

Loss prevention standards

Additional COVID-19 Controls: Fogging, Misting, Ozone Disinfection and Filtration Devices

Understanding the suitability and role of additional COVID-19 controls is essential to ensuring the continued health, safety and wellbeing of your employees, visitors, customers, contractors, and other members of the public



Additional COVID-19 Controls



Introduction

COVID-19 has an incredibly fast reproduction rate and is spread via droplets from sneezing, coughing and saliva. These droplets can settle quickly on surrounding surfaces such as door handles, computer equipment and handrails. Transmission of the virus can occur if another person subsequently touches the contaminated surfaces and then touches their mouth, nose, or eyes.

Throughout the COVID-19 pandemic, people have looked for what additional controls they can introduce in order to further minimise the risks of catching or transmitting COVID-19 in the workplace.



This Loss Prevention Standard has been produced in order to review the use of some of those deep cleaning and disinfection/filtration devices, their effectiveness and possible application and to clarify what they can and cannot do.

The Fundamentals

Regardless of any other controls that are to be introduced, the Government [advice](#) currently (as at 19/02/21) remains the same:

- Stay at home – work from home if at all possible
- Hands – wash your hands regularly and for at least 20 seconds
- Face – wear a face covering in indoor settings where social distancing may be difficult, and where you will come into contact with people you do not normally meet
- Space – stay 2 metres apart from people you do not live with where possible, or 1 metre with extra precautions in place
- Maintain good ventilation - good ventilation reduces the concentration of the virus in the air and therefore reduces the risks from airborne transmission
- Enhanced cleaning regimes – stringent cleaning and disinfection regimes help to minimise transmission from surfaces that people regularly touch

Any disinfection/filtration controls should be seen as being in addition to that advice, not instead of it. Any relaxation of these proven, effective control measures can increase the risk of viral transmission.

Control Systems Currently Available

Walk-through spraying or misting disinfecting systems

These systems use a tunnel, portal, booth, or other equipment and have been designed to apply disinfectant to people as they pass through.

Spraying people with disinfectants is not recommended under any circumstances (including in a tunnel, cabinet, or chamber). The [World Health Organisation](#) has also confirmed that it could be harmful and does not reduce the spread of the virus. This is because transmission is usually through droplets or contact, so the effectiveness of these systems is likely to be minimal.

LOSS PREVENTION STANDARDS

Even where a person who is infected with COVID-19 has passed through a disinfection system/device, as soon as they start speaking, coughing, or sneezing they can still spread the virus.

Disinfectants used in this way are potentially harmful and can cause health effects including respiratory and eye irritation.

Using fog, mist or ultraviolet (UV) systems for premises cleaning

Fog, mist, vapour, or UV treatments may be suitable options to help control the spread of coronavirus, by cleaning and disinfecting a larger space or room. However, apart from any safety concerns, each have physical limitations:

- **Disinfection by fog, mist, or vapour may not result in even application to all surfaces.** Hidden or 'shadowed' surfaces, or the surface underneath objects, may not be disinfected. The use of these methods in rooms of complex design with multiple surfaces may not be suitable
- Some sources of UV light can only destroy micro-organisms where the light can fall on surfaces for a sufficient time – you should seek advice from your supplier

Any use of these treatments should be subject to an individual risk assessment (for both the device and any chemicals used) and users must be competent and properly trained.

Disinfectants applied as a fog, mist or vapour may also reach harmful levels during delivery and UV systems may cause eye/skin damage if people enter an area undergoing treatment.

People should not enter rooms being treated by UV or disinfectants applied as fog, mist, or vapour. Chemical residue could be present for some time after the treatment has been completed. Locking rooms during the treatment will help to contain the emissions but other measures such as taping over doorway gaps or using suitable plastic or other sheeting to segregate some areas of the room may also be required.

Good ventilation will also help clear the disinfectant after the treatment if this can be controlled from outside of the room.

Large-scale spraying or disinfecting in outdoor spaces, such as streets or open spaces, is not recommended for COVID-19 or other pathogens. **Spraying disinfectants, even outdoors, can be dangerous to people's health and cause eye, respiratory or skin irritation or damage.**

UV lamps must not be used to disinfect hands or other areas of skin. These can cause skin damage and potentially skin cancer. Hands should always be cleaned with either alcohol based hand rub or washing hands with soap and water to remove the virus.

Ventilation

Before considering mechanical systems, it is important to recognise the value of good natural ventilation and how to use it to reduce the concentration of the virus in the air and minimise the risk of airborne transmission

Airborne transmission happens when people breathe in small particles (aerosols) in the air after someone with the virus has occupied an enclosed area.

Ventilation (whether natural or mechanical) will have little or no impact on droplet or contact transmission routes, **that's why we have to continue to maintain 'the Fundamentals'**.

