

WHO-recommended disinfectants are effective against novel coronavirus

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When used correctly, both alcohol-based hand disinfectants recommended by the World Health Organization (WHO) are effective against the novel coronavirus Sars-Cov-2, as confirmed by an international research team headed by Professor Stephanie Pfänder from the Department of Molecular and Medical Virology at Ruhr-Universität Bochum (RUB). The journal *Emerging Infectious Diseases* published the relevant article in its online edition on 13 April 2020.

30 seconds for disinfection

The researchers exposed Sars-Cov-2 viruses for 30 seconds to the WHO-

recommended disinfectant formulations. "This time frame was chosen based on recommendations for hand disinfectants," says Stephanie Pfänder.

Subsequently, the team tested the viruses in cell culture assays and analysed how many viruses remained infectious. "We showed that both WHO-recommended formulations sufficiently inactivate the virus after 30 seconds," as Stephanie Pfänder sums up the results. Plus, this does not merely apply to the WHO solutions; rather, their main components, the alcohols ethanol and isopropanol, also showed adequate inactivation of the virus.

WHO-recommended formulations

The [disinfectant I](#) recommended by the WHO consists of 80 volume percent ethanol, 1.45 volume percent glycerine and 0.125 volume percent hydrogen peroxide. Disinfectant II consists of 75 volume percent isopropanol, 1.45 volume percent glycerine and 0.125 [volume](#) percent hydrogen peroxide.

German Pharmacies allowed to sell WHO-II formulation

Following the amendments to the German Drug Law by the German government on Wednesday, March 4, 2020, that will remain in effect for six months, the formulation WHO II, which is based on isopropanol, has been approved for this period. As a result, pharmacies are permitted to produce and sell this formulation in order to alleviate the current shortage of disinfectants.

More information: Annika Kratzel et al. Inactivation of Severe Acute Respiratory Syndrome Coronavirus 2 by WHO-Recommended Hand

Rub Formulations and Alcohols, *Emerging Infectious Diseases* (2020).
[DOI: 10.3201/eid2607.200915](https://doi.org/10.3201/eid2607.200915)

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