

# Northwest Public Health

Spring/Summer 2006

Volume 23 Number 1

## Special Populations and Public Health



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Wildcat78, Dreamstime.com

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## Promoting Health for All — Group by Group

**T**he population-based approach to health that distinguishes public health from medicine generally refers to large-scale efforts such as ensuring safe drinking water, preventing pollution, and eradicating or controlling infectious diseases. But public health's mission to promote the conditions in which people can be healthy also refers to smaller groups—the disabled, the homeless, farm workers, children, the elderly, gays and lesbians—which often pose unique public health challenges. This issue of *Northwest Public Health* provides an excellent look at some of these groups in our region and how we in public health are working to identify and solve their problems.

At the UW School of Public Health and Community Medicine, much of our research is aimed at these special communities or populations. Although there are far too many projects to describe here, a look at the list of our centers and institutes (<http://sphcm.washington.edu/research/centers.asp>) offers a quick overview of a few of our areas of expertise.

One such focus is on children. In addition to our degree programs in Maternal and Child Health, we have a Center for Child Environmental Health Risks Research, which studies the mechanisms that define children's susceptibility to pesticides and identifies the implications for children's development and learning. Our Child Health Institute focuses on health care for children: access, cost-effectiveness, quality, and outcomes.

The UW Exploratory Center for Obesity Research concentrates specifically on a group found in increasing numbers, at all ages, throughout our population—the obese. This center is bringing interdisciplinary teams together—scientific, clinical, and public health researchers, schools, public health agencies, and community groups—to translate research results into evidence-based strategies for obesity prevention and treatment. Another center housed in our Nutritional Sciences Program, the Center for Public Health Nutrition, coordinates research, teaching, and outreach activities in public health nutrition and provides technical assistance to government agencies and community groups.

An overarching goal of public health is health promotion for all, and our center by that name—the Health Promotion Research Center—is pioneering fitness programs specifically for older adults, built on solid science and proven results. One of the center's hallmark programs, EnhanceFitness, combines a socially stimulating class with exercises that safely enhance strength, endurance, flexibility, and balance. The goal is to enrich lives through physical independence—at any age.

Every population—regardless of its size, age, or composition—has health concerns and risks of disease and injury. Public health—whether working in communities, educating practitioners, performing research, or formulating policy—has as its goal to improve and enhance the quality of life for all of our citizens. I hope you enjoy reading about a few of those efforts in our region in this issue of *Northwest Public Health*.

A handwritten signature in dark ink, reading "Patricia W. Wahl". The signature is fluid and cursive, with the first name being the most prominent.

Patricia W. Wahl, Dean  
UW School of Public Health  
and Community Medicine



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Peruvian sheepherder mother and  
baby at sheep camp in SW Idaho.

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### From the Editor



In a way, the theme of this issue—Special Populations—is a bit nonsensical. Labeling some groups as “special” implies that the rest of the population is somehow homogenous and humdrum, of no special interest or requiring no special considerations. We know, of course, that is an illusion, that in fact the populations of the Northwest states are really just a composite of a nearly infinite number of subgroups, each with unique or special characteristics. Globalization, as an ongoing social and economic phenomenon, is rapidly dispelling the myth of a singular, dominant, white, European America.

This reality matters for public health for two reasons. First, to be successful and sustainable, community-level efforts to reduce health threats or to strengthen health assets must be tailored to the specific context and conditions present. Second, it seems true that some segments of our society are always “on the outs,” ignored or disenfranchised by public policy and programs, economic development, or world events (just consider the current raging debate about immigration and immigrants). Since threats to public health, such as drug resistant tuberculosis or a terrorist attack using some biologic agent, don’t necessarily respect race or class boundaries, it is in all of our interests that interventions to protect community health be sensitive and responsive to the special conditions under which marginalized groups live. For these reasons, the construct of “special populations,” though flawed, may be useful in designing community health initiatives both to bring such groups into the fold of public health and to learn how to better promote well-being in the broader community. That’s the value of this issue of *Northwest Public Health*.

One characteristic of special populations is that they are, to one extent or another, invisible to society at large or to the powers that be. Take for example, people with autism. How many news stories about victims of Hurricane Katrina did you hear or read that reported on these individuals? Although the news media didn’t focus on them, some folks at Boise State University sure did, and the story of their efforts to support displaced families with autistic members is fascinating and instructive (Reischl, Oberleitner, and Simper, page 12).

Another “special” characteristic is being a social outcast, a member of groups the rest of us would rather forget, which are subjects of articles on public health issues concerning inmates (by MPH student Maggie Jones, page 14) and homeless people (Wenger, page 16). Rink, Zukoski, and Edmunds (page 10), discuss a group that is not, generally speaking, ignored or shunned, but whose role in sexual health has been largely ignored: young men. Two other articles focus on issues facing urban Indians (Taulii and Forquera, page 6) and people with disabilities (Abdullah and Horner-Johnson, page 8). A model for maintaining effective linkages and communications with “special” communities are the subjects of pieces by Tillman (page 22) and Holmgren (page 23), respectively. And, though we tend to shun manuscripts that are primarily about research, we found the study of a simple method to detect dangerous chemicals on farmworkers’ hands intriguing and possibly useful for practitioners (Stoffels, Russell, and Lammers, page 18).

Pay attention to the Viewpoint by Saylor, Graves, and Cochran (page 4), as they challenge the oft-used deficit approach to community health planning, and to the Northwest Region at a Glance display of data on special populations in our six-state area (page 5). Finally, in this issue we present one article that doesn’t quite fit the theme, but whose topic is nonetheless very important: the economics of school soda contracts (Pinson, page 20).

Aaron Katz, Editor-in-Chief  
Director, UW Population Leadership Program



# A Resilience-Based Approach to Improving Community Health

Brian Saylor  
Kathy Graves  
Patricia Cochran

**M**ost health planning emphasizes the nature and extent of a population's health problems and deficiencies. However, as a result of our work with indigenous populations, we have found that a resiliency-based, or asset-based, approach to establishing health service priorities offers an effective planning alternative for improving a community's health.

A deficit-based approach, of course, is useful in some contexts. For example, in the emphasis on eliminating health disparities, which has become a guiding policy in local, state, and federal agencies health service programs and priorities, the value we place on social justice in health care is well served by a deficit-based approach to health planning and priority setting.

Behavioral health programs, particularly in the area of substance abuse prevention, also employ a deficit-based approach, with interventions that focus exclusively on people who have been identified as high risk. However, this approach tends to dedicate the most intense resources to the fewest number of people in a target population.

Although the deficit-based approach has had a productive history in helping focus health and social welfare programs, we have seen an unavoidable downside to the approach in our work with Alaska Native and American Indian populations. Because it highlights health problems that disproportionately affect Native Americans, these populations are repeatedly reminded of their differential, usually lower, health status. This focus on disparity allows a channeling of resources to these areas, but it also emphasizes

**A resiliency approach, on the other hand, while still focusing on health problems, views the communities as capable of improving their own health.**

the populations' insufficiency. A resiliency approach, on the other hand, while still bringing focus to health problems, views communities as capable of improving their own health.

A resiliency- or asset-based approach to health planning is a positive alternative to deficit-based planning not only for indigenous populations, but also for any community facing population health problems. This approach is based on the belief that communities have access to the strengths and capacities of the citizens and associations of that community and that the assets of a community's institutions can be identified and mobilized to address threats to the community's health and welfare.

Resilient individuals and communities are better able to withstand hardship, repair themselves, bounce back, and grow. Resilient people, and communities, become stronger as a result of coping with stressful things in life. The asset model used in Alaska, which was developed by the Search Institute Youth Developmental Assets Framework, is a great example of how communities can effectively promote the positive attributes that protect their health and welfare in the long run.

Resiliency-based planning emphasizes cultural value systems and ways of knowing. It includes broad-based skill building, refusal skills, and promotion of appropriate lifestyles and choices. An asset-based approach can be thought of as an immunization or vaccination against real or perceived threats. Such an approach is particularly useful in the long run for protecting a population's health, since it affects more than an individual or a small collection of health problems that a community may face.

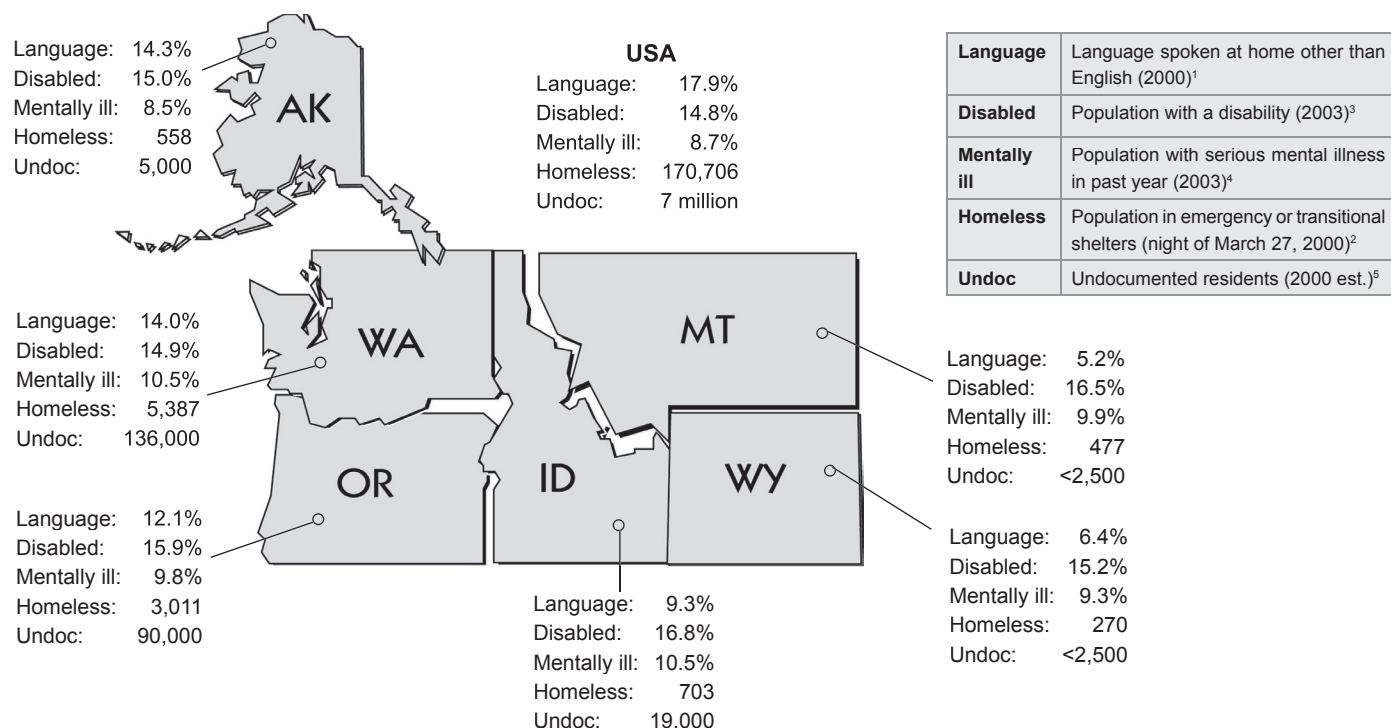
We have found that in addition to being more robust in their ability to protect the public health and welfare, resiliency options are more acceptable to Native Americans. For many years, the deficit-based approach has caused considerable embarrassment to populations who are at extreme deficit. A resiliency-based approach emphasizes the positive aspects of any community's efforts to protect and strengthen its population. Extensive social networks, natural support systems, and strong cultural values are sources of strength. Working with and promoting these sources of strength can improve resiliency and protect the health and welfare of a population.

