

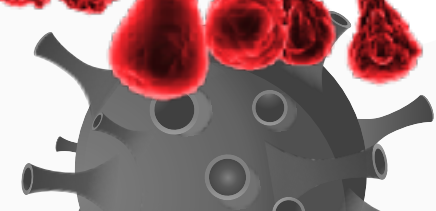
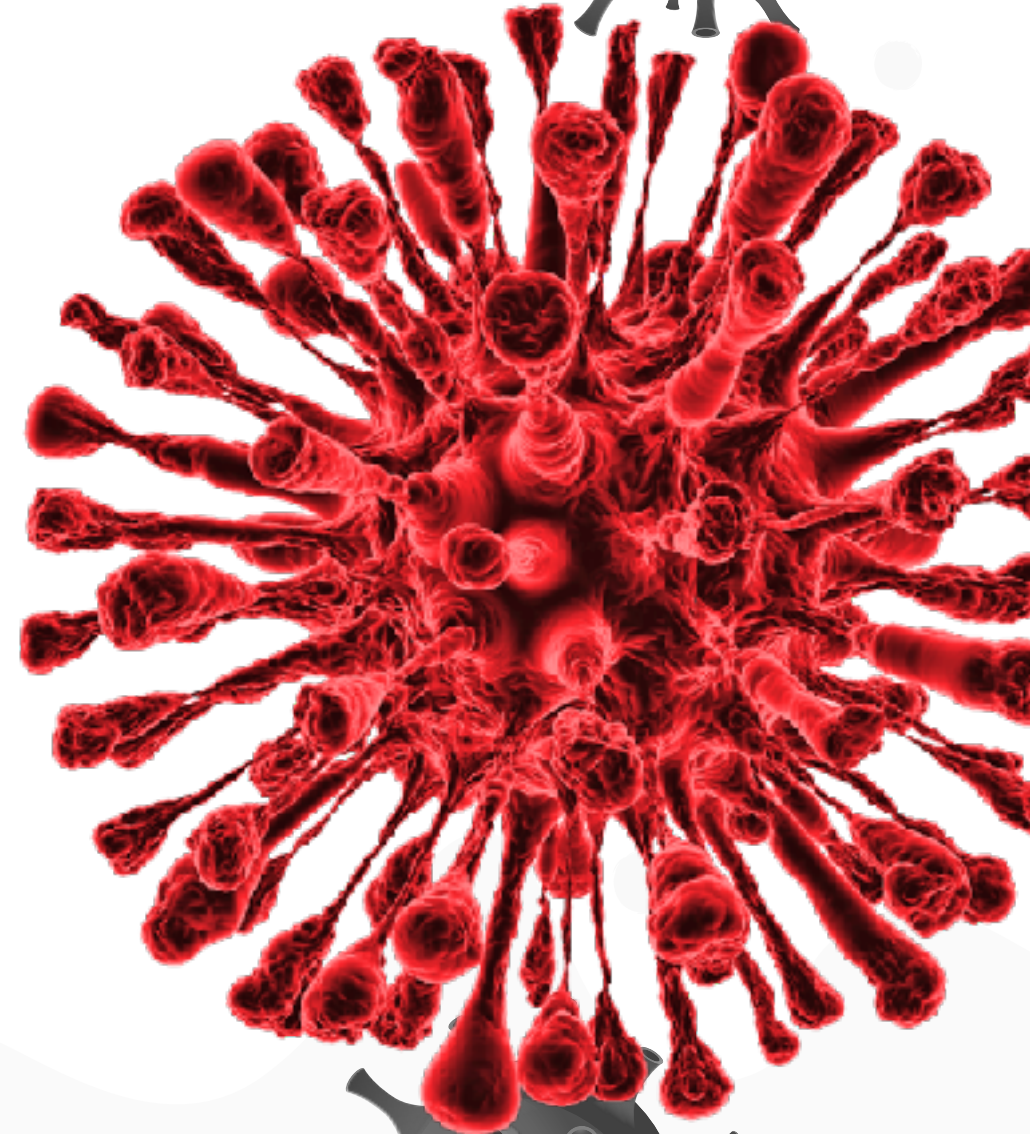
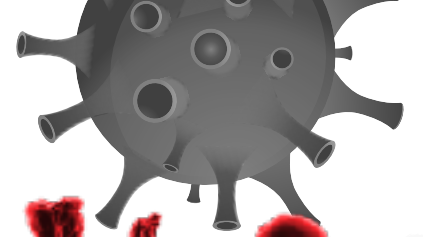


INTERNATIONAL DIGITAL
DENTAL ACADEMY

COVID-19

RESEARCH BASED INFORMATION & DENTAL TREATMENT PROTOCOL

By [Prof Adam Nulty](#), [Prof Chris Lefkaditis](#), [Prof Patrik Zachrisson](#), [Prof Quintus Van Tonder](#), [Dr Dan Shaffer](#), Dr Deanna Snitzer, Prof Wally Renne, Dr Chris Waith,
Dr Hossam Dawa, Dr Federica Antonellini and Dr Niraj Kinariwala Et al



Welcome Message

COVID-19

RESEARCH & FACT BASED DENTAL TREATMENT PROTOCOL

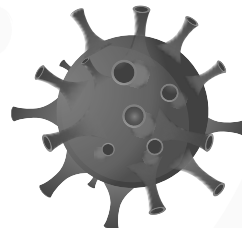
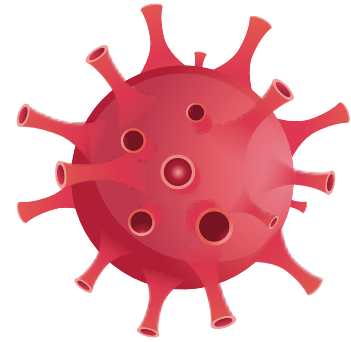
This document and the protocol herein was created by the IDDA team to guide Dental Practices and staff with information on the virus, our current situation and our suggested Dental Treatment Protocols in order to treat patients once the Covid-19 pandemic allows working practice to resume. It should be made clear that local authorities and regulators' rules and operating procedures should be adhered to at all times for the safety of patients and staff alike.

The aim is to allow for discussion in safe practices for the safe dental treatment of patients whilst also protecting the Dentist, dental auxiliaries, and other supporting staff.

This has been created using research, the latest published articles as well as professional judgement, clinical experience and common sense on an international basis.

The ideas and suggestions are for any provider to extrapolate to their own clinic. It is recommended that each provider continue to use their own best clinical judgement in accordance with local regulation in creating a safe working environment. Local recommendations should be adhered to (as always) at all times.

Please contact your local quality control, commissioner, regulator or health authority if you have any questions or problems with your own practice.

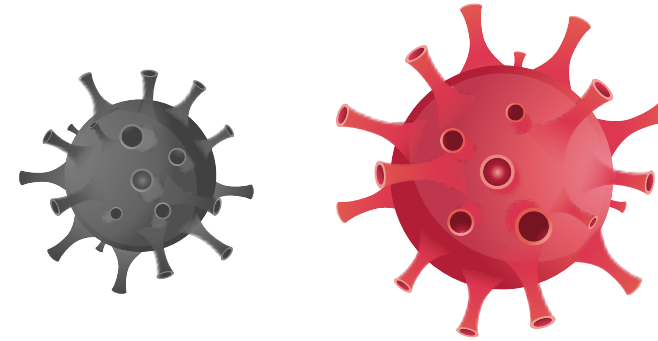


Resources and links

COVID-19

RESEARCH & FACT BASED

DENTAL TREATMENT PROTOCOL



Information Available	Link
Full NHS England guidance on Operational Procedures for Dental Teams – useful framework for adapting existing protocols for cross infection control, managing risks, and patient pathways.*	https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/04/C0282-covid-19-urgent-dental-care-sop.pdf
Comprehensive NHS England Cross Infection Control Guidance for all Healthcare Providers – detailed assessment of COVID-19 associated risks and IPC procedures suitable for all clinic settings*	COVID-19: NHS infection prevention and control guidance, 27 April 2020
RCS updates on the COVID-19 situation – updated regularly	Royal College of Surgeons Covid-19 Information Hub,
Further protocols and information on Transmission based Precautions (TBC's)	Reducing the risk of COVID-19 transmission in a hospital setting
An overview of the Hierarchy of Controls	CDC Hierarchy of Controls

* We recommend that NHS England guidance and procedures are followed, and checked for updates regularly



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DENTAL TREATMENT PROTOCOL

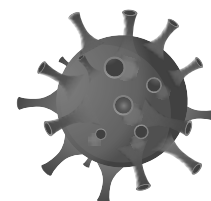
Contents

CORONA VIRUS Disease 2019

Information in a step by step approach

Advice and guidance

N.B. It is recommended that each provider continue to use their own best clinical judgement in accordance with local regulation in creating a safe working environment. Local recommendations should be adhered to (as always) at all times.



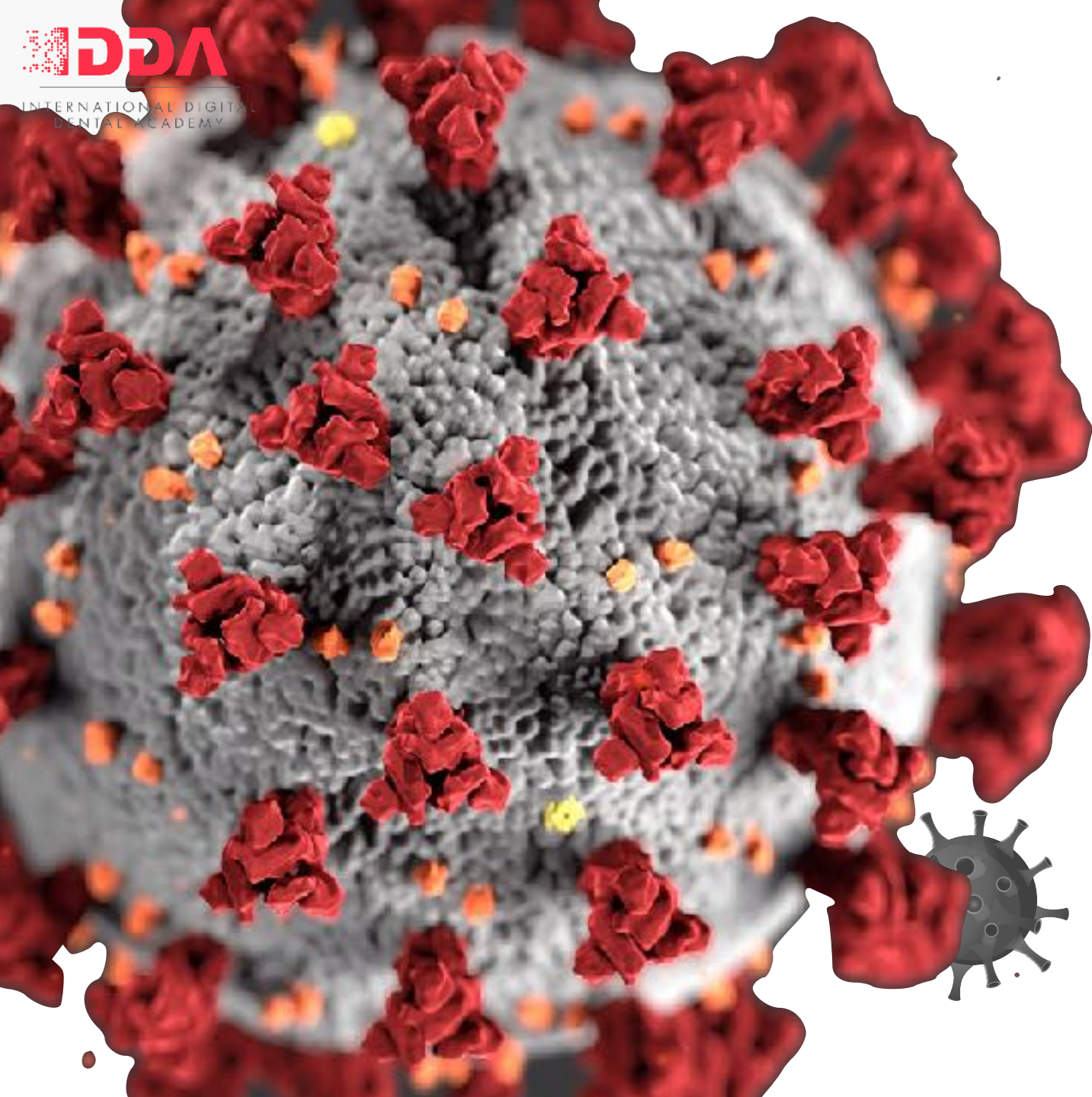
#01

About The Virus

CORONAVIRUS Disease 2019

The following section outlines the following:

- What is Covid-19?
- The source of Covid-19
- How Covid-19 spreads

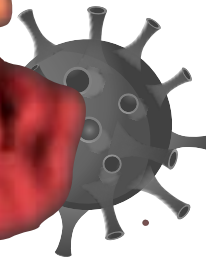


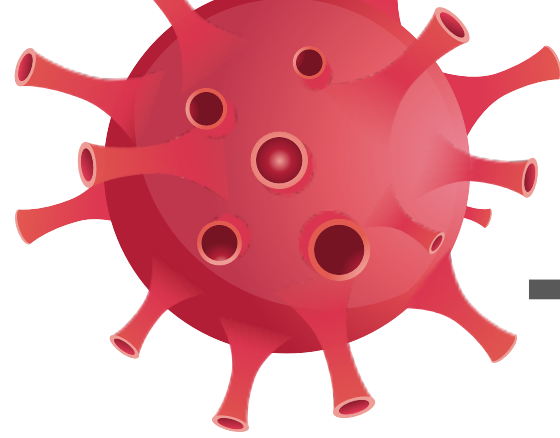
What Is COVID-19?

CORONAVIRUS Disease 2019

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases. A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans.

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered nCoV (SARS-CoV-2).



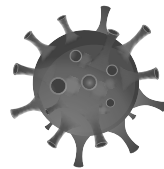


The Source of **COVID-19** CORONAVIRUS Disease 2019



Wuhan, Hubei District
People's Republic Of China

All available evidence (unless proved otherwise by the governments of the world) for COVID-19 suggests that SARS-CoV-2 has a zoonotic source. Since there is usually limited close contact between humans and bats, it is more likely that transmission of the virus to humans happened through another animal species, one that is more likely to be handled by humans. This intermediate animal host or zoonotic source could be a domestic animal, a wild animal, or a domesticated wild animal and, as of yet, has not been identified. All the published genetic sequences of SARS-CoV-2 isolated from human cases are very similar. This suggests that the start of the outbreak resulted from a single point introduction in the human population around the time that the virus was first reported in humans in Wuhan, China in December 2019. .



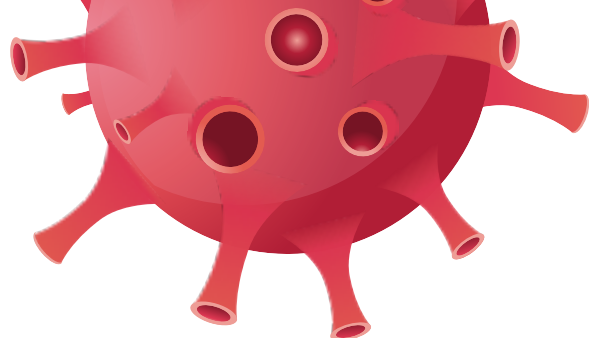
How It Spreads

CORONA VIRUS Disease 2019

- **Primary transmission between people:** respiratory droplets and contact routes
 - Direct contact with infected people
 - Indirect contact with surfaces in the immediate environment
 - Objects used on infected person
-
- **Airborne transmission may be possible:** specific circumstances through procedures that generate aerosols
 - The disease could be transmitted directly or indirectly through saliva



Through respiratory droplets produced when an infected person coughs or sneezes.



Person to Person
The virus is thought to spread mainly from person-to-person



Between people who are in close contact with one another

Less than 6 Feet

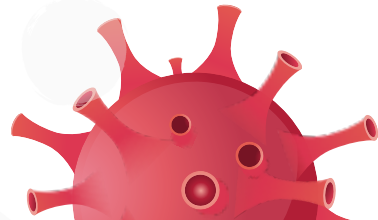
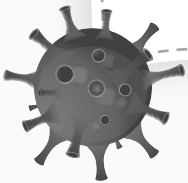




People are thought to be most contagious when they are most symptomatic (the sickest)

Some spread might be possible before people show symptoms

there have been reports of this occurring with this new coronavirus, but this is not thought to be the main way the virus spreads.



Can Someone Spread It Without Being Sick?



We know that coughs and sneezes spread the virus, so how is it possible for asymptomatic people to spread the infection?

People with mild or no symptoms can have a very high viral load in their upper respiratory tracts, meaning they can shed the virus through spitting, touching their mouths or noses and then a surface, or possibly talking. Even people who don't feel ill occasionally cough or sneeze.

Once symptoms develop, a person's viral load declines steadily, and they become increasingly less infectious. However, people appear to keep shedding the virus for around two weeks after they recover from covid-19, both in their saliva and stools (medRxiv, doi.org/dqbs). This means that even once a person's symptoms have cleared, it may still be possible to infect other people.





Can Someone Spread It Without Being Sick?

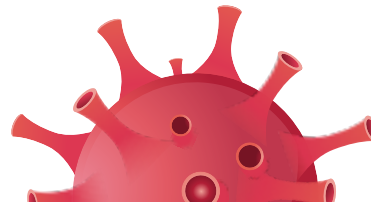


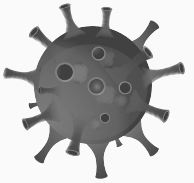
We know that coughs and sneezes spread the virus, so how is it possible for asymptomatic people to spread the infection?

Airborne droplets are likely to be the main infection route, but contaminated surfaces could play a role too. Health advice typically says the virus can persist for about 2 hours on surfaces, says William Keevil at the University of Southampton, UK.

