Best practice is to use new N95s. Decontamination does not solve the PPE shortage crisis, and is an emergency practice to be considered during the COVID-19 pandemic. Efficacy and safety of N95 decontamination has not been fully characterized.

**COVID N95 DECON & REUSE**

**HEAT RELATED CONCERNS**

### UNPROVEN METHODS

- **Autoclave**
  - Standard autoclave cycle (121°C steam, 15 min) inactivates SARS-CoV-2 on N95
  - Autoclave is an accepted means of sterilization in hospital setting
  - Many pleated N95 models (3M 1870, 1804S, 1862+, 9211; Aearo 1054S) pass quantitative fit test for 5 autoclave cycles
  - Common molded N95 models (3M 1860, 8210, 8000) known to fail after 1–2 cycles of autoclave treatment
  - There are few studies on N95 filtration efficiency after autoclave treatment
  - Different N95 models may respond differently to autoclave cycle

- **Microwave-Generated Steam**
  - 2 minutes above water reservoir in 1250 W microwave inactivates H1N1 and H5N1 flu (non-coronavirus) on N95
  - No data on MGS inactivation of coronaviruses on N95
  - Most common N95 models shown to withstand at least one 2-min MGS treatment, several models withstand up to 3 cycles
  - Possibility of N95 damage beyond three cycles
  - Few studies on N95 durability under more than one repeated decontamination cycle
  - Some N95 models destroyed by 2-min microwave without steam
  - Metal components of N95 may present sparking hazard

### UNSUITABLE METHODS

- **Home Oven**
  - Bringing potentially biohazardous materials home is highly dangerous and carries significant contamination risk

**SUPPORTING RESEARCH**


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