Deficit-based planning emphasizes weaknesses and highlights problems, an approach that can have a demoralizing effect on a community. Asset-based models appear to offer an alternative way of prioritizing health programs and promoting health not only on an individual level but throughout communities. ■

## Authors

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## Selected Demographics



Sources: <sup>1</sup>US Census Bureau. Census 2000. Summary File 3, DP-2 Profile of Selected Social Characteristics. <http://factfinder.census.gov>; <sup>2</sup>US Census Bureau. Census 2000. PHC-T-12 Population in Emergency and Transitional Shelters. [www.census.gov](http://www.census.gov); <sup>3</sup>US Census Bureau. US Disability Data Table. 2003 American Community Survey. [www.census.gov/acs/www/](http://www.census.gov/acs/www/); <sup>4</sup>USDHHS. Substance Abuse and Mental Health Services Administration (SAMHSA). Office of Applied Studies, National Survey on Drug Use and Health, 2002 and 2003. [www.oas.samhsa.gov/2k3State/appB.htm#tabB.21](http://www.oas.samhsa.gov/2k3State/appB.htm#tabB.21); <sup>5</sup>Office of Policy and Planning. US Immigration and Naturalization Service, Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990–2000, Table 1. Estimated Unauthorized Resident Population by State of Residence: 1990–2000. [http://uscis.gov/graphics/shared/statistics/publications/III\\_Report\\_1211.pdf](http://uscis.gov/graphics/shared/statistics/publications/III_Report_1211.pdf).

## Prisoners—The Invisible Public Health Population

Many public health concerns are accentuated in correctional settings, for example, increased spread of infectious disease, high prevalence of mental illness and homelessness, and cultivation of violent behavior. All of these problems disproportionately affect the communities that inmates come from and return to, which are typically low-income, urban, and racially and ethnically diverse.

Prisons provide an opportunity for public health entities to deliver services to people who would not otherwise have access to them. By successfully providing these services, public health agencies can have a significant effect not only on the health of individuals, but on the health of the community as a whole.

(For more information about the challenges and opportunities of serving inmate populations, see the article “Providing Public Health in Jails” on page 14.) ■

	1995	2004	Percent change 1995-2004	Average % change per year 1995-2004
State	1,026,043	1,316,301	28.3	3.1
Federal	100,250	180,328	79.9	8.9
US Total	1,126,293	1,496,629	32.9	3.7
Alaska*	3,522	4,554	29.3	3.3
Idaho	3,328	6,375	91.6	10.2
Montana	1,999	3,877	93.9	10.4
Oregon	7,886	13,183	67.2	7.5
Washington	11,608	16,614	43.1	4.8
Wyoming	1,395	1,980	41.9	4.7

**Prisoners under the jurisdiction of state or federal correctional authorities by region and jurisdiction, year end 1995 and 2004.**

Source: Department of Justice, Office of Justice Programs, 1996, 2004.

\* Because prisons and jails form one system in Alaska, this data includes both jail and prison populations.

Data researched, compiled, and analyzed by Maggie Jones, MPH candidate in the Community-Oriented Public Health Program at the UW School of Public Health and Community Medicine.

# Urban Indian Community Responds to an Information Crisis

Maile Taualii  
Ralph Forquera

Over the past three decades in the United States, American Indians and Alaska Natives (AIAN) have steadily relocated from rural and reservation communities to urban centers throughout the nation. Urban living may provide more opportunities for American Indians and Alaska Natives, but their departure from the reservation has typically resulted in the loss of health care. Historically health care was provided by the federal Indian Health Service, which has only a handful of facilities in urban areas. Although 61 percent of American Indians and Alaska Natives live in urban areas, according to the 2000 Census, only 1 percent of the Indian Health Service budget goes to address urban AIAN health. This lack of support is evident in all aspects of resources dedicated to urban AIAN, including incomplete and fragmented data collection systems that handicap urban Indian health organizations from effectively describing health needs and advocating for resources to address those needs.

In an effort to address the problem of inadequate data, the Seattle Indian Health Board established the Urban Indian Health Institute ([www.uihi.org](http://www.uihi.org)) in July 2000. The Institute's mission is to provide centralized, nationwide management of health surveillance, research, and policy considerations regarding the health status of urban American Indians and Alaska Natives.

Economic, cultural, social, and historical factors have led to severe health disparities among urban American Indians and Alaska Natives. According to 2000 US Census data, compared to all races combined, this urban group experiences higher death rates from accidents (38 percent higher), chronic liver disease and cirrhosis (126 percent higher), and diabetes (54 percent higher). Alcohol-related death rates are 178 percent higher. (Existing national data sources grossly underestimate the extent of health needs among urban AIAN as a result of inadequate data collection and racial misclassification on official documents.)

The Seattle Indian Health Board is one of 34 nonprofit, community-based urban Indian health organizations that contract with the Indian Health Service to provide assistance to off-reservation and urban American Indians and Alaska Natives. Similar to community health centers but with an expanded focus, most of these organizations provide medical and dental care, and lab, pharmacy, nutrition, and mental

health services within a primary care model. However, these programs go beyond primary health care. Most also offer an array of public health and community health activities designed to improve the overall health status of urban American Indian and Alaska Native people. These services include traditional healing and access to culturally specific and appropriate care.

## Building a research database

The Urban Indian Health Institute is unique in that it provides a mechanism to focus attention on the work of the 34 urban Indian health organizations so that a unified set of data can be acquired to address the urban AIAN health needs and clarify health disparities. Unifying data from 34 different agencies is no small task, but it is made possible by using Web-based technology as the primary data-gathering tool. Data collected by the Institute include service description, utilization of the services, patient-specific data, and population disease prevalence. This information is crucial for describing the health status of the population. To establish its infrastructure, the Institute solicited financial support from local foundations to purchase hardware, and pursued software donations to build the data-gathering platform.

The Web-based data collection system demonstrated its effectiveness in early 2001

when an inquiry was made about the activities of the 34 urban Indian health organizations operating under a new diabetes initiative. The organizations were asked to provide data on the success of the initiative's interventions, which enabled them to offer services to address the burden of diabetes in the population. Within days after the request, 30 of the 34 organizations submitted program service and disease prevalence information via the Web-based survey tool.

The information allowed the Institute to deliver a data-supported response, demonstrating the success of the initiative. This demonstration of success helped reinforce the value of the urban Indian health organizations as effective means to address the diabetes epidemic in Indian Country. It also resulted in additional resources for the urban Indian health organizations. The success of this approach illustrates the importance of using centralized data collection by an organization that understands the scientific, cultural, and political characteristics of inquiry and that can respond rapidly and effectively.

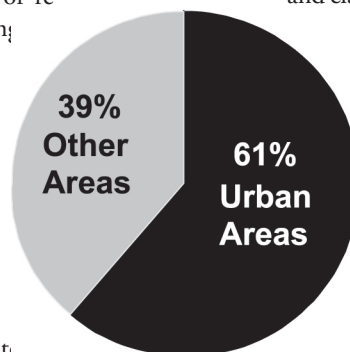


Figure 1. US AIAN population living in urban areas.  
(US Census, 2000)



After completing its first major demonstration, the Institute continued pursuing an information baseline necessary to conduct systematic studies of health and social conditions of urban AIAN that can be compared to other groups.

Because no definition of program scale existed, the first challenge was to determine the size of the urban AIAN population to establish a denominator for future calculations. Taking into consideration what data would be most accessible, the Institute started by asking the 34 urban Indian health organizations to define their service areas by using US counties, so that the resulting data could be compared to other US populations. Through this approach, the Institute determined that the 34 organizations offer assistance to American Indians and Alaska Natives living in 94 US counties in 19 states.

Since its inception, the Institute has completed a number of studies necessary to understand the health disparities experienced by urban American Indians and Alaska Natives. These studies include identifying the long-term care needs of urban AIAN elders, identifying the prevalence of urban AIAN adult tobacco use, and determining the screening barriers for breast and cervical cancer (*for a complete list of studies and projects, visit [www.uihi.org](http://www.uihi.org)*).

## Building a community-driven research agenda

The Institute was created out of frustration with existing research efforts and the lack of government attention to the needs of this special population. All too often, research fails to offer information useful to the community. Urban American Indian and Alaska Native communities tend to be small in population and highly diverse in both geographic and tribal affiliation.

The Institute's research model differs somewhat from what is typically considered community-based participatory research in that communities serve as true partners, identifying the areas of research and ensuring that the findings from those projects are used to help communities meet their self-identified needs. By design, the Institute is located in a community health and social service organization. This unorthodox location facilitates the Institute's participatory approach by ensuring that the sponsoring organization's obligation is directly to the community being served. Governed by an AIAN-majority community board of directors and directed by an urban American Indian, the goals and mission of the Institute directly reflect the needs and concerns of the urban American Indian and Alaska Native community.