Read more: <https://www.newscientist.com/article/2238473-you-could-be-spreading-the-coronavirus-without-realising-youve-got-it/>

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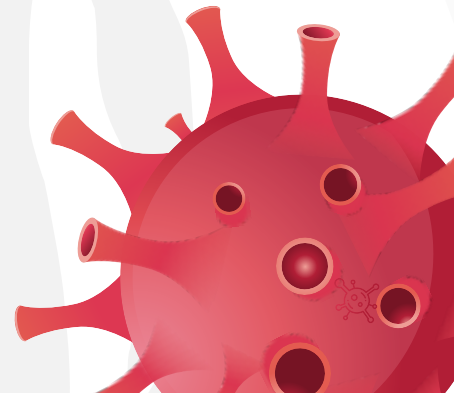
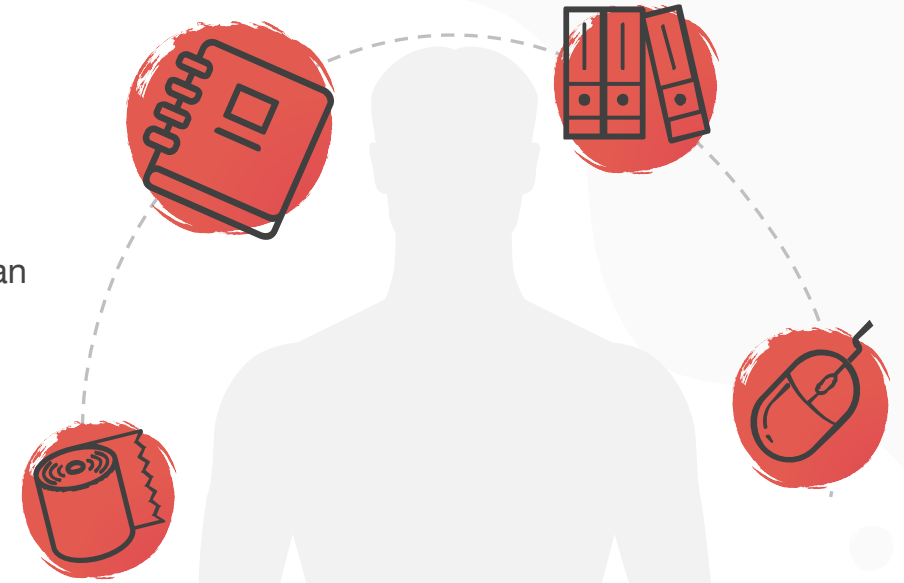


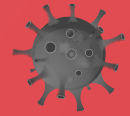
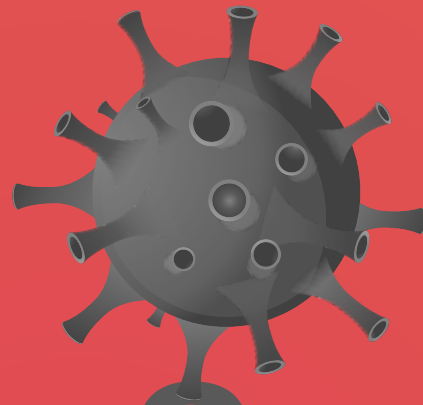
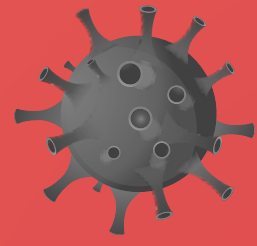
Spread From Contact With Contaminated Objects

CORONAVIRUS Disease 2019

In light of limited data for SARS-CoV-2, evidence was assessed from studies conducted with previous human coronaviruses including MERS-CoV and SARS-CoV. Human coronaviruses can survive on inanimate objects and can remain viable for up to 5 days at temperatures of 22 to 25°C and relative humidity of 40 to 50% (which is typical of air conditioned indoor environments). Survival on environmental surfaces is also dependent on the surface type. An experimental study using a SARS-CoV-2 strain reported viability on plastic for up to 72 hours, for 48 hours on stainless steel and up to 8 hours on copper. Viability was quantified by end-point titration on Vero E6 cells. **Extensive environmental contamination may occur following an AGP. The rate of clearance of aerosols in an enclosed space is dependent on the extent of any mechanical or natural ventilation** – the greater the number of air changes per hour (ventilation rate), the sooner any aerosol will be cleared.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/881489/COVID-19_Infection_prevention_and_control_guidance_complete.pdf

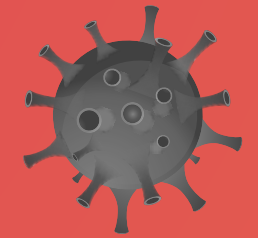




#02

Symptoms

CORONA VIRUS Disease 2019

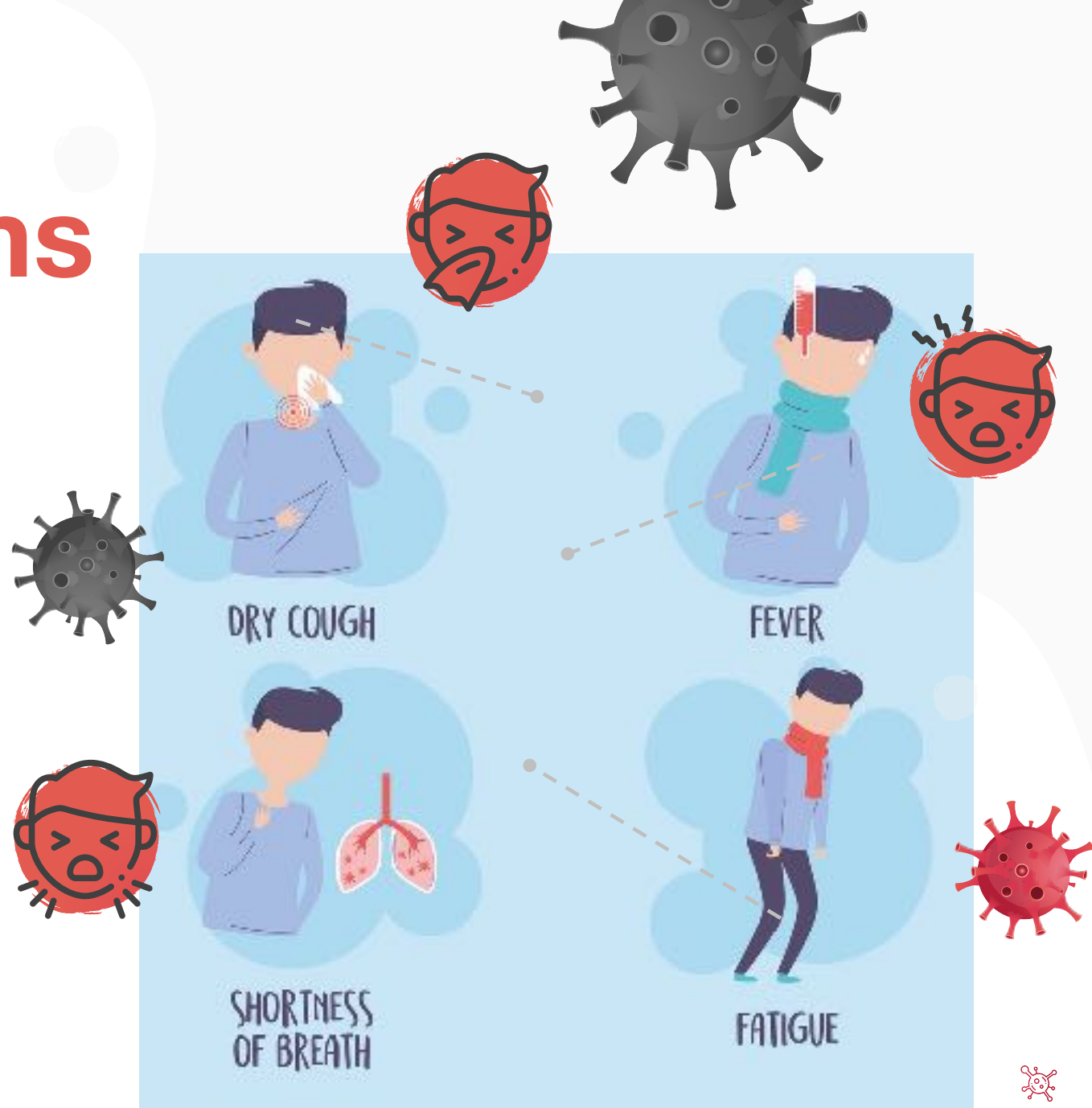
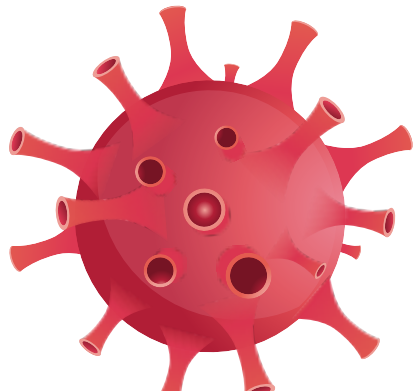


Early Symptoms

CORONA VIRUS Disease 2019

Signs and symptoms of COVID-19 may appear two to 14 days after exposure and can include :

- High Fever
- Dry Cough
- Difficulty Breathing
- Fatigue

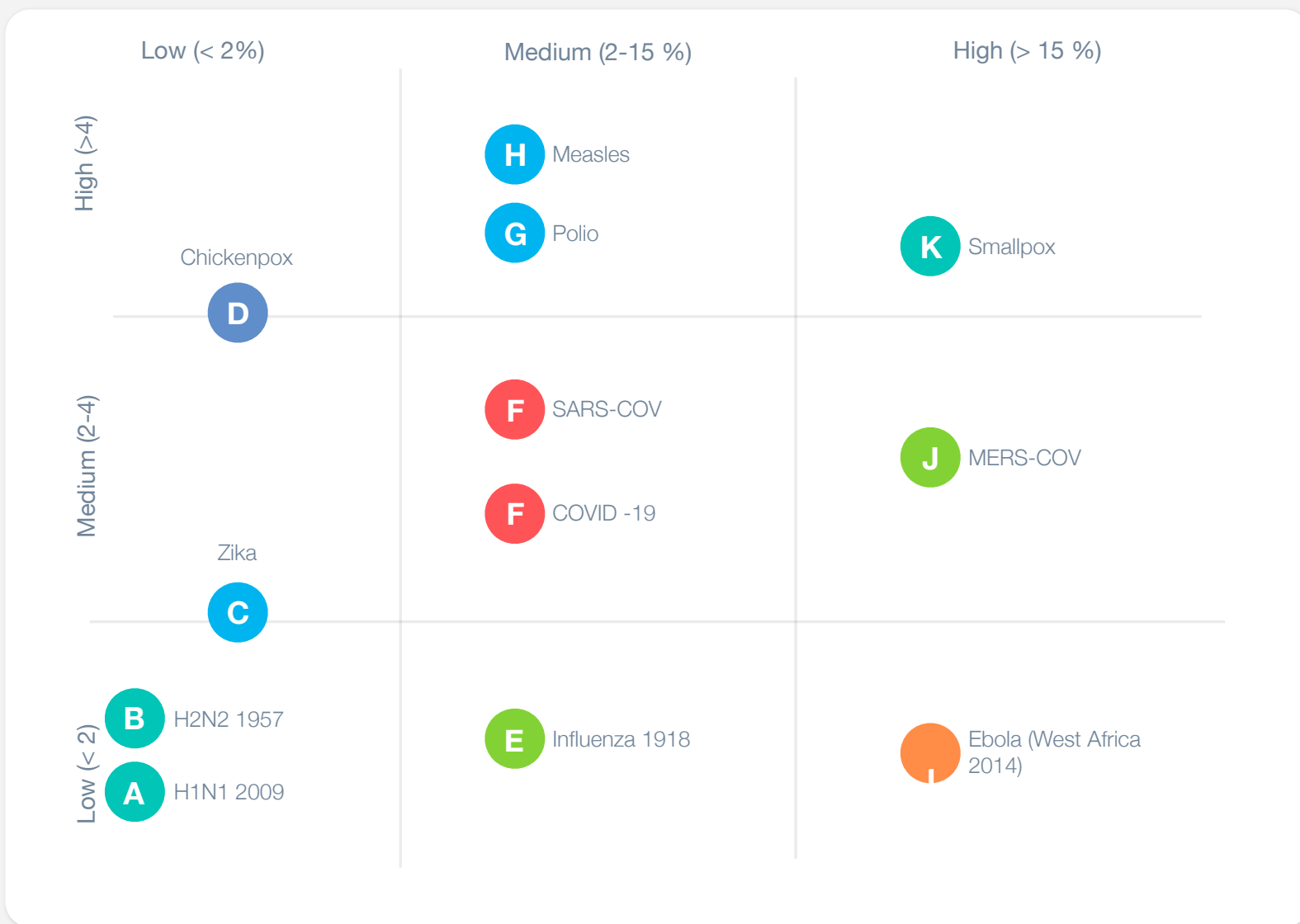


	Cold	Flu	COVID-19
Time between catching the virus and beginning to show symptoms	1-3 Days	1-4	2-14
Symptom onset	Gradual	Abrupt	Gradual
How long do symptoms last	7-12 days	3-7 days	Mild cases: ~2 weeks. Severe or critical disease: 3-6 weeks

Major symptoms

	Cold	Flu	COVID-19
Fever	Sometimes	Common	Common
Runny nose	Gradual	Sometimes	Less Common
Sore throat	Common	Sometimes	Less Common
Cough	Common	Sometimes	Common
Body Ache	Rare; if occurs, mild	Common	Less Common
Difficulty Breathing	Rare	Rare	Common





Features of the disease to date
(Latest as of Mar 2020)

1.5-2x

Higher Reproduction than the flu

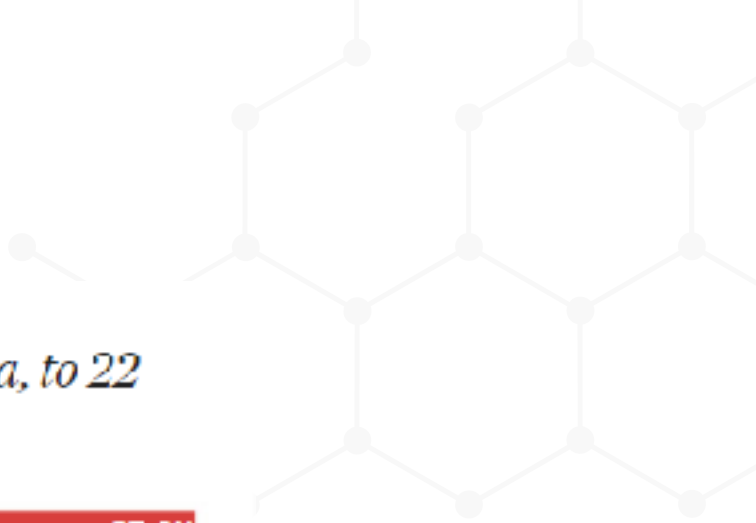
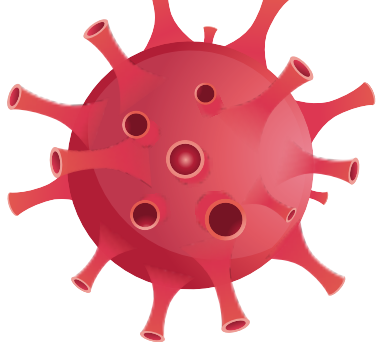
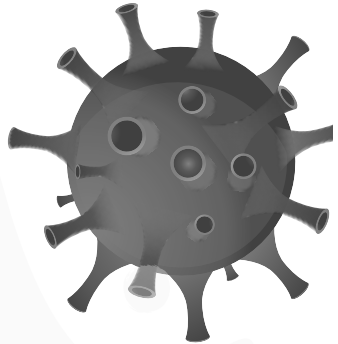
Up to 20%

Of cases have a severe/ Critical of the Disease

~0.9%

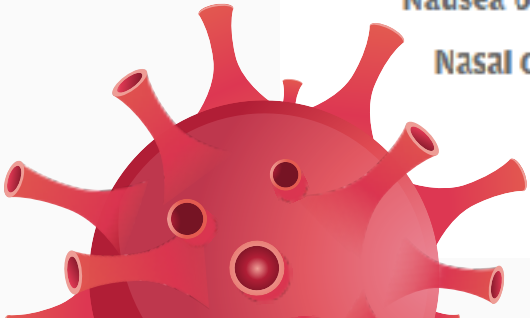
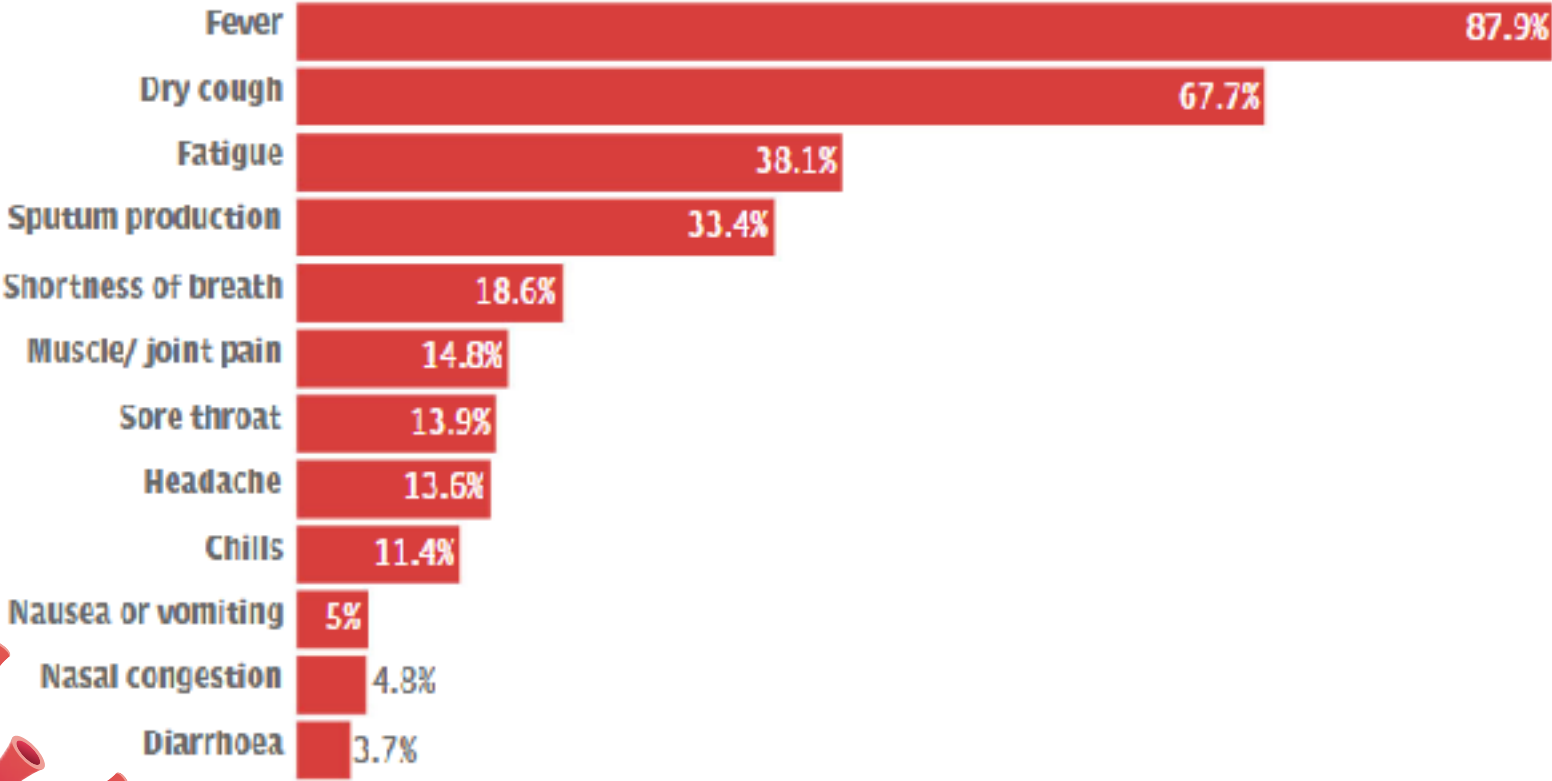
Case Fatality Ratio in south Korea after widespread testing. **CFR** appears higher where cases are missed and higher when health systems are overwhelmed





