

Top Tips

for using CO2 Monitors

CO2 Monitors are a helpful tool for assessing ventilation in your setting. Here are some top tips for using them...

- 1. Know what ventilation you have.** Identify how your school is ventilated (opening windows, mechanical ventilation or hybrid ventilation, which combine the two) and communicate this to the school community.
- 2. Assess ventilation.** Use CO2 monitors to help you to assess ventilation and identify poorly ventilated spaces across your estate. CO2 monitors can confirm where additional measures are needed, and when any additional action is working. For more information, see [guidance from the Health and Safety Executive \(HSE\)](#).
- 3. CO2 monitoring should happen regularly, especially when you change the way that a room is used.** This is because lots of factors affect CO2 readings, including the number of people in the room and the activities taking place. Remember to take the different uses of each room into account as part of the risk assessment, as some activities (e.g. singing, dancing or physical activity) may require additional ventilation.
- 4. Tell staff about them.** Make sure that classroom staff are aware that CO2 monitors are in rooms, and that the monitors support managing ventilation. Ensure staff have access to guidance on how to interpret readings on a CO2 monitor and what to do in response.
- 5. Check they're working correctly.** When they are first switched on or moved to another space, the reading will take time (15 to 30 minutes) to settle.
- 6. Place CO2 monitors away from windows and doors.** Position a CO2 monitor where you can see it easily. Place them at head height and keep them away from windows, doors and air supply openings, and at least 50cm away from people as their exhaled breath contains CO2. Depending on how the room is being used, you may wish to check the reading mid-way through class or at the end, to identify when you may need to adjust the ventilation.
- 7. Use them when the room is occupied.** CO2 monitors need to be used when rooms are occupied. When first placed in a room, the reading may need to refresh several times before settling on a reading. If you are sharing monitors between rooms leave them in the same location for at least one full day before moving to another space.
- 8. Calibrate.** Make sure that CO2 monitors are calibrated properly and check if they are giving unusual readings. To do this, place the monitor outside in a sheltered location for 15 minutes. Check that CO2 levels are showing as below 500ppm. If they are not, your unit may be faulty and you should contact the supplier.

KNOW YOUR CO2 READINGS



800ppm or less Ventilation is good.

800-1500ppm An **early indication to take action**: adjust the ventilation by opening windows or doors more widely. Over time the CO2 monitor can help you learn what works well.

Over 1500ppm If your CO2 monitor is frequently over 1500ppm for 20 minutes or more, this is a sign that **ventilation needs to be improved**. If your actions cannot easily improve the ventilation in your classroom you should report this to school leaders.

For more information, see the [DfE's guidance on CO2 monitors and air cleaning units](#).

For more tips on keeping classrooms warm, see [The Education Hub](#)



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