

Substandard housing, coupled with poor public health access, tainted water supplies and inadequate sanitation, puts whole communities at risk.



A community of safe and decent Habitat houses in a valley in Guatemala's Zacapa region stands in stark contrast to the dilapidated shack in the foreground.

A safe and secure home provides more than just shelter from nature's harshest elements. It is also a bulwark against disease—not only for the family who dwells within it, but also for the community in which they live.

Advances in the prevention of disease and disability have, for years, been linked to better housing. Public health advocates have understood, as Florence Nightingale, the founder of modern nursing, concluded more than a century ago, that "the connection between the health and the dwelling of the population is one of the most important that exists."

"A comprehensive, coordinated approach to healthy homes will result in the greatest public health impact," Dr. Steven K. Galston, acting U.S. surgeon general, declared in his 2009 report to the nation. "Directing resources toward a single disease or condition rather than working to improve the overall housing environment is inefficient and does not address residents' health and safety risks holistically."

As improved housing reduces the risk of disease, the reverse is also true: Substandard

## **Chapter 1**

# Introduction

"The connection between the health and the dwelling of the population is one of the most important that exists."

—Florence Nightingale

1 U.S. Department of Health and Human Services, Office of the Surgeon General. "The Surgeon General's Call to Action To Promote Healthy Homes." 2009.



With an estimated population of more than 1 million people, Kibera, in Nairobi, Kenya, is the largest slum in all of Africa. housing, coupled with poor public health access, tainted water supplies and inadequate sanitation, puts whole communities at risk.

The results range from Chagas' disease in South America to malaria in Africa and dengue fever in Southeast Asia. Leaky roofs, mold and mildew in homes still lead to asthma and preventable respiratory conditions in the United States and Europe. Inadequate housing contributes to typhoid and dysentery in Tajikistan. The lack of secured housing threatens a generation of African children whose parents and family members have succumbed to HIV/AIDS.

Beyond infectious diseases, the lack of decent, affordable housing affects almost all heath issues in some way. Poor children who have chronic diseases that require ongoing health care may be hospitalized at much greater expense if family housing can't be upgraded. The stigma of a disease such as leprosy affects housing choices available to recovering patients. Smart house design and healthy houses combine to aid the disabled.

More and more health professionals recog-

nize the role housing must play in the day-today lives of the people they serve.

"We have to shift our focus to more than just medicine," says Ana Chavez, director of pediatrics at Hospital Exequiel Gonzáles Cortés in Santiago, Chile. "[A sick child] has a lot of needs. But if they don't have a safe and adequate environment to go home to, then what we are doing here at the hospital doesn't make any sense."

Continued success at providing adequate shelter for the poor will depend heavily on integrating new housing initiatives and public health practices to secure the well-being of communities where the poor live and interact. We have entered a critical era where public policy and finance can no longer view housing and health programs separately, each with its own missions and advocates.

Dr. Paul Farmer, chairman of Harvard Medical School's Department of Global Health and Social Medicine, has spent years treating and working with the impoverished in Haiti and other developing countries. The co-founder of Partners in Health, a worldwide health organization, has

seen firsthand the need for a unified approach.

"A meaningful discussion about health care in the developing world and the eradication of cyclical poverty must include the right to safe and sufficient housing," Farmer said.

That mission has become more daunting for a number of reasons, not the least of which is the worldwide economic recession and the understandable reluctance of governments to increase spending at a time when revenue is uncertain. For instance, Michel Sidibe, executive director of UNAIDS, the Joint United Nations Programme on HIV/AIDS, estimates that it will take \$27 billion in 2010 to keep up the fight against HIV/AIDS in developing nations hit hardest by the epidemic. But after a heartening start five years ago, contributions to the fund from participating nations will be only about \$14 billion this year, The New York Times reports.<sup>2</sup>

Even more problematic is that the global landscape of poverty has changed dramatically in recent years. A majority of the human population now lives in urban areas, with the rate of population growth in low-income countries four times faster than in high-income countries.<sup>3</sup> Cities in developing nations are surrounded by makeshift settlements plagued with poor sanitation and lack of housing. The spread of disease is exacerbated as the poor in rural villages, seeking jobs, migrate to ill-equipped, overwhelmed urban areas. Whatever the geography, the result of inadequate housing is the same: death and disability where it need not exist.

Acute respiratory diseases account for more than 2 million deaths a year among children younger than 5, according to the World Health Organization. These diseases are exacerbated by cigarette smoke, poor ventilation, dust mites, mold and fungus in the home. More than 1.7 million small children die every year from diarrheal diseases brought on by improper sanitation and lack of access to clean water.<sup>4</sup>

In Africa, HIV/AIDS still poses a profound challenge. One-third of all new cases of AIDS globally are in southern Africa; two-thirds of people in the world who live with the virus live there. In Swaziland, 25 percent of all adults have HIV—the highest infection rate in the world.<sup>5</sup> There are pockets of progress on the continent, where health and government organizations, working together, have shown that treatment and prevention may be able to slow the epidemic, but the money for some of these programs has begun to run out, and more work, and coordination, is needed.