The most common coronavirus symptoms

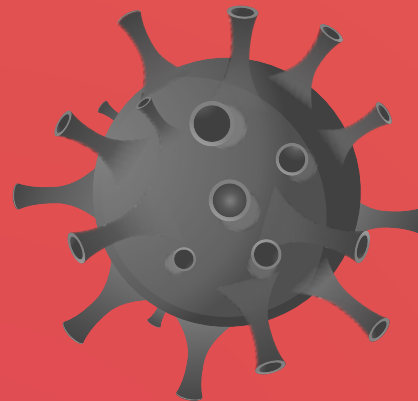
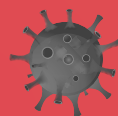
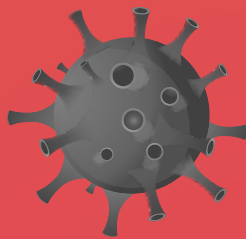
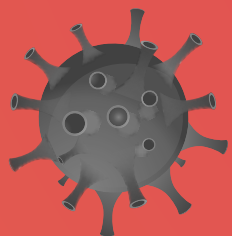
Proportion of cases reporting each symptom (from 55,924 cases in China, to 22 February)

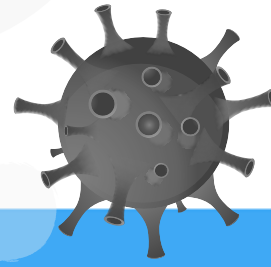


#03

Prevention

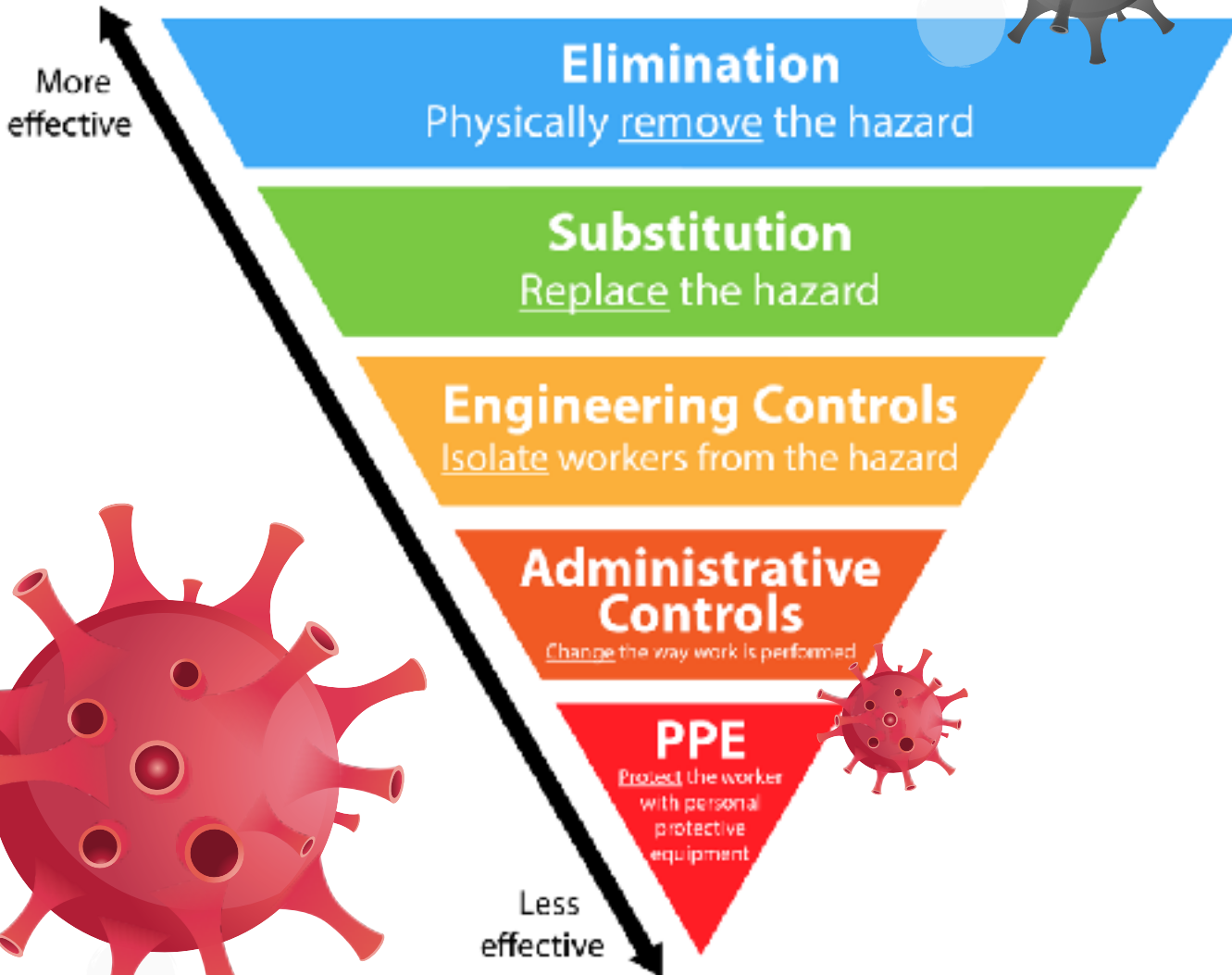
CORONA VIRUS Disease 2019



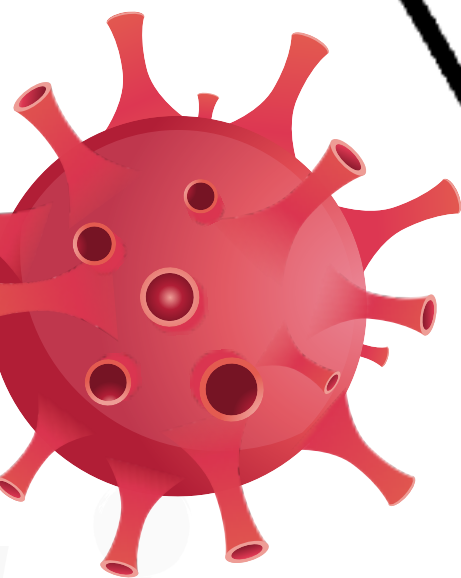


Hierarchy of Controls

NIOSH, CDC USA



Controlling exposures to occupational hazards is the fundamental method of protecting workers. Traditionally, a hierarchy of controls has been used as a means of determining how to implement feasible and effective control solutions. One representation of this hierarchy appears in the triangle image shown to the left. The idea behind this hierarchy is that the control methods at the top of the graphic are potentially more effective and protective than those at the bottom. Following this hierarchy normally leads to the implementation of inherently safer systems, where the risk of illness or injury has been substantially reduced.



Understand



Protect

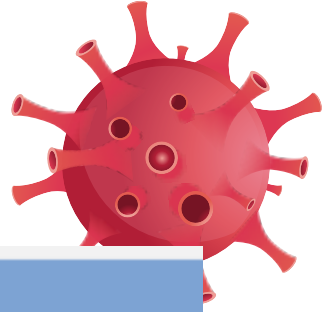


Restrict



Quarantine





Know How It Spreads

CORONAVIRUS Disease 2019

Primary transmission between people:

- respiratory droplets and contact routes
- Direct contact with infected people
- Indirect contact with surfaces in the immediate environment
- Objects used on infected person

Airborne transmission may be possible:

- specific circumstances through procedures that generate aerosols
- The disease could be transmitted directly or indirectly through saliva

How is COVID-19 transmitted?

- Primary transmission between people: respiratory droplets and contact routes
- Direct contact with infected people
- Indirect contact with surfaces in the immediate environment
- Objects used on infected person
- Airborne transmission may be possible: specific circumstances through procedures that generate aerosols
- The disease could be transmitted directly or indirectly through saliva



Protecting Staff

CORONAVIRUS Disease 2019

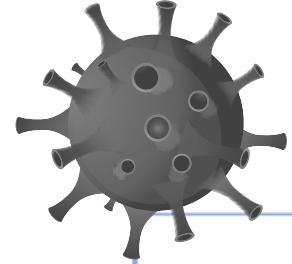


Table 1: Personal protective equipment (PPE) for COVID-19 urgent dental care settings

	Waiting room/reception	Dental surgery	Dental surgery
	No clinical treatment	Non-AGP treatment	Treatments involving AGPs
Good hand hygiene	Yes	Yes	Yes
Disposable gloves	No	Yes	Yes
Disposable plastic apron	No	Yes	No
Disposable gown*	No	No	Yes*
Fluid-resistant surgical mask	Yes	Yes	No
Filtering face piece (FFP3) respirator**	No	No	Yes
Eye protection***	No	Yes	Yes

* Fluid-resistant gowns (or long-sleeved waterproof apron) must be worn during aerosol generating procedures (AGPs). If non-fluid-resistant gowns are used, a disposable plastic apron should be worn underneath.

**If wearing an FFP3 that is not fluid resistant, a full-face shield/visor must be worn.

***Eye protection ideally should be disposable. If polycarbonate safety glasses/goggles or equivalent are used, they should be disinfected in line with manufacturers' guidance.

In the UK the NHS has advised the PPE requirements for their Urgent Care Centres as shown in the table to the left.

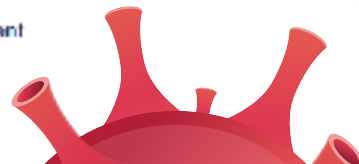
Main Principles of Staff Protection:

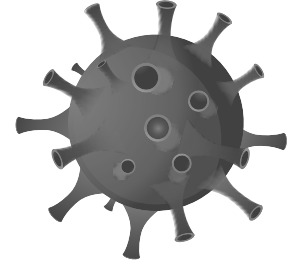
1. Remote triage of all visitors to the practice and refuse access if they are potential COVID-19 carriers
2. Assess all staff to ensure they are fit to return to work
3. Ensure adequate level 2 and level 3 PPE available to all clinical staff
4. Avoid all Aerosol-Generating Procedures (AGP's) unless necessary
5. Ensure clear protocols are in place in the event that AGP's are carried out.

NHS England guidance:

[COVID-19 NHS guidance and standard operating procedure Urgent dental care systems in the context of coronavirus](#)

[COVID-19: NHS infection prevention and control guidance, 27 April 2020](#)





Protecting Staff

CORONAVIRUS Disease 2019

Further resources:

PPE for COVID-19 UDC settings

Page 13: COVID-19: Guidance for local UDC systems

<https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/04/C0282-covid-19-urgent-dental-care-sop.pdf>

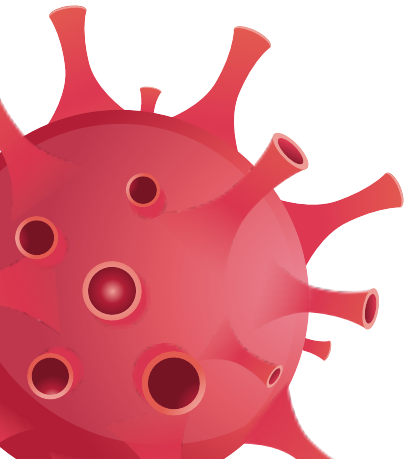
Recommended PPE for Primary Care Settings

Page 52: COVID-19: infection prevention and control guidance (PDF version of GOV.UK guidance)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/881489/COVID-19_infection_prevention_and_control_guidance_complete.pdf

Instructions for using PPE (posters)

<https://www.gov.uk/government/publications/covid-19-personal-protective-equipment-use-for-aerosol-generating-procedures>



Restrict Close Contact With Sick People

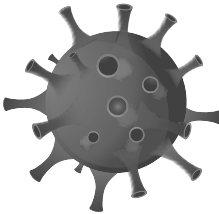
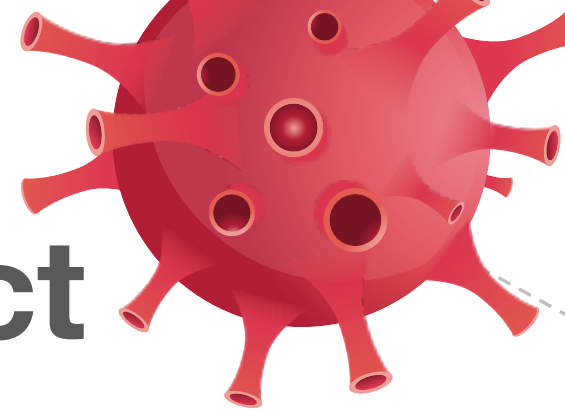
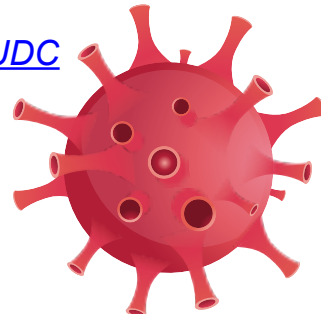
CORONAVIRUS Disease 2019

Screening Questions

As part of risk assessment, the following questions should be included, in line with the case definition for possible COVID-19 and isolation requirements:

- **Do you have a new, continuous cough?**
- **Do you have a high temperature (37.8C or over)?**
- **Does anyone in your household have a new, continuous cough or a high temperature?**
- **If you or anyone in your household has tested positive for coronavirus, are you still in the self/household isolation period?**

Source: [COVID-19: standard operating procedures for UDC services](#)



Definition of contact

A contact is a person who experienced any one of the following exposures during the 2 days before and the 14 days after the onset of symptoms of a probable or confirmed case:

1. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
 2. Direct physical contact with a probable or confirmed case;
 3. Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment;
- OR
4. Other situations as indicated by local risk assessments.

Note: for confirmed asymptomatic cases, the period of contact is measured as the 2 days before through the 14 days after the date on which the sample was taken which led to confirmation.

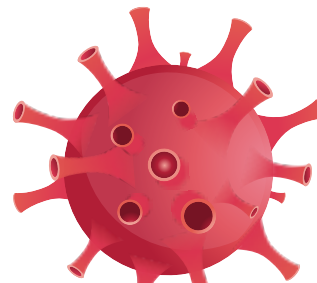
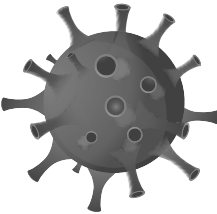
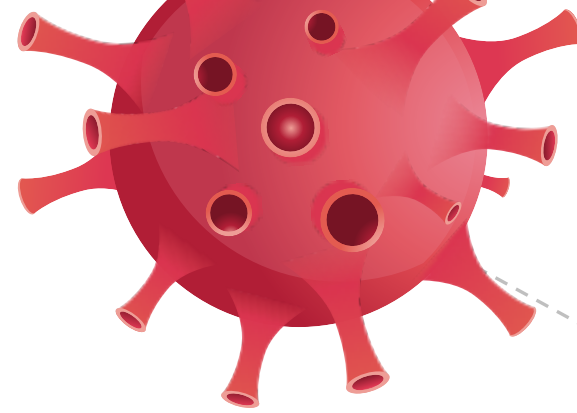
Source: [Coronavirus disease 2019 \(COVID-19\) Situation Report – 94](#)



Prevention summary

CORONAVIRUS Disease 2019

- Mitigate risks – remove the risk as far as possible by carrying out effective screening and triage of patients prior to allowing them to attend the clinic
- Ensure clear protocols are in place to establish a safe journey for patients and staff
- Wear adequate PPE, in line with guidance and appropriate to the task being carried out
- Avoid any Aerosol-Generating Procedures (AGPs) and ensure Level 3 PPE is available if they are being carried out in emergency cases
- When patients attend the clinic, ensure social distancing can be maintained. Be prepared to change your usual practice to accommodate this
- Follow cross infection control procedures as outlined in [COVID-19: NHS infection prevention and control guidance, 27 April 2020](#)





**Just Stay at Your Home. Protect
the Health Service. Save Lives**

Independent Quarantine

Government Close Contact Tracing App

The app automates the process of contact tracing - with the goal of reducing transmission of the virus by alerting people who may have been exposed so they can take action to protect themselves, the people they care about and the NHS. We believe this could be important in helping the country return to normality and beating coronavirus.

The app will be part of a wider approach that will involve contact tracing and testing. We are working hard to make sure that all these elements are properly linked up, to make it as seamless as possible and to ensure the app complements more traditional measures that, working together, can protect vulnerable groups and those who cannot or do not want to access digital tools.





NHS Contact **Tracing App**

How the track and trace App Works

The app will give the public a simple way to make a difference and to help keep themselves and their families safe. The technology is based on research evidence developed by epidemiologists, mathematical modellers and ethicists at Oxford University's Nuffield Departments of Medicine and Population Health. Once you install the app, it will start logging the distance between your phone and other phones nearby that also have the app installed using Bluetooth Low Energy.

The app will advise you what action to take if you have been close to someone who has become symptomatic – including advising you to self-isolate if necessary. The exact advice on what you should do will depend on the evolving context and approach. It will be based on the science, and will be approved by the Chief Medical Officer. Scientists and doctors will continuously support us to fine-tune the app to ensure it is as helpful as possible both to individuals and to the NHS in managing the pandemic.

