

When personal protective equipment (PPE) is in short supply attempts can be made to decontaminate and reuse N95's. **Using Time as a decontamination strategy is an emergency crisis strategy with unknown efficacy and safety.** Decontamination with Time may be appropriate for used, non-soiled filtering facepiece respirators (FFRs) and is based on the idea that SARS-CoV-2 slowly becomes inactive over time on surfaces.

WHEN NO OTHER CHOICE IS PRESENT, institutions who use Time as a decontamination strategy should consider:

- Storage of used FFRs **at room temperature** (22°C, 40-65% humidity) **for at least seven days** is expected to significantly reduce risk of exposure to SARS-CoV-2.^{1,2}
- Factors such as the initial viral load, N95 FFR material^{1,2}, storage temperature² and humidity³ all affect the amount of time needed to reduce the risk of infection.
- Treat respirators held in paper bags for any length of time as still likely contaminated with SARS-CoV-2 as well as contaminated with bacteria, mold, and other pathogens.
- Expect guidance on this strategy to evolve as more research is completed.

Please note that the US Centers for Disease Control and Prevention (CDC) suggests a decontamination strategy of five days of time before reuse of FFRs.⁴ However, more recent research (April 2020) suggests that SARS-CoV-2 may endure longer than 72 hours, where 'a detectable level of infectious virus could still be present on the outer layer of a surgical mask on day 7'.² The study showed that one out of 1,000 viral particles survived for this seven-day time period.² Based on the more recent study, seven days is recommended as the **minimum** number of days used for this strategy.

The CDC guidance on PPE decontamination is updated periodically and can be found at:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>

¹van Doremalen et al., (3/17/2020) DOI: <https://doi.org/10.1056/NEJMc2004973>

²Chin et al., (4/2/2020) DOI: [https://doi.org/10.1016/S2666-5247\(20\)30003-3](https://doi.org/10.1016/S2666-5247(20)30003-3)

³ Lin and Marr (2020) DOI: <https://doi.org/10.1021/acs.est.9b04959>

⁴ Specific CDC guidance on decontamination and reuse can be found here:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>