food retail providers to improve residents' access to fresh fruits and vegetables.

Studies monitoring internet cigarette vendors found age-verification inadequate, allowing the sale of tobacco to minors. Access to reduced-priced cigarettes was associated with low quit-smoking rates. The research was instrumental in creating regulations for online cigarette sales in over **30 states** and major credit card companies to ban Web-based tobacco transactions.



A study of a two-mile rails-to-trails segment near downtown Spartanburg, **South Carolina**, is determining how healthy spaces can affect urban community. Researchers are examining residents' reasons for using the trail, the activities (such as rollerblading or walking) they perform, and their ratings of the trail's safety and beauty. Economic effects, including property values and retail sales from businesses on the trail, are also being measured.

Long-Term Studies

Healthy Passages, a 10-year study begun in 2004, collects data from 5,250 fifth-grade students and their primary caregivers in Houston, Los Angeles, and Birmingham from the time the students are 10 years of age. The aim is to understand influences on adolescents' substance use, mental health, sexual behaviors, and school achievement.



Survey Tools

The **Speak to Your Health!** community survey, designed by community, health department, and university partners, explores how social justice is associated with health behaviors and service use. Survey data are used for training community residents and public health students.

A computer-based, video survey in **American Sign Language** and English-based signing modified questions from the Behavioral Risk Factor Surveillance System to survey high school students, college students, and deaf adults in Rochester, New York. This survey allows comprehensive health data collection from deaf sign language users.

Health Promotion

In June 2009, the 4th Annual **Latino Health** Conference in San Diego, “Advocacy, the Environment, and You,” increased understanding of the built environment for promoting physical activity among Latinos. Each year, the conference addresses the relationship of physical activity to the obesity epidemic in Latino populations.

Researchers and community members at the University of Kentucky PRC are trying to stop the spread of the human papillomavirus (HPV) in women living in **Appalachian Kentucky**. The partners are testing a 30-minute informational DVD to increase HPV vaccine completion and post-vaccination testing.



SHAPING THE FUTURE

PRCs continue their commitment to

- Reach out to communities and form community bonds.
- Approach health from individual, environmental, and policy perspectives.
- Seek low-cost health strategies that work.
- Apply innovation and strive for wide scale application.
- Offer the seeds for sustainable health change.
- Serve as a bridge between research and practice.
- Train the next generation of the public health workforce.

By combining sound research methods and community investment, PRCs and their partners are leading the way to a healthier world.

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**For more information, please contact the
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