Three Biggest Threats to Public Health

When the industrial revolution spread to the United States from Britain, it is doubtful that anyone at the time could have foreseen the consequences, both good and bad, that occurred over 100 years later as a result. The explosion of technology encouraged yet more technology, and the ingenuity that led to inventions like electricity, steam power, photography and the telegraph, along with the spread of education necessary to making new genius flourish, led us to where we Westerners and Americans are today: hundreds of millions of people connected and informed, every material desire and need met by more products and technologies than we can count.

It's an incredible world to live in, but as the 20th century staggered on under the burden of two world wars, an immense economic disaster, the paranoia of international nuclear animosity and the re-growth of wealth so sharp it seemed only a matter of time before history repeated itself, we welcomed in the new century with the knowledge that with great privilege comes greater risk, often at dear cost to our national health.

Obesity

In 2010 an expert panel at the advisory committee for the Dietary Guidelines for America called obesity "the single greatest threat to public health this century." According to the panel, about two thirds of Americans are now overweight or obese, the effects of which are felt in myriad ways, like the strain on health care costs, the rise of diabetes in children and prominence of heart disease. And as of 2010, the epidemic was getting worse, with the number of states whose obese population totaled over 30 percent rising from nine to 12 – in just one year.

Yet what can be done to control a situation that is rapidly spiraling out of control? Policymakers and others who have made their careers in public health have been outspoken about the need of lifestyle turn-around in Americans. They call for more physical activity, less food consumption, less consumption of sugars and solid fats, more of a plant-based diet, an improvement in nutrition literacy and cooking skills, greater availability of fresh, locally-grown produce and a change in what has been called the "food environment." According to the director of nutrition policy at the Center of Science in the Public Interest, "Basic nutrition advice hasn't changed much over the…years…what has changed is it is harder and harder to eat well."

Drinking Water Infrastructure

If you're a water expert or microbiologist then you know the situation is dire. Yet most Americans are not, and they do not, therefore, realize that one of the greatest threats to public health is out of sight – but not out of mind for some very concerned scientists. The problem is that the nation's drinking water infrastructure – underground pipes that are old and rusting – is badly in need of updating.

Unless these pipes get the attention they need, we will exist under threat of chemical or microbial disease outbreak – or a pipe burst, which could in effect limit, even halt clean drinking water (one of the basic human needs) to a population accustomed to turning a knob

and having a glass of cool aqua. What's more, leaks in the infrastructure already contribute to 1.7 trillion gallons of wasted water – and this at a time when water, the most precious natural resource on the planet, is facing a supply shortage.

It could cost governments billions of dollars to update the pipes, but the fact remains: it must be done.

Climate Change

A hot-button topic for years, climate change could have incredibly dire consequences for Americans. You don't need a master's degree in public health to understand the dangers of heat waves, storm run-off and asthma-inducing fog – all side effects of climate change.

Because hurting the balance in the environment, particularly in regards to American climate, can lead to disastrous public dangers: widespread drought and heavier, more frequent flooding. What's worse, researchers were surprised to discover that the damaging weather patterns could arrive – and stay put – at least a decade earlier than they had anticipated. Idealistic though it may sound, we can each help by doing something as simple as not driving one day per week, which would lower fuel emissions released into the atmosphere, slow the intensity of climate change and save both lives and money.