



Guidance on COVID-19

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Guidance on Managing Infection Related Risks in Dental Services in the Context of the COVID-19 Emergency

Introduction & Scope

These guidelines are intended to support dentist and others working in dental services to manage risk of healthcare associated infection in the context of the current COVID-19 emergency. The situation is changing rapidly both with respect to the scientific knowledge about the virus and virus transmission and the epidemiological situation therefore regular review of this Guidance Document will be required. The application of this guidance will vary with the context of Government decisions regarding the delivery of essential services and the definition of essential services. The definition of what constitutes essential, urgent or emergency dental treatment is outside the scope of this document.

General Background on COVID-19

COVID-19 is a novel disease in humans. The virus associated with the disease is SARS-CoV-2. The virus is in many respects similar to other Coronaviruses in particular in relation to its structure and mode of transmission but there is still a great deal of uncertainty in a rapidly changing situation.

It is not possible to differentiate between COVID-19 and other common respiratory infections based on symptoms alone. At the present time COVID-19 should be considered as possible in anyone with new onset of fever, new onset of symptoms of respiratory tract infection or acute deterioration of existing respiratory disease.

The laboratory diagnosis of COVID-19 is based mainly on detection of virus RNA in a nasopharyngeal swab but testing of lower respiratory samples is important in certain settings. A positive test for SARS-CoV-2 on a nasopharyngeal sample is accepted as establishing the diagnosis. Failure to detect the virus on sample makes the diagnosis much less likely in a symptomatic patient but does not exclude the

diagnosis. Testing should not generally be performed on asymptomatic people. Therefore, it is prudent to take precautions appropriate to the context with all patients with respiratory tract infection.

One area of particular concern is high-risk patients. These include older patients and those with pre-existing disease. High risk in this context means that those patients are at higher risk of developing severe disease if they develop infection. There is no evidence that they are more likely to become infected or more likely to pose a specific additional risk of spread of the virus to others.

Key Signs and symptoms of COVID-19

COVID-19 is a contagious viral infection that generally causes respiratory illness in humans.

The most common signs and symptoms include:

- Fever.
- Cough.
- Shortness of breath.
- Other respiratory symptoms.

Incubation Period

People with COVID-19 generally develop signs and symptoms, including mild respiratory symptoms and fever, on an average of 5-6 days after infection (mean incubation period 5-6 days, range 1-14 days).

Clinical Course

Most people with COVID-19 will have mild disease and will recover. A minority will develop more serious illness.

People at higher risk of developing more serious illness include:

- Older people – the risk goes up progressively in people above the age of 60 but is particularly higher in the 70s and 80s.
- Those who are immunocompromised.
- Those with underlying medical conditions.

Routes of Transmission

COVID-19 is transmitted through transfer of virus to the mouth, nose or eyes on hands following contact with surfaces contaminated with droplets, oral secretions or nasals secretions. It is also transmitted by direct droplet transmission to the mouth, nose or eyes during close unprotected contact with a person who is shedding the virus.

The risk of Contact Transmission is managed by good infection prevention and control practice including hand hygiene, respiratory hygiene and cough etiquette and environmental hygiene. Appropriate use of gloves and apron are also important in managing the risk of contact transmission. It is appropriate to review and reinforce best practice in this area at this time.

The risk of Droplet Transmission, in addition to the above, requires use of a surgical mask when providing dental care.

Airborne spread of COVID-19 is not accepted as a significant concern in most healthcare settings however it is a concern in the context of certain aerosol-generating procedures conducted in health care settings. A number of dental procedures generate aerosols from the oral cavity. If it is necessary to perform dental procedures on patients with suspected or confirmed respiratory virus infection including COVID-19 this is accepted as a significant risk although good evidence of transmission in this setting is lacking.

Some common dental aerosol generating procedures (AGPs) are use high-speed hand-piece, use of mechanised descalers, high pressure 3-in-1 syringe, use of air-driven surgical hand pieces. Non AGPs include examinations and assessments, hand scaling with suction, non-surgical extractions, certain surgical extractions with a speed reducing hand-piece and removal of denture stages.

There are also widely articulated concerns regarding the possibility of transmission by aerosol droplets from people who are infected but asymptomatic (for example those in the late incubation period for COVID-19 but who have not developed

symptoms). This is linked to general concerns about the role of transmission from asymptomatic people in the dissemination of the disease. It is not clear at this time the extent to which transmission from asymptomatic people occurs but it is likely from first principles that transmission from asymptomatic patients can occur in some circumstances.

Airborne transmission from asymptomatic patients during dental treatment is a valid hypothesis and it is of concern to those working in dental services given the frequency with which they perform AGPs and the duration of their exposure to aerosols. Based on this hypothesis some authorities advocate airborne precautions when performing AGPs as part of dental treatment on all patients but others do not. The hypothesis of airborne spread from asymptomatic patients during performance of AGPs during dental treatment or other procedures is not supported by evidence. The adoption of airborne precautions for all AGPs for all patients would have very significant implications for delivery of care and is not recommended at this time in the absence of evidence or a consensus of expert opinion.

Managing the risk of Transmission in Dental Services

As with all healthcare services, there is a risk to patients from exposure to other patients and to staff working in the dental practice.

