

This document is to provide understanding of how the ventilation system at Husky Elementary functions, and how it will operate during the COVID-19 pandemic. It is based on strategies from the "District Wide" plan to minimize COVID-19 risk. Maintenance staff inspected every room and all HVAC components of this building. Included in this document is a summary of the ventilation system, how the ventilation will operate during COVID-19, key action items for staff, and detailed space specific ventilation descriptions and instructions.

Summary of Husky's Ventilation System

- There are five main ventilation zones. Each zone has a HVAC unit that provides fresh outside air, filters, heats as needed, and supplies to the room. Part of the air is exhausted outside and the rest returned to the supply, filtered and recirculated. (see Husky HVAC Zone Map).

Ventilation Operation During COVID-19

- The maximum supply of fresh outside air allowing for 70°F will be used, beginning 1 hour prior to students arriving and end 1 hour after students leave. The temperature and air mixture is controlled remotely by Facilities.
- The building temperature will be kept at 68°F minimum 3 hours before and after students are present. This is controlled remotely by facilities.
- To increase ventilation, doors and or windows can be opened. This can be done during breaks to accelerate ventilation with minimal disruption to "Flush" the room.
- Windows in the modular classrooms should be opened 3 inches to increase ventilation.
- HVAC filters have been upgraded to MERV-11.
- Maintenance staff will inspect equipment for proper operation twice per month.

Key Action Items for Staff

1. **Masks:** Wearing masks is the single most effective measure for air quality in the school during the COVID-19 pandemic, followed by the operational blueprint, and then HVAC ventilation measures (See Corvallis School District COVID-19 Air Quality Plan - District Wide).
2. **Keep Clear:** To ensure proper ventilation HVAC equipment such as vents, heaters, fans, and radiators should not be obstructed, or have items stored on or within 2ft.
 - a. Do obstruct vents in the ceiling.
 - b. Do not block floor vents in the offices (Isolation room is the exception)
3. **Small Enclosed Spaces:** Small enclosed spaces with poor ventilation where a person remains unmasked for extended periods of time can be higher risk for aerosolized COVID-19. Staff should increase air circulation by opening windows, doors, reduce the number of people utilizing the space, and ventilate for 20 min between users.
 - a. The media Center has poor ventilation. If this space is used for more than 10 students ventilation should be increased by opening doors.

Detailed Husky Specific Ventilation Descriptions and Instructions

- **Classrooms:** Classrooms have a common HVAC unit for each zone (see Husky HVAC Map). Outside air is drawn from directly outside, combined with heated return air if needed, and then blown into the room. The air moves around the room, then is drawn through vents in the ceiling, returning to the HVAC unit. Some is exhausted outside, the rest is mixed with the fresh outside air, filtered, heated as needed, and recirculated. The exhaust fan runs at all times to circulate air. The air mixture ratio and temperature is controlled remotely by Facilities. During COVID-19, the maximum amount of fresh outside air that can maintain 70°F will be used.
- **Modular Classrooms:** Each modular classroom has its own individual HVAC unit located on a wall outside. Air is drawn directly from outside, heated, and then blown into the room. The maximum amount of outside air has been set manually by Facilities. The air moves around the room, then vents outside through doors and windows or is drawn back into the HVAC unit, heated, and recirculated. During the pandemic, two windows should be opened 3 inches to increase ventilation. District approved air purifiers will be provided as well.
- **Gym:** Air is drawn in from outside, heated, and then distributed to rooms in the Gym HVAC Zone (blue). Exhaust air is drawn back into the system from a vent above the staff room door, mixed back into the supply air and recirculated. If the gym is to be used for physical activities or by more than 15 people, Facilities should be notified to increase the percentage of outside air.
- **Hallways:** Air is drawn in passively when doors are opened and then passively exhausted outside through doorways.
- **Restrooms:** Air is supplied from a HVAC unit for its zone (see Husky HVAC Zone Map). The ceiling exhaust vents have a powered fan that exhausts 100% outside.
- **Kitchen:** The kitchen air is supplied by the Gym HVAC Zone unit, doors and windows. It is exhausted outside through the hood fan above the stove, doors and windows.
- **Office:** The office air is supplied by the Classroom 101 HVAC Zone. During COVID-19, maximum outside air will be used. Additional ventilation can be achieved by leaving doors open and using district approved portable air purifiers.
- **Media Center:** Air is drawn in from directly outside, heated, and then blown into the room. Air is exhausted through vents in the ceiling and then mixed with the fresh air and recirculated. When this space is to be used by more than 10 people, ventilation should be increased by opening doors. Portable air purifiers will be distributed as needed by Facilities.