



Living with COVID-19

CPD questions

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Lynn Woods, Health, safety and compliance adviser on the British Dental Association compliance team, provides an update on infection prevention and control principles now that COVID-19 restrictions have eased.

After two very long years, practices are cautiously starting to return to treating most of their patients as pre-pandemic. At the time of writing (June 2022) clinical dental team members will be relieved that they are able to treat most of their patients this summer without having to endure the extra work, discomfort and additional costs of enhanced personal protective equipment (PPE), in particular FFP3s.

Firstly, an overall look as to how we've got to this point:

Vaccination

COVID-19 vaccination remains the most important and effective way to protect us from becoming seriously ill from the virus. Whilst it is inevitable that the virus will continue to mutate and create new variants, we now have a significant wall of immunity that should continue to provide protection, even against new variants. The vaccines that were developed against the first form of the virus are still protecting us from the more recent variant, Omicron. However, new variants could significantly change the behaviour of the virus to make it more problematic. Currently, the emphasis is on monitoring new variants and reacting accordingly, including updating vaccines.

Protection against catching the virus can

wane quickly, but protection against getting seriously ill is longer lasting. Immunity is the reason we have been able to relax restrictions. However, significant waning of immunity could lead to new waves of COVID-19 and renewed pressure on hospitals. We need to be cautious of a period where it looks like COVID-19 is in retreat, only for it to come back once enough immunity wanes.

The amount of protection we have against the virus will need to be constantly monitored. This will dictate who gets further vaccine doses and how often. There has already been another booster this spring for the over-75s and people at high risk from the virus. There will be a wider booster campaign in anticipation of the winter months too. In the longer term there is already work under way on a next generation of COVID-19 vaccine to see whether it can provide longer-term protection.

Antiviral drug resistance

Drugs that destroy the virus are now being used to keep people out of hospital, but there is a danger that if used inappropriately, the virus will evolve to render the drugs ineffective. This may be the single most important issue in the months ahead. We are familiar with hard-to-treat superbugs (such as MRSA) which were created by misuse of antibiotics. The same can happen with antivirals. These drugs are currently playing a

vital role in saving lives and are one reason for the easing of restrictions. More importantly, they are the safety net for the future. If a new variant emerges that significantly bypasses our immunity, we will be dependent on antivirals to buy us time until an updated vaccine can be developed and rolled out. The more they are used the greater the risk of resistance, which means they will need to be used carefully in the people with the most to gain from them.

'Normal' life

As we continue to return to normal life, we must accept that the more we get together, the greater the opportunities for the virus. The effect of our changing behaviour is likely to have a considerable impact on the virus. The uncertainty means we could continue to have declining infections and people in hospital, or it could be the opposite. Currently, high levels of immunity mean overwhelming pressure on the NHS is unlikely.

Legal requirements have been replaced with advice. Adults and children who test positive are still advised to stay at home and avoid contact with other people. After five days, they may choose to take a Lateral Flow Device (LFD) test followed by another the next day – if both are negative, and they do not have a temperature, they can return to their normal routine. Those who test positive should avoid contact with anyone in an at-risk group, including if they live in the same

household. There is specific guidance for staff in particularly vulnerable services, such as adult social care, healthcare, and prisons and places of detention.

Long COVID

Not everyone quickly recovers, and some develop 'long COVID'. Symptoms include persistent fatigue, brain fog, shortness of breath and muscle pain. Studies have suggested vaccination reduces the risk but does not eliminate it. The number of cases of long COVID will need to be monitored. Understanding why the virus causes it and what the best treatments are could speed up recovery.

and be segregated or isolated, for example separated by space (two metres) or time (beginning or end of session) from other patients.

TBPs include – if treatment involves an AGP – enhanced PPE:

- Fluid repellent gown if risk of extensive spraying or splashing is likely
- FFP3 or respirator /hood.

Improving ventilation in dental settings

One aspect that came to light during the COVID-19 restrictions was the need to improve ventilation in many dental practice settings. Practices should identify poorly

Ventilation recommendations

UK building regulations recommend whole building ventilation to be 10 l/s/person, and current healthcare guidance for new buildings and major refurbishments specifies that a treatment room should have at least 10 air changes per hour (ACH).

Specialist advice should be sought on how best to achieve the recommended air changes.

Note – It is recognised that transitional arrangements may need to be in place to support dental practices where air changes are unknown or below this recommended level.

Going forward

Currently the Government's guidance to the general public includes the simple message below:

'Individuals can reduce the risk of catching and passing on COVID-19 by:

- a. Getting vaccinated
- b. Letting fresh air in if meeting indoors, or meeting outside
- c. Wearing a face covering in crowded and enclosed spaces, especially where you come into contact with people you do not usually meet, when rates of transmission are high
- d. Trying to stay at home if you are unwell
- e. Taking a test if you have COVID-19 symptoms, and staying at home and avoiding contact with other people if you test positive
- f. Washing your hands and following advice to "Catch it, Bin it, Kill it"

Useful resources

1. Gallagher J. Covid: Five things we still need to keep an eye on. BBC News, 26 February 2022. Available at: <https://www.bbc.co.uk/news/health-60494159> (accessed 30 June 2022).
2. Cabinet Office. COVID-19 Response: Living with COVID-19. Updated 6 May 2022. Available at: <https://www.gov.uk/government/publications/covid-19-response-living-with-covid-19/covid-19-response-living-with-covid-19> (accessed 30 June 2022).
3. NHS. Dental framework – Supporting Guidance for Primary and Community Care Dental Settings. 1 June 2022. Available at: https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2021/03/C1636_i_dental-framework--supporting-guidance-for-primary-and-community-care-dental-settings.pdf (accessed 30 June 2022).

<https://doi.org/10.1038/s41407-022-0989-5>

'If a new variant emerges that significantly bypasses our immunity, we will be dependent on antivirals to buy us time until an updated vaccine can be developed and rolled out.'

General dental practice

So, back to the practical aspects of treating patients in general dental practice.

Note, practices in Northern Ireland, Scotland and Wales should check their country-specific guidance.

Who can be treated as pre-pandemic (standard infection control precautions 'SICPs')?

Patients who do not have symptoms of respiratory infection. Such patients do not have to wear face coverings/masks and can sit next to each other in the waiting room as per pre-pandemic.

Who should be treated as 'higher risk' (transmission-based precautions 'TBPs')?

Patients with symptoms of or a confirmed respiratory infection.

Non-urgent treatment may be deferred

Aerosol-generating procedures (AGPs) may be delayed where possible until the patient's risk has reduced.

Patients whose treatment cannot be deferred should wear a face covering or be offered a face mask on arrival (if tolerated)

ventilated spaces and take steps to improve fresh air flow.

Ventilation is (and was) important to reduce the risk of aerosol contamination from potential airborne and droplet pathogens. Clearance of infectious particles after an AGP is dependent on the ventilation and air change within the room.

AGPs in dentistry – dental procedures that use high velocity air and water streams – are considered a high risk of creating aerosols and include:

- Ultrasonic scaler (including piezo)
- High speed air rotor (or electric rotor that is greater than 60,000 rpm)
- Piezo surgical handpiece
- Air polishers.

There is increasing evidence of the importance of circulating fresh air in reducing the risk of COVID-19 transmission.

Ventilation also helps with reducing transmission of other respiratory infections such as influenza, with some research showing that being in a room with fresh air can in some cases reduce the risk of airborne transmission of COVID-19 by over 70%.

There are also potential wider benefits of good ventilation, for health, concentration, and lower absence rates.