



PROTOCOLS FOR COMPETITION BOXING NOVEMBER 2021

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Introduction

The following document has been issued to assist in the organising and running of the boxing events, in a safe and compliant fashion. The paramount priority for the IABA is to ensure the health and wellbeing of all boxers, volunteers, coaches, staff & support personnel who are involved in or helping to facilitate these championships. This document outlines measures in line with public health guidelines, that members need to implement at all times during these championships. These measures will be in place until further notice and will only be updated as advised by the IABA, the National Health Authorities and with the gradual lifting of social restrictions. For more information please visit:

<https://www.gov.ie/en/campaigns/c36c85-covid-19-coronavirus/>
<https://www.nidirect.gov.uk/campaigns/coronavirus-covid-19>

This document outlines the robust measures which need to be implemented and maintain to help safeguard members during these championships. For additional information please visit:
<http://iaba.ie/covid-19-guidance/>

It is acknowledged that during competitive contests, that members will come into (close) contact with one another.

At all other times, participants should adhere to social distancing practices and other public health measures including hand hygiene, cough / sneeze etiquette, etc. For more information please visit:

<https://www.gov.ie/en/campaigns/c36c85-covid-19-coronavirus/>
<https://www.nidirect.gov.uk/campaigns/coronavirus-covid-19>.

The over-arching principle remains to limit the amount of time members are in very close contact with one another before, during, and after each contest, therefore helping to reduce transmission of Covid-19. During this period the competition organising committees will place additional emphasis on room ventilation, sanitising surfaces and hand washing.

***Only boxers from clubs that have submitted their Covid-19 Club Declaration form and have received a permission letter from the IABA Medical Commissioner can enter / compete in IABA sectioned boxing events.**



Competition Organisers:

The Competition Organisers **MUST** form a Competition Organising committee to oversee the running of the event. This committee is responsible for the following:

- ❖ Ensuring that at least **one** appropriately qualified **Covid-19 Event Officer** is appointed prior to the event.
- ❖ Ensuring that adequate support staff / volunteers are in place to implement the necessary protocols.
- ❖ Ensuring that a **tournament inspector** is appointed prior to the event.
- ❖ Ensuring that a suitably **qualified medical professional** is appointed prior to the event. This medical professional **MUST** be present at the event.
- ❖ Ensuring that anyone entering the venue (boxers, coaches and support staff) have completed and signed all the **relevant IABA Covid-19 forms**.
- ❖ Ensure all patrons have completed the antigen test and returned a negative result or have proof of been fully vaccinated or show medical proof of having recovered from Covid-19.
- ❖ Allow for staggered competition sessions which in turn will allow all competitors/participants (boxers, coaches, volunteers and support staff) to exit and enter without interaction
- ❖ Keeping accurate records (including a digital record) of who is present during competition events. This will include all persons present during competition sessions. This will help with contact tracing if necessary.
- ❖ Ensuring that the event risk assessment has been completed and a venue risk assessment sought when appropriate
- ❖ Ensuring the availability of hand washing stations, alcohol-based hand gel and hygiene facilities at multiple locations within the venue. Event organisers will encourage all members to regularly practice good hand hygiene throughout the session while observing the strict 2 meters social distancing guidance where necessary. [If fully vaccinated, they don't need social distancing]
- ❖ Ensuring that all Referees / Judges and all other support staff / volunteers are informed of the relevant protocols
- ❖ Support the Covid-19 Event Officer and Tournament Inspector in the implementation of all Covid-19 related protocols
- ❖ Provide relevant PPE to judges, referees, officials, coaches and other relevant volunteers for the duration of the event if they don't have sufficient supplies themselves. [Everybody attending should have the necessary items]
- ❖ Ensure that all boxers, coaches, volunteers and support staff are wearing the appropriate PPE at all times throughout the sessions. (all individuals should bring their own face covering/s with them to the venue)



Competition Risk Assessment:

Before staging the event, the competition organisers **will** conduct a full Event Risk Assessment covering the prevention and spread of Covid-19. This Risk Assessment **will** be conducted by the Covid-19 Officer and The Tournament Inspector.

