

February 26, 2019

The Honorable Michael Burgess M.D.
United States House of Representatives
2161 Rayburn House Office Building
Washington, DC 20515

Congressman Burgess,

Thank you for your inquiry regarding the recent outbreaks of vaccine-preventable diseases, including measles, in the United States. My name is Peter Hotez. I am a pediatrician-scientist at Texas Children's Hospital where I lead a team of scientists developing new vaccines for poverty related neglected diseases. Our vaccines for neglected tropical diseases are being developed in the non-profit sector because they target diseases of the world's poorest people. I am also the founding dean of the National School of Tropical Medicine at Baylor College of Medicine, a unique school devoted exclusively to emerging and neglected diseases.

In addition to my role as a scientist and educator, I am also a husband and parent of four adult sons and daughters, including Rachel who has autism and intellectual disabilities. I've just written a new book entitled, *Vaccines Did Not Cause Rachel's Autism* (Johns Hopkins University Press) which reports on the massive evidence involving studies of over one million children showing that vaccines do not cause autism, and also how autism begins in early fetal development well before children ever receive vaccines. I also talk about my family and Rachel's struggle as an adult woman with autism as she seeks employment and acceptance into the community.

I wrote *Vaccines* in response to my concerns that the antivaccine or antivax movement has grown in strength and size and is now affecting public health. Measles is one of the most serious human virus infections, causing permanent injury such as deafness or neurological injury, or even death. As recently as a few decades ago measles ranked among the leading killer of children globally, including the United States, but the number of deaths have recently decreased due to widespread global vaccination campaigns led by Gavi the Vaccine Alliance, UNICEF, and WHO. Unfortunately these public health gains have recently become reversed in Europe (where there were 80,000 measles cases in 2018) and in some US states in 2019 – Washington, Oregon, and Texas – due to an aggressive antivaccine lobby. My goal in the writing the book is to counter the phony misinformation from the antivax movement claiming that vaccines cause autism or other conditions.

In the book I report how the modern day antivaccine movement began in the late 1990s as a fringe group, but it has now expanded into its own media empire. Today, the antivax movement dominates the internet with almost 500 misinformation websites, which are amplified on Facebook and other forms of social media. The antivax lobby also produces books and documentaries filled with false information. And there is a political arm to it with antivaccine political action committees (PACs) in multiple states.

In 2018 I reported in the Public Library of Science (PLOS Medicine) how because of the antivaccine exemptions, non-medical vaccine exemptions (NMVEs) are rising in many of the 18 states that allow these exemptions for reasons of philosophical and personal beliefs. As a result there are now US counties where a high percentage of kids are not being vaccinated, including several (such as Clark County WA and Multnomah OR) where we're seeing measles outbreaks. Measles is typically the first break through

infection we see as vaccine coverage declines due to its high transmissibility. I consider measles a “biomarker” of low vaccine coverage and a biomarker of antivax activities.

I believe that left unchecked we’ll continue to see measles outbreaks and that while measles was eliminated in the US in 2000, now it’s coming back, so that soon measles will become the “new normal” in antivax America.

I believe that there are 3 major advocacy and policy steps needed to halt or slow the antivax movement and the return of measles and other vaccine-preventable diseases to America:

1. We need to begin disassembling or dismantling the antivax media empire. To do so will require public private partnerships between the US federal agencies devoted to public health and the major enablers of the antivax movement, including Facebook, Twitter, Google, Yahoo, and Amazon.
2. We need to close the non-medical exemptions in the 18 states that allow them for reasons of philosophical and personal belief. This action was instrumental in restoring vaccine coverage rates in California after their terrible measles outbreak in 2014-15.
3. Finally we need to restore a robust system of pro-vaccine advocacy in the US and work with the major federal agencies committed to public health for that purpose.

These three steps will not be easy, but they are doable and if we start now, I feel within 18 months we can go a long way towards restoring vaccine confidence and ensure that measles will be consigned to American history.

Sincerely,

Peter Hotez, M.D., Ph.D.