

EDWARD J. MARKEY  
MASSACHUSETTS

COMMITTEES:

ENVIRONMENT AND PUBLIC WORKS

FOREIGN RELATIONS

RANKING MEMBER:

SUBCOMMITTEE ON EAST ASIA, THE PACIFIC,  
AND INTERNATIONAL CYBERSECURITY POLICY

COMMERCE, SCIENCE, AND TRANSPORTATION

RANKING MEMBER:

SUBCOMMITTEE ON  
SPACE, SCIENCE, AND COMPETITIVENESS

SMALL BUSINESS AND ENTREPRENEURSHIP

CHAIRMAN:

U.S. SENATE CLIMATE CHANGE TASK FORCE

## United States Senate

January 19, 2018

SUITE SD-255  
DIRKSEN BUILDING  
WASHINGTON, DC 20510-2107  
202-224-2742

975 JFK FEDERAL BUILDING  
15 NEW SUDBURY STREET  
BOSTON, MA 02203  
617-565-8519

222 MILLIKEN BOULEVARD, SUITE 312  
FALL RIVER, MA 02721  
508-677-0523

1550 MAIN STREET, 4TH FLOOR  
SPRINGFIELD, MA 01103  
413-785-4610

Anthony S. Fauci, M.D.  
Director  
National Institute of Allergy and Infectious Diseases  
5601 Fishers Lane, MSC 9806  
Bethesda, MD 20892

Dear Dr. Fauci:

I write to inquire about efforts within the National Institute of Allergy and Infectious Diseases (NIAID) to improve our influenza vaccination program. With a mild influenza season killing 12,000 Americans per year – and up to 56,000 during a more severe season<sup>1</sup> – it is imperative that we diligently explore ways in which we can improve the production and design of the influenza vaccine.

Predicting the strain and virulence of influenza every season is challenging, given the high mutability and infectious nature of the virus. This, coupled with our current production and manufacturing processes, has historically led to the creation of a vaccine that ranges from 10 to 60 percent in effectiveness each year.<sup>2</sup> Experts from across the country are working to improve our understanding of why our influenza vaccine is traditionally ineffective, and to identify solutions that will yield a more successful influenza vaccine,<sup>2</sup> and ultimately, save lives.

I understand that you are interested in developing a universal influenza vaccine, which would protect Americans against a number of potential strains and would not require annual revaccination.<sup>3</sup> I agree that NIAID should be pursuing ambitious, disruptive goals like this, while concurrently working toward advancements that will strengthen our current influenza vaccination program and help save lives.

Please provide me with an update within 14 business days on your goals for improving the production and design of the influenza vaccine and the efforts NIAID is undertaking to achieve these goals. In your response, please outline the scientific and resource challenges to achieving an improved vaccine and cite ways in which Congress can work with NIAID to expedite these initiatives.

<sup>1</sup> <https://www.cdc.gov/flu/about/disease/2015-16.htm>

<sup>2</sup> <http://www.sciencemag.org/news/2017/09/why-flu-vaccines-so-often-fail>

<sup>3</sup> <https://www.niaid.nih.gov/diseases-conditions/universal-influenza-vaccine-research>

I look forward to working with you to improve the success of our influenza vaccination program.  
Thank you for your attention to this request.

Sincerely,

A handwritten signature in blue ink that reads "Edward J. Markey". The signature is fluid and cursive, with the first letters of each word being capitalized and prominent.

Edward J. Markey  
United States Senator