

## Staying Safe from Covid-19

Infectious-disease physicians and scientists have told us to wash our hands vigorously for 20 seconds after any possible exposure to Covid-19. However, we now know that transmission of this airborne pathogen is almost exclusively via inhalation. It has also been determined that the virus first establishes itself inside our mouth and nose. Over some period of time, it invades the healthy cells there – replicating itself before migrating further down the respiratory system to do its damage, resulting in symptoms several days after exposure. So why not wash out the inside of our mouth and nose? Get rid of the virus before it can make us sick.

In the lab, it has been discovered there are substances that inactivate over 99% of the virus. Listerine Original Antiseptic Mouthwash is one of those. We could rinse and gargle with Listerine or some other alcohol-based mouthwash, to destroy and remove the coronavirus from our mouth and throat. A 1% solution of J&J Baby Shampoo has also been shown to destroy over 99% of the virus. We could wash out the inside of our nose with that. But it's uncertain how the detergent might affect mucus membrane, albeit unlikely because it is so diluted. Nonetheless, it is probably wiser and totally safe to use a saline spray. This will not inactivate the virus, but it will facilitate wiping it out of the nose. It appears to be inarguable that throat-and-nose cleaning (TANC) will be a far more effective preventive action than hand washing.

There should certainly be a clinical trial to evaluate this prophylactic strategy. But that will take time. And time is of the essence in a pandemic. It seems sensible for all of us now, whenever we think we might possibly have been exposed to SARS-CoV-2, to perform TANC. That only takes a minute or two. Even if every viral particle is not inactivated and/or removed, the viral load will be substantially lowered. Reducing the amount of virus will minimize the probability of getting sick and, if the disease does happen to take hold, it will not be as severe as it would have been otherwise. TANC can be performed within hours after potential exposure or even at the end of the day. Let's deploy all the weapons in our arsenal in this existential War against Covid-19.

### HERE IS THE EVIDENCE FOR PERFORMING TANC:

1. Scientists at the University of North Carolina have discovered how the novel coronavirus moves through our respiratory system to ultimately do its damage to our lungs: <https://www.unc.edu/posts/2020/06/08/researchers-map-how-coronavirus-infection-travels-through-cells-of-nasal-cavity-and-respiratory-tract/>. UNC determined that *"SARS-CoV-2 — the coronavirus that causes COVID-19 — infects the nasal cavity to a great degree by replicating specific cell types, and infects and replicates progressively less well in cells lower down the respiratory tract, including in the lungs. [The findings](#) suggest the virus tends to become firmly established first in the nasal cavity. Then, in some cases, the virus is aspirated into the lungs where it may cause more serious disease, including potentially fatal pneumonia."*
2. Researchers at Penn State College of Medicine, in an article published in the *Journal of Medical Virology* <https://onlinelibrary.wiley.com/doi/10.1002/jmv.26514>, determined that some substances substantially reduced the amount of an infectious coronavirus (HCoV-229e) used as a surrogate for SARS-CoV-2. For example: *"With contact times of 1 and 2 min, the 1% baby shampoo solution was able to inactivate more than 99% and more than 99.9% or more of the virus, respectively."* Also: *"Even at the lowest contact time of 30 s [Listerine Antiseptic Mouthwash] inactivated greater than 99.99% of HCoV."*
3. An article published in *Nature*, <https://www.nature.com/articles/s41598-018-37703-3>, found that hypertonic saline nasal irrigation and gargling significantly reduced the duration of the common cold, including colds caused by coronavirus, if begun within 48 hours after symptom onset.