As mentioned in 'The Fundamentals' above, you should consider ventilation alongside the relevant control measures required to reduce the risk of transmission, not instead of them.

Natural ventilation

Providing adequate ventilation does not mean that workplaces have to be cold.

Simple steps, such as partially opening windows, can be taken to ensure ventilation is maintained.

Natural ventilation can be used with heating systems to maintain a reasonable temperature in the workplace.

Mechanical ventilation

Mechanical ventilation brings fresh air into a building and can include air conditioning and/or heating.

To help reduce the risk:

- Continue using most types of mechanical ventilation as normal and set them to maximise fresh air and minimise recirculation
- Consider extending the operating times of ventilation systems to before and after people use work areas
- **Make sure mechanical systems are maintained in line with manufacturers' instructions**
- If you use a centralised ventilation system that circulates air to different rooms, it is recommended that you turn off recirculation and use a fresh air supply
- Recirculation units for heating and cooling that do not draw in a supply of fresh air can remain in operation provided there is a supply of outdoor air, for example windows and doors are left open

Air cleaning and filtration units

Local air cleaning and filtration units can be used to reduce airborne transmission where it isn't possible to maintain adequate ventilation.

Filtration systems, high-efficiency filters and ultraviolet-based devices are the most suitable types to use. They should be the correct size for the area they are being used in. As mentioned previously, any change can introduce new or additional hazards into the workplace, carefully consider any changes and make sure they are included in the relevant risk assessments and that appropriate additional controls are implemented as necessary.

Summary

The key controls for reducing the transmission of COVID-19 are through high standards of hygiene, regular handwashing, frequent cleaning of the workplace, with particular attention on high-contact areas and surfaces and self-isolation for all employees who test positive for coronavirus or are told to self-isolate by the NHS Test and Trace App.

Checklist

A generic Additional COVID-19 Controls Checklist is presented in Appendix 1 which can be tailored to your own organisation.

Specialist Partner Solutions

Aviva Risk Management Solutions can offer access to a wide range of risk management products and services at preferential rates via our network of Specialist Partners.

For more information please visit:

[Aviva Risk Management Solutions – Specialist Partners](#)

Sources and Useful Links

UK Government guidance:

- [Working safely during coronavirus \(COVID-19\)](#)
- [HSE guide - Making your workplace COVID-secure during the coronavirus pandemic](#)

Additional Information

Relevant Aviva Loss Prevention Standards include:

- [Managing Change - Liability](#)
- [Wearing of Face Masks and Face Coverings](#)
- [Returning to Work in an Office Environment During COVID-19](#)

To find out more, please visit [Aviva Risk Management Solutions](#) or speak to one of our advisors.

Email us at riskadvice@aviva.com or call 0345 366 6666*

*Calls may be recorded and/or monitored for our joint protection.

Appendix 1 – Additional COVID-19 Controls Checklist



Location	
Date	
Completed by (name and signature)	

	Additional COVID-19 Controls	Y/N	Comments
1.	Before any additional controls are considered have you ensured that the relevant sections of the Government’s guidance ‘Working safely during coronavirus (COVID-19)’ are being implemented and adhered to and that ‘the Fundamentals’ are in place?		
2.	Have you reviewed how to make best use of natural ventilation in the workplace?		
3.	Have you considered the HSE’s guide on ‘Making your workplace COVID-secure during the coronavirus pandemic’ – particularly the section on ventilation and air conditioning?		
4.	Where existing mechanical ventilation is in use have you checked that the settings are those best suited to the prevention of the spread of coronavirus?		
5.	If you plan to implement additional controls have you checked that the option chosen is the best one for your staff, your activities and workplace?		
6.	Have risk assessments been produced specifically to cover the use/maintenance of the proposed equipment?		
7.	Do any risk assessments include additional hazards arising from the equipment’s size, location, maintenance, noise, etc. as well as from its general operation?		
8.	Have relevant staff been provided with guidance/information on the use and maintenance of equipment appropriate to their role?		
9.	Are there suitable arrangements in place for the maintenance of the equipment in the future?		

LOSS PREVENTION STANDARDS

10.	Additional comments:		
-----	----------------------	--	--

Please Note

This document contains general information and guidance only and may be superseded and/or subject to amendment without further notice. Aviva has no liability to any third parties arising out of ARMS' communications whatsoever (including Loss Prevention Standards), and nor shall any third party rely on them. Other than liability which cannot be excluded by law, Aviva shall not be liable to any person for any indirect, special, consequential or other losses or damages of whatsoever kind arising out of access to, or use of, or reliance on anything contained in ARMS' communications. The document may not cover every risk, exposure or hazard that may arise and Aviva recommend that you obtain specific advice relevant to the circumstances.

02/03/21 V1.0

Aviva Insurance Limited, Registered in Scotland Number 2116. Registered Office: Pitheavlis, Perth PH2 0NH.
Authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

LOSS PREVENTION STANDARDS