

## **DOSH Hazard Alert**

Helping employers prevent workplace injuries

### **April 2020**

# Ethylene Oxide Sterilization Systems must not be used to sterilize masks and respirators

The COVID-19 pandemic has led to a shortage of personal protective equipment (PPE). Employers have been seeking to clean, sterilize and reuse disposable PPE and respirators. Ethylene oxide (EtO) is used in healthcare and other industries to sterilize a wide range of equipment.

The use of EtO sterilization systems has **not** been approved by Federal OSHA for emergency use to sterilize filtering facepiece respirators. The Centers for Disease Control & Prevention (CDC) states that "Ethylene oxide is **not recommended** as a crisis strategy [for cleaning filtering face piece respirators] as it may be harmful to the wearer." There is evidence and concern that sterilizing PPE with EtO will result in off-gassing of EtO during use into the breathing zone of the wearer.

Per the EPA, ethylene oxide is a carcinogen and potentially teratogenic. CDC states "inhalation of ethylene oxide has been linked to neurologic dysfunction and may cause other harmful effects to the wearer." Prolonged exposure to ethylene oxide can hurt eyes and lungs, harm the brain and nervous system, and potentially cause lymphomas, leukemia, and breast cancer. This extremely hazardous toxic chemical poses a severe risk to human health.

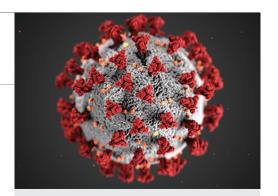
Hospitals and clinics are required to use their ethylene oxide (EtO) sterilizer systems for their intended and manufacturer-approved purposes. EtO sterilizer systems must NOT be used to sterilize masks, respirators, PPE or items worn by humans.

Healthcare and First Responders: There is FDA approved, state endorsed and federally funded decontamination of N95s available at the State Emergency Operations Center (SEOC) at Camp Murray. FEMA will pay for disinfecting the N95s.

For information, contact: 614-327-2608 or solutions@battelle.org

CDC Guidance on optimizing N95 respirator supplies: www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html

FDA Emergency Use Authorizations regarding PPE for COVID-19: www.fda.gov/medical-devices/emergency-situations-medical-devices/emergency-use-authorizations#covid19ppe











### Other resources you can access

To find an **electronic** copy of this Hazard Alert, go to **www.Lni.wa.gov/safety-health/preventing-injuries-illnesses/hazardalerts**.

L&I Safety web page: www.Lni.wa.gov/safety-health.

For other related rules, contact your local L&I office or visit the safety rules webpage: www.Lni.wa.gov/SafetyRules.

To find the nearest L&I office, visit www.Lni.wa.gov/Offices.

#### How can I get help from Labor & Industries?

The Department of Labor & Industries provides consultations, training, and technical assistance at no cost to employers. Call today to schedule a free confidential consultation or go to www.Lni.wa.gov/SafetyConsultants for more information.

You may also call 1-800-423-7233 or visit a local L&I office and ask for the Consultation Manager.

This alert was developed by L&I's Division of Occupational Safety and Health (DOSH) to alert employers, labor groups, and employees to potential hazards associated with work activities. **This is not a rule and creates no new legal obligations.** The information provided includes suggested guidance on how to avoid workplace hazards and describes relevant mandatory safety and health rules. DOSH recommends you also check the related rules for additional requirements.