Hi, my name is Deboki Chakravarti, I'm a science educator, and today we're going to talk about the social determinants of health.

Imagine a situation where two identical twins are raised in different settings.

Let's say Twin A grows up in a suburban area surrounded by parks, and Twin B grows up in an urban neighborhood next to a major highway.

Every day, while Twin A gets fresh air, Twin B is breathing in a small amount of car fumes.

Which might not seem like a big deal, but in the long run it could mean a higher risk of

developing asthma, allergies and pneumonia – because air pollution can irritate our airways and make our lungs vulnerable to infection.

Sure, Twin B might have access to other resources that help offset those risk factors. Maybe

they live near some clean, green spaces that they can run around in after school.

Or maybe Twin A breathes secondhand smoke every night because their caregivers love cigars.

So even though they share the same DNA, and we'd expect them to have the same health outcomes, there are factors outside of them that affect their health.

The conditions that people live, work and play in are what we call the social determinants of

health, and they can have an even more profound impact on our well-being than genetics alone.

Now, there are a lot of social determinants out there, but

the U.S. Department of Health and

Human Services lists five main factors.

First, there's our access to quality health care, which can be impacted by where we live.

Like, on average, people in rural areas in the U.S. spend 63% more time getting to the nearest

hospital than people in urban areas. Which makes it harder to get to important doctor's visits.

For instance, pregnant people in rural counties are often less likely to get regular checkups,

which can put them at risk for complications – like giving birth too early.

And children born even a few weeks too early have higher odds of developing a learning

disability. Which can make it harder to excel in school, since our society often doesn't

adequately accommodate people with disabilities.

So a single social determinant of health, like access to health care, can end up influencing other social determinants of health, like our access to quality education.

And this can have a profound impact on health outcomes. For instance, kids that grow up in communities with under-funded schools are less likely to graduate high school than kids from

wealthier communities. And not having a high school diploma is associated with a lack of health insurance and lower paying jobs.

That brings us to our next determinant of health -- economic stability. Many people with

lower-paying jobs end up working multiple gigs, or pulling double shifts. And a lack of free time is a common reason why people don't get regular screenings for diseases like cancer.

Next, there's our built environment, or the man-made spaces where we live and work. People living in low-income neighborhoods without easy access to grocery stores are often forced to rely on fast food or convenience stores for meals. And having a diet with little nutritional value is one of the top risk factors for chronic diseases like diabetes.

Finally, there's our social environment, which includes things like the laws which govern our lives, and how we interact with the people around us. Data shows that if people experience discrimination in a doctor's office because of their race or sexuality, they'll often delay their follow-up appointments. And since diagnosing diseases early allows doctors to treat them as soon as possible, delaying treatment can lead to worse outcomes.

Thankfully, public health professionals are dedicated to addressing all five of these social determinants head-on.

This could mean expanding the scope of governmentfunded health insurance programs like Medicaid, giving more people access to health care. Or it could mean allocating more money to public schools. One study that looked at thousands of schools across the U.S. found that increasing school funding by 10% raised the odds that low-income students would finish high school. Which could translate to higher wages and better access to healthy resources.

But we don't have to be public health experts to get involved and look out for our communities.

Something as simple as grabbing groceries for sick neighbors or driving a friend to the doctor can strengthen our social environment, and help reduce the negative impacts of other determinants.

So the social determinants of health all have a serious impact on our long-term well-being. But by identifying and addressing them at everything from the personal to the policy level, we can help ensure that people live their healthiest lives.

Thanks for watching! This video is part of a series created by Complexly and the American

Public Health Association to shed a little light on the important work that public health does. To learn more, visit apha.org.

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