

Case studies – A tale of two dental practices

The following hypothetical scenarios illustrate the potential transmission routes (underlined) of COVID-19 between staff members in a dental practice.

They highlight the different consequences of a practice member testing positive for COVID-19, depending on preventive transmission measures undertaken. It should be assumed that patients were not at risk, as appropriate PPE and infection prevention control measures were used in the clinical environment.

Practice 1

Dental nurse A was symptomatic for COVID-19 but the results of a test for the virus were inconclusive. Dental nurse B shared a car journey with Dental nurse A to practice 1. Dental nurse B was symptomless but subsequently tested positive for COVID-19.

Interactions

Social distancing within the practice between staff members did not occur during periods of non-clinical activity and this included sitting or standing less than 2m away from each other. Examples:

- In the reception area
- In the staff room
- During lunchtime in the kitchen area
- Outside during a break
- Social interactions in corridors, store rooms and waiting room areas

Whilst staff at the dental practice wore appropriate PPE for patient contacts, they did not wear fluid resistant (Type IIR) surgical masks in non-clinical areas.

Non-clinical areas

The use of non-clinical areas within the dental practice increased the chances of transmission of COVID-19 through:

- Sharing:
 - Computer terminals and desk space between users without appropriate cleaning
 - Cutlery and crockery in the kitchen area
 - A lift from the ground floor to the main surgery site

Members of staff used mobile phones but did not regularly clean them appropriately. Staff made beverages for other colleagues.

Summary

Potential routes of transmission of COVID-19 were possible in this scenario via:

- Interactions between dental staff
- Lack of social distancing and sharing of items in non-clinical areas within the dental practice, for example recreation areas (staff rooms and kitchen) and reception and sharing items such as computers, cutlery and crockery.
- Failure to wash or sanitise hands frequently, especially after touching commonly used surfaces.

Outcome

Dental nurse A needed to self-isolate for 10 days. Dental nurse B was initially asymptomatic and if they did not develop symptoms, they would self-isolate for 10 days. However, if dental nurse B subsequently developed symptoms after their test, they would re-start their 10-day isolation period from the day that the symptoms started. In all cases the day after symptom onset or test date is counted as the first full day of self-isolation.

Social distancing, frequent hand washing and the appropriate use of fluid resistant (Type IIR) surgical masks in conjunction with adequate social distancing as described in the scenario were not used during periods of non-clinical activity. All other staff working at the dental surgery had to self-isolate for 10 days (until the end of the tenth full day, after the day of most recent contact with the case), resulting in closure of dental practice 1 for this period.

Practice 2

Dental nurse C attended dental practice 2 for work and felt a little unwell. Dental nurse C subsequently tested positive for COVID-19.

Interactions

Appropriate social distancing between Dental nurse C and other members of the dental team occurred at all times in non-clinical areas and on entering and exiting the practice building. Staff washed their hands regularly in addition to that required for clinical purposes.

Staff wore fluid resistant (Type IIR) surgical masks in non-clinical areas. Dental staff that were not in the same household did not share private transport together.

Use of non-clinical areas

Surfaces that were touched frequently throughout the practice, such as door handles, telephones and light switches were cleaned regularly. Mobile phones were cleaned as appropriate before going to work and on leaving the premises. Computer terminals and desks were only used by one person. There was no sharing of communal areas such as kitchens or staff rooms (breaks were staggered) and no sharing of items such as crockery or cutlery. Some staff chose to eat alone in their car or socially distanced outside. Staff changed clothes at the beginning and end of the day, wearing scrubs in between.

Outcome

Appropriate social distancing was followed at all times, frequent hand washing and staff wore a fluid resistant (Type IIR) surgical mask in conjunction with appropriate social distancing in non-clinical areas. As a result, no additional staff in the practice needed to isolate and so practice 2 remained open following a deep clean.

Learning

Dental practice staff should maintain social distancing at all times, as far as is reasonably possible and practise frequent hand washing. This will mitigate against the risks of droplet/contact transmission both between staff/patients and staff/staff. For non-clinical

areas, such as reception or staff rooms, staff wearing a fluid resistant (Type IIR) surgical mask **may minimise** the risk of transmission of COVID-19, though it **does not** replace the need for appropriate social distancing and frequent hand washing in **all** non-clinical areas.

Even if **all** staff wore a fluid resistant (Type IIR) surgical mask in **all non- clinical settings**, **all of the time** there would still be a risk of transmission of COVID-19 if appropriate social distancing was not maintained. For example, if a positive COVID-19 individual and a colleague were within a reception/communal area whilst each wearing a fluid resistant (Type IIR) surgical mask and:

- were coughed on
- had a face-to-face conversation within one metre
- had skin-to-skin physical contact
- were within one metre for one minute or longer without face-to-face contact
- were within 2 metres for more than 15 minutes
- travelled in a small vehicle together

These scenarios would all count as close contacts under Test and Trace procedure, resulting in self-isolation of the colleague for **10** days.

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