[A template Risk Assessment can be located through the link below:](http://iaba.ie/covid-19-guidance/)
<http://iaba.ie/covid-19-guidance/>

COVID-19 Event Officer:

Competition organisers **MUST** appoint an appropriately qualified Covid-19 Event Officer/s who is/are responsible for managing issues and queries relating to the Covid-19 pandemic during the event. The Covid-19 Event Officer is responsible for the following:

- ❖ The appointed Covid-19 Event Officer **MUST** be present during the entire event.
- ❖ Contribute to the Event Risk Assessment and ensure that it is signed off by the Organising Committee.
- ❖ Ensure all persons entering the competition space (boxers, coaches & support staff) have completed and signed all the relevant IABA Covid-19 forms.
- ❖ Ensure they review, and that the competition organisers have complied with, all of the protocols outlined before staging the competition.
- ❖ Ensure all persons entering the competition space (boxers, coaches & support staff) adhere to Government / Public Health advice.
- ❖ Ensure that sufficient HSE Covid-19 information Posters are in place.
- ❖ Allow for staggered competition sessions which allow all persons entering the competition space (boxers, coaches & support staff) to exit and enter without any significant interaction.
- ❖ Ensure that the competition organisers keep accurate records (including a digital record) of who is present during the championships. This will include all persons present during the championships. This will help with contact tracing if necessary.
- ❖ Ensure that the contact details for all persons entering the competition space (boxers, coaches & support staff) are up to date as this will assist with contact tracing should it be necessary.
- ❖ Listen to feedback and contact the IABA if there are issues not covered under these protocols.
- ❖ Ensure that the competition organisers have ensured the availability to hand washing stations, alcohol-based hand gel and hygiene facilities at multiple locations in the facility. Event organisers will encourage all members to regularly practice good hand hygiene throughout the session while observing the strict 2 meters social distancing guidance where required.



NB: The Covid Officer has final overall responsibility for the COVID 19 protocols at the event.

Tournament Inspector:

The Tournament Inspector will have the overall responsibility on the date/s and time/s for all matters relating to the management of the event / activities. They will work closely with the Competition Committee and Covid-19 Event Officer.

The Tournament Inspector is responsible for the following:

- ❖ Overall Health and Safety of all present at the Competition / Event
- ❖ Participation in consultations with the Competition Organising Committee
- ❖ Contribute to the Event Risk Assessment and ensure that it is signed off by the Organising Committee. Request a Facility Risk Assessment if required.
- ❖ Ensure that a Covid-19 Event Officer and protocols are in place.
- ❖ Ensure that the appointed Medical Personnel are in place for the event / activity
- ❖ Will appoint a Chief Steward and ensure that there is sufficient number of Stewards / volunteers (Ushers and Security where required) present to ensure the safety of all people attending and participating in the event / activity
- ❖ Ensure that adequate measures are in place for the safety of all persons attending the event / activity
- ❖ May consult with a safety advisor to assess and mitigate risk for the event, the safety advisor shall be competent and familiar with staging similar events, and carry out risk assessment and reports that may be required
- ❖ Ensure that adequate briefing and familiarisation training is provided in advance to all people working/volunteering at the event
- ❖ Must be satisfied that the venue is safe and that all the required protocols are in place for a safe event

Weigh-Ins:

Weigh-Ins will be managed by the Tournament Inspector and **MUST** be overseen by the Covid-19 Event Officer. The Covid19 Event Officer is responsible for ensuring the following:

- ❖ Each club will be given a set time for their boxer to weigh-in. Weigh-ins will be staggered to allow for a boxer to arrive, weigh-in and leave before the next boxer partakes in the process.
- ❖ Each boxer (eighteen years of age or older) must complete an antigen test and return a negative result prior to being allowed weigh-in if not already fully vaccinated.