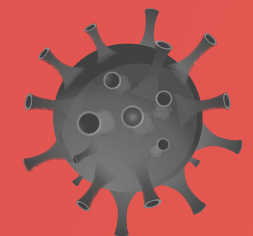


#04

Impacts Worldwide & On Dentistry

CORONA VIRUS Disease 2019

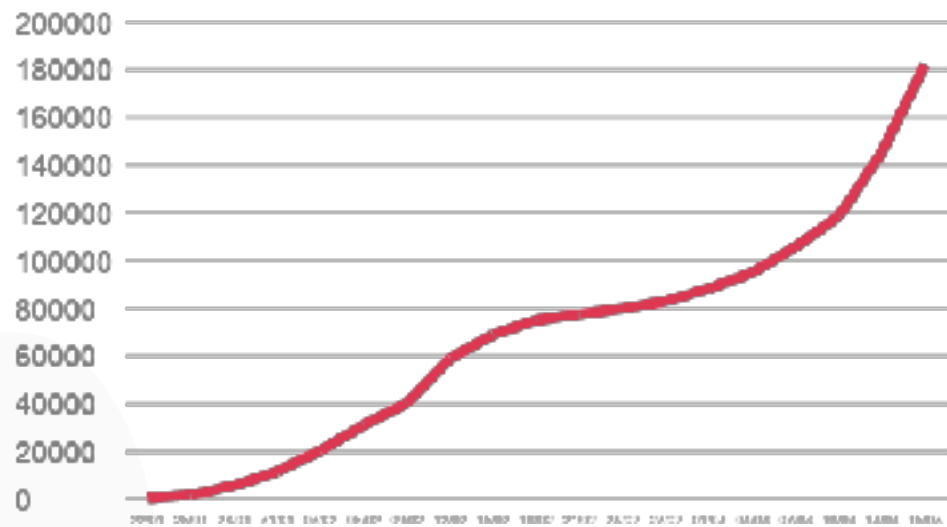
Effects on Dental Practices



Infection Linear Chart

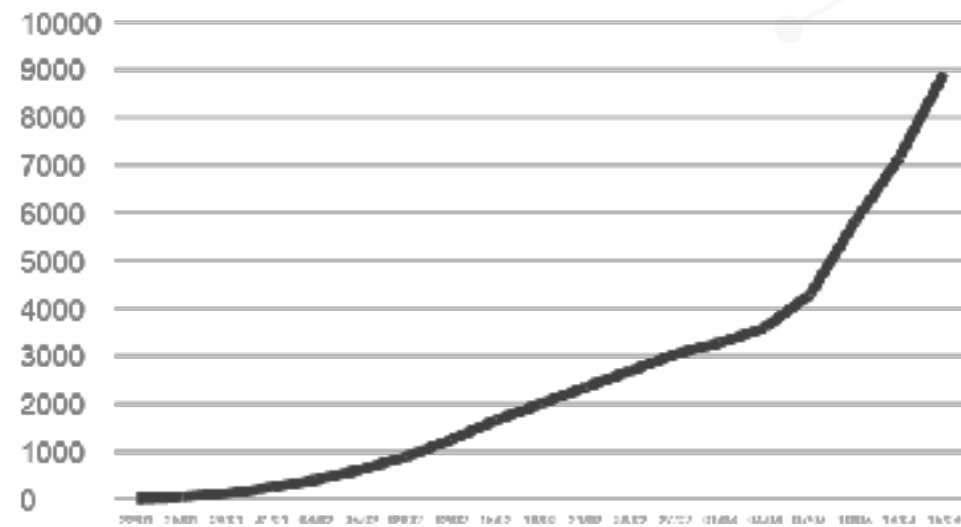


CORONA VIRUS Disease 2019



Infection

The coronavirus COVID-19 is currently affecting **212 countries and territories** around the world and 2 international conveyances.

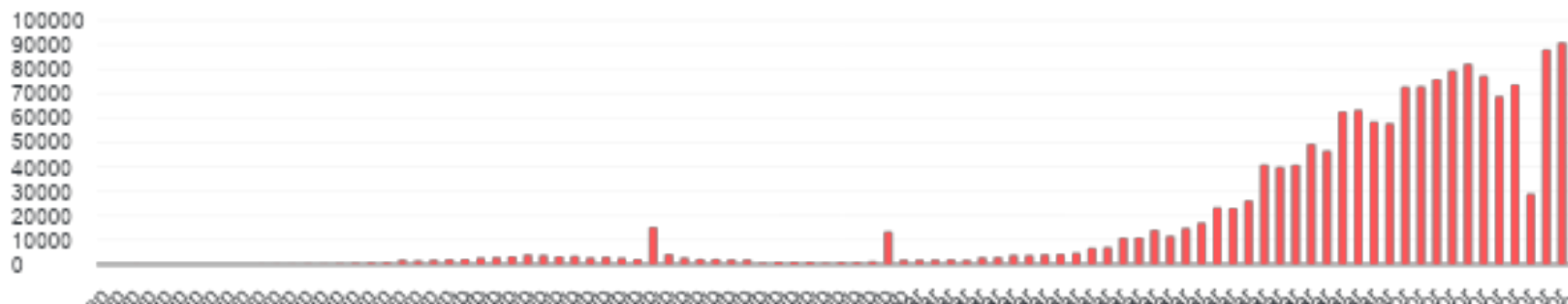


Deaths

The novel coronavirus' case fatality rate has been estimated at around 2%, in the WHO press conference held on January 29, 2020. A prior estimate had put that number at 3%. Fatality rate can change as a virus can mutate, according to epidemiologists.



confirmed cases



3,711,386

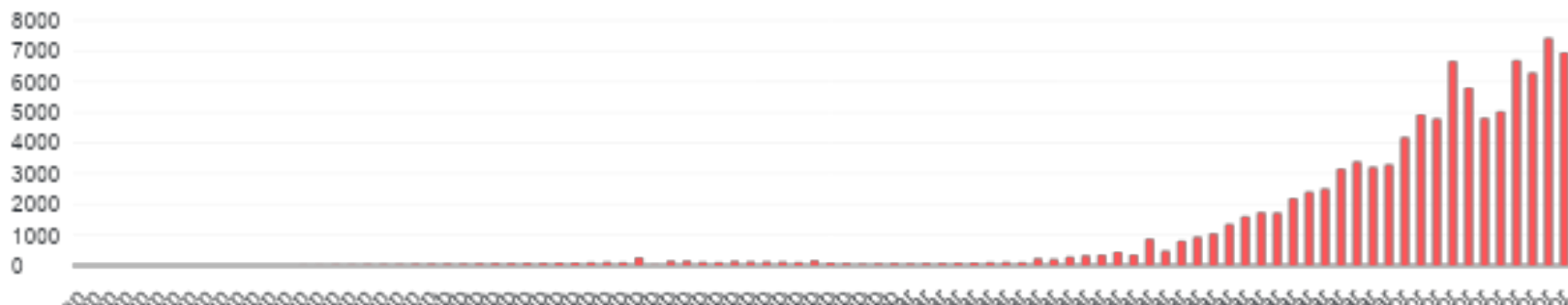
*TOTAL
CASES
(As of 5TH May 2020)*



257,019

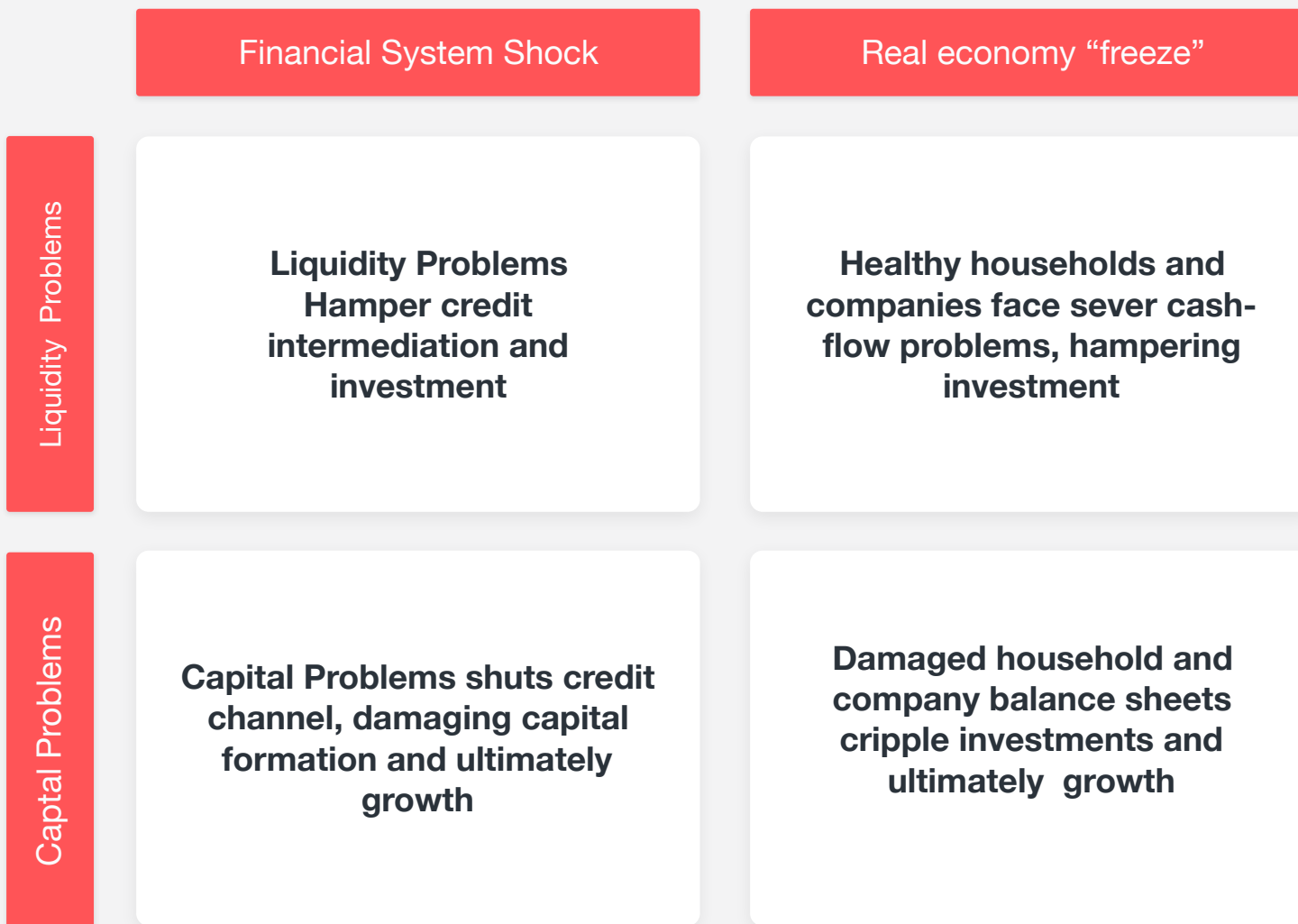
*TOTAL
DEATHS
(As of 5TH May 2020)*

confirmed cases



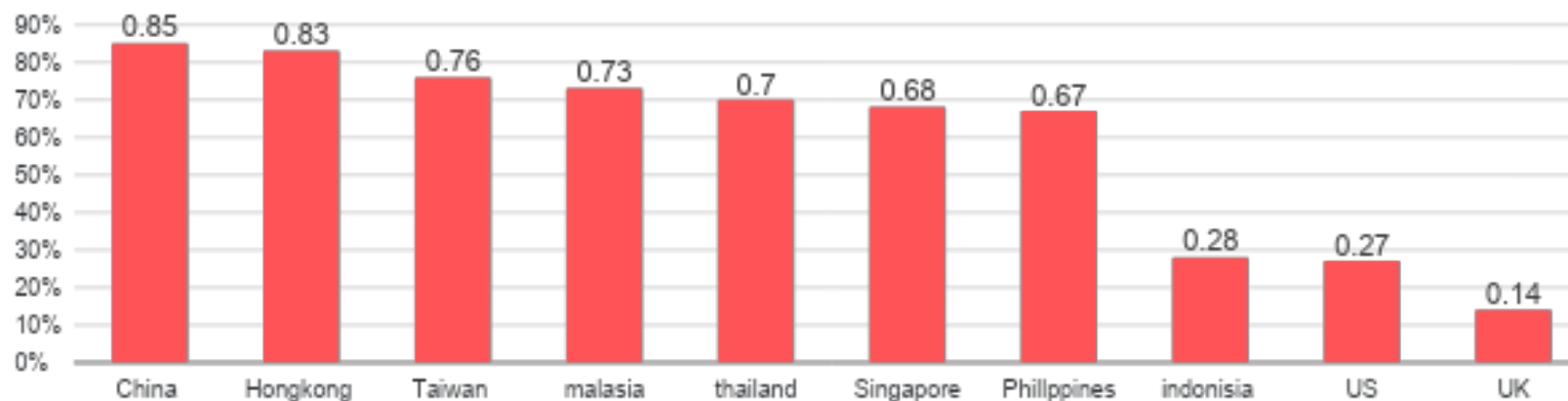
The financial and real economy risks are interrelated in two ways: First, a prolonged Covid-19 crisis could drive up the number of real economy bankruptcies, which makes it even harder for the financial system to manage. Meanwhile, a financial crisis would starve the real economy of credit.

It is fair to say the risk profile of the Covid-19 crisis is particularly threatening. While there is a policy playbook for dealing with financial crises, no such thing exists for a large-scale real economy freeze. There is no off-the-shelf cure for liquidity problems of entire real economies.



While the coronavirus has a critical impact on global supply chains, multiple sources say that it may boost eCommerce revenue as consumers stay away from physical stores. According to a new survey from YouGov, 85% of internet users in China and 83% of those in Hong Kong said they avoided crowded public places in the past two weeks. Just more than a quarter (27%) in the US and 14% in the UK said the same.

Internet users they avoided crowded public places



Rank	Category	Change in March (2020 VS 21019)
1	Disposable Gloves	670%
2	Streaming Services	652%
3	Cough & Cold Medicine	535%
4	Soups	397%
5	Dried Grains & Rice	386%
6	Packaged Foods	377%
7	Fruit Cups	326%

Rank	Category	Change in March (2020 VS 21019)
1	Luggage & Suitcases	-77%
2	Briefcases	-77%
3	Cameras	-64%
4	Men's Swimwear	-64%
5	Bridal Clothing	-63%
6	Men's Formal Wear	-62%
7	Women's Swimwear	-59%

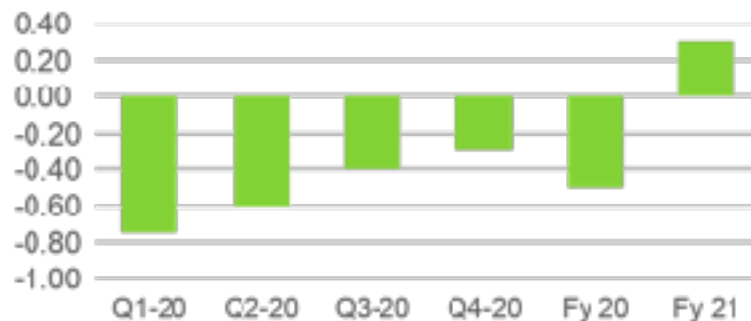


Covid-19

Baseline scenario

Impact on GDP forecasts

(Change % to quaternity baseline.)



Global GDB

2.4%
2020

3.3%
2021

No recession

Sector risk

IT (chips)
autos; retail

DENTAL

Some

Monetary and
fiscal easing
regulatory
changes

Bounce-back2021

Downside scenario

Impact on GDP forecasts

(Change % to quaternity baseline.)



Global GDB

1.4%
2020

2021 ???

Recession
risks: Italy,
Japan,
Germany, UK

Sector risk

Above Plus
transport:
leisure general

Significant

Monetary and
fiscal easing
regulatory
changes

DENTAL

**Recovery
delayed**





#05

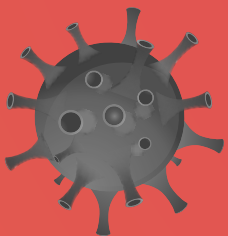
Nurse & Staff Protocols



CORONA VIRUS Disease 2019

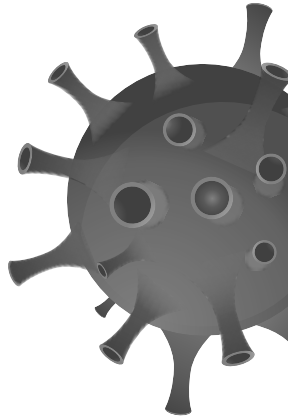
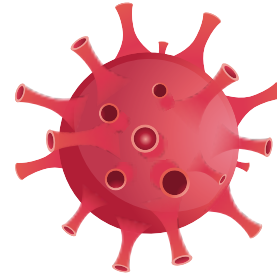
The following information is to provide Nurses and Auxiliary staff with set up and running information to allow the whole dental team to get back to work in a smooth and controlled fashion.

This advice is provided to allow the Treatment Protocols to be followed in a seamless and easy to cover environment.