Scientists and public health advocates—aided by decades of anecdotal evidence—have long recognized the link between poor health and poor housing. But hard, empirical evidence has been lacking. Separating the structural deficiencies within the dwelling itself from the way the people inside it live—their diet, consumption of alcohol, use of tobacco and other risky health behaviorshas always complicated research that attempts to make a direct link. But increasingly, scientists have observed that people in the developing world are facing many of the same health and housing issues that people in Europe and North America faced during industrialization. The patterns are similar, but the solutions employed now need further study, most experts agree.

#### Investing in long-term solutions

Still, we know some things work and must remain in our toolbox. Improved construction standards, including hard-surface floors and roofs, screened windows or pesticide-treated netting, and adequate space, should become routine. Similarly, access to clean water and a working, nonpolluting sanitation system should be requirements for new and renovated construction.

Beyond the dwelling itself, as the World Health Organization has noted, the mission of housing advocates must include the immediate "A meaningful discussion about health care in the developing world and the eradication of cyclical poverty must include the right to safe and sufficient housing."

—Dr. Paul Farmer

- 2 "At Front Lines, AIDS War is Falling apart," The New York Times, May 9, 2010.
- 3 Why Urban Health Matters, World Health Organization, 2010
- 4 WHO World Health Report, 2005.
- 5 Global Health Council, HIV/ AIDS (2008) UNAIDS Fact



6 WHO Fourth Ministerial Conference on Environment and Health, 2004

environment outside the house and more attention to the public health of the entire community.6 That will mean establishing strong, ongoing partnerships with local and national governments.

The setting and environment of housing is also key, emphasizes Dr. Howard Frumkin, the U.S. Centers for Disease Control and Prevention's director of climate change and public health, and an expert on environmental health and housing.

"An adequate house built in a substandard location doesn't solve much," he says. "It's all about context. To be effective, we must work on them together."

Aid organizations and individuals need to adopt a holistic approach that will integrate all social, health and housing needs of families and communities.

Such approaches could be as simple as providing "health educators" like those who routinely visit the homes of people in Honduras to inspect their dwellings for signs of the insects that spread Chagas' disease, or as legally and emotionally challenging as helping orphans and vulnerable children in Africa secure the property of their families and protect them from financial, physical and other forms of exploitation.

Government decision makers, health ministers and funding organizations whose efforts in the past have sheltered millions of people in need of help must now broaden their approach to build not just safe dwellings but also healthier communities.

As the U.S. surgeon general has concluded, "A house does not exist in isolation ... it is part of a larger community; the place from which people depart to work, play, study and interact with others; and the place to which they return."

**Chonlada Duongtip (from** 

left) and her sister Chonticha play with a friend in their new community of 82 houses, built during the 2009 Carter Work Project near Chiang Mai, **Thailand. The Duongtips** previously lived on a pig farm where the girls' father works. "The air here is cleaner; the children are healthier," said their mother, Kamnoi.



Mikhail Ponomarev (from right), his mother, Irina, and his sister, Tatiana, in their renovated living

### THE HEALTH-HOUSING CONNECTION

#### Kyrgyzstan: A 'full, healthy person'

This is Mikhail Ponomarev's goal in life: to be a "full, healthy person and to be strong."

Born with cerebral palsy in Bishkek, Kyrgyzstan, Ponomarev has added depression and anxiety to his diagnoses over the years. Still, the 22-year-old has worked hard toward realizing his dream: winning Paralympics medals in running and soccer, and friends wherever he goes. And with help from Habitat for Humanity Kyrgyzstan and its partners—the Open Society Institute and a local NGO, Family and Society—Ponomarev is now a step closer to his goal.

A few years ago, Mikhail and his mother, Irina, and his sister, Tatiana, struggled to deal with his condition, with little local support and meager financial means. Mikhail's father left the family soon after Mikhail was born. Irina held odd jobs, stretching her income to pay for food, clothes, transport and an education for Tatiana, who is studying to become a bookkeeper.

That left no money, though, for repairs on their old, two-bedroom house. When the family applied to partner with Habitat for Humanity Kyrgyzstan, the windows and doors were no match for the bitter cold of Bishkek winters, where the average daily temperature in January is 24.8 degrees Fahrenheit (-4 degrees Celsius). The heating system in the living room gave out completely, making the room uninhabitable in the winter. And, as is the case with many Kyrgyz households, there was no indoor toilet or bath.

In 2009, the Ponomarevs took part in a pilot project that aims to enable low-income people with mental disabilities to stay in a safe, decent home with their families and avoid dehumanizing institutions. The disabled also receive job training and in-home therapy, and other family members get therapy and training to help them cope with the specific illness and its difficulties.

Habitat for Humanity helped repair the Ponomarevs' house and installed an indoor bathroom. A state program provided Mikhail with a personal computer, and Family and Society arranged computer training. He spent the winter of 2009-10 in a warm living room, putting together slide shows on his computer, a skill he hopes to turn into income.

"Before, I didn't like to do anything," he said, but "when I'm busy with some job, I don't feel my illness."