The following are guiding principles related to controlling the risk of transmission in the healthcare setting

- i. reduce footfall.
- ii. minimise workplace contacts.
- iii. maintain social distancing.
- iv. avoid unnecessary exposure in the clinical environment.
- i. follow **Standard Precautions with all patients at all times** in particular hand hygiene and appropriate use of personal protective equipment. Guidance on the safe use of PPE, including donning and doffing PPE including a video is available on www.hpsc.ie.

Responsibility for delivering safe and effective care

All healthcare workers in dental services must act to protect their patients, while also safeguarding their own health, and the health and wellbeing of colleagues.

All healthcare workers in dental services are advised to remain up to date on the Covid-19 public health and occupational health guidance, available from the Health Protection Surveillance Centre, and to seek medical advice by telephone at the earliest opportunity should they develop respiratory symptoms.

Before providing or accessing dental services

A key element in managing the risk of exposure to risk from staff to patients is that staff members with fever or symptoms of respiratory tract infection do not attend for work and follow specific national guidance on exclusion from work in the context of the COVID-19 emergency.

In relation to risk to patients from other patients (for example while waiting for treatment) key elements of managing that risk are addressed as follows.

Identify all patients with new onset fever or symptoms of respiratory illness and all COVID-19 Contacts before they attend the practice (for example by telephone call or text) and defer the appointment for symptomatic patients if possible. Such patients should be directed towards appropriate medical care.

Place signage at the entrance to the practice and ensure a further verbal check for fever or symptoms of respiratory illness and COVID-19 Contact status at reception to identify symptomatic patients.

Dentists should follow current Government decisions on delivery of dental services. In relation to those services that are permitted at a given time it is appropriate perform a risk assessment taking account of the expected benefit of the treatment to the patient, the likely consequences of delayed treatment for the patient and the risk of infection to patients and staff related to providing the service in the current COVID-19 emergency. Where possible this assessment may be made in advance of the patient's attendance based on the patients records and self-reported symptoms.

Environmental and administrative controls are paramount and all staff should be conscious that the role of good infection prevention and control practice including appropriate use of PPE is to mitigate risk that cannot be avoided.

Organisational Measures

- For patients with dental symptoms, use a telephone based triage, with a series of questions, leading to a decision for the patient to attend, or for symptoms to be managed without clinical treatment, but with follow up arranged.
- Ask parents not to bring non-appointed siblings or other people to the appointment.
- Use signage and answering machine messages to ensure that all access is by scheduled appointment where possible.
- Promote hand hygiene at reception (signage, verbal reminders and provide alcohol hand rub).
- Promote respiratory hygiene and cough etiquette (signage, provide tissue and bins).
- Reduce use of waiting areas and arrange for patients to attend the surgery directly at the appointed time.
- Promote social distancing to the greatest extent possible while waiting treatment.
- Consider asking the patient to wait in their own vehicle rather than in a waiting area where appropriate.
- Ask the patient to establish phone contact on arrival to help manage attendance and check in.
- Ensure that scheduling of appointments is managed to reduce patient contacts and allow appropriate time for any cleaning and disinfection required before the next patient.
- Minimise non-essential interaction (especially physical contact) between staff members and patients and between staff members.
- Monitor supplies of materials required for good infection prevention and control practice including supplies required to support hand hygiene and supplies of PPE.

Surgery Preparation

- Remove non-essential items from surgeries and waiting areas.
- Ensure hand sanitiser is available.
- Ensure that an environmental cleaning protocol is available for cleaning and disinfection.

Infection Prevention and Control During Clinical Assessment and Treatment

- Observe adherence to the Dental Council Code of Ethics and guidance relating to infection control.
- Observe strict adherence to infection prevention and control standards, including dealing with clinical waste. For information, the HSE's IPC standard operating procedures are available here:
<https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/hcai/resources/dental>
- Limit personnel in the treatment room to the minimum required and ensure that the door remains closed throughout.
- Non-essential personnel should not enter the treatment room during the procedure to address other issues.
- Avoid use of dental cuspidors to minimise contact with oral secretions (e.g. use of a disposable cup).
- PPE should be used as per Standard Precautions when performing a procedure associated with contact with body fluids (oral fluids) and risk of splashing (gloves, plastic apron, surgical mask and eye protection).
- Following clinical assessment, it is appropriate to review the risk assessment regarding the expected benefit of the treatment to the patient, the likely consequences of delay of treatment for the patient and the risk of infection to patients and staff related to the available treatment options.
- Minimise use of Aerosol Generating procedures (AGPs) wherever possible.
- If AGPs are necessary the generation of aerosols should be minimised through use of suction, cotton rolls and damp gauze.
- Use a rubber dam with high volume suction during aerosol generating procedures to reduce aerosol generation.

- Where possible use absorbent materials, e.g. cotton rolls, damp gauze to minimise prolonged washing/rinsing as part of treatments.
- Testing of asymptomatic patients to assess infection status in advance of essential treatment is not appropriate. The current tests are not intended for this purpose.

Note. If it is essential to perform aerosol generating procedures on patient with suspected or confirmed COVID-19 the procedure should follow HPSC guidance on PPE use for aerosol generating procedures (gown, respirator mask, eye protection and gloves) and may be better provided in a hospital setting with optimal facilities (ventilated theatre) and support services.

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