The Dental Nurse

Role & Responsibilities



Clinical Responsibilities (in the context of COVID-19 procedures)

1. Preparing the surgery for clinical procedures, following agreed protocols
2. Maintaining a safe and clean clinical environment
3. Assisting clinical procedures using appropriate suction and any additional equipment to reduce aerosols
4. Patient reassurance and support throughout procedure
5. Cleaning the clinical area adequately, in line with protocols, and preparing the clinical area for the next patient

Clinician

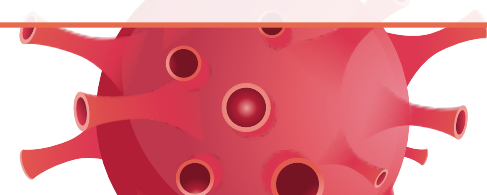
- Dentist or clinician providing patient care

Dental Nurse

- Providing direct chairside assistance
- Required for all dental procedures

Runner (if required)

- Providing additional support in the surgery, but not direct chairside assistance
- Generally only required in surgical settings where a sterile field is required but in the context of post-COVID procedures, additional support may be required



The Runner

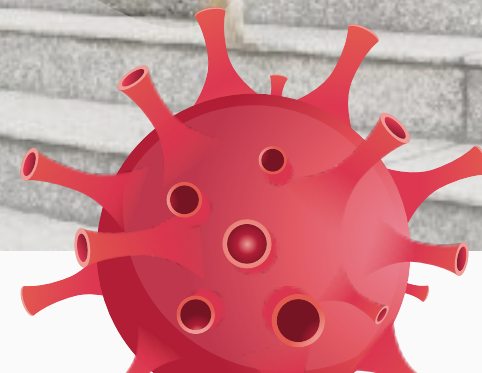
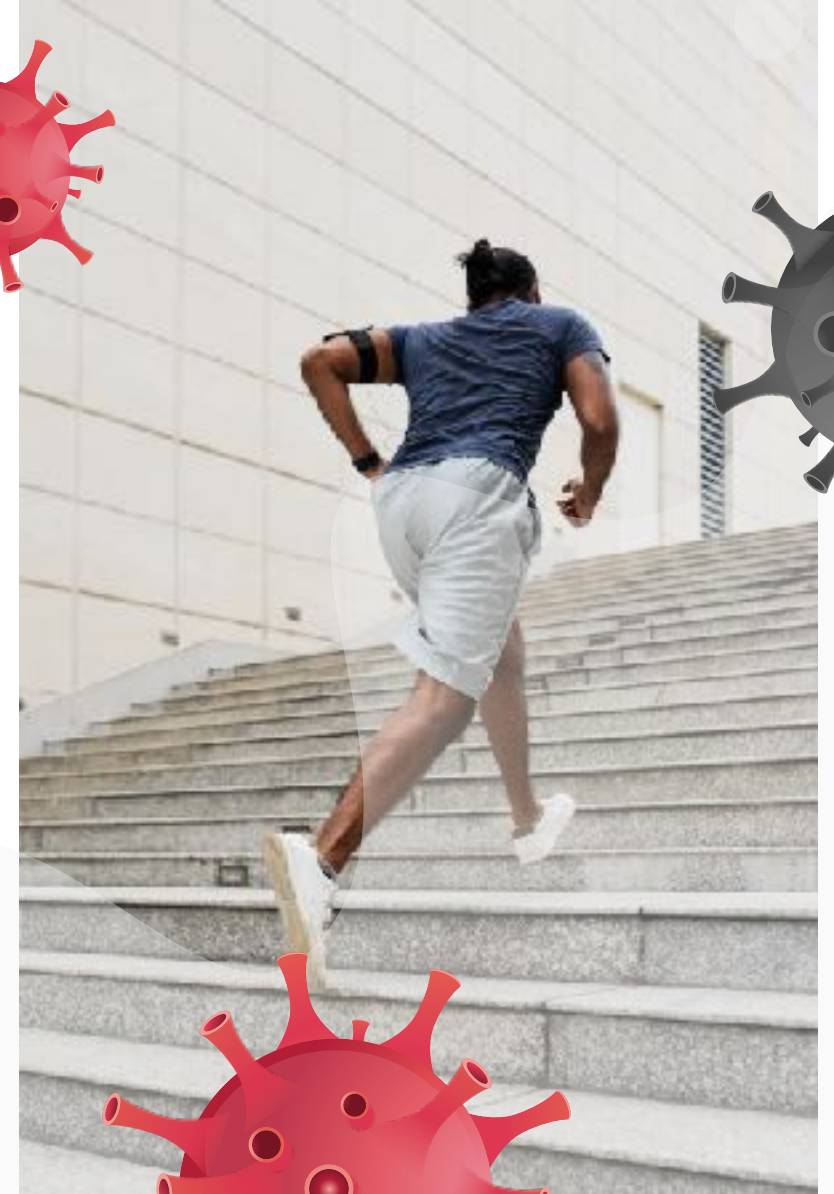
Role & Responsibilities

What is a Runner?

A runner is a clinical staff member who is not directly involved in procedures but remains outside of the sterile field or immediate clinical area and on hand to assist as required.

General Responsibilities

- Equipment set up
- Bringing instruments from non-clinical areas
- Communication with other team members on behalf of the treating clinician/dental nurse
- Decontamination room tests
- Restocking PPE in all areas, clinical and communal
- Assisting the DN to maintain environment and follow IPC procedures (more details in next slides)

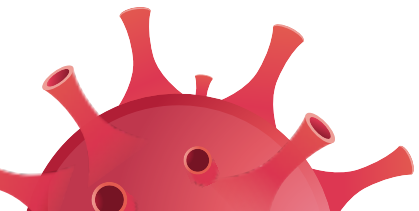
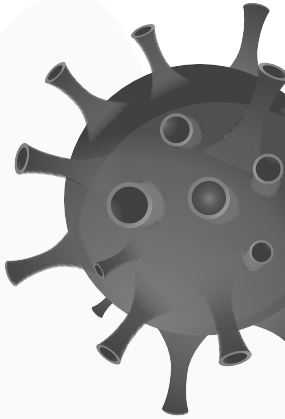
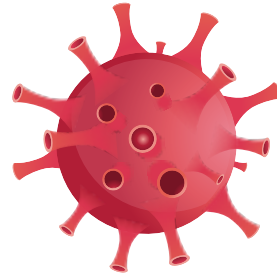


The Runner

Role & Responsibilities

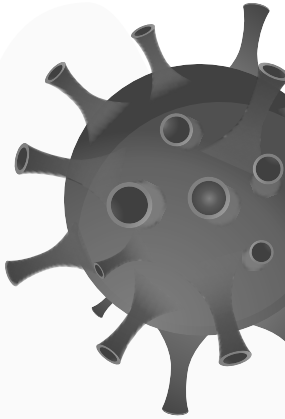
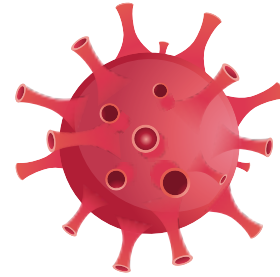
After patients

- Bucket and mop ready to wash floor in surgery (diluted bleach)
- Jug filled with water and bleach to wash all surfaces (diluted bleach)
- Allow 30mins for non-aerosol treatment and 1 hour for aerosol treatment to allow aerosols to settle before cleaning
- During this time clean any hand-rails, door handles, hand sanitiser pump after the patient has left
- Clean instruments following UK HTM-01-05 Protocols in decontamination room
- Enter surgery and remove all coverings on equipment
- Clean all surfaces – from clean to contaminated areas.
- Re-check and clean all surfaces with diluted bleach using the same method and technique
- Mop the surgery floor starting at the top end of the surgery working your way out of the surgery



The Runner

Role & Responsibilities

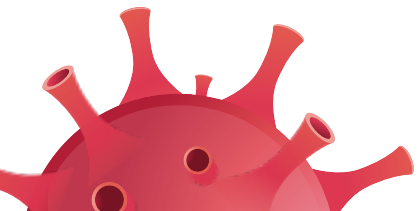


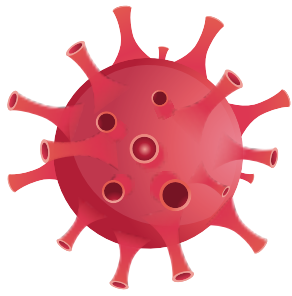
After cleaning

- Go to spare room/declared dirty room to don off
- Return to surgery and hand wash and re-don PPE
- Re-cover all surfaces such as:
 - computers, keyboards and mouse
 - all pipes (hand pieces and suction)
 - x-ray arm
 - spittoon taps

Effective communication between all team members is paramount, especially when working under potentially challenging and unfamiliar conditions

- **The Practice Manager** plays a key role in ensuring nursing staff are clear on their role and duties for the day.
- Use checklists and consider temporary changes to job roles during the initial transition period.
- Morning 'huddles' are strongly advised prior to opening your doors to patients. Review your protocols and ensure all staff are clear on their role.



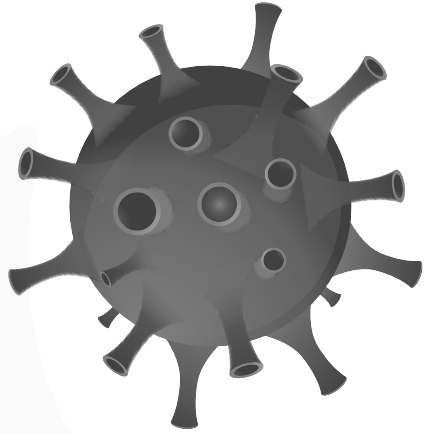


Dental Team **Daily Protocol (example)**

Morning

All staff on arrival must:

- Place shoe covers on outside shoes, must always remain on your shoes
- Wash hands thoroughly, including forearms
- Use hand sanitiser



Reception

- Set reception up
- Check voicemail/emails

Dentist and nurse(s)

- All nurse and dentist go to changing room to place uniform and surgery shoes

Practice Manager

- Liaise with staff (morning huddle) and review procedure/delegate tasks for the day.
- Confirm all staff happy and answer any questions.



Dental Nurse **Daily Protocol (example)**

Morning

Dentist and nurse(s)

- All nurse and dentist go to changing room to place uniform and surgery shoes
- Receive instruction from Dentist/PM on roles for the day
- Ensure clinicians aware what each of you are doing

Dental Nurse

- Compressor on/set up decontamination room
- Set up all surgeries following agreed protocols
- Ensure barriers in place and surgery ready for first patient

Runner

- Set up decontamination room.
- Tests in decontamination room.
- Set up PC's and open dental software
- Complete audits for decontamination for that day



Dental Nurse **Daily Protocol (example)**

Decontamination Protocol

- Patients leaves practice – check time to allow 30mins
- Clean walkthrough area/stairs immediately after patient leaves practice
- Return to decontamination room.
- Change 2nd outer layer gloves, place new layer on
- Keep apron and visor on
- Place marigolds and remove dirty box lid
- Carry out normal decontamination process
- After 2nd sink, remove marigolds
- Place hand pieces and trays into autoclave/DAC with one hand – so one hand dirty one hand is clean to touch the DAC and autoclave.
- Remove 2nd layer, place another pair of gloves on
- Empty disinfectant water, place bleach in first and 2nd sink and clean with wipe and water
- Check time – if 30mins is up clean surgery
- Once finished surgery Don off (PPE removal) (If you have back to back patients - go to Don on (Place new PPE) in surgery.



Nurse/Reception **Daily Protocol (example)**

Gaps & End of Shift

- All nurses to help one another clean the surgery and close-down decontamination room
- Must make sure all dental chairs are flushed each week
- Re- stock PPE in all areas required
- Check stock levels for general stock, such as gloves and Surgical masks, local anaesthetic – **inform Practice Manager of stock levels.**

End of the day

- The same process as normal – but make sure all surgeries are left wrapped, stocked ready for the next day

End of the teams shift

- Kitchen to be cleaned
- Chairs and tables to be cleaned
- Reception surfaces to be cleaned such as keyboards, phones printer, chairs



#06

Treatment Protocols

CORONA VIRUS Disease 2019

The following information is in line with the
following documents:

[COVID-19 guidance and standard operating procedure](#)

[Urgent dental care systems in the context of
coronavirus](#)

[Heirarchy of Controls of Covid19 in Dental Practice by
Dr. Deanna H. Snitzer](#)

and

[COVID-19: NHS infection prevention and control
guidance, 27 April 2020](#)



Step 1

Set Up & Equipment



CORONAVIRUS Disease 2019

1. Follow your local policies and procedures, ensuring they are in line with National Guidance (see slide 2 for further information)
2. All AGP's will require either Rubber and Dam **and** HVE, or an isolation system such as *Isolite* – both have been found to reduce aerosols significantly.

Further reading on reducing Aerosols:

<https://www.zyris.com/how-it-works/#isolite-isolation-system>

[Effectiveness of Two Isolation Techniques in Aerosol Spatter Reduction by Andrea D. Frere, DDC; Keith S. Margulis, DDS; Farhad Yeroshalmi DMD; and Victor Badner, DMD](#)

[Aerosols and Splatter in Dentistry by Stephen K Harrel, DDS and John Malinari, PhD](#)

Containment: High volume external aspirator units	Air quality management: HEPA™ filter air filtration units
<ul style="list-style-type: none"> ▪ High volume external aspirator units should be given serious consideration. ▪ If the aerosol generated by the patient is "contained", the risk of infection is very significantly reduced. ▪ Collection of the aerosol leads to a very significant reduction in air and surface contamination. (It also reassures the patient- a "step up" measure in infection management). 	<ul style="list-style-type: none"> ✓ HEPA™ filter air filtration units may be considered for clean air in the clinic, waiting area and reception. Filter size 3 micron or smaller.

[C.L. Fogh, M. B. \(1999\). Quantitative measurement of aerosol deposition on skin, hair and clothing for dosimetric assessment. Final report. Risoe National Lab.](#)



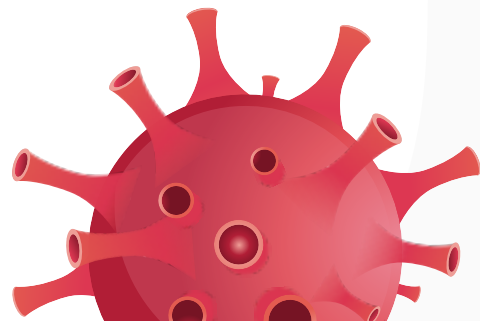
Step 1

Set Up & Equipment

Air Purification - Background Information

Hinds 1982 found aerosol particulate matter was able to remain airborne for up to half an hour. Furthermore, such particulate matter (particularly those down to fractions of a micron in size), are able to circulate around entire practises due to natural convection currents (James et al. 2015).

Due to the potential harmful qualities of such pollutants when breathed, it is important to account for the risk of these contaminants left unaccounted for by existing PPE solutions



Step 1

Set Up & Equipment

Air Purification - Background Information

A well-researched and recommended solution in the literature to this issue is the use of air purification units within surgeries (Harrel et al 2004). Sawhney et al. 2015. concluded that despite the effectiveness of suction methods in reducing cross infection within dental units, the use of air filters and purification of 'air-borne microbial pollutants' should be utilised to account for the incomplete current solutions.

Further, studies such as Chen et al. 2010 study shows how the use of an 'air cleaner' can lower the Dental Healthcare Workers's (DHCW's) exposure to the droplets/aerosols projected from a patient's oral cavity within a dental clinic setting.



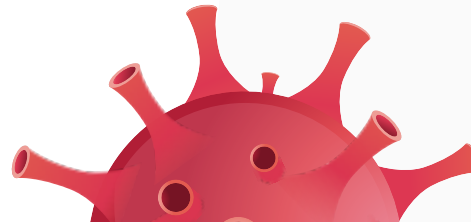
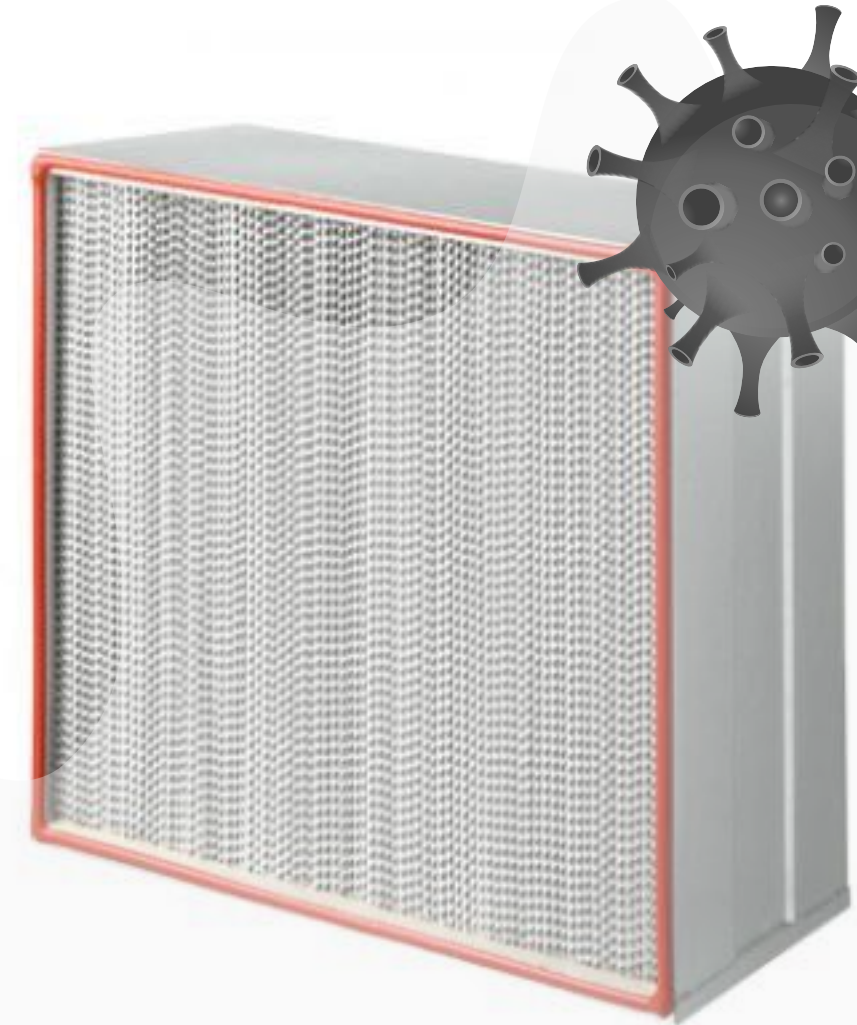
Step 1

Set Up & Equipment

Air Purification - HEPA Filtration

According to the extensive literature on the subject of air purification, a combination of technologies are required within the internals of such units, in order to provide optimal improvements in dental surgeries air quality. Mechanical filters are first important in order to remove particulate matter from the air and can be categorised according to their ability to remove particles of a down to a particular size, at a certain filtration efficiency.

The type of mechanical air filter commonly referred to in the literature is the HEPA Filter or 'high efficiency particulate air' filter, which by definition is able to capture 99.97% of dust and other microbes in the air down to a size of 0.3 microns. Such filters have shown to be very effective in when tested against viruses as compared to other methods (Dee et al 2006).