The Institute's research model is based on the fundamental need for communities to play an active role in determining their health status. American Indians and Alaska Natives recognize the importance of participating in appropriate and meaningful research among their people, especially when it means they can live healthier and fuller lives. The Institute's approach emphasizes the need for community involvement at all stages of the research process. It also creates learning opportunities that foster the equitable exchange of knowledge and ideas between communities and researchers. Examples include establishing community advisory boards, steering committees, and workgroups

with community member leadership and decision making authority. In addition, the Institute uses qualitative research methods, such as focus groups, cognitive interviewing, surveys, pilot tests, and discussions to solicit community input

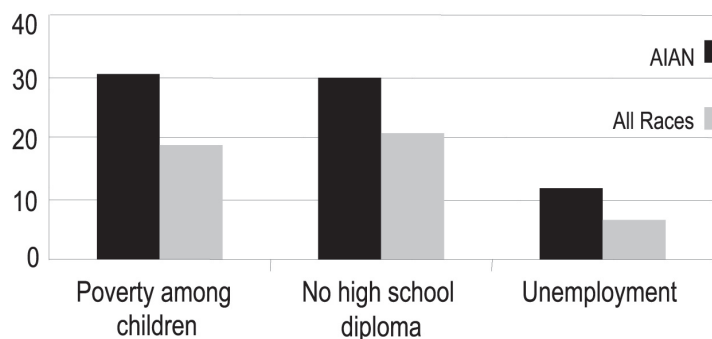


Figure 2. Percent of socioeconomic disparities among AIAN and all races in counties with urban Indian health organizations (US Census 2000)

on project designs, materials, and methods. Any initiative that is community-responsive must ensure an authentic community voice. The Institute is fully engaged in a collaborative approach to its research in which the community representatives participate directly in the research.

The need for research and public health surveillance must include an understanding of the cultural and anthropological aspects of communities if effective solutions to health disparities are to be discovered. The Urban Indian Health Institute has successfully demonstrated that science and culture can be merged. The Institute strives to meet the needs of the urban AIAN community and the organizations that serve them, while using acquired information to help define a national agenda to address health disparities that afflict urban AIAN across the nation.

Community-based research efforts are time and resource intensive. However, despite limited resources and faced with the overwhelming requests for help, the Institute has successfully implemented innovative strategies and techniques that meet the needs of the communities and certainly raise awareness of the value of using research to guide program and service delivery. With greater awareness to the plight of urban American Indians and Alaska Natives and their health needs may come more resources and support. With more resources, the urban Indian health organizations will be able to deliver a broader array of assistance to the American Indians and Alaska Natives who need them the most. ■

### Authors

Maile Taualii, MPH, is associate director of the Urban Indian Health Institute. Ralph Forquera, MPH, is executive director of the Seattle Indian Health Board.

### Resources

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Stehr-Green P, et al. Effect of racial misclassification of American Indians and Alaska Natives on Washington state death certificates, 1989–1997. *AJPH*. 2002; 92(3).

Urban Indian Health Institute. *The Health Status of Urban American Indians and Alaska Natives: An Analysis of Select Vital Records and Census Data Sources*. March 2004. [www.uihi.org/reports/2004HealthStatusReport.pdf](http://www.uihi.org/reports/2004HealthStatusReport.pdf).

# Promoting Healthy Lifestyles Among People with Disabilities

Can people with disabilities live a healthy life? An Oregon program says “Yes.”

Nasreen Abdullah  
Willi Horner-Johnson

Jennifer is a 54-year-old woman with arthritis, lower back and knee pain, weakness, and diabetes. Jennifer is one of 521,000 Oregonians who experience a disability. Pain and arthritis decreased Jennifer’s mobility; she had difficulty walking without the use of a walker. By participating in a program called Healthy Lifestyles for People with Disabilities, Jennifer learned to engage in health-promoting behaviors such as walking regularly and doing stretching exercises. Within months, she had gained greater flexibility and increased muscle strength and endurance, a change that greatly reduced the need to use her walker and increased her independence.

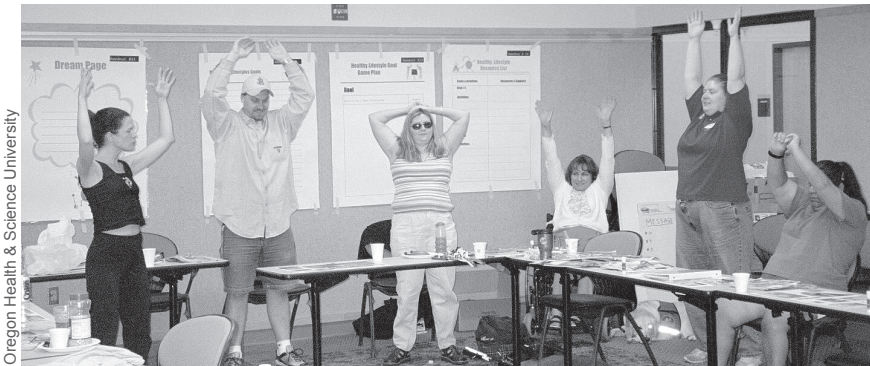
conditions can lead to reduced functional ability, activity limitation, dependence on others, and poor quality of life in individuals, and they have an enormous effect on the health care and social service systems.

As noted in Healthy People 2010, very little attention has been paid to health promotion for people with disabilities. Many health care and service providers do not address health and fitness in people with disabilities. Community resources are still inaccessible for too many people with disabilities, and health promotion campaigns have largely neglected the sub-population that experiences disabilities. In short, people with disabilities have less access to health promotion and maintenance programs than the general population.

## Changing for the better

The effect of secondary conditions can be greatly reduced by strategies aimed at lifestyle and behavior change. The Oregon Office on Disability and Health at Oregon Health & Science University developed and tested a community-based health promotion program called Healthy Lifestyles for People with Disabilities. Successful traditional health promotion programs focus on an integrated view of health and use strategies that address the social, environmental, and psychosocial factors affecting health. The approach taken by the Healthy Lifestyles program adds to that traditional focus a number of goals that are particularly important for people with disabilities, such as making friends, getting a job, and developing skills for independent living.

The Healthy Lifestyles program works with people with a variety of disabilities to improve health-related behaviors and prevent or reduce the effects of secondary conditions. After reviewing existing curricula and obtaining input from a series of focus groups with Oregonians with disabilities, three researchers with disabilities wrote a curriculum for the program. The Healthy Lifestyles for People with Disabilities curriculum has an easy-to-use manual with detailed information for new trainers. It contains a scripted training guide, participant handouts highlighting the main points of the training, and several appendices, including



Oregon Health & Science University

Participants in a Healthy Lifestyles workshop enjoying non-impact aerobics.

## Disability and health

Disability is typically defined as a limitation in activities or social roles that results from an underlying congenital or acquired impairment. The onset of disability can occur at any age. And with the aging population steadily increasing and people living longer than ever, the nation faces a challenge in dealing with the disabilities that become more common with age.

Public perception is, generally, that all disabled people are ill, but disability is not necessarily a condition of ill-health. However, unless managed well, a disability can lead to poor health, secondary conditions, and early death. Secondary conditions are physical or mental health conditions occurring as a consequence of a primary disability. They include conditions such as pain, fatigue, obesity, isolation, and depression. They are often preventable. The long-term effects of secondary

nutrition information and tips on planning successful workshops and support groups. Health professionals and disability service providers can easily adapt the curriculum to meet the unique needs and capacities of their consumers.

The program consists of a workshop of two and a half days followed by monthly two-hour support group meetings. The highly interactive workshops are conducted in community settings and are led by trained lay personnel, who often have a disability. Individuals are eligible to participate if they are at least 18 years old and have a self-reported disability. Generally, a group size of fifteen participants is recommended to achieve the maximum group cohesion and bonding. Other programs have modified and used this curriculum with adolescents with disabilities.

During the workshop, the participants learn about key components of health, including physical, social, spiritual, and emotional health, and health through meaningful activities. Participants also engage in healthy activities, such as non-impact aerobics and therapeutic massage, and learn about healthy eating. They learn the skills and strategies needed to successfully incorporate such positive changes into their daily lives. At the end of the workshop, participants identify two achievable health-related goals to work toward during the next several months.

Following the workshop, participants attend monthly two-hour support group meetings. During the meetings, participants report success with their goals and discuss challenges and barriers in achieving those goals. Additional health-related information, ongoing problem-solving assistance, and peer support are provided in the groups.

## Evaluating program success

We evaluated the effectiveness of the Healthy Lifestyles program through pre- and post-training measurement of health behaviors. Compared to a wait-list control group, the workshop completers showed significant improvements in health behaviors. For all participants, post-workshop scores remained high at six- and nine-month follow-up measurement points.

Participants who completed the program reported eating better, exercising more, coping better with stress and anxiety, and paying better attention to their symptoms enabling them to prevent or reduce the risk of developing secondary conditions. By adopting health-promoting behaviors, participants were able to accomplish such goals as losing weight, finding employment, making new friends, going back to school, living independently, improving their self-esteem, and communicating better with their doctors and caregivers.

One participant said after completing the

program, "The most important change is my concept of health, which now includes the idea of my whole body and life experiences and not just eating healthy foods. I am more consciously aware of my healthy choices. I feel I can become much more independent."

Another participant, Mary, provides an example of the effectiveness of the Healthy Lifestyles intervention. A few years ago, Mary experienced a stroke that left her with weakness and partial paralysis on the left side of her body, requiring her to use a wheelchair. Limited mobility and inability to cook quickly led to weight gain. Mary wanted to lose weight but wasn't sure what kind of physical activity would be safe for her. After learning about the benefits of water aerobics during a Healthy Lifestyles workshop, Mary started attending water aerobics three times a week. The workshop also taught her how to read food labels and create nutritious and balanced meals. By improving her eating habits and increasing her physical activity, Mary was able to lose 30 pounds.

## Future research

A substantial proportion of the participants reported successful weight loss, suggesting that future research should include systematic evaluation of body mass index and other anthropometric data. If future results parallel the present findings, the Healthy Lifestyles program could become a valuable tool in addressing the growing epidemic of obesity especially prevalent among people with disabilities.

The recently released Surgeon General's *Call to Action to Improve the Health and Wellness of Persons with Disabilities* asks for an increase in the number of health and wellness training opportunities for people with disabilities, especially programs that focus on the whole person and not just the disability. Healthy Lifestyles for People with Disabilities is such a program, with demonstrated results in promoting behaviors that help maintain and improve health and wellness and quality of life for people with disabilities. ■

*For more information about the Healthy Lifestyles program, see the program Web site at [cdrc.ohsu.edu/oodh](http://cdrc.ohsu.edu/oodh). To request a copy of the curriculum, contact Willi Horner-Johnson at [hornerjo@ohsu.edu](mailto:hornerjo@ohsu.edu).*

## Authors

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# Working with Young Men

Education program promotes sexual health and responsibility among high school and college men.