- ❖ Please note boxers under the age of eighteen are not required to completed an antigen test and returned a negative result or have proof of been fully vaccinated or show medical proof of having recovered from Covid-19.
- ❖ Social distancing practices and other public health measures, including hand hygiene, cough / sneeze etiquette, etc should be adhered to at all times during the weigh-in process.
- ❖ The scales **MUST** be cleaned and disinfected before and after each weigh-in using anti-bacterial / disinfectant wipes/spray.
- ❖ Relevant HSE Covid-19 information Posters are displayed at the venue of the weigh-in.
- ❖ All boxers attending the weigh-in **MUST** wear a protective mask throughout the entire weigh-in (this should be brought with them).
- ❖ Officials, volunteers, coaches, support staff and any other person present for the weigh-in **MUST** wear protective masks throughout.
- ❖ Boxers travelling to the weigh-in should try to do so on their own or with a member of their own family unless all persons are fully vaccinated (people giving lifts to other boxers outside of a household should be aware of higher risks)
- ❖ A one-way system will be in operation where sanitising upon entry and before exit apply.
- ❖ All boxers will have their temperatures checked prior to entering the building before the weigh-in. The temperature reading will not be recorded it will just be checked to ensure the person does not have a fever (temperature at or over 38 °C)
- ❖ Covid-19 Health Questionnaire must be completed before weigh-in **[All weigh-ins occur on the day of the contest]**

Venue:

The Competition Organisers and Covid-19 Event Officer, will be responsible for the following at the event:

- **Arrivals**
- ❖ That everybody entering the venue for boxing **MUST** wear protective face covering / mask.
- ❖ Ensure all persons attending the venue for the boxing event have signed the appropriate documents prior to attending the venue (i.e. boxers, coaches and officials)
- ❖ That boxers / coaches given a set time to arrive at the venue. To allow for staggered entrance and exit to/from the venue
- ❖ That there is one-way system in operation for entrance and exits from the venue. All persons attending must sanitise their hands when entering and before exiting the venue. Social distancing practices and other public health measures such as hand hygiene, cough / sneeze etiquette, etc should be adhered to at all times.
- ❖ A contact tracing register **MUST** be in operation.
- ❖ A Covid-19 screening questionnaire **MUST** be filled out by all boxers, coaches, volunteers, officials and support staff attending.



- ❖ Boxers travelling to the venue should try to do so on their own or with a member of their own family unless all persons are fully vaccinated. Carpooling carries extra risks.
- ❖ Boxers/coaches must hand over the boxer's books to the admin at the initial weigh-in.

- **General / During Competition**
- ❖ The boxer should nominate three coaches when registering for the event/competition and only two of those named coaches can attend with the boxer and work in their corner during the event.
- ❖ **VACCINATED SPECTATORS** only can attend the event and must be seated, in the event that the organisers are permitting spectators.
- ❖ Showers and changing rooms will not be available for use unless boxers are fully vaccinated or have successfully passed an antigen test. Limited times in these areas should apply.
- ❖ Where individuals have mixed immunity status the use of shower facilities should be pod based.
- ❖ The type of protective measures implemented when using showers will be determined by the type of facility users (i.e. vaccinated / mixed immunity). Sample protective measures may include:
 - Limit overall duration of individuals in a changing room for example implement a 15 minute window / 5 minute shower rule etc.
 - Implement adequate social distancing measures in changing areas for example the use of every second changing space/lockers/shower head etc.
 - Recommend the wearing of masks in shared areas (showers an exception).
 - Provide clear signage highlighting any relevant space capacities and time durations. Close off any unnecessary spaces or those not in use/not permitted.
 - Monitor toilets with agreed capacity numbers and limit to participants/patrons only. Implement flow management systems where necessary. [?](#)
 - To improve ventilation consider an open window / open door policy (subject to privacy).
 - Provide sanitisation stations as appropriate on entrances and in shared areas. Continue to promote hand hygiene and respiratory etiquette through signage, posters etc.
 - Ensure deep cleaning of shared areas on a regular basis.
- ❖ Toilets will be available (Patrons will be reminded of good hand hygiene before exiting toilets. Every other toilet or urinal will be marked out of use. Where only one toilet is available, only one person may enter at one time. Organisers to sanitise toilets between each session).



