

Hand Sanitizers for use in the SARS-CoV2 virus pandemic

The virus causing COVID-19 transmits through two main methods, droplets and either direct or indirect contact. Hands are a vital contributor for this transmission. Our hands can get contaminated with our respiratory secretions, contributing to transmitting the disease to others. We can also infect ourselves with SARS-CoV2 by touching our nose, mouth and eyes with our hands while they are contaminated from an outside source.

Hand hygiene is used to prevent both spread from us to others and from others to us.

Hand hygiene is done by

- washing hands with soap and water : Washing hands with soap and water is preferred where practically possible as there are other advantages such as removing any chemical contaminant, removal of other micro-organisms such as spore forming bacteria.
- using an alcohol based hand sanitizer, with an alcohol percentage between 60% - 80% (most commonly 70%). Some facts to remember when using hand sanitizers
 - to be used when washing with soap and water is not possible (eg: when travelling using public transport)
 - Frequent use of alcohol leads to dehydration of hands.
 - Agents that prevent this are used in hand rub formulations.
 - Alcohol based hand sanitization is not effective when hands are dirty.

Role of other disinfectants to 'sanitize' hands

While there are other numerous disinfectants (agents that can be used on non-living surfaces to disinfect them), they are currently not recommended for hand sanitization for different reasons.

- They may not be effective against viruses
- They could be toxic and irritate the skin. In addition, residues of the product could remain and contribute to toxicity
- Contamination of the product (if not properly prepared and packaged could get contaminated with bacteria
- Many 'new' hand sanitizers are being advertised and sold in shops in Sri Lanka as being effective against SARS-CoV2.
 - Check what they contain
 - Check their claims to be effective against SARS-CoV2 – (although they may contain products which are effective against viruses in the laboratory, check whether studies have been done on the antiviral activity of the final product which is being sold and on safety for human use)

Many experimental results cannot be directly translated to effectiveness in application.

Very importantly, users may think their hands are clean, while their hands are actually not clean.

Current recommendations

Wash hands with soap and water or use a solution containing at least 60% of alcohol.

We urge the general public not to get carried away with novel products advertised on social media and media.

Always request to know the composition of the product that is used and check if authorization from National Medicines Regulatory Authority is available.

References

Who-interim-recommendation-on-obligatory-hand-hygiene-against-transmission-of-covid-19. Available from <https://www.who.int/docs/default-source/inaugural-who-partners-forum/who-interim-recommendation-on-obligatory-hand-hygiene-against-transmission-of-covid-19.pdf>

CDC - Show Me the Science – When & How to Use Hand Sanitizer in Community Settings. Available from <https://www.cdc.gov/handwashing/show-me-the-science-hand-sanitizer.html>