From: (b) (6)

Sent: Sat, 7 Mar 2020 09:07:07 -0500 **To:** Auchincloss, Hugh (NIH/NIAID) [E]

Subject: Fwd: Pneumococcus vaccination in relation to coronavirus infection.

Pls respond

Sent from my iPhone

Begin forwarded message:

From: Lars Nielsen (6) (6) > **Date:** March 6, 2020 at 8:07:37 PM EST

To: "Fauci, Anthony (NIH/NIAID) [E]" (b) (6)

Subject: Pneumococcus vaccination in relation to coronavirus infection.

Dear Anthony Fauci,

As I understand the fatal cases of covid-19 develop pneumonia after several days of symptoms of the acute viral infection.

In this way the present conoravirus infection is very like our present and previous fatal influenza virus infections. In the 1918 pandemic many if not most of the fatal cases were caused by bacterial superinfection with hemolytic streptococci and pneumococci. The former is rather seldom now, but the pneumococcal infections are common.

Should we advice persons over >65 y as well as people with chronic diseases with increased risk of fatal coronavirus diseases to be vaccinated against pneumococci now?

My best regards and thank you for your significant contribution to inflammatory medicine and infections.

Lars P. Nielsen, M.D.

Specialist in Medical Microbiology and Virology

Former head of the Danish National Influenza Laboratory.