- **Exiting / Leaving the Venue:**
- ❖ Attendees not to congregate around the venue or in car park
- ❖ Attendees to go straight to their transport and leave
- ❖ Attendees to maintain social distancing at all times
- ❖ Event staff will be on duty throughout to oversee compliance
- ❖ No one should stay longer than necessary or become a spectator

The Contest:

This part of the process will be managed by the Tournament Inspector in conjunction with the appropriate officials (i.e. referees/judges, support staff and glove stewards) and **MUST** be overseen by the Covid-19 Event Officer, who is responsible for ensuring the following:

- ❖ Boxers must come prepared to box – boxing boots, shorts, vest, groin guard, chest protector, hair nets, and gumshields
- ❖ Boxers will present themselves at a hand-wrapping station where they will have their hands sanitised, wrapped by an appointed official using new unopened wraps and then gloved up by another official. At no stage will the boxer or his/her seconds remove the gloves. The gloves will only be removed by the glove stewards in the designated corners at the completion of the bout.
- ❖ The boxer and all officials / volunteers involved in this process **MUST** wear face coverings / masks during hand wrapping and gloving up. If the boxer requires someone to remove their face covering / mask prior to their contest, this will only be done by someone wearing the appropriate PPE (i.e., nitrile disposable gloves, a face covering / mask and face shield if desired).
- ❖ Prior to entering the ring, (where applicable) the seconds will place the boxers' head-guard on, where required. The appointed corner (red or blue) glove steward will sanitise the gloves and head-guard with anti-bacterial wipes/spray.
- ❖ Gumshields will be put in by boxer prior to warm up and gloves on.
- ❖ Between rounds, the coach will **not** remove the gumshield from a boxer's mouth.
- ❖ Following each contest, the ring area including corner stools will be sanitised by an appointed person(s) (stools & ropes)
- ❖ Coaches must wear face coverings / masks, nitrile disposable gloves at all times.
- ❖ At the end of the contest, the boxers will come to the centre of the ring where the referee ideally will point to the winner following the announcement by the MC.
- ❖ Medals, certificates and boxers books will be given to the club coach.
- ❖ Boxers to refrain from 'high fiving' and embracing at the end of a contest.



The Field of Play:

The Field of Play will be managed by the Tournament Inspector; however, it **MUST** be overseen by the Covid-19 Event Officer, who is responsible for overseeing the following:

- ❖ A distance of 2m from the ring must be observed.
- ❖ That all relevant Field of Play officials have received correct PPE in advance of each bout.
- ❖ The below roles are adhering to the below protocols.
 - **All Officials/Volunteers**
 - ❖ All officials and persons working at the event must wear face coverings / masks at all times whilst inside the venue.
 - ❖ When referees and judges are not officiating, they must still remain 2m apart unless fully vaccinated.
 - ❖ No unauthorised personnel can enter the field of play.
 - ❖ **Must** adhere to the one-way system when leaving/going to their stations.

 - **Top Table**
 - ❖ Top table officials will be situated a minimum of 2m back from the ring and spaced appropriately from each other and anyone else in the space. They will wear a face covering / mask.
 - ❖ They will carry their own pen as well.
 - ❖ Officials must sanitise their hands regularly following touching items such as; boxer's books, paperwork, programmes etc.

 - **Judges**
 - ❖ Judges will be situated a minimum of 2m back from the ring and spaced appropriately from each other and anyone else in the space. Judges will wear a face covering / mask.
 - ❖ When judges arrive at the judging station and just before leaving the judging station the judge will sanitise their hands with alcohol-based gel.
 - ❖ An appointed official (a glove steward) will sanitise the buttons on all judges scoring machines between bouts when using the computer scoring. However, in the event of a computer malfunction, Judges will bring their own pen with them for marking bouts. Sanitised pens can be provided if necessary. The pen will be retained by each judge throughout the competition. They should not use anyone else's pen.
 - ❖ If a paper scoring system is used, then a designated official will collect the scores and return them to the Tournament Supervisor.



