



How can dental practices ensure they are 'COVID-secure'?



Decontamination expert **Tautvydas Karitonas**¹ considers what a COVID-secure dental practice looks like and how practice managers can ensure they achieve this.

Despite the announcement that dental practices could re-open at the beginning of June, whilst many have done just that, some are only just starting to reopen and resume seeing patients now. However, the British Dental Association (BDA) recently reported that social distancing measures and a shortage of personal protective equipment (PEE) has resulted in many dental professionals delaying the re-opening of their practices.

Take a proactive approach

A proactive approach to decontamination is vital in combatting the transmission of COVID-19 in dental practices. Evidence published in *JAMA* and the *BMJ* suggests that anywhere between 40%¹ - 80%² of COVID-19 cases could be asymptomatic. This, plus the delay between contracting the virus and the onset of symptoms, even in those who experience them, means the virus is able to spread quickly between seemingly healthy members of the public.

With this in mind, taking a reactive approach to decontamination – only beginning a deep clean when a case has been identified – is not enough to protect patients and staff.

To break the chain of infection and reassure patients, dental practices must thoroughly decontaminate all patient areas and treatment rooms according to a proactive schedule – as well as having a contingency plan in place for when cases are identified. This is particularly critical in treatment areas, which must be decontaminated after aerosol generating procedures (AGPs), according to NHS England guidance.³ Of course, in a dental practice, most procedures are AGPs – meaning a robust decontamination schedule is needed to ensure ample time between patients.

Large, busy practices should also consider a professional Workplace Infection Prevention Assessment (<https://bit.ly/2WXR5Ui>) to identify and mitigate the risk factors in their

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offering 'fogging' services, practice managers should take steps to ensure that suppliers can provide legitimate, proven results to avoid patients being exposed to potentially harmful cleaning chemicals – or pathogens left behind by incorrect chemicals or technique.

Hydrogen peroxide vapour (HPV) and ultraviolet-C (UV-C) light technology can be used to combat micro-organisms much more resistant than the SARS-CoV-2 pathogen to safe levels. Both methods break down the fat and protein outer layer of the virus, before destroying the genetic material within. Their efficacy and reliability means they are often used by NHS Trusts to combat infection concerns like COVID-19, MRSA and *C.difficile* – more than a third of NHS Trusts (41%) currently use Inivos' HPV and UV-C decontamination technology and services on wards and surgical areas.⁷

Have a PPE contingency plan

Dental professionals will need to ensure that they have suitable PPE in order to make practices COVID-secure. To do so they will need to follow the correct procedures to ensure they are disposing of their single use PPE, to combat the risk of spreading the virus or alternatively decontaminating their PPE between seeing patients.

With stocks of PPE in short supply, dental practices must ensure that they have a plan in place should they run out. As well as ensuring the practice has reputable, reliable sources, practice managers should plan for a worst-case scenario should their suppliers run short.

Hospitals are already looking at using hydrogen peroxide vapour to effectively decontaminate single use PPE if this becomes necessary. Although it's not a long-term solution, a University Hospital Southampton study has concluded it is a viable contingency option during shortages.

Inivos' ProXpod rapid decontamination chamber is able to facilitate the decontamination of PPE quickly and effectively, using the leading ProXcide technology; it deploys a low chemical concentration through ultrasonic dispersal.

References

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Author information

¹Tautvydas is a leading expert in harnessing decontamination technology to eliminate viruses, bacteria and other contaminants from hospitals, care homes and public spaces. In his role as Head of Research & Development at Inivos, Tautvydas has led research and development into numerous pioneering solutions for virus outbreaks, including isolation pods, automated hydrogen peroxide vapour (HPV) and ultraviolet-C (UV-C) systems and decontamination wipes. <https://www.hygiene-solutions.co.uk/>

environment, and understand what needs to be done to make the space COVID-secure.⁷

Manual cleaning alone is not enough

The SARS-CoV-2 virus that causes COVID-19 can live on certain surfaces for days,⁴ therefore surfaces that are left without being decontaminated frequently can become a key source of transmission to healthy patients. Although an essential first step of decontamination is to manually clean surfaces, it is not enough on its own.

Cleaning by hand cannot achieve sufficient reduction of pathogenic organisms alone as even the most thorough manual cleaning can leave traces of bacteria behind by unintentional but unavoidable human error.

More robust methods are essential for a safe environment for staff and patients. While there has been a rise in companies

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