

How laws affect your health (Activity 4 Epidemiology)

Beginning in the 1950s, American orthopedic surgeon and noted sports car fanatic Dr. John States was working as a physician at the Watkins Glen International Speedway in New York state.

While working the job, Dr. States witnessed countless high-speed crashes.

But he noticed that even though the racecars were going much faster than cars on the highway, the drivers were actually more likely to walk away from crashes without serious injury compared to drivers on the open road.

Dr. States credited this to safety precautions like seatbelts and helmets.

Back then, there were few safe driving laws in place, and driving-related deaths and injuries in the U.S. were skyrocketing. Most cars didn't even come with seat belts! Dr. States knew that a change was needed.

Over the next several decades, he conducted research on severe crashes, and even designed and patented his very own seatbelt. He became one of the country's leading advocates of seatbelts and challenged policymakers in New York to improve automotive safety.

Finally, in 1984, New York became the first U.S. state to mandate the use of seat belts—thanks largely to Dr. States' decades of work.

Today, 49 states have adopted similar seat belt laws, and seat belt use has continued to grow—from 11% in 1981 to around 90% in 2020, saving almost 15,000 lives in 2017 alone, while cutting the risk of serious injury by 50%. Looking back, we might call this an almost perfect, fairytale-ending to a story about how public health and policy can come together to improve and save lives. But it's not always so simple in the moment.

If you've been paying attention since about 2020, you're no doubt familiar with the tension that can come with crafting health policy.

When public health crises arise, the people who make policies can often find themselves in the difficult position of having to balance some people's freedom to do what they want with other people's right to be healthy.

Understanding Health & Policy

When we talk about health and policy, we're talking about policies that change human behaviors or their environments to improve overall health and wellbeing.

That's health policy. It sounds simple enough, but sometimes it can get complicated.

Like, consider the issue of smoking in indoor public settings. This impacts the health of the smoker, but also the health of the non-smoking people around them, because they can wind up inhaling the same potentially harmful chemicals that that smoker is inhaling voluntarily.

Governments have struggled for a long time with how to tackle this issue, but it wasn't until 2004 that Ireland became the first country in the world to ban smoking in all indoor workplaces.

These smoking bans, as well as seat belt laws like the ones recommended by Dr. States, are an example of a mandate, or a legal order that tells people or companies how to act.

Again, assuming that you're living in a world that was affected by the COVID-19 pandemic, the idea of a mandate may be familiar to you.

But policies don't—and often can't—just tell people to be healthier.

So, policymakers need a few different tools in their health policy toolbox.

Some of these tools are policies that aim to educate people.

Take healthy eating, for instance. There's no all-knowing frozen-pizza-bagel police who are going to come knocking if we've had one pizza bagel too many.

Which today, as a non-American, I learned is actually just a bagel with pizza toppings on it.

But flip that pizza bagel box over and we see a list of nutrition facts that are there to remind us exactly what we are—and aren't—putting into our bodies.

In the U.S., those nutrition facts are there because of the Nutrition Labeling and Education Act, which was signed in 1990 and basically says that people have a right to know what they're putting into their bodies.

This is why even the most eye-catching, mouth-watering, stomach-grumbling food packaging out there still needs to clearly feature those oh-so-recognizable nutrition facts.

This can include other information, too. Like in some countries, there are warnings on the front of products that contain excessive levels of things like sugar or sodium.

Vaccination Policies

Another complicated – and heavily debated but known to be good – issue that policy makers must grapple with is vaccination, or boosting the body's defenses against a disease with a vaccine.

Consider measles, a highly infectious disease most commonly associated with health complications among children. In 1912, measles became common enough in the U.S. that it was named a nationally notifiable disease, which is a disease that healthcare providers must report to local health departments.

Measles continued to be so common that, by 1963, nearly every child was expected to get measles by the time they were 15, and up to 4 million people in the U.S. were infected every year. Measles was also responsible for up to 500 deaths and 48,000 hospitalizations each year.

However, policies requiring childhood vaccinations over the last several decades have meant that an increasing number of people have become vaccinated against measles, improving overall childhood health.

And in the year 2000, measles was declared eliminated from the U.S.– thanks largely to the push from government and public health authorities to get kids vaccinated.

For the record, "eliminated" doesn't mean that there hasn't been a single case of measles—just that there hasn't been an observed spread of the disease that lasted longer than a year.

Different countries approach vaccination policy in different ways.

In a 2019 analysis of over 140 countries, 89 were found to have some form of nationwide mandatory vaccine policy for children. And in 20 countries, including the U.S., vaccination was only mandatory for entry into school. Meanwhile, 33 countries recommended childhood vaccinations but didn't mandate them.

Policies also affect our health in ways that aren't quite as obvious as giving our immune systems a boost – like by environmental regulations.

How Policies Save Lives

For example, in 1970, with the help of health experts, politicians, and factory workers,

the U.S. passed the Clean Air Act, which regulated the emissions of hazardous pollutants from things like vehicles and factories. From 1970 until 2020, the combined emissions of six common air pollutants was found to have decreased by 78%. This has had strong health impacts by preventing premature deaths and other negative health outcomes