- **Timekeeper**
- ❖ The timekeeper will wear face covering / mask and a face shield if also desired. They will sanitise their hands, on arrival and before leaving their station with alcohol-based gel. They will sanitise the clock, bell or knocker on arrival and before leaving their station with anti-bacterial wipes

- **MC**
- ❖ The MC will wear face covering / mask and a face shield if also desired. They will sanitise their hands, on arrival and before leaving their station with alcohol-based gel. They will sanitise the microphone on arrival and before leaving their station with anti-bacterial wipes

- **Doctor/Medical Professional**
- ❖ The Doctor/Medical Professional will wear a face covering / mask, a face shield, disposable apron and disposable gloves. The doctor will be double gloved. Outer gloves need to be removed after each interaction with a boxer. The face shield may also need to be wiped and sanitised after an interaction with a boxer.

- **Referee**
- ❖ The referee in the ring will wear a face covering / mask and disposable gloves. The referee must limit his/her handling of boxers and must never touch the boxers in the event of cuts or blood being present. He/she will always send the boxer to the doctor. After the bout, the referee must dispose of his/her gloves, dispose of their mask if necessary.

- **Hand Wrapping, Gloving Up Official/ Stewards**
- ❖ The hand wrapping and gloving up officials must wear a face covering / mask and regularly sanitise their hands.
- ❖ Glove stewards must wear a face covering / mask, disposable gloves and ideally a face shield for the end of each bout.

Warming Up Boxers Pre-Contest:

- ❖ Event Organisers **WILL** designate a space within the building / hall or outside that can be used specifically for boxer/s warm-ups and be of sufficient space. This may be 2 separate areas (1 for each boxer/coach) or a space that is large enough to enable the 2 boxers and coaches to easily keep 2m apart.
- ❖ This/these area/s is/are not to be used by anyone else and cannot be where people can walk through during the warm-ups.
- ❖ Coaches must meet their boxer 10mins prior to hand wrapping / gloving up within designated space.



- ❖ Coaches should allocate a maximum of 2mins for close contact work (i.e. pad work) during the warm-up. The rest of warm up the coach should maintain a 2m distance from the boxer unless both are fully vaccinated.
- ❖ If coaches use pads during the warm-up, they must disinfect those pads with anti-bacterial wipes before and after use.
- ❖ Coaches MUST sanitise their hands immediately after the warm-up with alcohol-based hand sanitiser.

Multiple Roles:

Where possible Event Organisers will try to have 1 role allocated to 1 person throughout the event. Where this is not possible, the protocols below will be adhered to:

- ❖ When changing roles during a competition volunteers should check that:
 - a. They have adorned the correct PPE for that role
 - b. Sanitise their hands immediately before/after changing roles
I.e. Judge → Referee, Coach → Judge, Referee → Coach
 - c. Followed the one-way system
 - d. Keep 2m apart when changing roles
- ❖ Note that the Tournament Inspector and Covid-19 Event Officer should be singular roles. These volunteers should not be taking on other roles during the competition/event.

How to manage a member with Covid-19 symptoms:

- ❖ The designated Covid-19 Event Officer in conjunction with the medical professional present will take charge of the management of any persons with Covid-19 symptoms.
- ❖ Immediately separate any person displaying or complaining of Covid-19 related symptoms from other persons present at the event.
- ❖ Ask this person to wear a face covering if possible or if available provide them with a protective facemask.
- ❖ The designated person/s managing the situation will try to maintain at least 2 metres from the person with symptoms and will wear a face covering and wash their hands regularly.
- ❖ Provide the ill person with tissues and hand sanitizer and ensure that all tissues are disposed of in a waste bag that can be tied and marked as separate from other waste.
- ❖ If they are well enough to go home, arrange for them to be transported home by a family member, as soon as possible and advise them to inform their general practitioner by phone of their symptoms.
- ❖ If they are too unwell to go home or advice is required, contact 999 or 112 and inform them that the sick person is a Covid-19 suspect.



- ❖ All persons who have been in close contact with the suspect case will need to be informed to restrict their movement for 14 days or until further information is available (i.e. a negative test result of the suspect case).

Medical isolation room:

In the event that a member becomes unwell during an event, the member will be escorted to the designated medical room (dressing rooms which are not in general use will be used as the designated medical rooms) which will contain the appropriate personal protective equipment. The Covid-19 Event Officer will be responsible for information and consulting with the appropriate medical service - for example, local accident and emergency department (in the event of an injury), general practitioner or out of hours GP service.