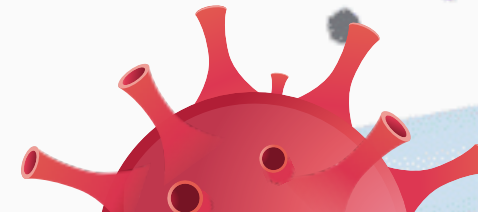
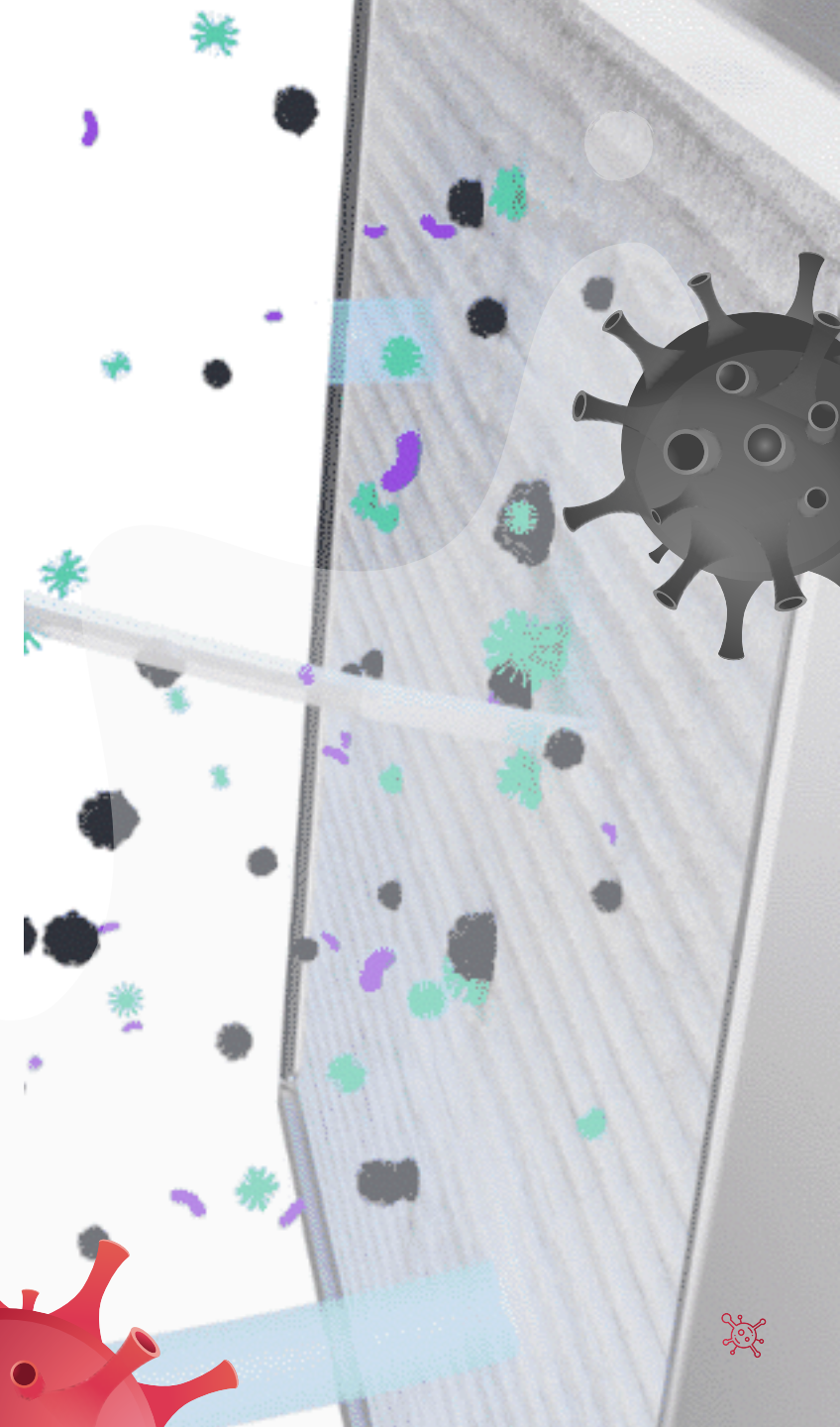
Step 1

Set Up & Equipment

Air Purification - HEPA Mechanical Filtration

The HEPA filter purifies the air in three main ways. To begin with, particulate matter above 10 microns are filtered due to their inability to fit through holes in the filter. Particles between 0.5-10 microns (including many strains of bacteria) become filtered via 'inertial impaction' whereby their comparatively higher density to the surrounding air causes them to become captured by the filter. The particulate matter below this size, become trapped by the filter due to their low density- causing them to exhibit non-laminar air flow-type movement, thus causing them to become caught via 'diffusional interception'.

Having considered the three ways a HEPA filter works, it can be understood why such filters are categorised by their ability to filter particulate matter of 0.3 microns because any smaller than this and the particles are less susceptible to Brownian motion, thus inertial impaction, so have a higher probability of escaping the filter.



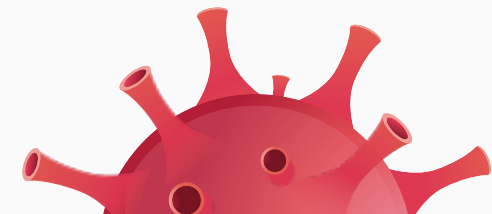
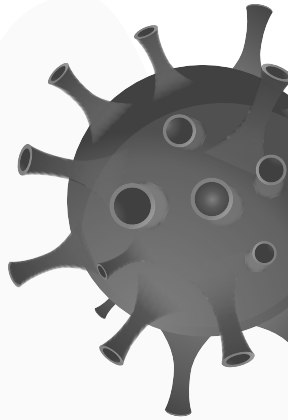
Step 1

Set Up & Equipment

Air Purification - HEPA Mechanical Filtration

Dee et al. 2006 observed that when testing the ability of a HEPA filter, 2×-low-cost filtration, bag filtration, and use of a filter tested against particles derived from dioctylphthalate, against aerosol transmission of Porcine reproductive and respiratory syndrome virus, the HEPA filter was the top performer and prevented any transmission. Similarly, in a double blind study that considered the effectiveness of a HEPA filter in removing particulate matter from the air found a reduction of particulates sizes $\geq 0.3 \mu\text{m}$ by 73.4% vs a 3.6% control. The same study also found a decrease in the amount of time the particulates were able to remain airborne (Reisman et al. 1990).

Despite, by definition, HEPA filter's remarkable efficiency, such filters only trap particulate matter in the air, they are unable to kill such bacteria, viruses, fungi or other contaminants. Further, HEPA filters are ineffective against removing volatile organic compounds (VOCs), dental odours and other gaseous air pollutants. As a result, it is, therefore, necessary HEPA is only part of the solution in the air purification process.

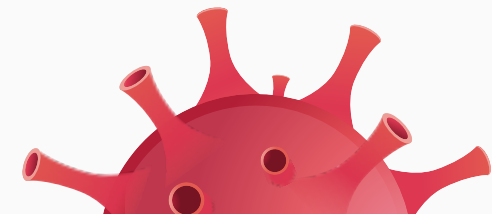
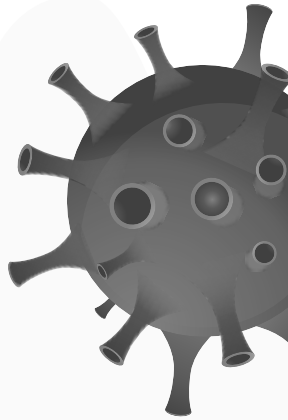


Step 1

Set Up & Equipment

Air Purification - HEPA Mechanical Filtration

HEPA filters require replacement once per year, assuming continual usage throughout this period. Furthermore, it is not advised, that you clean your HEPA filter via the use of a vacuum for a number of reasons. Firstly, by doing so, you are exposing yourself to harmful particulates unnecessarily that likely exist on the filter, you also risk releasing these pollutants back into the surrounding air because of the lack of efficacy of your vacuum. Secondly, by attempting to clean the HEPA filter, you risk damaging the filter. HEPA filters, by definition, have efficiencies of greater than 99.97% at particle size $0.3 \mu\text{m}$ (Xu et al. 2010) and this high performance is likely to become compromised through manipulation of the fibres involved in the use of a vacuum.



Step 1

Set Up & Equipment

Air Purification - Activated Carbon Filtration

Jo and Yang (2009) consider the use of 'Activated Carbon Filters' in removing VOCs under simulated indoor conditions as effective. Urano et al 1982 similarly confirm the effectiveness of an activated carbon filter in the removal of organic compounds. Such technology involves gasses becoming trapped on a layer of charcoal through adsorption (the pollutants essentially stick to the outside of the carbon).

This type of filter layer is extremely effective at removing mould and dust from the air thanks to the increased surface area offered by the lattice of tiny pores within the charcoal. Despite the importance of this activated carbon layer however, its role is specialised and it is to be used alongside other filters within any complete air purification unit solution.



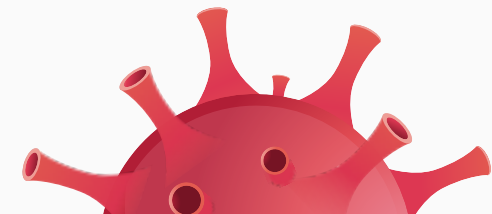
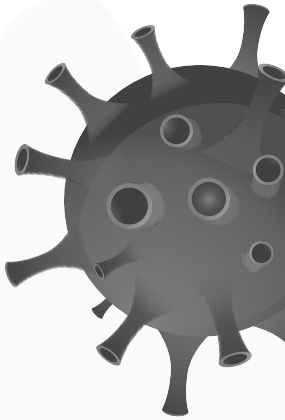
Step 1

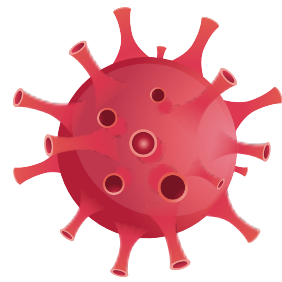
Set Up & Equipment

Air Purification - Activated Carbon Filtration

As discussed, a HEPA filter, even when combined with an activated carbon filter, are unable to actively kill genetic material. Chuaybamroong, P., et al. 2010 found that a HEPA filter solution (alone), may result in microorganisms trapped in the filter re-entering the surgery air following future throughput of the unit. Furthermore, the same paper identified the problem of such a filter becoming a breeding ground for microbes. Given suitable temperature and humidity, the microbes retained within the filter have a tendency to multiply.

It is therefore crucial that an air purification solution has ultraviolet type C (UV-C) Irradiation capability in order to destroy genetic material within the microbes in a process called 'germicidal irradiation'. Important, therefore, is not only the presence of a UV-C capability within a purification unit but the ability of these powerful waves to be positioned appropriately, in order to target build up of microbes on the HEPA filter in order to prevent microbe breeding (Chuaybamroong, P., et al. 2010).





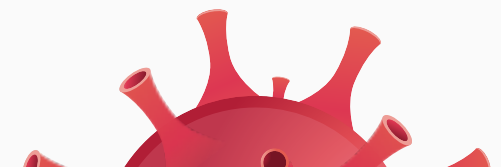
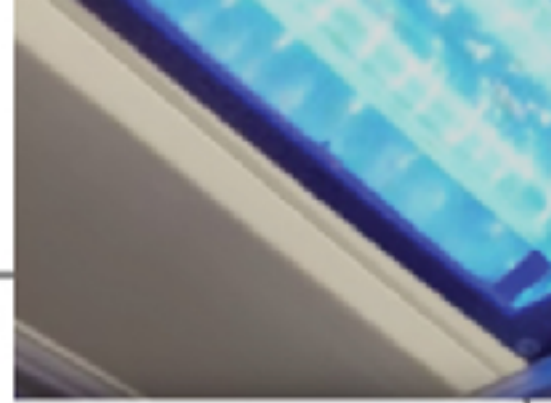
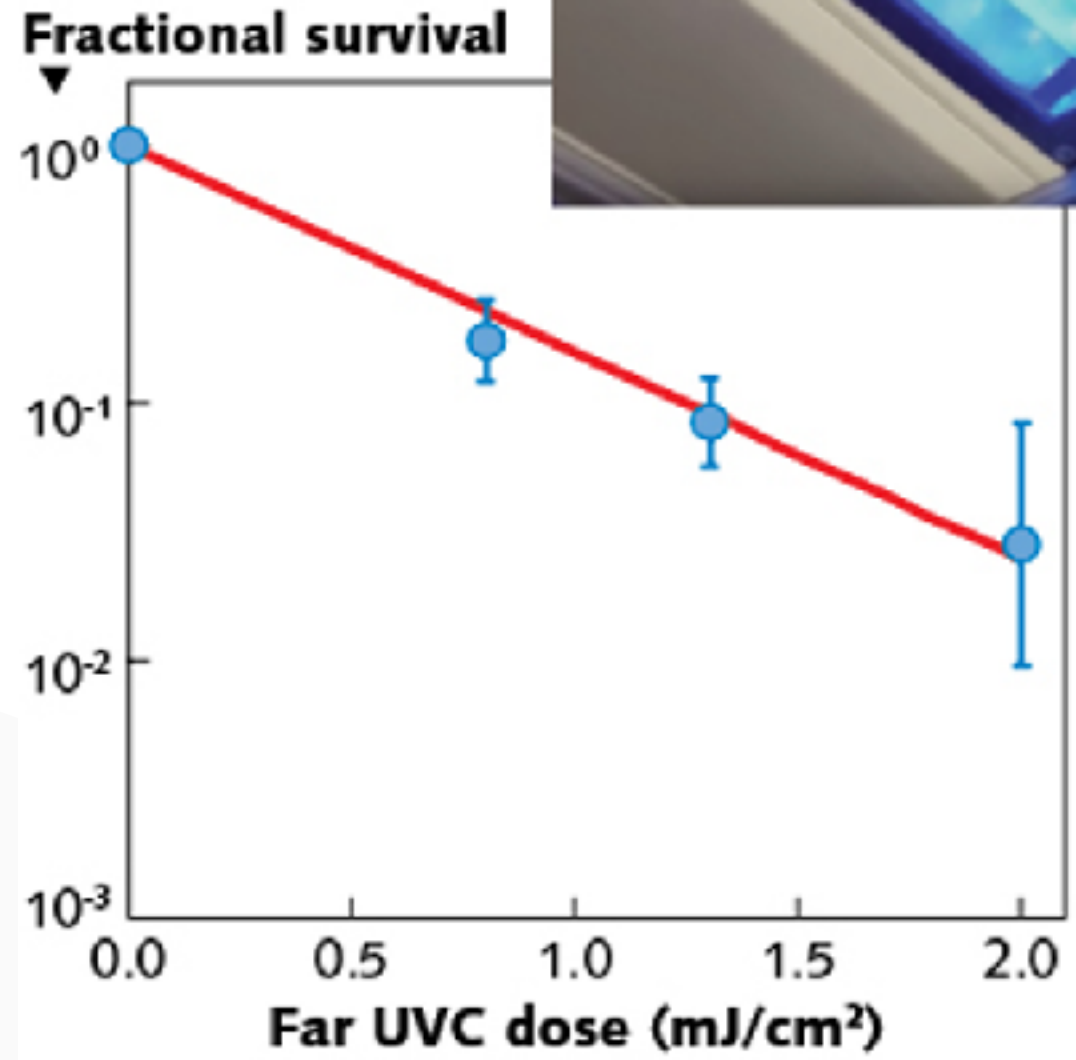
Step 1

Set Up & Equipment

Air Purification - UV-C Capability

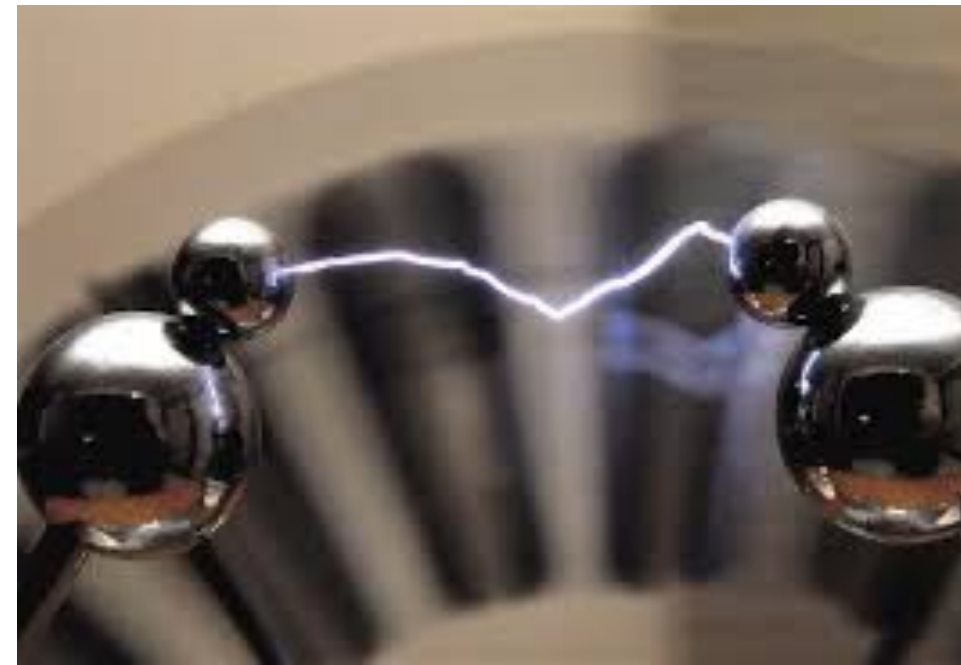
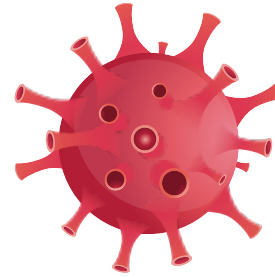
The UV-C capability is also extremely important in order to purify for particulates too small for a HEPA filter to trap, these include bacteria and viruses with diameter 0.01– 0.3 μm . A recent study by Kim and Kang 2018 considered UV-C irradiation's ability to inactivate aerosolised viruses, bacteria, and fungi within a sterilisation chamber to be effective 'regardless of taxonomic classification'. In this study, measurements were taken after the first pass of pollutants through the chamber, with efficacy shown to be linearly related to the strength of UV exposure.

Thus, a higher UV-C capability (which can be measured by total wattage) would result in increasing UV-C germicidal irradiation. In addition to the UV-C irradiation capabilities, a catalyst (often titanium oxide) is commonly used to accelerate the chemical reaction between the organic pollutant matter and the UV-C waves, Goswami et al. 1997 found that such a catalyst was able to significantly improve the effectiveness of such a purification process at higher humidities.



Step 1

Set Up & Equipment



Air Purification - Air Ionisation

Air ionisation also plays a role in air purification. Air ionisation involves applying a high voltage to one or more needles which act as electrodes. Such a process encourages the electrons within the internal circuit towards the needle point, pushing these together. Due to their negative charge, electrons repel each other and as they reach the tip of the needle they fall off and land on the nearest airborne particulate, giving it a negative charge. These particles are now all negatively charged, repel apart from one another and become attracted to the earth.

The air becomes cleared as these particles find their way onto surfaces, eliminating them from the air. Such particulates are then dealt with via conventional disinfectant methods such as wiping down surfaces. Ions released also interact with small particulate matter such as viruses in such a way they become damaged, rendering them ineffective. Akihiro et al. 1996 found such purification technologies resulted in 'modified respirable and inhalable dust' count decline by as much as 46%, such findings are supported by Jafar et al. 2018 which found air ionisation as an effective method of microbial disinfection. As a result, air ionisation is an essential and valuable addition to any air purification solution.





Step 1

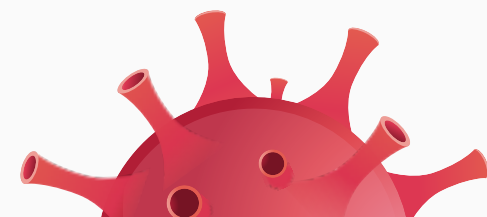
Set Up & Equipment

Air Purification - Practice Size

When comparing models of air purification, it is important to consider the maximum throughput capabilities of each. Many of the models on the market claim their maximum capabilities in terms of the size of the room the unit would be able to purify (in meters²). Such a metric, however, is ambiguous and confusing because the number of times the air in the room would be ‘turned-over’/‘purified’ is left unanswered for, thus allowing many companies to exaggerate the power of their units. A more rational metric to show maximum capability would be meters³/hour. Through adopting this metric, we can calculate exactly the number of times a unit can throughput the air in the room per hour, based on its height, width and depth dimensions. Current Public Health England COVID-19 guidelines suggest a minimum of 6 air changes per hour, thus a calculation is required to understand the throughput necessary based on the size of your surgery, to achieve safe air quality (Public Health England, 2020).

