

# STUDY CONFIRMS N95 respirators are for single use only!

## Reuse of N95 respirators endangers nurses, health care workers, and their patients

Donning (putting on) and doffing (taking off) the same N95 can:

- ▶ **Increase the risk** of exposure to nurses from contamination on the N95.
- ▶ **Degrade the N95** and disrupt the fit, which undermines respiratory protection.

**A new study confirms:** N95s donned more times and worn for more hours were more likely to fail fit-tests – meaning these N95s did not seal to the wearers' faces and failed to provide the minimum level of protection.

**About the study:** Researchers from South Korea examined fit-test results among a group of female infection control practitioners after reuse and extended use scenarios using OSHA's standard protocols. During each donning, participants performed work activities, including sitting at a desk, taking phone calls, talking, and walking around wards.

### Results of Repeatedly Donning an N95

#### For One-Hour Periods (Reuse)

After donning **2 times, 60% failed** fit test

After donning **3 times, 70% failed** fit test

After donning **4 times, 90% failed** fit test

#### Three-Hour Periods (Extended Use)

After donning **1 time, 50% failed** fit test

After donning **2 times, 70% failed** fit test

*Source: Jung, J., J. Kim, et al., "Fit-failure rate associated with simulated reuse and extended use of N95 respirators assessed by a quantitative fit test," Infection Control & Hospital Epidemiology, Jan 25, 2021.*

**What the study tells us:** Extended use and reuse of N95s led to high rates of fit-test failure. N95s were designed for single use only!

**Comprehensive workplace protections remain critical for nurse and patient safety from Covid-19, including:**

- ▶ Screening every patient for Covid-19, including testing, symptoms, and recent exposure history
- ▶ Creating dedicated units for Covid-19 patients with no mixed assignments
- ▶ Ventilation, including isolating confirmed and suspected Covid-19 patients in airborne infection isolation rooms and improving ventilation in other areas to decrease recirculation of viral particles.
- ▶ Testing for all health care workers, at least weekly and after an exposure
- ▶ Safe staffing
- ▶ Personal protective equipment (PPE) for every encounter with a Covid-19 patient or patient who may have Covid-19:
  - » Optimal PPE includes a powered air-purifying respirator, coveralls that are impervious to viral penetration and that incorporate head and shoe coverings, and medical grade gloves
  - » Minimum PPE is a single-use N95 respirator, eye protection, isolation gown that is fluid impermeable or resistant, and medical-grade gloves.

**OUR PATIENTS. OUR UNION. OUR VOICE.**

View more information about nurse and health care worker safety and Covid-19 at [www.nationalnursesunited.org/covid-19](http://www.nationalnursesunited.org/covid-19)



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