In the event an athlete is injured (i.e. a knock-out) a separate medical room should be available for the medical staff to use. This room must Covid compliant.

Waste Disposal:

Due to the potentially infected PPE waste being disposed of then the following protocols must be followed:

- ❖ Where possible all persons in the venue should take home their own rubbish and face coverings
- ❖ Where disposable gloves, aprons and face coverings are disposed of these should be placed in yellow clinical waste bags and should be tied and kept separate from all other waste.
- ❖ Attendees should refrain from touching these bags.
- ❖ At the end of each session disposed of waste should be bagged by designated individuals wearing blue nitrile gloves.
- ❖ The gloves should then be removed properly without touching the outside of the gloves and placed in the next yellow waste bag.
- ❖ This waste must be then disposed of in line with public health recommendations.



Frequently Asked Questions (FAQ's):

Q. Can a contest continue if there is a bleed?

A. Covid-19 is a respiratory droplet rather than a blood borne virus. Contests may continue as per the current IABA cuts guidelines i.e. superficial cuts that do not obstruct vision should not stop a contest.

Q. Can spit-buckets still be used?

A. Increased saliva and mucous production are a physiological response during boxing. Spit buckets can be used but should be treated as a contact biohazard. They should be handled with disposable gloved hands and washed out at the end of the night with water and detergent or bleach solution. Ideally, buckets should be left two days before being reused again.

Q. Can boxers shake hands after a contest has finished?

A. Handshakes should be avoided by boxers without gloves on.

Q. Can a boxer go to the opposite corner after a contest has finished?

A. This practice should be avoided. Boxers wishing to acknowledge the opposite corner should do so by bowing towards the opposite corners at a safe distance, in a show of mutual respect.

Q. Can the referee raise the hand of the winner after the contest?

A. Ideally the referee will only point to the winner who in turn raises his/her own hands

Q. Can group pictures be taken before/after the contest?

A. No.



Ventilation

Ventilation will remain a core component of the COVID-19 response. The HSA has published a new COVID-19 Work Safely Protocol employer checklist on ventilation. Further expanded details on ventilation can be found in the Appendixes.

NB: For additional information relating to Covid-19 guidance please visit

<http://iaba.ie/covid-19-guidance/> and <https://www.gov.ie/en/campaigns/c36c85-covid-19-coronavirus/?referrer=http://www.gov.ie/coronavirus/>.

***NB: These protocols are only based on current information available to us at this time and alterations may be needed if circumstances change.**

Appendixes

Heating, Ventilation and Air Conditioning (HVAC)

The details provided in this section are general in nature and relate to non-healthcare settings. The spread of the virus is most likely when infected people are in close contact so the risk of getting COVID-19 is higher in crowded and poorly ventilated spaces where infected people spend long periods of time together in close proximity. It is important to maximise ventilation in areas where people are in close contact. This applies whether the location is a workplace, a residence or other community setting.

While large droplets containing the virus will settle onto the surrounding surfaces within seconds, smaller particles can stay suspended for longer. Dilution of indoor air by opening windows and doors or using mechanical ventilation systems can lower the airborne concentration and remove these smaller particles from the air. Reoccupying workplaces should not, in most cases, require new ventilation systems but improvements to ventilation will help increase the quantity of clean air and reduce the risk of exposure to airborne concentrations of the virus.



Ventilation, refers to the movement of outdoor air into a building, and the circulation of that air within the building or room while removing stale air to improve the air quality. This can be achieved through natural means (e.g. opening a window) or by mechanical means e.g. HVAC systems. While ventilation reduces the amount of virus in the air and the aerosol risk, it will have minimal impact on droplet transmission where people are within 2 metres of each other, or contact transmission (touching surfaces), which is why it is not a standalone measure and continued adherence to other public health advice is absolutely essential.