Elizabeth Rink  
Ann Zukoski  
Lena Edmunds

The sexual health needs of young men have been largely ignored in the field of reproductive health. Young men are not underrepresented in reproductive health services simply because the services are not available to them. Men are underrepresented because they have not been socialized to seek reproductive health services. Young women from very young ages are encouraged to seek regular health care and receive annual reproductive health examinations such as pap tests and clinical breast exams. Men, however, influenced by gender norms and roles, seek out health care only under extreme circumstances. This gap in services is evident in the fact that during the past thirty years, only 2–4 percent of Title X family planning clinic clients have been men.

Reproductive health funding and services have historically targeted women—a strategy that seems sensible given that women ultimately bear the consequences of pregnancy. Although the focus on women has been successful in reducing teen pregnancy and some sexually transmitted infections, the United States continues to have high rates of unintended pregnancies and sexually transmitted infections. More recently, public health professionals have become aware that in order for young women to be sexually healthy, the reproductive and sexual health needs of their male partners must be addressed.

## Involving men

The public health strategy for providing reproductive health services and education to men is termed *male involvement*. Whether it is on the streets of Seattle or the ski slopes of Big Sky country, a central belief of the male involvement approach is to meet guys “where they are.” The core philosophy of the male involvement approach is to treat men as individuals in order to meet their unique reproductive and sexual health needs so that they can make healthy and well-informed choices about their sexual health and sexual behavior. Common male outreach themes include:

- Reducing the obstacles to care for men by creating male supportive environments within health care settings
- Training health care professionals to provide men with sexual and reproductive health education and services
- Building men’s skills by providing training on self



Promoting the MARS program on the Oregon State University campus.

Benton County Health Dept.

advocacy, decision making, goal setting and achieving, communication, healthy relationships, partner intimacy, negotiating sexual activity, and how to access information and services

- Offering counseling and mental health services for men
- Providing preventive health care services for men in addition to clinical diagnosis and treatment

The growing literature on male involvement programs demonstrates that incorporating a male involvement philosophy into clinic-based or community-based sexual health programs takes commitment and effort but can lead to successful results. One such male involvement program in Benton County, Oregon, is Male Advocates for Responsible Sexuality, or MARS.

## Advocating for responsible sexuality

Located in the fertile Willamette Valley, Benton County is home to Oregon State University’s Beaver Nation, the infamous Squirrel’s restaurant and bar, and 21,000 males aged 13 to 25. Every fall thousands of young men converge on the Oregon State University campus to pursue their academic aspirations. At any time during the school year, young men can be seen walking to and from the Valley Library, rushing to class, playing in extramural sports, or hanging out in the eateries along Monroe Street. Weekends in Corvallis find the local Diary Queen, Blockbuster Video, and bowling alley packed with high-school-aged males fighting off the boredom that accompanies small town life. Whether abstinent or sexually active, these young men face multiple decisions related to enhancing and protecting their own and their partners’ reproductive health. Benton County, like many communities in the US, is a perfect place for a male involvement program.

Started in 2000 at the Benton County Health Department, MARS is an innovative male reproductive health demonstration project funded by the US Office of Population Affairs. MARS uses educational outreach and family planning clinical services to increase sexual responsibility among males ages 13 to 25. The mission of MARS is to support men in taking a responsible role in promoting equality and cooperation in relationships, pregnancy and infection prevention, and overcoming stereotypical gender

roles. Male peer health educators ages 18 to 24 form the core of the MARS program. They receive extensive training and are responsible for implementing the MARS program.

MARS has two components: educational outreach and clinical services. The educational outreach takes place in a variety of venues, from the bars and restaurants located throughout Benton County to the dining halls and fraternity meetings at Oregon State University. MARS outreach workers, clad in t-shirts that say "Respect Yourself," hand out condoms, MARS pens and pencils, MARS "Respect Yourself" tattoos, and red and white wristbands to college-aged men. These items promote taking an active role in sexual health and coming in for a MARS clinical educational session. The MARS outreach workers also conduct a six-session MARS curriculum in the four Benton County school districts. Teams of two male MARS outreach workers facilitate the MARS curriculum in high school classrooms using a combination of media images, skits, role-plays, and small-group work. The emphasis of the MARS curriculum is on:

- Understanding how male and female stereotypes in our society influence decisions regarding sexual health
- Addressing the components of healthy relationships
- Communicating with your partner about sex and contraceptive use
- Obtaining information on sexual health issues, such as pregnancy, sexually transmitted diseases, abstinence, and contraceptive methods
- Knowing where and how young men can access sexual health services

One high school teacher commented, "So many kids don't know what healthy relationships are, and don't know how to make good decisions. I believe MARS teaches kids the importance of working together, and the MARS role-plays really help students to understand how to have healthy relationships."

The MARS clinical educational appointments take place at the Benton County Health Department, Oregon State University Student Health Services, and Alsea Rural Health Center. The sessions are conducted by the MARS outreach workers and last from 30 to 45 minutes. Common topics covered in the MARS clinical appointments include how to properly use a condom, the effectiveness of different methods of birth control, the signs and symptoms for various sexually transmitted infections, the benefits of abstinence, and relationship issues. Young men who have attended MARS clinical appointments appreciate the openness and friendliness of the MARS outreach workers. One client commented, "I liked that the appointment was one-on-one. I wasn't rushed. It was an open forum to discuss sex with no pressure."

The MARS program evaluation uses qualitative and quantitative methods to assess program effectiveness and measure short-term outcomes. For classroom sessions, pre- and post-tests are administered at the start and end of the six-session series. The tests measure changes in student's knowledge, attitudes, and beliefs about gender roles, healthy relationships, self-efficacy in communicating with partners, decision-making skills, abstinence, contraceptives, sexually transmitted infections, and where to access free and confidential health care services. Teacher evaluation forms are also used to assess host classroom teachers' perceptions

of the MARS curriculum and teaching skills of the MARS outreach workers. The clinical appointments are evaluated with client questionnaires and follow-up phone calls that measure changes in young men's attitudes toward abstinence, healthy relationships, and contraceptive methods.

Evaluation findings from MARS are promising. Initial program results demonstrate statistically significant increases in student sexual health knowledge, confidence, and self-efficacy in communication, decision making, and knowl-

## Strategies for Implementation

- Involve men from target populations in planning and implementation
- Partner with organizations that already work with males
- Offer incentives
- Provide skill-based education
- Implement a social marketing campaign to influence social norms
- Provide reproductive health services as part of sports physicals
- Create a gender-neutral environments for services

edge of where to go for sexual health services. In addition, the number of men attending MARS clinical sessions has increased dramatically, from 41 visits in year one to 270 visits in year two. Ninety-eight percent of men indicated they would recommend a MARS appointment to a friend.

## Implementing male involvement programs

Male involvement is a new field in the area of reproductive and sexual health programming. At present no acceptable best practice exists for how to empower men to take an active role in their sexual and reproductive health and increase the use of reproductive health and clinical services. Young men need a wide range of sexual health education, reproductive health clinical services, counseling, and skill building that specifically targets them as individuals.

By engaging men as active participants in decisions regarding sexual and reproductive health, the chances of successfully reducing adolescent pregnancy, sexually transmitted infections, and other potential negative outcomes related to engagement in sexual activity can be substantial. ■

## Authors

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## Resources

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# Connecting Autism Families with Emergency Support

Uwe Reischl  
Ron Oberleitner,  
Patra Simper

In August 2005, Hurricane Katrina created serious public health problems in the coastal communities of Louisiana, Mississippi, and Alabama by destroying or degrading the capacity of many communities to deliver critical social services. Among the people adversely affected by the hurricane were more than 50,000 families with a member who has autism. People with autism can have great difficulty adjusting to change. The disruption of daily routines can cause severe anxiety and stress not only for the people with autism but also for their families and caregivers. During the evacuation from Hurricane Katrina, for example, many autism families were asked to leave public shelters because of the disruptive behaviors of their children. These families were in desperate need of services that local, state, or federal agencies could not provide at the time. In response, autism support groups mobilized to help.

## Autism challenge

Autism is one of the fastest-growing and most prevalent childhood developmental disorders in the United States, affecting as many as one in every 166 births. Autism is a neurological disorder that interferes with normal development in language, intuitive thought, social interac-

tion, and the ability to connect with surroundings. Approximately half of all children with autism are unable to communicate their needs using spoken words. Most are unable to accommodate changes in their daily routines. Associated problems can include hyperactivity, self-injurious behavior, sleeplessness, eating disorders, and gastrointestinal problems. Order and consistently administered therapeutic interventions are important for the child and the family's well-being.

## Relief initiative

To help autism families deal with the after-effects of Katrina, a consortium of leading national autism organizations, coordinated through the Center for Health Policy at Boise State University (BSU), formed an emergency relief and recovery initiative in September 2005, called AutismCares ([www.autismcares.org](http://www.autismcares.org)). The initiative began in order to raise funds and provide immediate help by leveraging the existing network of autism support groups. The consortium includes a number of support organizations: Autism Speaks, Cure Autism Now, First Signs, TalkAutism, Southwest Autism Research and Resource Center, Unlocking Autism, The Help Group, and Princeton Autism Technology.

The services provided by the AutismCares initiative was made possible by the support received from volunteers living in the affected coastal regions and by the volunteers at BSU who contacted displaced families using the Internet and telephone. Key to locating displaced families was the sharing of contact information, family names, and known addresses contained in the files of the autism support group membership lists.

To date, AutismCares has raised more than \$140,000 for the relief program. Additionally, in-kind donation offers were received from more than 700 people from across the country. Christmas Day 2005 marked the 100<sup>th</sup> day of operations. By that time, 126 autism families had been helped directly through financial support and in-kind donations that included clothing, beds, personal hygiene articles, kitchen utensils, and autism-appropriate toys for children. Hundreds more were helped through referrals to local and state support services. Furthermore, more than \$30,000 was provided for direct housing rental support, and 46 new beds were purchased and delivered



Uwe Reischl

Dr. James Ball, Vice President of Autism Services at the Sawtelle Learning Center in Montclair, New Jersey, evaluates by videophone a child with autism spectrum disorder. The child is from a family displaced by Hurricane Katrina.



to 14 autism families. AutismCares also assisted families affected by hurricanes Rita and Wilma.

The effectiveness of the AutismCares relief initiative came from the organization's ability to quickly help with temporary relocation support, mobilizing specialty assistance teams in the Gulf region who could reach the families personally, and providing autism-conscious supplies to the affected families and to the professionals caring for them. Providing families with pre-paid Wal-Mart purchase cards, for example, helped them meet their immediate nutritional and household requirements.

