

# Colgate Laboratory Tests Show Toothpaste and Mouthwash Neutralize 99.9% of the Virus That Causes COVID-19

## *Clinical Research Program Underway To Validate Potential of Oral Health Products to Slow Spread of the Virus*

Laboratory studies show that toothpastes containing zinc or stannous and mouthwash formulas with cetylpyridinium chloride (CPC) neutralize the virus that causes COVID-19 by 99.9 percent. The studies are part of a Colgate research program that includes clinical studies among infected people to assess the efficacy of oral care products in reducing the amount of the virus in the mouth, potentially slowing the transmission of the COVID-19 virus.

In the laboratory studies -- the first to include toothpaste -- Colgate Total and Meridol toothpastes neutralized 99.9% of the virus after two minutes of contact. Colgate Plax and Colgate Total mouthwashes were similarly effective after 30 seconds. The studies, completed in October, were conducted in partnership with Rutgers New Jersey Medical School's (NJMS) Public Health Research Institute and Regional Biosafety Laboratories.

The results suggest that some toothpastes and mouthwashes may help reduce the spread of SARS-CoV-2, the virus that causes COVID-19, by temporarily reducing the amount of virus in the mouth. The virus spreads through respiratory droplets or small particles produced when an infected person coughs, sneezes, sings, talks, or breathes, according to the U.S. Centers for Disease Control and Prevention.

"We're at the early stages of our clinical investigations, but our preliminary laboratory and clinical results are very promising," said Dr. Maria Ryan, Colgate's Chief Clinical Officer. "While brushing and rinsing are not a treatment or a way to fully protect an individual from infection, they may help to reduce transmission and slow the spread of the virus, supplementing the benefit we get from wearing masks, social distancing and frequent hand washing."

Said Dr. David Alland, Chief of Infectious Diseases and Director of the Center for COVID-19 Response and Pandemic Preparedness, who led the Rutgers NJMS study along with colleagues Drs. Pradeep Kumar and Riccardo Russo: "Given that saliva can contain amounts of virus that are comparable to that found in the nose and throat, it seems likely that SARS-CoV-2 virus originating in the mouth contributes to disease transmission, especially in persons with asymptomatic COVID-19, who are not coughing. This suggests that reducing virus in the mouth could help prevent transmission during the time that oral care products are active."

Concurrent to the laboratory study, Colgate sponsored a clinical study involving some 50 hospitalized subjects with COVID-19. This study demonstrated the ability of Colgate Total (with CPC and zinc), Colgate Peroxyl, and Colgate PerioGard mouthwashes to substantially reduce the amount of the virus in the mouth temporarily. The researchers plan to share their findings in December. Additional Colgate-supported clinical research studies on toothpaste and mouthwashes are in early stages at Rutgers, the Albert Einstein Institute in Sao Paulo, Brazil, and at the University of North Carolina at Chapel Hill Adams School of Dentistry, with some 260 people with COVID-19 participating in these studies.

"Colgate is collaborating with numerous investigators throughout the globe to conduct clinical research to explore the potential of oral care products to reduce oral viral loads as a risk reduction strategy," Dr. Ryan said. "We think oral care has a role to play in fighting the global pandemic, alongside other preventive measures."

Said Dr. Mark Wolff, Morton Amsterdam Dean of Penn Dental Medicine at the University of Pennsylvania: "With this pandemic, the more we understand about the virus, the more effective we can be in fighting it, so I am excited to see the impressive research program Colgate has undertaken. We need to continue to take the precautions recommended by health authorities, and with these studies we may demonstrate an additional way to address the transmission of disease among people in close contact, particularly in dental practice. That would be an important advance."

As the world's #1 trusted dental expert, Colgate is committed to leading in science and to ensuring that its products address health challenges and meet consumers' needs. For more information about the effects of oral hygiene on overall health and additional insights on mask mouth and other topics, visit [www.colgate.com](http://www.colgate.com).

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