

Washington, D.C.
April 15, 2020 (revised, May 1)

Robert R. Redfield, MD
Director
Centers for Disease Control and Prevention
Atlanta, Georgia

Dear Dr. Redfield:

As an historian and medical writer concerned about the coronavirus pandemic, I am writing to you to urge that CDC recommend gargling to all Americans. Like social distancing, handwashing, and face masks, gargling is a simple approach that could become standard practice for epidemics of respiratory infections.

Japanese researchers have conducted many studies that show gargling to be protective against respiratory infections. Although they are careful to note that no exact mechanism has been identified, nor do they know why the protective effect extends for hours between gargling sessions, their studies demonstrate that various gargles—in particular, povidine-iodine, green tea extracts, and hypertonic saline—have effectiveness in treating the throat, a major site of replication of pathogens. In the COVID-19 pandemic, even though some virus initially penetrates directly into the lungs, a significant amount remains in the throat where it replicates to very high numbers (for instance, a peak at $7.8 \times 100,000,000$ RNA copies per throat swab day 4) (Wölfel R et al. Nature 2020;Apr 1). Many of these replicates descend to the lungs and elsewhere.

During the Spanish Flu pandemic of 1918-19, Japanese public health authorities made three main recommendations—face masks, gargling, and inoculations. They prepared a gargle formula and distributed it to the people. While other factors played a role, the recent Japanese studies should lead us to suspect that gargling was one cause of Japan's low mortality rate.

Now, in the coronavirus pandemic, in spite of mistakes, Japan has far fewer confirmed cases and deaths than the US. Again, while other factors are involved, the results of the Japanese studies should lead us to suspect that gargling by tens of millions of Japanese has played a significant role.

Gargling can assist in the effort to restart economies after lockdowns. Meanwhile, billions of people in developing countries can protect themselves with this simple, low-cost intervention—if public health authorities recommend it to them. A CDC recommendation to gargle could create a ripple effect in other countries that would reduce the spread of coronavirus among poor people worldwide.

Therefore, I call upon CDC to recommend that all Americans gargle during the pandemic, perhaps for 15 seconds 3 to 5 times a day, with a suitable gargle such as povidine-iodine, green tea extracts, or hypertonic saline.

Sincerely,

Kenneth J. Dillon