



By: Jeffrey Frankel

Turning back the clock on public health to 1900



US President William McKinley died in 1901 from gunshot wounds that modern medicine could easily have treated.

Though X-rays had been invented, they were not yet widely available, so McKinley's medical team were unable to find one of the assassin's bullets.

And the antibiotics that could have prevented the onset of sepsis – McKinley's ultimate cause of death – would not be discovered for another few decades.

When US President Donald Trump talks about making America great again, this is the period to which he is referring.

McKinley was a "strong believer in tariffs," Trump has **remarked**, and under his leadership, the United States was "probably the wealthiest" it has been at any point in its history. As usual, however, Trump gets both the history and the economics wrong.

For starters, the McKinley Tariff was **passed** in 1890, when its namesake was a representative.

During his presidency, which began seven years later, McKinley turned against tariffs. Moreover, although it was the height of the Gilded Age, all was not golden for Americans.

Real **incomes** were one-seventh of their size today, and extreme inequality prevailed. Something like 1% of American households had indoor toilets in 1890, compared to 99% today.

Needless to say, health outcomes have improved dramatically since McKinley's day. US child mortality has **plummeted** from 23.9% in 1890 to 0.7% today, and average life expectancy at birth has **soared** from 47 to 77 years.

We owe this progress largely to improvements in sanitation and advances in science and medicine.

The impact of vaccination

Consider the impact of vaccination. Since Max Theiler, a South African immigrant, developed a yellow-fever vaccine in 1937, the disease has been eradicated in the US and many other countries.

After Pearl Kendrick and Grace Eldering developed their pertussis (whooping cough) vaccine in 1939, deaths from that disease declined sharply.

Since Jonas Salk **developed** his polio vaccine in 1955, followed by the Polish immigrant Albert Sabin's oral vaccine in 1960, the disease has been eradicated in all but a handful of countries.

Measles is another example here. It was once a leading cause of child mortality in the US. In 2000, it was declared eliminated in the US and sharply suppressed in the rest of the world, thanks to a vaccine introduced in 1963.

Vaccines against smallpox, typhoid fever, diphtheria, tetanus, hepatitis B, and the flu have saved countless lives.

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And then there is the COVID-19 vaccine – a true triumph of modern science. Building on mRNA **breakthroughs**, the vaccines were developed in under a year, and they **averted** an estimated 14-20 million deaths in their first 12 months.

This achievement was made possible, in part, by the work of immigrants: Hungarian-born Katalin Karikó, Lebanese-born Nour Afeyan, and French-born Stéphane Bancel at Moderna, and Indian-born Nita Patel, who led Novavax's vaccine team.

Taken together, vaccines have **saved** at least 154 million lives over the last half-century, and they continue to save an estimated 4-5 million lives per year. And this is to say nothing of the

myriad other life-saving advances in diagnostics and treatment that have emerged in the 124 years since McKinley was shot.

In the name of “America First”

Trump is now threatening to unravel this progress. His administration has **slashed** foreign aid and balked at international cooperation in the name of “America First.”

And now he has **fired** the director of the Centers for Disease Control because she refused to endorse Secretary of Health and Human Services Robert F. Kennedy, Jr.’s anti-vaccine policies.

But by enabling the resurgence of diseases that have been brought under control, and hampering progress in tackling others, Trump is indirectly jeopardizing Americans’ health.

Trump’s war on universities dovetails with his war on immigrants

Trump is also mounting direct attacks on their health at home. His administration has all but declared war on universities, hospitals, public-health agencies, and other non-profit science-based institutions.

Funding for vital medical research – including grants from the National Institutes of Health – has been sharply reduced or eliminated.

Trump’s war on universities dovetails with his war on immigrants. As students return to university campuses to begin the new academic year, many desks are empty, because the Trump administration has blocked their would-be occupants from entering the US.

Trump is also seeking to make it harder for foreigners to remain in the US after receiving their degrees, despite the long list of scientific breakthroughs to which immigrants have contributed. This is not a brain drain, but a brain squeeze.

Trust in science

The COVID-19 pandemic was supposed to serve as a wake-up call, making the value of scientific expertise, medical research, and public-health preparedness impossible to ignore, let alone deny.

But the opposite has happened in the US: trust in science, government, and public institutions has plumbed new lows, owing partly to the MAGA movement’s promotion of health misinformation, conspiracy theories, and mistrust of “the establishment.”



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Now, vaccine skepticism is surging, with a growing number of Americans doubting the safety and efficacy not only of the COVID-19 vaccine, but also of the established vaccines that have saved millions of children’s lives and added decades to our lifespans over the last century.

Vaccine misinformation of the kind peddled by Kennedy has already contributed to a measles **resurgence**.

One might say that the Trump administration is attempting to turn back the clock on public health to 1900. The question is why.

Applying Occam’s razor – the principle that the simplest explanation is the most likely – one can only conclude that the objective and the effect are the same: to increase the number of people suffering and dying from

contagious disease. Now there's a conspiracy theory for the Trump faithful to sink their paranoia into!

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