

As a primary care physician I took care of thousands of people with asthma attacks, chronic lung disease, and other medical conditions, by prescribing multiple medications. People usually felt better for a while but they almost always got sick again. These were diseases that are sometimes caused by, and often worsened, by breathing polluted air.

Now we have ways to clean up the air we breathe, and we know that means we can have better health throughout our population.

The two main pollutants that harm health are soot, called particulates by scientists, and smog, called ground-level ozone. World-wide the main causes of soot and smog are coal and gas power plants, cars, and buses, and trucks. In Delaware the biggest share of the problem comes from vehicles.

We know that smog inflames the lungs, and can cause wheezing, coughing, and shortness of breath. Soot passes through the lungs into the blood stream, and is carried to the heart, brain, kidneys, pancreas, and even to the placentas of pregnant women. It has been implicated in causing or worsening angina, dementia, learning difficulties, diabetes, and pregnancy complications.

We even know that the higher the level of soot in the air the greater chance that someone with Covid would die from the disease. In the United States that came to an 18% increased likelihood of death. Overall that meant, nationally, over 200,000 people died because of excessive particulates, people who could have survived if our air were cleaner, if cars, buses, trucks, and power plants didn't pollute our air.

Even beyond Covid, 4% of higher income White Americans, and 7% of White lower income Americans, and 7% of Black Americans of any income level, die prematurely due to air pollution.

Delaware does NOT have healthy air. And most of the problem is from vehicles that travel our local roads. The ALA most recently graded New Castle County with an F for smog, Sussex a C, and Kent a B. In New Castle County there are at least 11 days a year when the air is unhealthy for anyone with asthma, any lung disease, heart disease, who works outdoors, or is older. And in Delaware 15,000 Children, and 77,000 Adults, have asthma, and 70,000 Adults have heart disease.

The GOOD news is that by cleaning up our air pollution the health risks decrease almost immediately. The climate warming from carbon emissions is mostly related to global pollution, and will take years of decreased emissions to lessen. But smog and soot are mostly produced by regional power plants that supply our electricity and by vehicles on our local roads. It's been shown that electric vehicles quickly result in cleaner air. That means fewer asthma attacks, fewer days of school and work missed. It also means millions of dollars less in health care costs for medications, doctor and emergency department visits, and hospitalizations. In fact, the magnitude of the damage from air pollution is about the same as that of health problems from smoking. Just as those problems have lessened as smoking has dropped from 45% to less than 20% of adults, so will health problems from pollution fall.

There are plenty of other statistics we can share, but what's most important is knowing that there is not just a financial cost, but also a human cost, to breathing polluted air. And Delaware does not have clean air, and most of that is because of fossil fuel power plants, and most especially, the vehicles on our roads. And, that with the encouragement of zero emission vehicles through ACC 2 we can quickly bring better air quality and better health to tens of thousands of our neighbors in Delaware.