Despite the above calculation, research suggests that large items within the surgery (eg. Dental chair) shall impact the ability of air purifiers to remove aerosols from the air. Thus, a unit only marginally capable of delivering the required air-turnover within a surgery might see its effectiveness drop below the required level when such air-flow obstacles are taken into consideration. Furthermore, the unavoidable opening and closing of the surgery door throughout the day will impact air flow and inhibit the purification unit to achieve its ‘optimum’ throughput (Chen et al. 2010). It is for the above reasons that it is important to consider by what margin a specific unit has the required capability to achieve required turn-over of air.

Some units might be marginally able to achieve the turnover- when running at 100%, however, this will require the unit being over-extended. It is therefore advisable to purchase a unit capable of easily clearing achieving sufficient throughput, allowing for a margin. This will not only ensure the required throughput is also attainable, but also will avoid over-extending the unit, a problem associated with more regular maintenance requirements. Thus, an optimal unit would be capable of a far higher maximum capacity of throughput per hour, able to operate at only a fraction of capacity during non-aerosols producing procedures. Well-designed units are capable of scanning the air continually to ensure they only operate at the fan speed necessary according to the levels of particulates in the air.



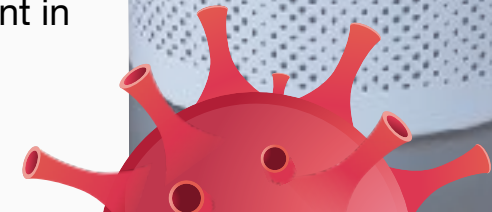
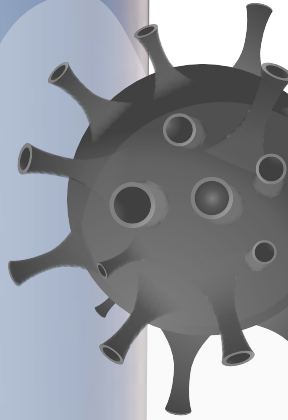
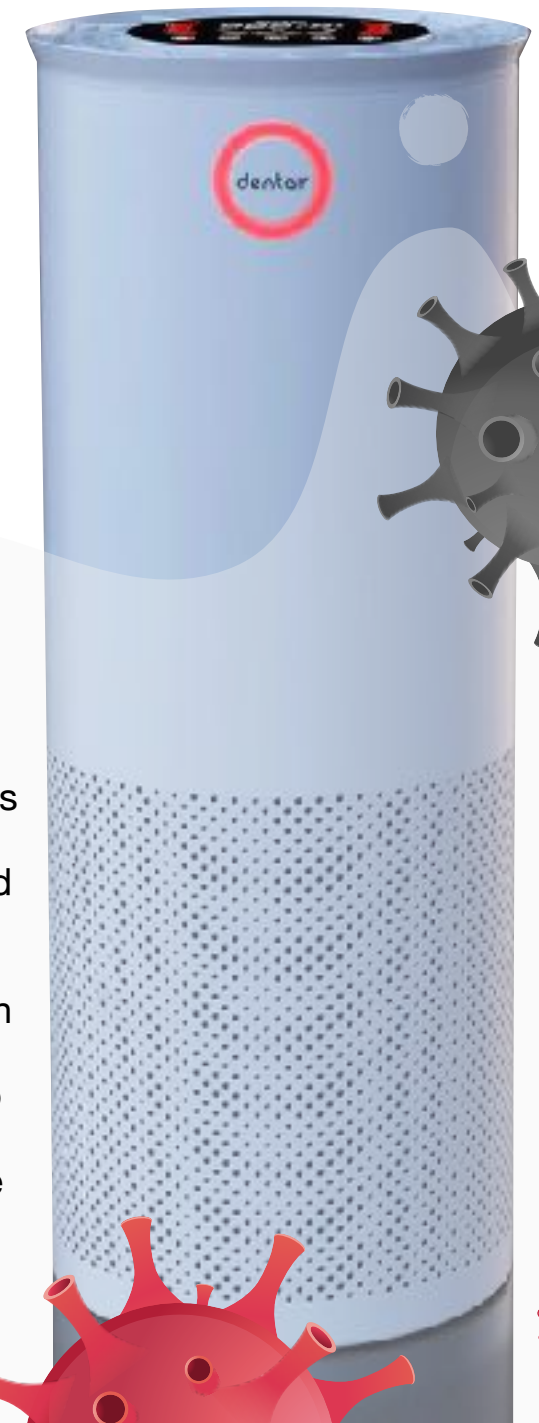
Step 1

Set Up & Equipment

Air Purification - Number of Units

Additionally, it is recommended that practices should look to introduce these units in the numbers equivalent to the number of dental chairs in the practise, as convection currents mean airborne particulates can travel around the surgery as well as between rooms in the practice (James et al. 2015). With this in mind, patients waiting areas are also considered high risk areas and should also be appropriately managed via the introduction of an air purification unit here.

Having considered the necessary combination of technical requirements within any effective air purification unit, two appropriate existing solutions appear available for purchase in the UK. Both the Jade SCA5000C and the DentAir offer extremely well designed and complete solutions. The DentAir could be considered to have a slight edge over the Jade however because of the way the HEPA filter has been engineered to become exposed to UV light, thus eradicating the risk of a breeding ground on the filter. It is, therefore, the recommendation of the IDDA to purchase an air filtration unit that takes all of these factors into account in order to ensure the wellbeing of healthcare professionals and your patients alike within the dental environment.

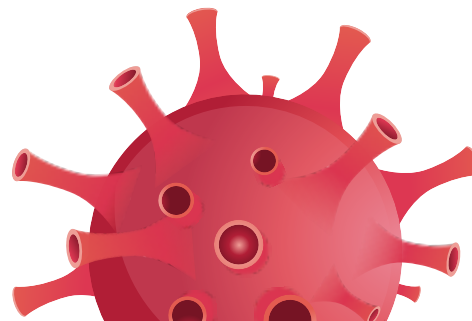
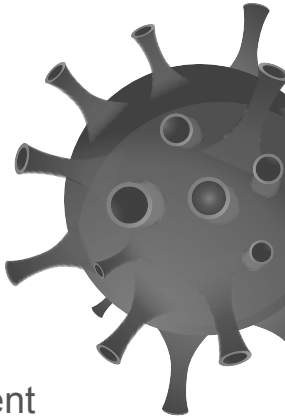


Step 2

Surgery Preparation

CORONAVIRUS Disease 2019

1. All items not immediately required in a clinical room should be removed, a very minimalist approach should be considered sensible.
2. Surfaces should be wipe clean and un-cluttered. Clinic rooms can be cluttered with papers and other items, all these items should be removed
3. Single use items should be used wherever possible.
4. All team members should wash hands at regular intervals and in accordance with guidelines
5. Cleaning protocols can be considered and monitored:
6. All surfaces should be wiped between each appointment
7. Surgery floor should be cleaned at the beginning of the session, middle of the day and at the end of the day.
8. High and low volume aspiration units attached to dental unit should be cleaned using a cleaning fluid between patients when the equipment has been used
9. Waste management to be considered with an increase in disposable products



Step 3 Pre-Appointment Screening

Patient Screening

Confirmation 24h before appointment
Questions apply to ANYONE needing to enter the clinic.

The patient, and their driver if having a dental surgery requiring a driver

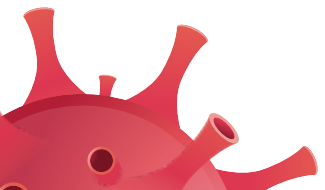
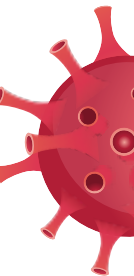
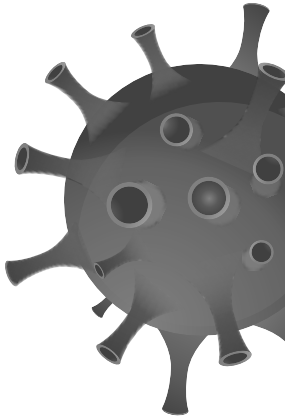
1. Have you traveled to any of these locations in the last 14 days?
 1. China, Iran or Italy (Hotspots)
 2. NYC, New Orleans or Another hotspot near you.
2. Have you had contact with anyone with confirmed COVID-19 in the last 14 days?
3. Have you had any of these symptoms in the last 14 days?
 1. Fever greater than 100.4F
 2. Difficulty Breathing
 3. Cough
4. Are you currently experiencing fever over 100.4F, difficulty breathing or cough

If the patient answers YES to questions 1 or 2 then instruct them to call their primary care provider for instructions OR refer them to a pre-existing referral pathway for COVID-Positive Patients

The patient should be rescheduled until symptoms have resolved and their physician has cleared their quarantine time.

If patients answer NO to 1 and 2 but YES to 3 and 4, then recommend that their appointment be rescheduled until 2 weeks after their symptoms resolve, and recommend to contact their GP/Physician if symptoms worsen or become severe.

All answers to the above questions should be documented in the patient charting with appropriate follow up after 2 weeks to check the status of the patient.



Step 3 Clinic Set Up

Pre Patient Arrival - (Also See section 5)

NO FAMILY POLICY (Parent & Guardian Exceptions Apply)

NO Extraneous people in the clinic.

ONLY the patient and (if necessary) the parent or driver are to enter the clinic.

-

FAMILY members or Friends must wait in the car or at home.

ALL external doors propped open if weather allows

MINIMISE touching of doors

IF windows open and weather allows, open to maximise air flow

LOCKS required may mean an airflow device should be considered to be installed.

YACHOO! Install a sneeze guard and sanitiser at reception if possible.



Step 3

Patient Arrival

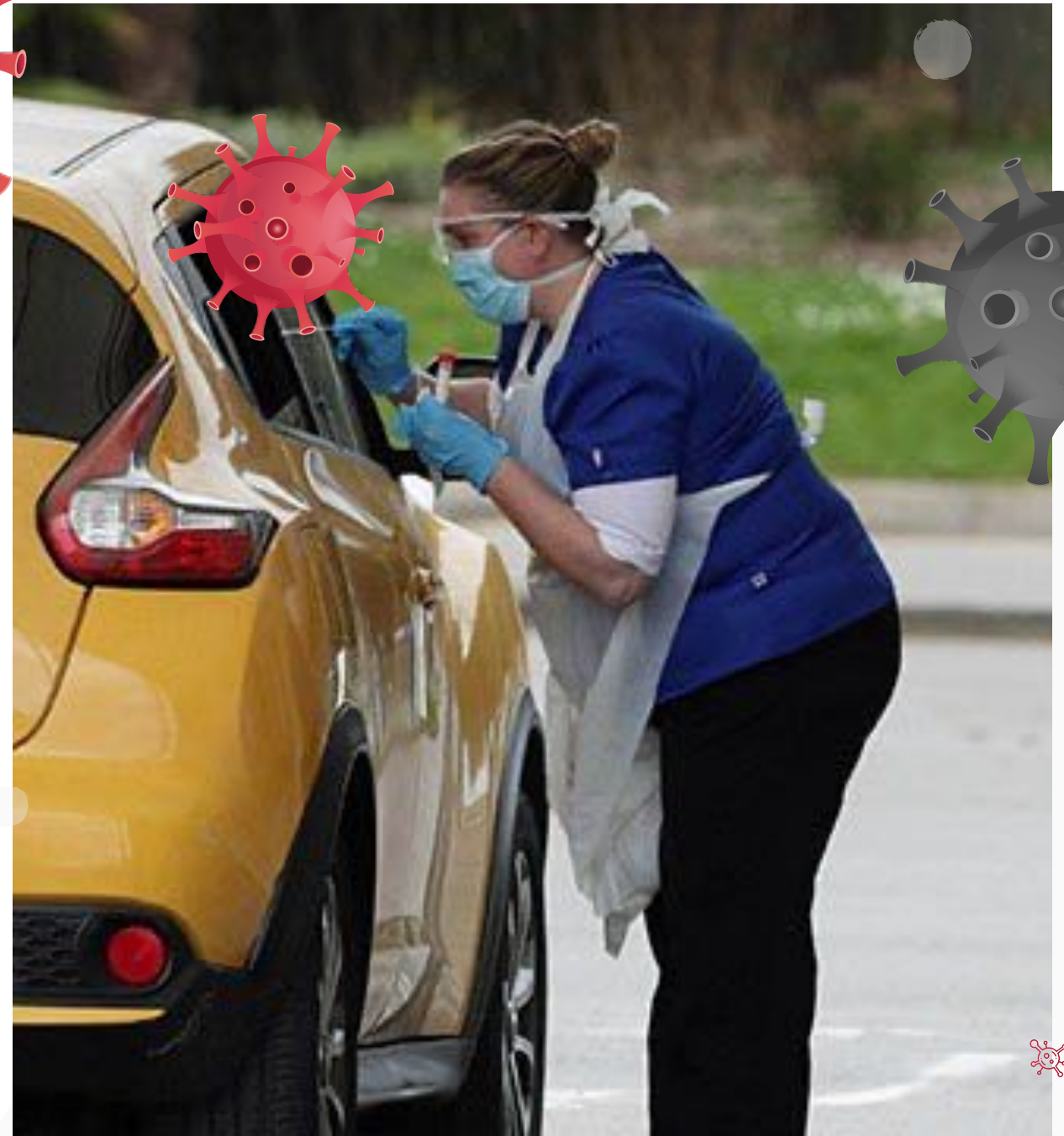
Further Screen Patients - NO ONE enters without a temperature screening

Patients text/call when arrived. Recommend arrival early for in/out times

Patient will be told the amount due for the appointment and prepare it in the car. Ideally card payment.

Area in car park, patient in car or section of entrance area to SCREEN patients. Staff wearing PPE. Patient wearing face covering.

- Use temporal thermometer to take temperature.
- If fever notify patient. Wait several minutes and retake (in case patient rushed to appointment)
- If there is a driver, their temperature should be checked too.



Step 3

Patient Arrival

CORONA VIRUS Disease 2019

Considerations for Arriving patients:

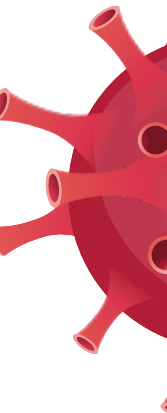
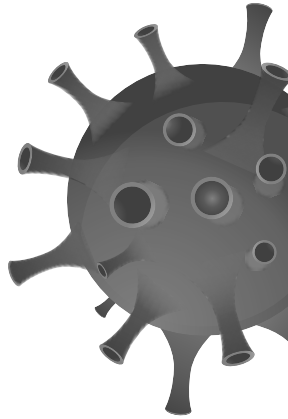
1. Triage and assess for COVID-19 risk prior to attending
2. Instruct all patients to do the following:
 - Shower and change clothes prior to attending
 - Brush teeth prior to attending
 - Attend alone unless they require a carer/guardian
1. On arrival the patient is asked to:
 - Wash hands and use hand sanitiser
 - Wear a mask while in the waiting area (to be provided)
 - Undergo a mandatory temperature check
 - Rinse mouth with a hydrogen peroxide-based mouth rinse prior to treatment



All staff should be conscious that patients may be apprehensive, especially when we depart from standard procedures. Time should be taken to explain anything expected of them in advance.

If a patient fails to comply with any instructions, then consider refusing treatment, on the basis that all steps are necessary to reduce risk of potential COVID-19 transmission to staff and other patients.

All instructions should be in written format where possible, and any policies available for patients who wish to request a copy.



Step 4

Waiting Room

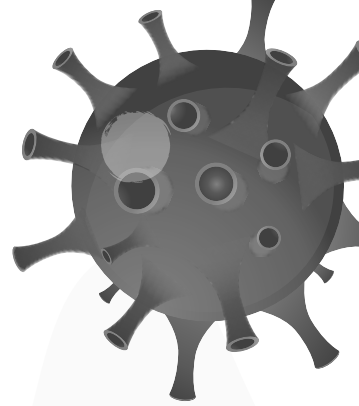
CORONAVIRUS Disease 2019

- All magazines and all non-essential material should be removed, including drinks dispensers. The only item should be the chairs.
- Posters that are framed can be retained on the walls but all items on the wall and surfaces should be capable of being cleaned with surface wipes.
- Waiting area should be scheduled for regular cleaning throughout the day including chairs and floor.
- Patient escorts should be asked to wait outside the building wherever possible. Access to the clinic is for active patients only.
- In the case of paediatric treatment, consent is to be obtained at reception and the parent or guardian asked to wait outside.
- Video consultations may be set up for another time should a parent or guardian wish to discuss their child's treatment with the Dentist.

When we cough or sneeze, both droplet quantity, size range and velocity are increased massively. Some studies suggest that aerosol can be measured 8 metres away from the sneezing subject immediately after the sneeze, with the aerosol then dispersing widely using air currents to follow a complex dispersal path that even the latest computer modelling struggles to depict. ([Bourouiba, 2020](#))

Source: [Getting Back to Practice: COVID-19 implications on dental clinic operations and management - Dr Julian Perry et al](#)





Step 5

Treatment Aids

PPE - Masks

“From the evidence that we found there would appear to be small additional protection (0.4%) offered by FFP3/FFP2 masks compared to a surgical face-mask during aerosol-generating procedures if we use a combination of high-volume suction and rubber dam”

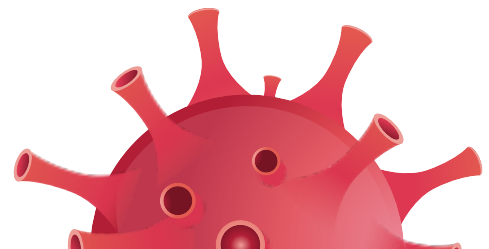
<https://kevinobrienorthoblog.com/ffp3-masks-protection-in-dental-surgery/>

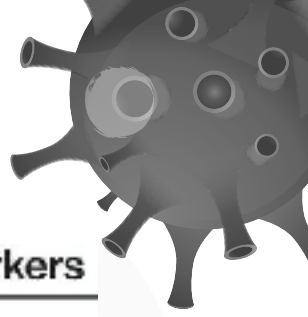
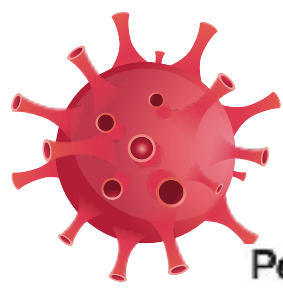
PPE Control Goals:

Follow local recommendations (as always) which may override the below. e.g CDC in the USA or NHS England and CDO in the UK. At all times.

