In public health, upstream approaches seek the causes of disease and disability and address problems through prevention rather than treatment. The upstream metaphor goes like this: People are drowning in a river. Rescue workers are pulling them out but soon realize that no matter how hard they work, there are always more people floating downstream. Public health advocates decide to take a walk upstream, to see why people are falling into the river in the first place.

During the 20th century the average life span in the United States increased by almost 30 years. However, less than 20% of the increased life span can be attributed to medical care, while public health efforts deserve the credit for the remaining 80%. Nearly all these gains are due to programs and policies that address social and environmental factors that influence our health.

In the last 100 years deaths related to motor vehicle accidents, infectious disease, and workplace injuries all declined remarkably because of efforts to improve our surroundings. Progress in sanitation, school-required childhood vaccination programs, and government mandates to build vehicles with safety belts and shatter-resistant windshields all contributed to this sharp decline in mortality and increase in life expectancy. Mandating safer conditions in workplaces alone resulted in a 40% reduction in occupational deaths.

However, funders of public health initiatives (mostly governments and non-profit organizations) now focus primarily on educating individuals. But having accurate information does not guarantee that people will make healthy choices. People make healthy or unhealthy choices as a response to the conditions where they work, live and play. Research shows that altering the social or physical environment through policy works. Adding speed bumps to a neighborhood, for example, reduces accidents more than educating drivers to drive slower.

In order for educational efforts to succeed, we must first create community conditions that support educational messages. In one low-income neighborhood in Oakland, California a group of public health folks designed an educational program to increase fruit and vegetable consumption. When they realized that this neighborhood had no grocery stores or farmers’ markets, they shelved the educational program and worked with local government officials who convinced Safeway to open up a large grocery store. Other examples of public health programs that modify our environment include regulating the number of liquor outlets in a neighborhood, limiting the availability of “junk” food and soda in schools, creating urban design that encourages walking and biking, and fluoridating water supplies to prevent cavities. Other policy interventions that have worked on the national level include adding vitamin D to milk and requiring new cars to have air bags.

In public health, educational campaigns continue to trump policymaking because they are less controversial and conflict less with business interests. The fight against breast cancer highlights this conflict. Health education approaches, such as Pink Ribbon campaigns, Race for the Cure, and screening programs, are important. However, these efforts alone will never prevent breast cancer. While breast cancer awareness campaigns increase screening rates they also benefit companies by increasing sales of treatment medications. These corporations usually do not fund research or support policies that address the underlying causes.

In fact, a large number of corporations such as those involved with tobacco, alcohol, and snack foods, actively oppose prevention efforts. Many of these corporations use the media to sway public opinion and, most effectively, use campaign contributions and lobbying to resist good public health policies.

The benefits of upstream health policies that stand up to industry lobbying can be enormous, both in terms of economic savings and improved quality of life. The recent 60¢ per pack increase in cigarette taxes will decrease cigarette consumption by 7%, resulting in an annual economic savings of over $100 million in medical costs and lost productivity.

The record of public health indicates that we can reduce the financial and quality-of-life costs of disease and disability by altering our community’s social and physical environments. Oregon has a tradition of being a pioneer in innovative approaches to public health issues in areas such as the environment, citizen access to government, and medical care. Public health advocates need to utilize the ingenuity of citizens and policymakers to create an environment that allows people to make healthy choices for themselves and their communities.

Raquel Bournhonesque and Craig Mosbaek are members of Upstream Public Health, a new non-profit organization promoting the health of Oregonians by establishing effective public health policies.

“Y ou can predict the public health problems of tomorrow by examining the public policies we pass today.”

— Larry Wallack, Director of the School of Community Health at Portland State University