Ventilation should therefore not be seen as a replacement for the other infection prevention and control measures advised such as hand-washing, surface cleaning, respiratory etiquette, physical distancing, mask wearing and the continued advice to work from home where possible. In addition, the continued need for workers to stay at home if they have any symptoms of COVID19 or are feeling unwell is crucial too. Employers can also seek to reduce the risk of transmission by limiting the numbers of workers in a given area and paying particular attention to work activities that increase deeper breathing (including singing, physical exertion and shouting).

All of these infection and prevention control and other measures should continue to be adhered to and implemented. The primary principle for improving ventilation is to minimise transmission, so that the level of “fresh” outside air should be maximised therefore reducing the level of recirculated air in the workspace, unless high-efficiency particulate filters (HEPA) are installed in the ventilation system. Regulatory requirements in the Workplace The Safety, Health and Welfare at Work (General Application) Regulations 2007, requires



employers to make sure there's an adequate supply of fresh air (ventilation) in enclosed areas of the workplace. This can be done by:

- Natural ventilation which relies on passive air flow through windows, doors and air vents that can be fully or partially opened. This is the simplest way to ensure adequate air quality in poorly ventilated areas.
- Mechanical ventilation using fans and ducts including window fans to bring in fresh air from outside, or a combination of natural and mechanical ventilation, for example where mechanical ventilation relies on natural ventilation to maximise fresh air.

Any planned changes to ventilation should consider regulatory requirements under building, food and/or health and safety regulations along with other consequences such as cost, energy use, noise and security. Determining ventilation of enclosed workplace settings should be considered as part of the workplace risk assessment.

The priority for the risk assessment is to identify areas of the workplace that are usually occupied and are poorly ventilated. These are also the areas that should be prioritised for improvement to reduce the risk of aerosol transmission of the virus. A poorly ventilated area may include:

- Areas where people work and where there is no mechanical ventilation or natural ventilation such as open windows, doors or vents etc.
- Areas that use mechanical ventilation if the system recirculates air and has no outdoor air supply in place.
- Areas that are stuffy or smell bad.



There are various recommendations made for what the appropriate air changes per hour (ACH) could be for different indoor settings. However, the overall objective should be to increase the ventilation in the workspace thereby improving the existing ventilation without impacting on the workers'/occupants' comfort. The following should be considered when developing a workplace risk assessment:

How do you currently provide ventilation (fresh air) in your workplace? Most ventilation is provided by natural or mechanical means or a combination of both of these.

How many workers occupy or use the area(s)? The more people who use or occupy an area the greater the risk that an infected person is there, increasing possible exposure to aerosol transmission. Ensuring that workers who have symptoms of COVID-19 or are feeling unwell remain at home is key here. In addition, reducing the number of people who use or occupy an area can also reduce this risk.

- How much time do workers spend in the area(s)? The longer workers spend in an area, the greater the risk. This risk can be minimised by encouraging working from home where possible.
- What work activities take place in the area(s)? Activities that make you breathe deeper, for example physical exertion or shouting, may increase generation of aerosols and increase the risk of transmission.
- How large is the area(s)? The larger the area, the lower the risk as the virus droplets will be diluted and less likely to build up.
- Are there any features in the workplace which might affect ventilation? For example, is there large machinery in use which might impact cross ventilation air flow?
- Do you use open windows?

- Cross-ventilation is a good option for window ventilation as it facilitates the quick exchange of room air for fresh air through widely opened windows opposite to each other, where possible.



- Propping open internal doors may increase air movement and ventilation rate - Fire doors should not be propped open unless fitted with approved automatic closers so that they function as fire doors in the event of an alarm or fire. - Airing rooms as frequently as you can improves ventilation.

Open all the doors and windows fully to maximise the ventilation in a room. This may be best done when the room or area is unoccupied.

- Do you use desk or ceiling fans? Desk or ceiling fans should not be used in poorly ventilated areas as they may only recirculate the virus droplets rather than remove them from the area. Fans should only be used in areas where there is a single occupant.
- Does the workplace have Local Exhaust Ventilation (LEV)? Where workplaces have Local Exhaust Ventilation, the make-up air should ideally come from outdoor air rather than from adjacent rooms. The Health and Safety Authority guidance on LEV is a useful resource for advice and guidance and it is available here.
- Does the workplace have multiple or complex ventilation systems in place? For example, different systems on different floors or areas.