Hurricane Katrina victim Linda Davis, who temporarily relocated to Texas with her daughter and autistic son, said about the program, "AutismCares really helped my family. We were living in our car because we were asked to leave the hotel when my son continuously made high-pitched screams, which is common when he gets upset. AutismCares

took advantage of this offer and pre-registered before evacuating for Hurricanes Rita and Wilma. All of these families were subsequently contacted to determine the level of immediate and longer-term assistance needed. AutismCares provided the families with resources available through autism communities in nearby locations. By March 2006, more than 320 families had registered with the AutismCares database, which will serve as a platform for future emergency response activities.

## Organizational structure

The hurricane disasters revealed that autism community support groups were able to respond quickly and effectively in helping families with their special needs after the damage caused by the hurricanes. The relief efforts were effective in part because of the family-focused approach in delivering assistance and the simplicity of the organizational structure.

## The relief efforts were effective in part because of the family-focused approach in delivering assistance and the simplicity of the organizational structure.

paid for us to get an apartment, replaced the battery in our car, and made sure I had what I needed to take care of my kids until we could return home. I could not have done it without them."

## Concurrent projects

To help displaced autism families during the Christmas holidays, AutismCares conducted the "Holiday Help a Child" program, assisting 211 autistic children and their siblings by posting their stories and wish lists on the AutismCares Web site. Each child was matched with a generous donor who provided items specific to the child's needs and wants.

AutismCares collaborates with The Help Group, which provides affected autism families access to trained therapists and grief counselors 24 hours a day, seven days a week through a toll-free telephone number.

AutismCares also facilitated the first Telehealth evaluation for an evacuated Katrina family to expedite a formal evaluation of a child's autism condition and produce a legal document enabling an out-of-state school to admit the child. The child's related health records had been lost during the storm.

## Planning for future emergencies

To keep up with the changing needs of displaced families, AutismCares is using a short questionnaire to measure and assess on-going family issues related to housing, employment, and their children's needs. The telephone survey allows the identification of changes over time and delineates potential priorities in future relief efforts. The information will be shared with the autism support organizations and will provide a basis for helping the autism community better prepare for future emergencies.

After Hurricane Katrina hit the Gulf region, AutismCares encouraged families affected by autism to register with the organization's database. More than 200 families

BSU was able to provide financial oversight and transparency, thus establishing public credibility and confidence for donors who needed to know that their funds were disbursed appropriately. The legal account for AutismCares is housed within the Boise State University Foundation, and the Center for Health Policy provides fiscal oversight.

The Gulf Coast experience with Hurricane Katrina revealed important vulnerabilities in our special needs populations. Numerous families with autism had difficulty responding to this public health emergency. Many of their needs could not be met by the local, state, or federal relief agencies. However, the spontaneous and focused volunteer actions by autism support groups helped their members during the time of crisis. This experience illustrates the potential effectiveness of grassroots activism during and after a natural disaster. We believe that the AutismCares initiative may serve as a model for helping future special needs populations during a public health emergency. ■

## Authors

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## Resources

Autism Speaks. [www.autismspeaks.org](http://www.autismspeaks.org). Information about autism and advocacy.

Cure Autism Now. [www.cureautismnow.org](http://www.cureautismnow.org). Information about autism and research.

TalkAutism. [www.talkautism.org](http://www.talkautism.org). How the autism community shares knowledge information, and assistance.

# Practicing Public Health in Jails

Maggie Jones

**T**he criminal justice system has become a catch-all for people whom society has failed and the general public tries to marginalize and disenfranchise. In reality, correctional facilities are not the appropriate place for many of the inmates they house. National data show that jail populations have disproportionately higher rates of mental illnesses, infectious diseases, and substance abuse than the general public. These people are in jail because they are awaiting charges or sentencing for an alleged crime. Their alleged crimes, however, may have been avoidable if treatment options were available for their underlying problems. Research has shown that interventions that address inmates' mental health and substance abuse and screen for infectious diseases can reduce recidivism, while improving the health of inmates and the community as a whole.

Many barriers, however, impede the provision of optimal public health services to inmates. A fundamental challenge is the conflict between the therapeutic nature of public health and the punitive nature of the criminal justice system. This innate conflict is compounded by the public's lack of support for providing health services to inmates, incomplete or unavailable inmate medical histories, the transient nature of the population (making continuity of care and follow-up difficult), and limitations on scheduling and treatment options due to the processes of the correctional system.

Jail Health Services (JHS) at the King County Correctional Facilities (KCCF), a two-facility jail system in Seattle and Kent, Washington, has implemented several successful programs that provide public health services to the jail population.

## Identifying infectious disease carriers

Correctional facilities are high-risk settings for the spread of infectious diseases. They are often overcrowded, with close living quarters and recirculated air. When infectious diseases are not identified early on in the inmate's incarceration, they can spread to others in the jail (both staff and inmates) and then to the wider community when the infected inmates are released.

The first step to preventing the spread of a disease is identification of infected inmates. In a

correctional facility, public health agencies have a captive audience to screen. As a result, public health programs can treat those with infectious diseases who would otherwise remain unaware of their status and go untreated.

One of the JHS programs that provides a model for intercepting infectious diseases is its Tuberculosis (TB) Control program. Inmates are at higher risk for TB, in part because of personal and social risk factors such as HIV infection, low socioeconomic status, lack of access to health care, and substance abuse. In addition, TB is an airborne infection and may spread more easily in correctional settings. Successful TB control programs in correctional facilities are crucial for effectively preventing and controlling TB in the larger community.

Between 2001 and 2004, Seattle had two TB outbreaks—one in the homeless population and one in the East African immigrant population. In early 2004, JHS hired an infection control practitioner to assess TB control within JHS. The review revealed two themes: first, the need for increased communication and coordination with Public Health - Seattle & King County's TB Clinic, and second, the need to clarify and increase compliance with JHS protocols for ruling out TB. As a result, JHS formed a collaborative partnership with the TB Clinic and revised the existing protocols for TB identification and screening.

The new protocols require the epidemiologist and case managers at the TB Clinic to provide the infection control practitioner at JHS with a list of people with active TB whose whereabouts are unknown or who are known to cycle in and out of jail. This list is given to intake sergeants, intake nurses, and clerical staff at KCCF—who ensure that none of the people on the list have entered the general inmate population. As an additional precaution, the infection control practitioner enters the names into the electronic database, and an alert comes up if any of the persons are booked into the facility. The new protocols have had initial success; in 2005, after the implementation of these new practices, two people were successfully identified and put into airborne isolation, and no active cases of TB entered the jail's general population.

JHS uses a similar approach, through a partnership with Public Health - Seattle & King County, to provide STD testing and treatment. Dr. Benjamin Sanders, JHS medical director, said, "These programs show how it is possible to leverage the 'captive audience' of the jail to make a real difference in disease detection and treatment in perhaps the most vulnerable segment of the community."

### Managing mental illnesses

Many people with mental illnesses cycle in and out of the criminal justice system. The prevalence of severe mental illness is two to four times greater in prisons than in the general population. An estimated one in six prisoners in the United States has a mental illness. Despite such high rates of mental illness, many correctional facilities use officers with no training or education in pharmacology or psychology to monitor medications and to supervise those inmates with mental illness. Inmates often do not have access to mental health services outside of jail. A study conducted at KCCF indicated that of 100 inmates residing in psychiatric housing, only about half were receiving psychiatric medications

## A fundamental challenge is the conflict between the therapeutic nature of public health and the punitive nature of the criminal justice system.

outside of jail, half did not have connections to an outpatient community service agency, three-quarters did not have a case manager, two-fifths reported being homeless, and more than four-fifths reported a history of psychiatric hospitalization.

JHS has successfully developed community partnerships with mental health providers and advocates in order to link their patients with outpatient mental health services on their release from jail. JHS connects inmates to resources by using criminal justice (CJ) liaisons, who are Seattle Mental Health employees working full-time in the jail facilities. The CJ liaisons take referrals from JHS psychiatric staff for patients who are in need of funds, mental health treatment, and housing resources. The CJ liaisons are able to connect patients with the appropriate resources, help patients apply for Medicaid (which will pay for mental health treatment in the community), and make appointments for initial psychological evaluation.

While patients are in jail, the mental health services staff at JHS provide treatment for symptoms of mental illnesses. Dr. David Kersey, medical director of Psychiatric Services, noted, "Despite difficult circumstances, we have worked hard to create a real system of care that does a better job of ensuring that people who need it receive care in a timely manner." JHS can prescribe medications while patients are in jail and order seven further days of medication, which is placed in the person's property for use after release. They also write longer-term prescriptions when these can be coordinated through an external case manager. JHS also facilitates the timely activation of Medicaid benefits by providing the required psychological evaluation in-house. Providing this primary evaluation removes the need for patients to wait to see an external case manager before activating their benefits.

### Reducing substance abuse

The Bureau of Justice Statistics (BJS) reported that almost 25 percent of state prisoners to be released by year-end 1999 were alcohol-dependent. BJS data also indicate that 83 percent of state prison inmates reported using drugs prior to arrest, and 33 percent reported being on drugs while committing their offense. The use of drugs and alcohol is often correlated with recidivism, in particular because people are more likely to engage in illegal activity to support their addiction (e.g., prostitution, drug sales, theft). Substance abuse also is associated with homelessness, unemployment, and social isolation, all of which increase the likelihood of recidivism.

JHS is in the midst of implementing an opioid-substitution (methadone) treatment program, called the Jail-based Opioid Dependency Engagement and Treatment (JODET), for opioid-dependent inmates while in custody. The program is in response to recommendations made by the Seattle/King County Heroin Task Force in 2001. The strategy is to interrupt the cycle of opioid dependency and recidivism for opioid-dependent inmates cycling through King County's

correctional system. JODET aims to reduce costs associated with repeated incarcerations by reducing consequences of forced withdrawal—that is, increased risk of overdose after release from custody and increased risk of disease transmission (e.g., HIV, Hepatitis C) as a result of injection drug use. The goal is to have the treatment program fully implemented in summer 2006, at which time the facility will become the second jail in the United States—after Rikers Island Jail in New York—to have an in-house methadone treatment program. Research conducted at Rikers Island Jail has shown that methadone treatment programs in jails decrease not only adverse health outcomes but also crime rates and recidivism.

Addressing the health needs of inmates is a complex health challenge complicated by societal attitudes toward providing health services to inmates. These examples of programs offered by JHS illustrate how by offering services in-house and partnering with community agencies, jail health services can take advantage of the opportunities to serve this hard-to-reach community and improve the health not only of individual inmates but of the community as a whole. ■

### Author

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### Resources

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# Helping the Homeless Stay Healthy

Carolyn Hamlin Wenger

**P**erry H. is a 79-year-old man who works as a laborer in the Billings area. He herded goats all summer and is proud of his summer spent on the open range. Perry is a client of a clinic for the homeless. He comes in weekly to check his weight, blood sugar, and hematocrit.

