

CO2 Monitor Guidance

How CO2 monitors help identify poor ventilation

The priority for your risk assessment is to identify areas of your workplace that are usually occupied and poorly ventilated. CO2 monitors can help you do this.

People breathe out CO2. If there is a build-up of CO2 in an area it can indicate that ventilation needs improving.

CO2 monitors don't measure levels of coronavirus but using them can tell you if an area needs improved ventilation. The current HSE guidance can be found in this link [Identifying poorly ventilated areas by using CO2 monitors \(hse.gov.uk\)](https://www.hse.gov.uk/ventilation/)

1. Where should settings place CO2 monitors?

The guidance says the following. Monitors should be placed:

- At head height when seated.
- Away from ventilation outlets, such as grilles or windows.
- At least 0.5m away from occupants (closer than this could give inaccurate readings).

2. How long should monitors be kept in one place?

The guidance says settings can rotate monitors around the building in spaces that are "suitable for monitoring".

It says rooms should be monitored for at least one full day before rotating the device to a different space.

The guidance also says settings should keep their rota simple. It adds: "Start with potentially under-ventilated rooms as set out above and then move your monitors to other rooms."

Settings have also been told to prioritise those areas that are most used or with the highest occupation density.

3. Which areas in a Setting are suitable for CO2 monitors?

The guidance says that the areas in education and childcare settings where monitors can be used include:

Teaching spaces (including lecture rooms, classrooms, and practical teaching spaces).

Indoor play spaces (for example, rooms in nurseries).

Staff rooms, large offices, meeting rooms, group, or breakout rooms.

4. Which areas in Setting are not suitable for CO2 monitors?

Settings have been told that monitoring is not recommended in areas where CO2 monitors are unlikely to give reliable readings. These include:

Large, open internal spaces and spaces with higher ceilings, such as sports halls or atriums.

Spaces that are densely occupied for shorter periods, such as corridors or lobbies, and areas with low occupancy density, including kitchens and toilets, or offices with one or two occupants.

5. What should I do if my monitor is flashing red / beeping?

CO2 monitors are intended to help you identify areas that are poorly ventilated, so that you can explore what steps you can take to improve ventilation.

It is important to remember that CO2 monitors are an indicator of ventilation status and not infection risk. If the monitor flashes red or beeps this is an indicator of poor ventilation and you should explore what steps you can take to improve/increase ventilation, i.e. open windows, vents, doors. There is no need to stop using the room.

Purging (airing rooms) frequently by opening all the doors and windows maximises ventilation in rooms when the room is unoccupied. If you have rooms with mechanical ventilation that brings fresh air into a building from outside, make sure the system is working optimally i.e. set to work at a sufficient rate to supply fresh air into an area, and make sure it's maintained in line with manufacturers' instructions.