



When public health professionals go to work, they help us all live healthier, happier lives.



Who Keeps Americans Healthy?

BY ELLEN PILIGIAN

A 17-year-old boy showed up at Mary's Center, a community health clinic in Washington, D.C., last spring to get an HIV test. Alis Marachelian, 29, the health educator at the clinic, could tell immediately by his bandanna and the three tattoos on his hand that he was in a gang.

Marachelian could have said, "You should get out of the gang. It's not good for you." Instead, she treated him on his own terms. "I met him for what he was," she says. "I welcomed him to bring his friends to get HIV tests. He brought every one, one by one. And he got them to come back to get physicals."

To Marachelian, that's as big a success as she can have.

Marachelian is among the 450,000 public health professionals in this country who work to keep people in the United States healthy. Public health focuses on preventing illness and injury among a whole population.

Public health issues change over the years. In the United States today, some of the top concerns are obesity, heart disease, diabetes, food safety, HIV/AIDS, and bioterrorism. Jobs in public health are diverse but fall into three main categories—research, delivery of health-care services, and education/administration.

It's exciting work, says Kathy Vincent of the Public Health Workforce Development Collaborative. "In public health, you never know exactly what you might be involved in. There's never a dull moment."

HEALTH EDUCATORS

An important part of public health is community health, which deals



Community health educator Alis Marachelian teaches pregnant women how to take good care of themselves.

directly with the people in one area. People who work in community health include the clinic nurse who gives you a flu vaccination and the inspector who makes sure the burger in your local restaurant is safe to eat.

Health educators teach people how to best take care of themselves to avoid illness and injury. Marachelian, who has a master's degree in public health, is a health educator and one of about 150 staffers at Mary's

Center. At the center, doctors, health educators, social workers, and nutritionists work to improve the lives of the multicultural, and often uninsured, population they serve.

Marachelian, an Armenian who was born in Iraq and grew up in Argentina, speaks three languages—Armenian, Spanish, and English—which helps her relate to her clients. Language is a way to connect with them, she says. "I also immigrated. I know nostalgia. I know what it's like to be displaced."

Many of the people who come to Mary's Center can't read, are having trouble adapting to a new culture, or are dealing with depression. Some are pregnant women and teens who've lost their jobs or dropped out of school. On a given day, Marachelian might administer HIV tests, teach kids about puberty, and educate a group of mothers about family planning and contraception. Her goal is to teach people to help themselves.

As a health educator, Marachelian helps people improve their physical

FOCUS:

Public Health Education

Education: Bachelor's degree (minimum); master's degree helpful

Salary range (after one year): \$22,000–\$57,750

The work: Teach people to make healthier lifestyle choices and to care for themselves

Sample job titles: Health educator, community health liaison, wellness consultant

SOURCE: ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH

—PAGE 6 LEFT: AMY ETRAPHO/PHOTODISC; RIGHT: JUSTIN SULLIVAN/GETTY IMAGES; PAGE 7: MARY'S CENTER FOR MATERNAL AND CHILD CARE



Many of Lorelei Claiborne's dental clinic patients had never been to a dentist before.

and emotional health. The biggest issues she sees among teens relate to body image and peer pressure. They can lead to other problems, like eating disorders or gang participation.

What does Marachelian enjoy most about her job? "I can bring in my humor, my professionalism, and my multiethnic background. I can use all of me."

HEALTH-CARE PROVIDERS

Community health-care providers include physicians, nurses, dentists, social workers, dietitians, nutritionists, and counselors who work in a public health setting, such as a community health center, nursing home, social service agency, or school.

Gary Wiltz, a physician at the Teche Action Clinic in Franklin, La., knows what it's like to be poor. During the Depression, his father had to quit school in ninth grade to go to work. Wiltz himself was born in a charity hospital in New Orleans. He attended medical school through a scholarship with the National Health Service Corps, which required payback: The new physician had to work three years in an area in need of medical care—rural Franklin in southern

Louisiana, a town so tiny that the phone book was only 10 pages long.

At first, Wiltz counted the days until his return to New Orleans. But he says the small-town experience changed his life. He never left. He's been at the clinic since 1982. "I realized I was called to do this kind of work," says Wiltz, 51. "There's a difference doing community medicine in a rural community. The people are so grateful."

