VENTILATION AND AIR PURIFICATION

Reducing COVID-19 transmission risk

POLICY

The purpose of this policy is to ensure schools understand how to ventilate indoor school spaces and maximise the use of outdoor spaces to reduce the risk of COVID-19 transmission.

DETAILS

Reducing COVID-19 transmission in school settings can be achieved through maximising ventilation of indoor spaces, minimising the use of spaces that can't be ventilated with fresh air and using air purifiers to augment ventilation, particularly in areas which pose a higher transmission risk.

Ventilation through opening windows encourages fresh air into a room and assists in diluting potential viral particles in indoor air.

Ventilation is an important part of the broader suite of controls to reduce the risk of COVID-19 transmission in school settings including vaccination, physical distancing, good hygiene, cleaning and mask use, but should not be considered in isolation of these other measures.

There are 3 ways ventilation can be improved:

- natural – bringing in outside air by opening windows and doors
- mechanical – using air-conditioning/heating systems to bring outside air into the inside (air conditioning systems that do not bring in outside air are not mechanical ventilation)
- augmented – using air purifiers to filter the air.

Maximise the use of outdoor learning areas

Schools are strongly encouraged to conduct outdoor learning whenever and as much as practicable.

Identify spaces within your school that could be used for outdoor learning. These spaces could be areas that are already sheltered and shaded. The use of this space could be rotated between classes.

Consider options to set up different spaces depending on weather conditions.

Maximise ventilation of indoor spaces with outside air

Ventilation is an important strategy in reducing the risk of aerosol transmission by increasing circulation of outside air, increasing the delivery of clean air, and diluting and filtering out aerosolised viral particles.

Schools are required to maximise fresh air flow into all indoor spaces.

Ventilation using windows and doors

- Keep all windows, doors and vents open as much of the day as possible and even when unoccupied, if practicable
- Keep these openings clear of any obstruction to air flow
- Open windows and doors on multiple sides of the room to draw air through a space. This is called cross ventilation and is more effective than if windows and doors are only open on one side of the room (single-sided ventilation)
- Where windows open at the top and bottom (double-sash windows) open both parts
- If the weather does not permit windows and doors to be open throughout the school day (for example, during storms or other severe weather conditions), consider opening windows periodically
- Aim to open windows and vents that are higher or towards the ceiling during poor or windy weather

Ventilation using air conditioning systems

- Some schools have a centrally controlled mechanical ventilation system which can bring in outside air. Where these are installed, they should be set to use as much outside air as possible. These systems should be run during school hours, including when rooms are unoccupied and, if possible, ideally 2 hours before and after the use of a space
- A large proportion of air conditioning systems in schools are split systems. Split systems use recirculated air from the room and should therefore be used alongside open windows and doors to bring in outside air
- Air conditioning filters should be maintained according to maintenance plans, checked and filters cleaned regularly

Use of fans to assist air movement

- Maximise air movement by turning on fans when windows and doors are open
- Ceiling fans and other fans can be used to increase air movement in a room
- Pedestal or desk fans must be used on an oscillating function (not continually pointing in one direction)
- Exhaust fans are to be used as much as possible (for example in kitchens, bathrooms and laboratories)
- If split system air conditioners are not required for thermal comfort, they can still be used to assist with air movement within the room

Instances of poor outside air quality

- Monitor the VicEmergency App for risk warnings and advice on thunderstorm asthma, smoke and other events reducing outside air quality
- Action to protect students during periods of poor outside air quality (such as smoke, thunderstorm asthma events) takes priority
- Take steps to close windows and doors, set air conditioners to re-circulate air, and enhance other COVID safe behaviours and controls
- Where possible, use air purifiers in rooms where windows must be closed

Implement measures for a comfortable learning environment

In this guidance it is recognised that a COVIDSafe learning space is a place where health and safety measures are practised, but also an environment where people can comfortably learn and work.

Maintaining thermal comfort

To maintain thermal comfort, schools are encouraged to use heating and air conditioning systems – even when windows and doors are open. These can be either systems that bring in outside air or only use recirculated air. Schools can also introduce measures such as flexible seating arrangements.

Minimise use of indoor spaces that can't be ventilated with outside air

Where possible, schools are encouraged to:

- avoid the use of spaces without openable windows – use other teaching spaces with good ventilation or outdoor spaces instead
- where possible, avoid the use of classrooms with windows that open onto a busy road or other source of noise and/or other outdoor air pollutants.

Where none of the above options are possible, schools are encouraged to use an air purifier in spaces that cannot be well ventilated with outside air.

Use of air purifiers

Air purifiers augment and complement natural and mechanical ventilation methods. Air purifiers filter existing air within a space and do not bring in outside air.

Safe movement of air purifiers

The air purifiers that are being provided to schools are on wheels and can be moved by staff to where they are considered most necessary, having regard to the considerations in this policy and associated guidance.

Given the weight and size of the air purifiers, school staff who move or lift air purifiers must take steps to manage the associated OHS risks, including when they are delivered and being moved around the school. These steps must include:

- reviewing the guidance for the safe movement of air purifiers by school staff, available in the Movement of air purifiers: safe work procedure (DOCX)
- completing the Risk assessment for movement of air purifiers (DOCX) and tailoring it to the school's particular context and environment
- ensuring those staff members have completed the Manual Handling eLearning module (staff login required) – or complete it as a refresher – on LearnED prior to starting this work.

A Manual handling awareness training presentation (PPTX) is also available to support staff to familiarise themselves with safe manual handling techniques.

Window maintenance

Where windows are designed to be opened cannot be opened, schools are strongly encouraged to arrange for them to be fixed through their general maintenance processes.

This will generally be a simple and inexpensive maintenance issue and should be funded by a school's Student Resource Package maintenance funding. Schools are encouraged to speak to their regional provision and planning manager for further advice and assistance.

In some instances, schools are required to balance the requirement to bring in outside air with the risk of students absconding from their learning spaces. Schools are encouraged to consider and implement solutions that allow air in while preventing absconding. Examples may include installation of fly screens for windows, mesh security doors for doorways, and indoor safety gates. Schools can speak with their regional provision and planning managers for assistance if required.

Use of aerosolised disinfectants

The use of products which introduce particles into the air to 'disinfect' indoor air, such as gels, liquids, spray bottles, aerosols or vaporisers, are not recommended.
There can be allergen concerns with the introduction of particles into the air and introducing chemicals or oils into the air is not a proven method to reduce the risk of transmission of COVID-19 in indoor environments.

DEFINITIONS

Air purifier

An air purifier is an indoor portable device that filters domestic or industrial air, and which is used primarily to remove pollution, improve air quality, and purify the air.

EVALUATION

This policy is taken directly from the **Department of Education and Training's Policy and Advisory Library (PAL)** dated **January 31, 2022** and will be reviewed in line with new legislation, regulations and best practice.

POLICY REVIEW AND APPROVAL

Policy last reviewed	February 2022
Consultation	OHS Representative School Council
Approved	February 2022
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