Preventive care is important to homeless people. They are very aware that they cannot afford to become ill. As one client stated "If I don't look after myself, no one else will." Prevention and self-reliance are inter-twined concepts. Homeless people tend to lead chaotic lives. Sources of shelter and food are unpredictable, and substance abuse may compound the problems that come with living on the street. Control over one small part of life, even if it is only maintaining a healthy weight or blood pressure, becomes a significant and meaningful achievement for a homeless person.

The tendency in social services and health care is to over-pathologize the homeless, but rural homeless people share characteristics with other rural populations. They are self-reliant and hardy and favor self-care. Many have received demeaning or abusive care by other providers, and they avoid encounters with providers who have treated them poorly in the past.

## Taking preventive care to the homeless

For almost 20 years the Billings Campus of Montana State University (MSU) Bozeman College of Nursing has run a clinic for primary health prevention among the homeless population in Yellowstone County. The clinic, originally funded through a National Institutes of Health Special Projects Grant, was the first organized approach to meeting the health care needs of homeless individuals and families in the Billings area. Weekly clinics continue to be conducted at the Montana Rescue Mission (MRM), which provides shelter and food to homeless people and those who may be near-homeless.

The MSU Nursing clinic serves the health needs of this population and provides a place for senior community health nursing students to engage in the independent practice of nursing. The eighteen-year history of the clinic has provided an opportunity to examine the usefulness of primary prevention as an effective approach to homeless health care. Using block grant funding from MSU College of Nursing in 1993, the clinic performed a retrospective chart review and documented the levels of prevention in nursing care that was provided to the MRM clients. The initial retrospective record review has been periodically validated not only by ongoing interest in the clinic, but also through consumer surveys and other empirical measures.

Although the population seen at this clinic includes both men and women, clients are predominately male, which is consistent with the composition of residents at the Rescue Mission. Although the ages of people seen at the clinic have ranged from two days to 94 years, most of the clients have been in the 30- to 45-year range. Recently, however, the clinic has been seeing more people 18 to 25 years old and over 50. Predominant ethnic groups among the homeless population reflect the ethnic make-up of the area—Caucasian, American Indian, Hispanic, and African American—although minority groups are over-represented in comparison with the general population. Veterans are also a significant population among the homeless in Yellowstone County.

## Combining prevention and primary care

Primary prevention includes education and counseling independent of diagnosis. Secondary prevention includes screening and education related to screening results. Clients most frequently require assistance with some kind of trauma. However, the review of patient records indicated that secondary prevention occurred in about two-thirds of the visits. Individuals primarily interested in their health, as well as persons with risk factors

such as a family history of disease, requested health screenings. Tertiary care was reflected in 11 percent of records. Tertiary care includes dressing changes, exercises, or suture removal.

Funding for the homeless clinic has come from various sources over the years. When the NIH Special Projects Grant ended, the MSU College of Nursing took over funding the clinic. When Yellowstone City-County Health Department added a Health Care for the Homeless program in 1993, the College of Nursing established a collaborative relationship with the health department to provide a wider array of services.

The combination of the two clinics increased on-site delivery of both direct medical care as well as prevention services to the homeless population. Primary medical care services include the diagnosis and treatment of chronic diseases. Managing chronic diseases is a natural extension of the clinic's focus on prevention, and nurse practitioners and physician's assistants play an important role in the delivery of these services. Nurse practitioners and physician's assistants provide medical services for both acute and chronic illnesses. Prescriptions are an important component of the health department services. Limited funding is available for those requiring specialty services.

MSU faculty speculated that homeless individuals might prefer direct medical care over prevention services. However, clients have continued to request health screenings and preventive care. Nurses from both MSU and the health department meet every week prior to the prevention clinic to discuss mutual clients. They also coordinate care by phone throughout the week.

## Reaching the invisible homeless

A significant number of homeless people are not easily identifiable. Because they are not street people, they often are lost in census counts. These "invisible" homeless include people who are employed but cannot find affordable housing. Employed homeless persons do not match the stereotype of homelessness and seldom manifest problems in public. When the employed homeless can be reached, however, they are open to simple prevention activities, such as monitoring weight, nutrition education, and health screening. They will come to a clinic if it offers services before 7 AM so they can get to work on time.

Other invisible homeless are people who may hide during the day. The clinic staff often finds out about them from other clients who are concerned about their friends living in dangerous, abandoned housing or under trucking docks. As part of the clinic outreach, staff along with student nurses visit these places and talk about preventive care and health care needs with the people there. This outreach is invaluable to nursing students, who have usually not fully recognized that their role extends beyond institution walls.

Now that the Nursing Program is collaborating with the local health department, nursing students usually accompany outreach workers from the Health Care for the Homeless program to see these people.

## Benefits for nursing students

Providing primary and secondary health care in a homeless clinic is a unique learning opportunity for nursing students to engage in public health nursing. It allows students to realize how very close to homelessness many people are. The main comment students make is about how much homeless people appreciate their services. In a hospital setting, patients often defer to the staff nurse. In the homeless clinic, the students are the experts, and they gain an appreciation for the opportunity to be a "real" nurse caring for some of society's most challenging health care consumers.

The clinic has proved an important service for those who find themselves without homes. The clinic's focus on preventive care, which recognizes and builds on the resilience and strengths within the homeless population, offers individuals such as Perry H. not only improved health but also the sense of personal control that comes with self-care. ■

### Author

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### Resources

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## Annotated Resources on . . . Special Populations

**CDCynergy-Social Marketing Edition.** Turning Point. University of Washington. [www.turningpointprogram.org](http://www.turningpointprogram.org).

This CD-ROM provides materials to help public health professionals analyze health problems and plan, implement, and evaluate social marketing programs to address those problems. It contains case studies, commentary from experts, and tutorials for each stage of effective program development.

**Emergency Risk Communication for Public Health Professionals.** Northwest Center for Public Health Practice, University of Washington. [www.nwcpnp.org/erc/](http://www.nwcpnp.org/erc/).

This self-paced course provides an introduction to planning for an emergency, best practices, creating effective messages, and strategies for interacting with the media and the community during times of crisis.

**Lipson JG and Dibble SL (eds).** *Culture and Clinical Care*. School of Nursing/UCSF Nursing Press, 2005. [nurseweb.ucsf.edu/www/books.htm](http://nurseweb.ucsf.edu/www/books.htm).

This book offers extensive information about 35 cultural and ethnic groups. Information for each group covers demographics, spiritual/religious orientation, communication, activities of daily living, food practices, symptom management, birth rituals and care, development and sexual issues, family relationships, illness beliefs, health issues, death rituals, and selected references.

Find more annotated resources online at [www.nwpublichealth.org](http://www.nwpublichealth.org).

# Detecting Chemicals on Farmworkers' Hands

Sharon K. Stoffels  
Dale D. Russell  
Richard Lammers

**F**elix is a seasonal farmworker. He has worked hard all day in the fields. His back aches from repetitive bending over the crops, and he looks forward to sitting down and relaxing at home. Felix's hands are dirty. He wishes he could wash them but the worksite has no hand-washing facility. He wipes his hands on his pants before he gets into his truck to drive home. Felix's family greets him at the door. He gently pats his elderly father on the shoulder and warmly embraces his wife. His kids cling to his legs vying for attention. Felix makes his way to his chair to sit down where he is handed the baby.

How often are chemicals and pesticides carried beyond the fields? Is there a risk of poisoning to the individual or a risk of potential contamination of vehicles, housing, and family members?

It is estimated that more than 3 million migrant and seasonal farmworkers work in the United States. These farmworkers support the \$28 billion US fruit and vegetable industry. Of these crops, 85 percent are hand harvested or cultivated. The plants and soil are often treated with chemicals and pesticides. Precautions are taken to protect the farmworkers from exposure, but poisonings do occur. The Environmental Protection Agency (EPA) estimates

that 300,000 farmworkers suffer from acute pesticide poisoning each year, and many more go unreported or are misdiagnosed.

Public health workers need a simple, easily tolerated method to detect chemicals and pesticides on the skin surface to identify whether the chemical contaminants are carried beyond the fields. The authors tested a potentially useful, non-invasive method of detecting metals and organics present on the skin surface in a pilot project in southwest Idaho during spring and fall 2005.

## Recruiting participants

To find participants for the test group, we visited health fairs at three migrant farm worker camps in southwest Idaho on three consecutive Saturdays in November 2005. A bilingual undergraduate white male student greeted all people attending the health fair and invited them to participate in the project. All study activities with the farmworker group were conducted in Spanish. A convenience sample of students from two university Health Science and Chemistry lecture classes in spring 2005 served as the control group.

Participation was voluntary for each of the study groups, and the gender of the participants was evenly weighted between men and women. Prior to the study, each participant was informed of the nature of the study, the collection process, and its possible risks. They were also assured of the complete anonymity of each sample. Participants were also asked if they had recently used any known pesticides, poisons, or other chemicals that could give skewed results. If they had, their collection sample was discarded, since we wanted to see what was on the hands of "clean" participants.

In the control group, twenty-four students chose to participate in the study. In the targeted Hispanic farmworker group, twenty-four people agreed to participate. This number of farmworkers was surprisingly low, since twenty-nine members of the local farmworker community had become ill in July 2005 after working in an onion field, and their illnesses were widely attributed to agricultural pesticide exposure.

Many of the farmworkers at the three health fair locations expressed great interest in studies that could potentially lead to safer working conditions, but when asked to partici-



John Kelly/Boise State University

Boise State University students discuss health promotion with a Hispanic farmworker in a work camp in SW Idaho.



pate in the study, most of them respectfully declined. A Hispanic field foreman shared his opinion that many of the farmworkers may believe that if they test positive for pesticide exposure, it could be traced back to them and ultimately cost them their employment, their housing, or their residency in the United States. He also thought that workers might have had reservations about a non-Hispanic heading the sample collection effort. These factors may have contributed to the lower than expected number of farmworker participants.

Participants were instructed to use generic, hypoallergenic baby wet wipes to thoroughly clean their hands, taking extra precautions not to pre-contaminate the wipes. Latex gloves were used to hand out the wipes, and the researcher put on a new pair with each participant. After the wipe was used to clean the hands of the volunteer, it was placed in a sealed plastic bag, using one plastic bag to collect all the wipes for each sample group. The aggregate samples preserved the anonymity of the participants, ensuring that no individual could be identified from the results.

