Ways Community Design Can Contribute to Health

Dr. Howard Frumkin believes our current car-focused design strategies, with their resulting urban sprawl, have serious health penalties. Northwest Public Health interviewed Dr. Frumkin about the health effects of community design. And what public health workers can do to promote a healthy built environment.

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NPH: How does good or bad design of the built environment affect different groups of people?

Let’s take transportation as one example. In a very car-dependent world, people who don’t drive cars are disenfranchised. And that includes kids up to the age of 16 or 18 depending on the state, elderly people who can no longer drive, people with disabilities who can’t drive, and people who can’t afford cars. That’s something like 30 percent of the population according to the last census, maybe a bit more. If they don’t have good transportation available, they can’t get to the things they need to get to. If you don’t drive and need to get to a job, you’re at a real disadvantage. It puts you at a high risk of poverty, and poverty’s very bad for health.

Or, if you do try to get to a job that’s far away using an inadequate transportation system and you end up traveling for two hours at a time, then you don’t have time left in your day for doing things like being with your kids. Poor public transportation is also bad for kids because kids need increasing independence to explore their environments as they grow from being toddlers to being fifth or sixth graders to being teenagers.

It’s also very different in a lot of the European cities where you have higher levels of pedestrian activity, but you have much lower pedestrian fatality rates. So, it is very possible to build the infrastructures and inculcate attitudes in which cars and pedestrians coexist. But we haven’t done that. We’ve developed such a car-oriented mentality here and our infrastructure has followed suit that it is often dangerous for pedestrians to be out. That’s a design feature that we need to change.

One more thought on the elderly. Another land use issue is the concept of aging in place. This emerging concept holds that there’s a benefit to being able to stay in one’s community after one becomes an empty nester and then becomes elderly, because of the social links already established with resources like library, church, doctor’s office, and so on. Those are all very helpful to preserve a part of the quality of life of aging. However, as you age, if you’ve been living in a residential suburban subdivision, that option doesn’t exist. When you’re ready to downsize, you need to uproot and move to another part of the metro area with townhouses, condos, or smaller homes. That means that aging in place is engineered out of the equation and that interrupts the continuity across the lifespan of where people live. It’s not to say that everybody has to stay in the same place. But for those people who would like to, it’s a practical impossibility. Their contribution to society is removed, and their quality of life that may stem from staying in the same place is diminished.

NPH: How are residents of rural areas affected by problems of the built environment?

It’s a question that’s relatively understudied. A lot of the recent attention to the health implications of the built environment has focused on urban and suburban areas. What we do know is that physical activity is low in rural areas. People have to go long distances in rural areas, typically by car. For people who are actually living on the land, the ranchers in Wyoming or in Montana, for example, who really need to be out in the middle of nowhere, a lot of this built environment thinking isn’t that germane. But for people who are buying a second home, for example, in a rural area (as I understand it, that’s a fairly rapidly growing population in the WWAMI region), there are some ways we might encourage more physical activity. One approach is cluster development—creating hamlets within rural areas where homes and stores and schools are a little closer together. Hamlets can still offer people a lot of the benefits of rural living, that is, plenty of open land nearby, but put facilities closer together so that people are able to walk walking into their daily routine. Or you might find old rural towns, many of which are in decline, and rebuild those towns. This is the “fix it first” principle. Make them attractive places to live but incorporate some of the principles that we know are healthy: walkability, alternatives to car travel, and so on.

NPH: How does the tension between public good and private rights affect public health efforts to use the built environment to improve people’s health?

My own feeling, and I have the bias of a public health person, is that we need to strengthen...
the concept of the common good in this country. The common good has to do with things like having public places such as parks and sidewalks near where we live, work, and play. It has to do with creating a social context where people work together to solve common problems and achieve common goals. It has to do with mixing across racial and ethnic lines and across social class lines so we build a more cohesive society. And it has to do with jointly addressing issues like environmental scarcity, which will become big problems in coming years, so that we can solve them in equitable and inclusive ways. That's how we strengthen our democracy.

If you start with this assumption, then you approach the question of land use and transportation by asking a pretty broad question: What land use practices would be best for most of us? I think you would get an answer that involves balancing relatively dense development in some places with preservation of green spaces in other places so that everybody has access to green space. Green space is good for health, directly and indirectly. What kind of transportation would be good for all of us? I think we'd get to a mix of transportation options, so that those who want to drive can drive, those who want to walk or bike can do so, and those who want to use transit can do so as well. And that extends way beyond individual, private interests to a notion that the overall shape of the built environment and the design strategies that we use can serve the common good, not only maximizing health but maximizing other social goals.

These are not easy questions to answer; they're very complicated. We need to encourage a lot of non-adversarial, nonpartisan public discussion about what kind of land use and transportation decisions are best for the most of us in the long run, not best for a few of us in the short term.

One of the great opportunities here is we all want good places in which to live and work and raise our kids. If we sit down together across the political spectrum and talk about what makes a good place, I think there's a lot more consensus and common ground than the belligerent political discourse of today would lead you to believe. NPH: What are some practical things public health practitioners can do to achieve safe, healthy, attractive, sustainable, economically sound places, whether in cities, suburbs, or in rural places?

You can think through the answers based on the core functions of public health. For one thing, public health has a traditional convening function to get dialogue going, using health as a catalyst. They can bring together those who work on zoning and land use decisions, those who do property development, transportation planning and engineering, and school boards.

Provide epidemiologic data to point out the public health implications of these decisions. If you go to a school board meeting, as a public health person, in which a decision is being made about where to site a new school and you show data on the rising prevalence of obesity in children and point out that it's very helpful to put schools in places to which kids can walk or bike, that can be compelling. Data really are an important driver, and public health people not only have the moral high ground of talking about health, but they have the special propensity to back up what they say with data.

A third arena for public health people to get involved in is advocacy and policy making. It may mean getting onto bodies like zoning boards or going to public forums like the county commission or the city council or writing pieces in the local newspapers, all to emphasize the notion that we ought to be building healthy places and to provide concrete solutions for local authorities and members of the public on how to do that.

Another function is training and educating others. So going to groups of planners and traffic engineers and other professional groups and educating them on the health perspective. I tell them they are public health officials just like my more direct colleagues are. What they're doing is an upstream determinant of health.

And finally, mobilizing the community, arousing interest in constituencies, especially by looking at inequities. Use these issues to empower communities and include them in public decision making. Help them engage in the issues and advocate for what would be best for their health.

A century ago, public health officials were all about the built environment. A lot of the early built environment governance came out of public health people; parks, for example, were built out of health considerations. Obviously, water treatment facilities and the protection of source water were driven by public health. Well, for the last 30 or 40 years, we've separated the environmental side from the health side, and the design and the urban planning side is entirely different still. It's not second nature for most of us in public health to engage issues of planning, land use, and transportation. But there's a lot of good evidence now that it really has an impact on public health.

Resources