

### Guidance for improving ventilation in the workplace

#### **Summary version**

To help keep everyone safe this winter, encouraging and improving ventilation forms part of the wider approach to help reduce the spread of COVID-19, flu, and other seasonal viruses.

This guidance is for workplaces across Jersey to encourage good ventilation to help improve the health and wellbeing of Islanders.

Ventilation is the provision of fresh, clean air to a room or building.

Infectious diseases like COVID-19 can spread through the inhalation of airborne particles and aerosols and by improving ventilation we can help to reduce transmission.

Research shows changing the air in a room multiple times an hour with filtered or clean outdoor air can reduce the risk of COVID-19 and other airborne respiratory diseases.

#### The benefits of good ventilation

- brings in fresh, clean air
- can reduce the spread of respiratory infections, such as COVID-19, influenza, tuberculosis, and rhinovirus (cause of the common cold)
- helps with condensation which may lead to mould and damp
- helps get rid of moisture, smoke, cooking odours, and other pollutants
- can improve health, better concentration, lower rates of absence from work and a better quality of sleep

#### Ventilation and the law

The Health and Safety at Work (Jersey) Law, 1989, states that workplaces should be adequately ventilated.

#### Ventilation and energy costs

Both heating and ventilation can use increased amounts of energy, but there may be ways to even up energy costs to gain the health benefits of good ventilation. These may include looking at:

- energy recovery ventilation systems which transfer the temperature and humidity from exhausted conditioned air to incoming fresh air, which can conserve energy
- demand-controlled ventilation have CO2 sensors to calculate optimal airflow and adjust the ventilation
- variable-speed compressors can control airflow and temperature with less energy

## Key guidance for improving ventilation

# 1. Understand your building and make a plan to improve ventilation

A number of factors and considerations need to be taken into account when determining the appropriate measures for each individual building:

- current public health guidance
- size and location of the building
- number of people occupying the space
- who the occupants are
- outdoor air quality
- climate and weather conditions
- available Heating, Ventilation, and Air Conditioning (HVAC) equipment

## 2. Maximise ventilation

- opening windows and doors to increase the air flow (weather permitting). In colder weather, open higher, top opening windows, or open windows for just short bursts to bring in fresh air. Do not prop open fire doors. Hold open devices may enable fire doors to be opened safely
- reduce the number of occupants in a room if possible
- use fans to increase the effectiveness of opened windows, creating directional airflow, 'always on' low noise fans can further improve air flow in damp rooms. This is not applicable in high-risk settings such as hospitals and care homes
- open trickle vents and do not block air vents
- check exhaust fans are functional, in toilets and kitchens for example. Consider leaving them on longer or installing an 'always on' fan
- avoid recirculation and transfer of air from one room to another where possible
- avoid the use of rooms which cannot be ventilated and use outdoor spaces where possible

## 3. Planning and information sharing

- inspect ventilation systems based on the manufacturers guidance
- review COVID-19 workplace risk assessments. For general guidance on risk assessments <u>Risk</u> <u>assessments (gov.je)</u>
- ensure regular maintenance of systems and equipment
- ensure employees have information regarding why ventilation is important, instructions for use for any vents and systems and know the agreed routine for opening and closing doors and windows
- ensure that fire safety, security and health and safety leads are well briefed in order to coordinate consistent messages to employees around guidance and procedures for good ventilation

### 4. Supplementary measures

- consider carbon dioxide (CO2) monitors. If used properly, CO2 monitors can help you understand whether the ventilation is adequate or needs improving
- consider fitting Heating, Ventilation, and Air Conditioning (HVAC) or high-efficiency particulate air (HEPA) systems
- some workplaces may wish to consider the use of Ultraviolet Germicidal Irradiation (UVGI) which uses ultraviolet energy to kill viral, bacterial, and fungal organisms. These could be useful in more high-risk indoor settings

For further information Health and safety in the workplace