## Analyzing for chemicals

Chemical analysis was performed to determine what metals and organic compounds, if any, were removed by the wipes from the farmworkers' hands. Three sets of samples were collected from farmworkers at the three migrant camp locations, and a similar set of samples were collected from the control group students, who were presumably not exposed to agricultural chemicals, in order to compare the results. This analysis could not tell how farmworkers may have been exposed to the chemicals, but only that at some point they had been exposed.

The chemicals were extracted from the wipes using standard methods published by the US Environmental Protection Agency. This procedure produces a water-based solution containing the organic compounds and the metals. The solution is split into two parts, one for analysis of the organics and the other for analysis of the metals. Organic compounds were analyzed using an EPA standard method on a gas chromatograph with mass spectral detection (GC-MS) and a capillary column. This method is very similar to the method used to determine if Olympic athletes have used illicit drugs. The metals were analyzed using EPA standard methods appropriate to each metal.

The results showed different findings for the two study groups. In the farmworker group, significant amounts of lead and organics were found. Most of the organics could have come from non-agricultural activities. For example, a number of the organics were non-hazardous compounds found in cooking oils and personal hygiene products such as lotions, sunscreens, and cosmetics.

However, several hazardous and toxic organics were detected, including compounds used in pesticides, herbicides, and veterinary pharmaceuticals. One of the organics identified (9-hexadecenoic acid) is used as its lead salt in some pesticides. Significant levels of lead (0.1 to 0.4 mg/kg

sample mass) were also found. Cadmium and arsenic levels were examined but were not detected. These two metals may have been present at levels below the detection limit of the method (2.5 and 0.025 mg/kg, respectively).

In contrast, analysis of wipes from the control group of university students showed several compounds commonly found in personal hygiene products, but none of the compounds found in herbicides and pesticides. Also none of the metals measured was detected in the student sample.

## Evaluating the research

The results of this pilot project demonstrate that chemical analysis of samples collected with wet baby wipes can detect metals and organics on the surface of the skin. Further study is needed to refine the process. However, use of wet wipes to collect samples from the surface of the skin is non-invasive, easily accepted by the participants, and inexpensive. It may be possible to gather samples from surfaces of vehicle interiors and the home environment for chemical analysis using a similar sampling process.

The presence of toxic organics and metals on the farmworker wipes does not necessarily indicate pesticide poisoning. Additional studies should be conducted to correlate the presence of metals and organics on the skin of the hands with sources of contamination and pesticide poisoning.

Further research should also take into account possible levels of distrust in the farmworker community toward non-Hispanic researchers. Involving farmworkers in the development and planning of research projects and, in particular, using Hispanics to solicit farmworker participants and collect the samples may help ease any distrust, and result in a higher number of study participants. ■

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## Authors

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# School *Soft Drink* Contracts —Who Benefits?



Anita B. Patterson. www.dreamstime.com

Nicola Pinson

**W**ith the numbers of obese and overweight children skyrocketing since the 1980s, childhood obesity has become one of the most pressing public health issues of our time. To reverse the alarming trends, parents, public health advocates, and policy makers at national, state, and local levels are taking a closer look at the nutrition environment in schools. And they're not happy with all the candy, soda, and chips.

Oregon Senator Bill Morrisette called removing sugary drinks and high-fat snacks from schools "no brainer" reform.

**As communities begin to craft these policies, they may find that changes to school foods are not solely within the community's control.**

So why, he asked, can't this state pass legislation ensuring healthier choices? Morrisette was referring to a modest, and failed, attempt to set nutrition standards for foods available in Oregon public schools. Introduced in the past two legislative sessions, this seemingly innocuous legislation sparked a contentious debate, with issues of local control, school financing, and most importantly, children's health, at the heart of the controversy.

Although Oregon's bill, along with similar bills across the country, was defeated in 2005, a new federal law requires school districts nationwide to develop local wellness policies to address nutrition and physical activity in schools by the 2006–2007 school year. Yet, as communities begin to craft these policies, they may find that changes to school foods are not solely within the community's control.

In the unenviable position of having to plug school funding holes, school boards and administrators across the country have signed contracts with soda companies. Contract revenues are derived from two main sources: payments to districts made by the companies, often in lump sums at the start of the contract, and revenue generated from the sale of products to students. The effect of these agreements on the ability of schools and parents to make changes will

be a crucial point of discussion as communities develop their local wellness policies. Important questions need to be addressed. What are the details of the contracts? What rights have schools granted companies? How much control do schools have over the beverages offered to students? How much money do the contracts, in fact, generate, and where does it come from? And most importantly, what are the long- and short-term implications for students' health?

These and similar questions motivated our organization, Community Health Partnership ([www.communityhealth-partnership.org](http://www.communityhealth-partnership.org)), to delve into the details of the contracts between Oregon school districts and beverage companies. Of the 25 districts we surveyed statewide, 12 reported contracts with either Coca-Cola or Pepsi or local distributors of these brands. Among the 13 districts that did not have district-level agreements, most identified individual schools that contracted with companies. Because CHP is a small organization, we limited our analysis to district-level contracts.

## Giving with one hand

Based on our review, we found that these agreements are not as lucrative as they appear on first glance. Portland Public Schools' eight-year contract with Coca-Cola, for example, provides \$1.9 million at the beginning of the contract in 2001, with annual installments of \$45,000 until the end of the contract in 2009. These payments may initially appear to be a large sum of money, but they translate into about \$5 per student per year for the 51,000 Portland Public School students covered by the contract. For other districts surveyed, the fees paid by soda companies, what we term "cash advances" in our report, total between \$2 and \$8 per student annually.

In addition to cash advance fees, schools also collect a commission percentage from the sale of beverages to students. Our analysis revealed that most of the money generated for schools through the contracts comes from students purchasing beverages, not from payments made by the companies. Each time a student buys a soda for, say

\$1, a fraction—on average of \$0.32—is channeled back to the school to help compensate for budget shortfalls. The larger share, an average of \$0.68, goes to the soda company. With the commission revenue and company payments combined, districts collect an estimated total of \$12–\$24 per student annually. As a point of comparison, this amount is less than half of a percent of annual district spending per student, which ranges between \$6,000 and \$8,000 for the districts studied.

Although these contracts and their cash advances may appear generous, the companies, in fact, earn far more from these agreements than they pay out. Cash advances range between \$2 and \$8 per student per year, yet companies can expect to collect between \$14 and \$32 per student annually based on revenue from sales. In some cases, districts guarantee companies the sale of a minimum volume of beverages over the life of the contract. For example, Hillsboro's contract with Coca-Cola guarantees the minimum sale of 420,000 cases over the 12-year term of the contract, averaging 45 beverages per student annually. To meet this sales volume requirement, students must not only consume more than 10 million beverages, but also must spend approximately \$10 million over the course of the contract. Based on the contract's commission arrangement, the district will receive \$3 million, while Coca-Cola will collect the remaining \$7 million.

## More than just money

Companies gain more than just money from sales. Of far greater value, companies have the opportunity to build brand loyalty among young people in an educational setting. Exclusive contracts mean competition-free, profuse exposure for their products, name brands, and logos. Vendors also receive explicit rights to advertise and promote their products on school campuses through banners, cups, scoreboards, and more.

Vendor contracts may pose challenges for many school districts wanting to make changes. The agreements we examined last an average of 9 years, with some lasting as long as 15 years. Where schools receive upfront payments, they may find it extremely difficult to terminate an agreement early because of contract provisions requiring schools to pay back fees received in advance. Schools also relinquish their autonomy over nutrition-related decisions. As Portland Public Schools discovered two years ago, for example, the district not only had to ask for Coke's permission, but they also had to pay a \$9,000 penalty for removing sports drinks from middle schools. Companies may be willing to amend contracts and supply healthier products, but this is a decision over which some districts no longer have sole control.

Although the soft drink industry espouses community-minded values of helping schools to “narrow the education funding gap,” our study illustrates that the bulk of the financial gain from these agreements comes from the community's own pockets, not from the donations of the soda companies. Companies are actually taking more money from communities than they're contributing, and they're also gaining a host of rights to control the availability of their products in schools and to instill brand loyalty among

young people. These concerns raise the question: If the fundamental purpose of the contracts is to generate money for under-funded school activities, are these contracts truly helping communities achieve that goal?

## Budgets vs. health

Public reaction to our findings reflects the growing concern about childhood obesity and the role that schools play when it comes to children's health. A *Eugene Register-Guard* editorial, for example, said, “[W]hen a short-term solution to a cash crisis clearly contributes to a health problem that has lifelong—and life-threatening—consequences for students, it's time to take a look elsewhere for money. The Eugene district should find a way to pay the \$160,000 that it would take to terminate its soft drink contracts in 2005.”

As our report reveals, local community control is at the mercy of soda companies when it comes to providing and promoting beverages in schools. This fact is also highlighted in the American Beverage Association's new school vending policy, released in August 2005. Although the voluntary policy emphasizes reducing the proportion of soft drinks stocked in school vending machines, it concludes, “Where school beverage contracts already exist, the policy would be implemented when the contract expires or earlier if both parties agree.” If companies sincerely want to help, they would permit parents and educators to make their own rules, rather than tie them to contracts that conflict with the interest of children's health.

We hope CHP's research catalyzes further dialogue about the role of soda contracts in schools, not only in Oregon but around the country. According to a recent Government Accountability Office report, nearly 75 percent of high schools, 65 percent of middle schools, and 30 percent of elementary schools had exclusive contracts in 2003–2004. As communities shape nutrition-related goals through their local wellness policies, evaluation of the contracts, their role and benefit to schools, and the flexibility of schools already in contracts, will be crucial points of discussion. ■

### Author

Nicola Pinson, JD, is a public health lawyer and author of the Community Health Partnership report *School Soda Contracts: A Sample Review of Contracts in Oregon Public Schools, 2004*. See the report at [www.communityhealthpartnership.org/publications/reports/reports.html](http://www.communityhealthpartnership.org/publications/reports/reports.html).

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# Community Connector Networks

Building on staff connections helps department reach minority communities.