In such cases, the CIBSE Ventilation Guidance can provide additional information. In addition, it may be necessary to retain the services of a ventilation engineer to provide expert advice on what modifications are needed to the mechanical system to reduce any potential transmission risks. Before embarking on use of a service engineer, all other mitigation factors such as reducing occupancy etc., should be considered first.

While the use of HVAC systems can provide comfortable environmental conditions (temperature and humidity) and clean air in indoor settings such as buildings and vehicles, it is important to check ventilation systems to ensure that there is an adequate supply of fresh



air (from a clean source) and that recirculation of untreated air is avoided. There is no need to switch off air conditioning to manage the risk of COVID-19.

It is advised to speak to the building engineer or system manufacturer before implementing any of the changes or recommendations below relating to mechanical ventilation.

- Disable air recirculation system settings where possible.
 - Keep ventilation running all the time regardless of building occupancy, even if on a low setting when building unoccupied. Ensure that demand controlled ventilation settings are turned off where necessary.
 - Use the correct filters as per the manufacturer's specifications.
 - Ensure regular maintenance of HVAC systems.
 - Ensure those who are responsible for maintaining and servicing are trained and competent.
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- Avoid the use of ceiling mounted, desk and portable fans where possible as they may only recirculate the virus droplets rather than removing them.
 - Extend the hours of nominal HVAC operations particularly in relation to before the building is occupied.
 - Avoid directing air flow directly onto individuals or across groups of individuals as this may facilitate transmission.
 - Ensure extractor fans in bathrooms are functional and running when in use. Ensure that such fans are not recirculating air to other poorly ventilated areas of the workplace where workers are exposed.
 - Ensure that any changes to ventilation systems introduced do not have negative impacts on worker's comfort levels or do not result in non-compliance with occupational health and safety or building regulations.

Checking CO2 levels may also help determine if ventilation is poor in an area where people work. For example, where there is no mechanical ventilation or natural ventilation in place



or for areas that are stuffy or smell bad. However, while checking CO₂ levels may be useful in a number of limited settings, they are less effective in work areas used by few people or in large work spaces. The use of CO₂ measurements as an indicator of building ventilation when there are CO₂ sources other than people, such as fuel combustion (fires and stoves) and cooking is also not recommended.

Checking CO₂ levels is also not a good proxy for transmission risk in spaces where there is additional air cleaning (e.g., HEPA filtration) as these remove the virus but not exhaled CO₂. Additional research is needed to determine overall how levels of CO₂ can provide a more reliable indicator to show that ventilation is adequate to mitigate transmission risks. Always follow the sensor manufacturer's advice and instructions on care and use of the sensor at all times and ensure adequate training is in place on their use and maintenance. CO₂ monitors should never be used as a means to avoid adherence to the infection prevention and control measures recommended by Public Health.

Other equipment and systems Local air cleaning may be beneficial in reducing risks in some spaces, particularly where it is not possible to increase ventilation using natural or mechanical means as set out above. Such devices typically use HEPA filters. These devices are usually either stand-alone and they can be deployed in any space or installed in a manner similar to a local air conditioning unit.

While these devices can increase the air flow, their effectiveness will depend on the volume of the room/area and the flow rate through the device. Therefore, it is important that considering this as an option the device should be of a suitable specification for the relevant area. Their introduction and use in the workplace should be done as part of an overall assessment of the existing ventilation systems in place to show that their use is necessary.

There are also drawbacks in using these devices – noise emissions are likely and these impacts need to be risk assessed before using them. In addition, operators need to be properly trained to use and maintain them. As with CO₂ monitors, use of such systems are



supplementary in nature and should not be seen as a substitute for Public Health advice or ventilation.

Guidance and Information Further information on ventilation is available at: HPSC – Guidance on non-healthcare settings WHO - A roadmap to improve and ensure good ventilation in the context of COVID-19 across healthcare, non-healthcare and residential settings. Provides useful flow charts to assist in decision making about ventilation.