

COVID-19 Information on Decontaminating Facepiece Respirators

Protecting Against COVID-19

According to guidelines from the Centers for Disease Control and Prevention (CDC), **decontamination is not approved as standard of care** for disposable filtering facepiece respirators (FFRs), such as N95 masks, used to protect healthcare personnel from the spread of COVID-19. However, the agency says this may need to be considered to ensure availability during a pandemic. The CDC offers extensive guidance at its [Decontamination and Reuse of Filtering Facepiece Respirators](#) web page.

Some information to note:

- The CDC says one option is to issue five masks to each healthcare worker who may care for patients with suspected or confirmed COVID-19. The healthcare worker will wear one respirator each day and store it in a breathable paper bag at the end of each shift, leaving five days between use of each mask to potentially allow the virus to die. Masks still should be handled as if they are contaminated.
- Limited research is available on decontamination, but potential methods showing promise include ultraviolet germicidal irradiation, vaporous hydrogen peroxide, and moist heat. Steam treatment and liquid hydrogen peroxide show promise with some limitations.
- Decontamination using autoclaves, dry heat, alcohol, microwave irradiation, or soap and water is not recommended because they cause significant filter degradation. Bleach is not recommended because it causes filter degradation and creates an odor rendering masks unsuitable for use. Disinfectant wipes also may alter performance.
- Battelle Memorial Institute, a science and technology development firm based in Columbus, has developed the Critical Care Decontamination System to decontaminate N95 respirator masks, allowing them to be used up to 20 times. The technology uses concentrated, vapor phase hydrogen peroxide, exposing masks to an adequate concentration level over an adequate period of time. The use of this system has been authorized by the U.S. Food and Drug Administration. **Check the [FDA website](#) for other systems authorized for use.**
- A recent study by Stanford University researchers has gained attention following reports that it indicates that N95 masks can be decontaminated in a home oven. However, the study used

bacteria different from the virus that causes COVID-19 and involved only one type of fabric used for N95 masks. The method is **not** approved by the U.S. National Institute for Occupational Safety and Health (NIOSH), and study authors stress: “Our reports do not advocate for people to disinfect masks for reuse by heat treatment in home ovens.”



The CDC and NIOSH offer [guidance](#) on the extended use and limited reuse of N95 masks in healthcare settings.

For additional information, visit coronavirus.ohio.gov.

For answers to your COVID-19 questions, call 1-833-4-ASK-ODH (1-833-427-5634).

If you or a loved one are experiencing anxiety related to the coronavirus pandemic, help is available. Call the Disaster Distress Helpline at 1-800-985-5990 (1-800-846-8517 TTY); connect with a trained counselor through the Ohio Crisis Text Line by texting the keyword “4HOPE” to 741 741; or call the Ohio Department of Mental Health and Addiction Services help line at 1-877-275-6364 to find resources in your community.

CORONAVIRUS DISEASE 2019 **Ohio**

Department
of Health

Protect yourself and others from
COVID-19 by taking these precautions.

PREVENTION

For additional information call 1-833-4-ASK-ODH or visit coronavirus.ohio.gov.



STAY HOME



PRACTICE
SOCIAL
DISTANCING



GET ADEQUATE SLEEP
AND EAT WELL-
BALANCED
MEALS



WASH HANDS OFTEN
WITH WATER AND SOAP
(20SECONDS
OR LONGER)



DRY HANDS WITH
A CLEAN TOWEL
OR AIR DRY
YOUR HANDS



COVER YOUR MOUTH
WITH A TISSUE OR
SLEEVE WHEN
COUGHING OR SNEEZING



AVOID TOUCHING
YOUR EYES, NOSE,
OR MOUTH WITH
UNWASHED HANDS
OR AFTER
TOUCHING SURFACES



CLEAN AND DISINFECT
"HIGH-TOUCH"
SURFACES OFTEN



CALL BEFORE VISITING
YOUR DOCTOR



PRACTICE GOOD
HYGIENE HABITS

For more information, visit: coronavirus.ohio.gov