Latricia Tillman

**H**urricane Katrina blew the lid off the simmering issues of racism and class in the United States. An ineffective response revealed the undeniable chasm between the people with power and resources and those without. This was a hard lesson to swallow, even for Portland, in Multnomah County, Oregon, which is a comfortable distance from the Gulf states. As Portland prepared to receive hurricane survivors, a more hopeful lesson emerged. Community members from African, Asian, and Hispanic American communities stepped forward to support Multnomah County efforts to make sure that evacuees received a culturally competent welcome and effective response. These community members, or “community connectors,” addressed the full range of needs caused or exacerbated by the hurricane. Having members of diverse communities in the command post during the Katrina response helped to link hurricane evacuees with culturally competent mental health providers, give timely information to diverse communities, and connect them with community-generated volunteer responses.

## What Is a Community Connector?

Community connectors are the people the community turns to for help with health questions and social supports. Community connectors:

- Get stopped in the grocery store and asked about health services
- Know that in an emergency situation people will ask them for help
- Have a position of leadership in their community
- Are members of volunteer, faith, or civic organizations
- Are community organizers or event planners
- Interact with a lot of people and people trust their opinions
- Share the information they get on the job with a broad social network

## Finding grassroots in agencies

The community connector concept emerged in summer 2003, when the health department began exploring communication strategies to reach communities who may not tune in to mainstream media or for whom English is a second language. The department had to look no further than its own employees who already had established relationships with immigrant or refugee communities and communities of color in Multnomah County, either through their work or personal lives. Project staff conducted focus groups with the employees. Because of limited

resources, project staff confined the scope of the initial inquiry to a small number of vulnerable communities. The goals of these discussions were to learn what employees thought about emergency preparedness, what roles they could play in an emergency, and what support they need to fulfill those roles.

The discussions revealed several important findings. First, numerous department employees already serve as community connectors, building bridges between the county and diverse communities. They either have relationships with community leaders or are themselves leaders in their community. Additionally, they have the skills and trust needed to serve as communicators in the event of an emergency or emerging disease.

The focus group discussions also showed that the department needed to build and sustain a formalized communication network with staff so that communication to specified communities can be well-coordinated in the event of an emergency or emerging disease.

Such a network of individuals could be mobilized for day-to-day health promotion activities as well as emergency events. By regularly activating community connectors for non-emergency issues, employees have the opportunity to practice collaborating with each other and their community, increasing the likelihood of successful communications in the event of an emergency or emerging disease.

In 2004, the department finalized a description of community connector roles and recruited, trained, and exercised the first group of connectors. After an initial training, community connectors assisted in the distribution of flu vaccine during the vaccine shortage in fall and winter 2004. They helped with planning to support hurricane survivors evacuated from the Gulf Coast in fall 2005. Community connectors also assist in translating and distributing pre-event materials at community events and identifying additional community outreach opportunities.

*Continued on page 24.*

# Lessons Learned Communicating Health Information to Special Populations

J. Christie Holmgren

**T**he terrible disasters in Indonesia and New Orleans in 2005 raise serious questions about ways to relay critical information to the people who need it during a disaster. Oregon is unlikely to face a hurricane, but violent storms and other emergencies do happen everywhere. Are public health staffs prepared to communicate with the many different kinds of people who live in Oregon? What do they need to do to get prepared?

## Oregon studies its communication plan

The Oregon Department of Human Services (DHS) Public Health Preparedness program conducted two research projects to identify potential barriers and effective communication methods and channels for a dozen special audiences. These populations include Native Americans, Hispanic Americans, Asian Americans, African Americans, non-English speaking people, rural populations, seniors, children, those with physical or mental disabilities, the homeless, and migrant farm workers.

In the first study, we contracted with a research firm to conduct interviews with 24 caseworkers and other professionals who routinely work with these populations. The firm also reviewed available census data and other research and literature on health communication and emergency preparedness for each identified group.

In its second study, DHS contracted with a research firm to conduct a statewide random telephone survey of 1,000 Oregonians to determine current knowledge, perceptions, and information needs related to bioterrorism and other public health emergencies. The results of these two studies were not particularly surprising. One key finding, for example, was the importance of including special communities in public health preparedness planning efforts. Although this is an obvious point, having the research to back it up helps to make the case for special communications efforts to local health departments whose resources and staff are already overstretched.

Another finding, for example, was that Spanish-speaking households in Oregon were generally less knowledgeable about, and less prepared for, public health emergencies than other Oregon households, despite reporting greater concerns about public health threats.

In conjunction with local health departments in Oregon, DHS is using the results of the two research projects to develop emergency communication plans and local planning guides and templates for populations that cannot be reached through mainstream channels.

## Key actions to improve communications

**Identify communities with special information needs and establish continued relationships with community leaders in advance of an emergency.** Local health departments should build a database of key contacts who are able and willing to pass information along during an emergency, and plan to partner with local organizations that serve targeted populations when delivering health or emergency messages. Ideal spokespersons for delivering risk messages are generally local community leaders of the targeted audience, who can help validate public health messages. These may include religious clergy, health care professionals, or caseworkers. Be aware that police, fire, and other uniformed officers may cause alarm to some populations.

**Conduct outreach to churches, schools, and social service groups to reach populations with special communication needs.** Many of these groups have phone trees or member directories and can assist in disseminating culturally appropriate risk messages in native languages.

**Establish relationships with organizations that provide services for people living in poverty,** who may have more pressing issues that prevent them from receiving or acting upon public health messages. We can advise the public, for example, to stock up on food and water in case of an influenza pandemic, but what advice should we give to people who are already hard pressed to find their next meal?

**Conduct a campaign to emphasize personal preparedness especially targeting elderly shut-ins or those with physical disabilities.** For example, people who might have difficulty receiving or responding to crucial health messages during an emergency can be encouraged to arrange beforehand with a neighbor or nearby relative to assist them in an emergency.

**Conduct outreach in other languages.** Distribute information through alternative language media, where available, to reach audiences whose first language is not English. Translate essential informational materials into the most common languages and dialects spoken in each county or region. Use interpreters for public meetings and telephone hotlines in areas where people do not speak English. And include low-literacy materials and pictographs. Literacy, as well as language, may be a barrier.

**Most importantly, understand the beliefs and practices of the target audiences.** Working consciously with the cultural expectations and understandings of target audiences is the key step to successful planning for emergency communications. ■

## Author

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Community connectors strengthen relationships between the health department and diverse communities. Their liaison role is crucial. Community connectors take the pulse of the community and serve as two-way communicators who provide important feedback about reactions,

## Expectations of Staff

Staff who become a part of the Community Connector Network are expected to:

- Make a one year commitment
- Attend training and skill-building activities
- Develop “Go Kits”
- Develop community assets maps and community-specific communication strategies
- Compile fact sheets for potential emergencies and emerging diseases
- Brainstorm, practice, and prioritize effective outreach strategies
- Be willing to be activated in real emergencies, as necessary

rumors, comments, or questions. This helps improve future health department communication, policies, and emergency response. Community connectors review public information messages for cultural appropriateness and ensure that risk communication and planned responses reach underserved communities through acceptable channels. They also help mobilize and engage communities in appropriate responses to emergencies.

Community connectors reap benefits, along with the communities they serve. Trainings inform their current work, as well as potential emergency response. The Community Connector Network will expand the community connectors’ relationships across cultural communities and strengthen their leverage in the health department and their effect on the department’s emergency preparedness team.

The health department invites all staff to join the Community Connector Network if they are part of an underserved community. Although not a competitive application, participants must complete a Profile Questionnaire, including after-hours contact information, and obtain their supervisor’s approval. The questionnaire asks staff about personal or family emergency plans, membership or affiliation with business, school, civic, or faith groups, community leaders with whom staff have relationships, roles held in professional or community organizations, community communication methods, languages, disaster experiences, and special skills.

## Next steps

Multnomah County Health Department plans to enhance training opportunities for community connectors to build skills to take on vital communication and community response roles in an emergency. Trainings will include first aid and CPR, community outreach and organizing, working effectively with local, culturally specific media, and community-based response planning in advance of an emergency.

Long-term plans focus on expanding the Community Connector Network beyond the health department to ensure that county staff with connections to other vulnerable communities are also trained and prepared to respond in emergency situations. County employees in other departments have relationships with aging and disabled populations, people with mental illness, homeless individuals, and a range of other vulnerable populations. Many have the outreach and communication skills needed to be community connectors and engage in community emergency preparedness planning.

*Redefining Readiness: Terrorism Planning Through the Eyes of the Public*, a national study funded by the W.K. Kellogg Foundation and released in September 2004, suggests that when individuals are given the opportunity to offer feedback and insight into the development of emergency plans, they will follow the plans in an emergency. Including community representatives in the planning process will increase the level of community confidence and cooperation with emergency response systems. Community involvement adds valuable elements to emergency preparedness and facilitates the equitable sharing of power, resources, and benefits to all communities. Emergency response planners know it is important to develop relationships with diverse communities in advance of a crisis. The Community Connector Network offers one model for developing those relationships. ■

## Author

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Web site: [www.nwcp.org/](http://www.nwcp.org/)

### Regional Contacts

#### State Departments of Health

Alaska: [www.hss.state.ak.us/dph/](http://www.hss.state.ak.us/dph/)

Idaho: [www2.state.id.us/dhw/](http://www2.state.id.us/dhw/)

Oregon: [www.oregon.gov/DHS/](http://www.oregon.gov/DHS/)

Montana: [www.dphhs.state.mt.us/](http://www.dphhs.state.mt.us/)

Washington: [www.doh.wa.gov/](http://www.doh.wa.gov/)

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## Dates to Note

**June 12–16, 2006.** Fifth Annual Montana Public Health Summer Institute. Great Falls, MT.  
Information: [JBenson-Rosston@mt.gov](mailto:JBenson-Rosston@mt.gov)

**June 21–24, 2006.** American Congress of Epidemiology. Seattle, WA.  
[www.epicongress2006.org](http://www.epicongress2006.org)

**August 3–4, 2006.** Tribal Preparedness Conference. Seattle, WA.  
Information: [Tacey Casey tcasey@npaihb.org](mailto:TaceyCasey@npaihb.org)

**August 21–25, 2006.** Summer Institute for Public Health Practice, Seattle, WA.  
Information: [www.nwcphp.org/si/](http://www.nwcphp.org/si/)

**October 16–18, 2006.** WSPHA Joint Health Conference. Yakima, WA.  
Information: [www.wspha.org](http://www.wspha.org)

**November 4–8, 2006.** APHA 134<sup>th</sup> Annual Meeting. Boston, MA.  
Information: [www.apha.org/meetings/](http://www.apha.org/meetings/)

**December 4–6, 2006.** Alaska Health Summit. Anchorage, AK.  
Information: [www.alaskapublichealth.org/summit.shtml](http://www.alaskapublichealth.org/summit.shtml)



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