

DOI COVID-19 Ventilation Checklist

This document is intended for use in DOI owned and operated buildings. It’s primarily use is use Centers for Disease Control and Prevention Guidance on Ventilation in Buildings to evaluate and document potential modifications to Heating, Ventilation, Air-Condition (HAVC) systems.

Ventilation system upgrades or improvements or other steps can increase the delivery of clean air and dilute potential contaminants.

Completed by: _____

Date: _____

Intervention Considerations	Facility Notes
<ul style="list-style-type: none"> <input type="checkbox"/> Obtain consultation from building managers and experienced Heating, Ventilation and Air Conditioning (HVAC) professionals when considering changes to the HVAC systems and equipment 	
<p>Ventilation improvements may include some or all of these considerations:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Increase outdoor air ventilation (using caution in highly polluted areas) <input type="checkbox"/> Increase fresh outdoor air by opening windows and doors. <i>NOTE: Do not open windows and doors if doing so poses a safety or health risk to occupants in the building.</i> <input type="checkbox"/> Use fans to increase the effectiveness of open windows. <i>NOTE: To safely achieve this, fan placement is important and will vary based on room configuration. Avoid placing fans in a way that could potentially cause contaminated air to flow directly from one person over another.</i> <input type="checkbox"/> Decrease occupancy in areas where outdoor ventilation cannot be increased. <input type="checkbox"/> Ensure ventilation systems operate properly and provide acceptable indoor air quality for the current occupancy level for each space. <input type="checkbox"/> Increase airflow to occupied spaces when possible. <input type="checkbox"/> Turn off any demand-controlled ventilation (DCV) controls that reduce air supply based on occupancy or temperature during occupied hours. In homes and buildings where the HVAC fan operation can be controlled at the thermostat, set the fan to the “on” position instead of “auto,” which will operate the fan continuously, even when heating or air-conditioning is not required. <input type="checkbox"/> Open outdoor air dampers beyond minimum settings to reduce or eliminate HVAC air recirculation. <i>NOTE: In mild weather, this will not affect thermal comfort or humidity. However, this may be difficult to do in cold, hot, or humid weather.</i> 	

<ul style="list-style-type: none"> <input type="checkbox"/> Improve central air filtration by increase aid filtration to as high as possible without significantly reducing design airflow. <input type="checkbox"/> Improve central air filtration by inspect filter housing and racks to ensure appropriate filter fit and check for ways to minimize filter bypass. <input type="checkbox"/> Improve central air filtration by checking filters to ensure they are within their service life and appropriately installed. <input type="checkbox"/> Ensure restroom exhaust fans are functional and operating at full capacity when the building is occupied. <input type="checkbox"/> Inspect and maintain local exhaust ventilation in areas such as kitchens, cooking areas, etc. Operate these systems any time these spaces are occupied. Consider operating these systems, even when the specific space is not occupied, to increase overall ventilation within the occupied building. <input type="checkbox"/> Consider portable high-efficiency particulate air (HEPA) fan/filtration systems to help enhance air cleaning (especially in higher risk areas such as a nurse’s office or areas frequently inhabited by persons with higher likelihood of COVID-19 and/or increased risk of getting COVID-19). <input type="checkbox"/> Generate clean-to-less-clean air movement by re-evaluating the positioning of supply and exhaust air diffusers and/or dampers (especially in higher risk areas). <input type="checkbox"/> Consider using ultraviolet germicidal irradiation (UVGI) as a supplement to help inactivate SARS-CoV-2, especially if options for increasing room ventilation are limited. Upper-room UVGI systems can be used to provide air cleaning within occupied spaces, and in-duct UVGI systems can help enhance air cleaning inside central ventilation systems. 	
<ul style="list-style-type: none"> <input type="checkbox"/> This checklist is on file with building manager 	

Note: The ventilation intervention considerations listed above come with a range of initial costs and operating costs which, along with risk assessment parameters such as community incidence rates, facemask compliance expectations and room occupant density, may affect considerations for which interventions are implemented. Cost estimates per room for the listed ventilation interventions in cost.

Example: In non-residential settings, consider running the HVAC system at maximum outside airflow for 2 hours before and after the building is occupied.

- No cost: opening windows; inspecting and maintaining local exhaust ventilation; disabling DCV controls; or repositioning outdoor air dampers
- Less than \$100: using fans to increase effectiveness of open windows; or repositioning supply/exhaust diffusers to create directional airflow
- \$500 (approximately): adding portable HEPA fan/filter systems
- \$1500 (approximately): adding upper room UVGI

Additional information: <https://www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html>