Wiltz, who still makes occasional house calls, says as a health-care provider, his strongest foe is the "Louisiana lifestyle. Anything you can

FOCUS:

Public Health Practice

Education: Associate's through doctoral degree, depending on job

Salary range (after one year): \$27,450–\$68,000

The work: Provide physical or mental health care to a community or population

Sample job titles: Physician, dentist, nurse, dental hygienist, nutritionist, counselor

SOURCE: ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH

imagine, we can fry it," he says, adding that the health problems he sees in his community include obesity, high blood pressure, and diabetes.

He tells his patients not to smoke, to eat a healthful diet, and to exercise, but Wiltz says the goal is to get them to take charge of their own health. "The key is self-discipline and giving them the tools to help themselves." That's not easy. "It's difficult to get people to buy into prevention," he says. But Wiltz wouldn't be anywhere else. "In a small community, you worship and shop with people. You just become a part of it."

Two years ago, a woman arrived at Lorelei Claiborne's Detroit community dental clinic with a bad case of gum disease. "She was on the road to losing all her teeth," says Claiborne, 39, a graduate of Georgetown University's dental program. The woman had gone for years without proper dental care. Claiborne treated the disease and taught her patient how to prevent tooth loss. "Now she comes in like clockwork, every three months. Her teeth are spotless."

Many of Claiborne's patients are children. With them, she stresses the importance of dental care. She then sends them home with toothbrushes and toothpaste. The problems are "mostly [due to] a lack of education," she says, adding that she sees too many toddlers with tooth decay because parents don't clean their children's teeth. "I don't like to pull teeth on a little 3-year-old," she says of the front four teeth she can't always save. "It can be avoided." Gaps left behind can have long-term effects on self-esteem, chewing, and speech.

Working in an office filled with colorful dental-care posters, Claiborne has brushed up on her high school Spanish since working in the clinic and now uses it more than half the time, she says.

"I realize I'm making an impact on these families," she says. "They really appreciate what I'm doing for them."

THE 'DISEASE DETECTIVE'

In the summer of 2003, hundreds of people showed up at hospitals across five states with similar symptoms—diarrhea, fever, stomachaches. It was no coincidence: Something had caused a major outbreak of salmonella poisoning; salmonella is a bacterium that causes food poisoning, which can result in death.

It's just the kind of problem that Amy DuBois, a "disease detective" with the Centers for Disease Control and Prevention in Atlanta, works to solve. DuBois, 37, is an epidemiologist, a scientist who studies diseases among populations. Epidemiologists study how a disease began in an area,

how it spread, and how to overcome or avoid the problem in the future.

Her title—epidemic intelligence officer, Foodborne and Diarrheal Diseases Branch—often draws

'That's what I like about the job. It's very intellectual, yet we're catching frogs.'

AMY DuBOIS, EPIDEMIOLOGIST

giggles, but her work is far from funny. Like a SWAT team, DuBois and four other officers arrived on the scene last summer to manage and coordinate the salmonella investigation. "When there's a food [-related] outbreak, you have to be fast," says DuBois, who always keeps a suitcase packed, having traveled four months of her first year on the job. The officers spent two 20-hour days interviewing people who had become sick.

"We try to find out what's in common," says DuBois.

The salmonella culprit? Roma tomatoes from a deli chain. But before taking action against the supplier, DuBois and her team had to analyze their data. "It's part detective work and part geeky science," says DuBois. She must be sure of the cause before shutting down a produce plant. "That's people's jobs," she says. "You have to be able to defend [your findings]."

DuBois and the team figured out that the tomatoes carried a type of salmonella found on the skin of frogs. So DuBois was off again, this time with a net in hand to catch frogs on tomato farms. "That's what I like about the job," she says. "It's very intellectual, yet we're catching frogs." Luckily, the salmonella outbreak was contained, and no one else fell ill because of infected tomatoes.

Whether they are focused on the larger population or building a healthy population one person at a time, public health workers help people live longer and feel better. And that serves us all. **CW**

FOCUS:

Epidemiology

Education: Bachelor's through doctoral degree, depending on job

Salary range (after one year): \$25,450–\$90,825

The work: Study how a disease or disability starts and spreads among population groups

Sample job titles: epidemiologist, research manager, data analyst, bioterrorism coordinator

SOURCE: ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH



Amy DuBois (second from right) and her team of "disease detectives" are on the case.