Masks & Visors

- Clinical Staff
 - Best - N95 or KN05 NIOSH/CE approved
 - Face Shield
- Non-clinical Staff not interacting directly with patients;
 - Cloth or 3-PLY Mask (e.g. ASTM1)
 - Must not enter aerosol area (dirty zone)





Step 5

Treatment Aids

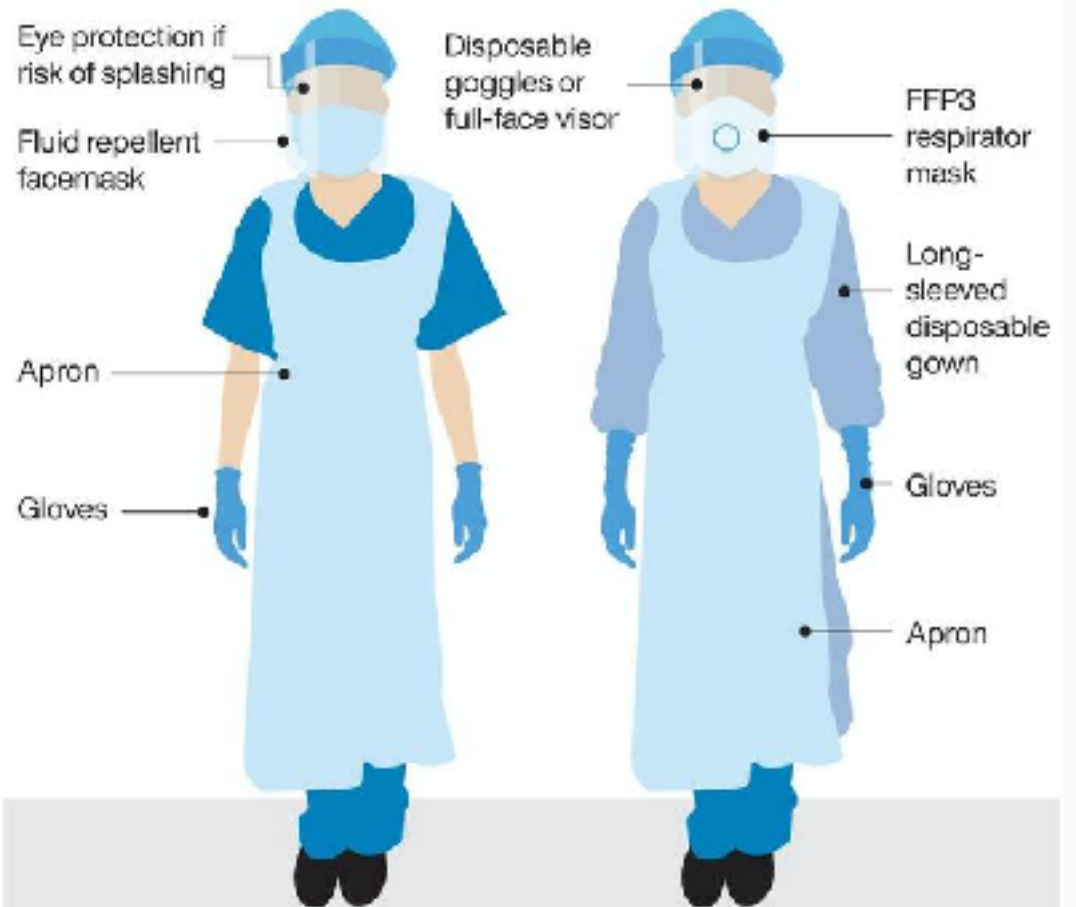
Gowns & Hair Cover

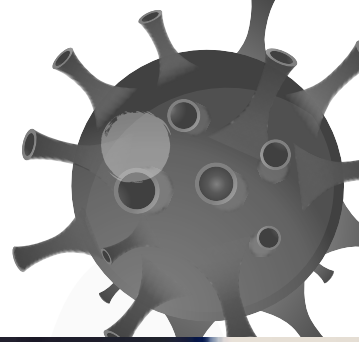
- Disposable gown or if possible laundered gown to prevent excess waste development. (Soap and water kill the virus - it does not survive a washing Machine with detergent.)
- 1 Gown per day
 - unless it is wet or soiled.
 - Or unless recommended by local authority to dispose between patients.
 - Covering disposable apron
(In AGP procedure - change each patient)
- Hair cover disposable or laundered scrub hair cover.

Personal protective equipment (PPE) for health workers

Within metre of patient with possible/confirmed Covid-19

For high-risk procedures including contact with bodily fluids





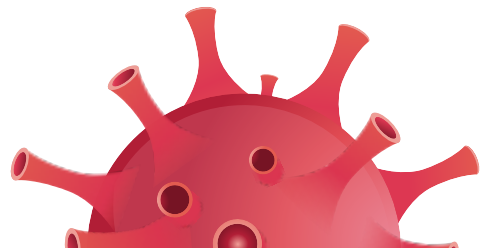
Step 5

Treatment Aids

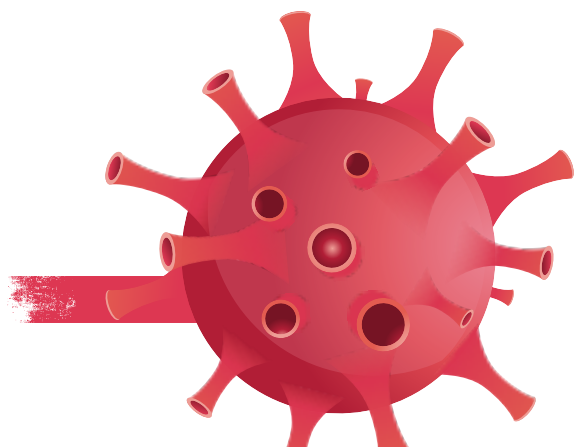
Workwear

Scrubs under gown

- All scrubs laundered on site or sent to laundry service
- Work Shoes stay at work
- Disinfectant spray soles of shoes at end of day
- Wash hands before leaving work



Step 5 Treatment Risk Categories



PPE/Procedures Risks Procedure Risk

Corresponding PPE



Highest Risk

- Anything that involves intra-oral drilling with handpiece
- Surgical Extractions
- Ultrasonic/Cavitron Use
- Implant Placement
- Endodontic therapy
- Periodontal Surgery



Medium Risk

- Crown/Bridge Seat
- Denture adjustments
- Handscale with no Ultrasonic/Cavitron and prophylaxis paste
- Impressions



Low Risk

- Post-ops
- Hygiene Exams
- ER Screening
- Orthodontic adjustments/delivery not involving dental handpiece
- Consults



Highest Risk

- Gown - disposable - 1 per patient if possible
- N95 - CAN BE REUSED, see CDC Guidelines, store in brown paper bag at the office.
- Surgical mask (level 1/2/3) over N95 to keep N95 dry and unsoiled
- Surgical cap - washable - keep on all day in clinical areas
- Face Shield - clean between patients with soap and water



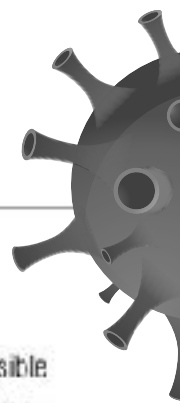
Medium Risk

- Scrub Jacket or disposable/laundryable gown
- Surgical Mask
- Surgical cap
- Face Shield



Low Risk

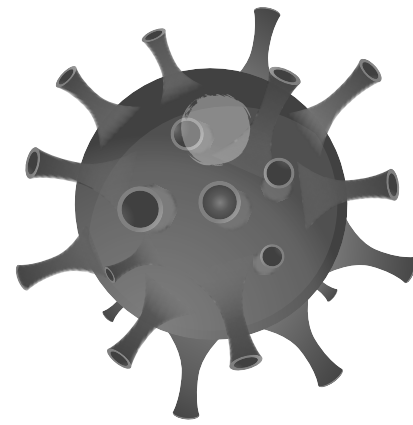
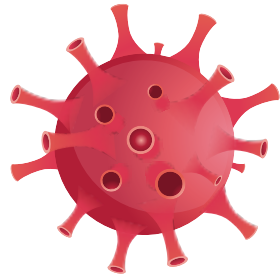
- Scrub Jacket
- Surgical Mask
- Surgical cap



Step 5

Treatment Aids

High Volume Suction (Such as Isolite)

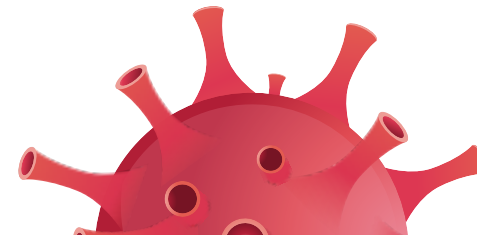


High volume suction (HVE)

Harrel and co-workers (Harrel et al., 1996) looked at the use of high-volume suction. They did an in vitro study and used an ultrasonic scaler for 1 minute to generate a dye-containing aerosol. They repeated the experiment ten times. **They found that the high-volume evacuator attachment produced a 93% reduction in surface contamination .**

Jacks performed a similar in-vitro study resulting in a 90.8% reduction in surface contamination (Jacks, 2002).

There was only one in-vivo study. Devker and co-workers (Devker et al., 2012), cleaned half the mouths of 30 dentate subjects using an ultrasonic scaler as a control and the other half using high volume suction. They recorded bacterial cultures using culture plates that they placed on the operator and patient. **They found that when they used the suction, there was an 81% reduction in bacterial culture forming units.**



Step 6

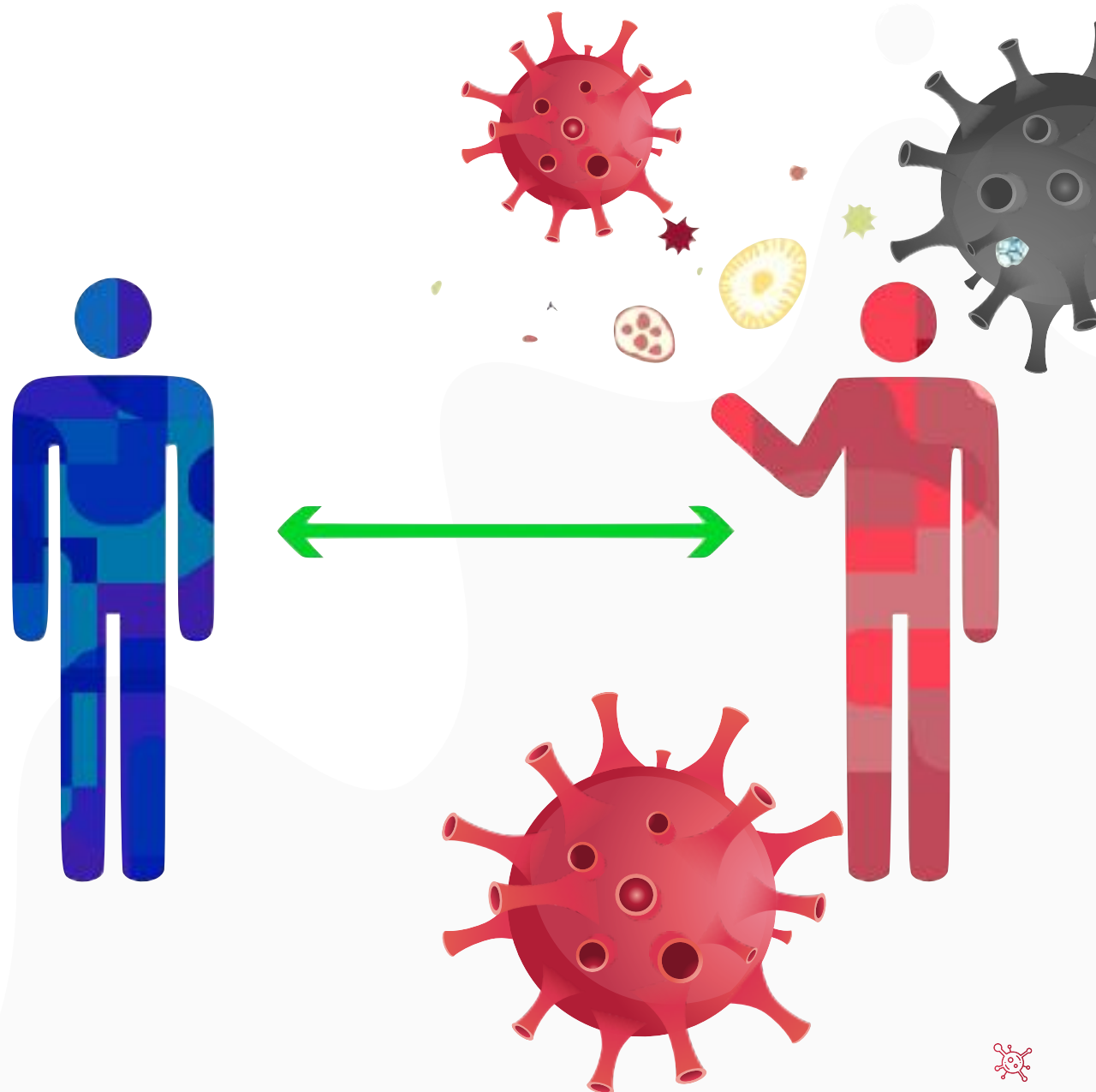
Treatment Sessions

**IDEAL PERSON TO PERSON HUMAN INTERACTIONS
REDUCED TO 1-2 PER PATIENT**

The clinical staff member and the Dentist (if needed).

All other communication is remote.

As minimal number interactions AS POSSIBLE



Step 7

Payment

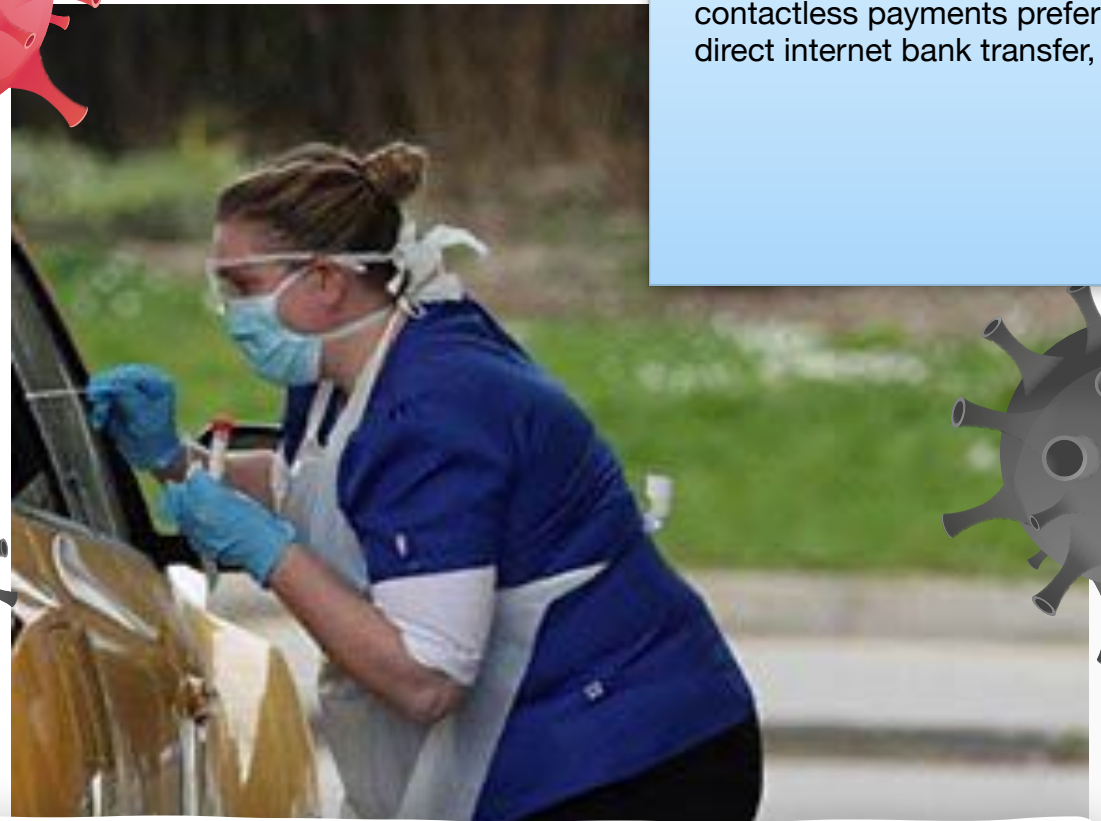
CORONA VIRUS Disease 2019

Ideally collect payment prior to treatment commences.

Patients should be informed of costs in advance of the appointment and payment collected by nurse in PPE in screening area (Step 3)

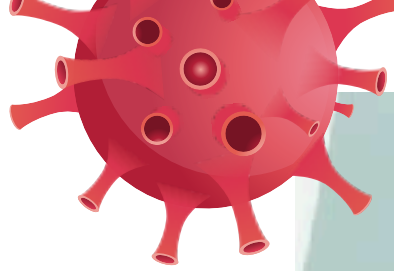
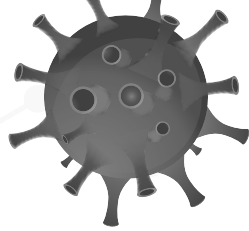
Use contact-less, or something like PayPal or bank transfer. Try avoiding cash as far as possible

contactless payments preferable including direct internet bank transfer, paypal



“ **Ideally collect payment prior to treatment commences.** ”





Step 8

Gap Between Patients

Waiting Time - Plan your day

When staff are ready to leave the room, the window must be left open to help reduce aerosols built up in the room.

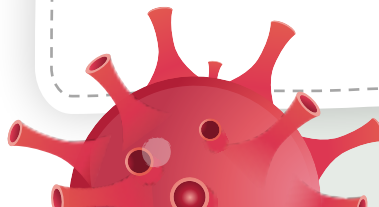
Clean nurse and dirty nurse leave the surgery to Don Off Practitioner - Clean and dirty nurse to go to Surgery to re-apply PPE

Runner to clean down surgery after allowing the correct time for aerosols to settle

Runner to follow separate protocol and watch video for cleaning down surgery



“ **SURGERY DOOR TO BE KEPT SHUT WHILST WAITING 30 MINUTES FOR NON AEROSOLS TO SETTLE AND 1 HOUR FOR AEROSOLS TO SETTLE**



Final Thoughts

CORONA VIRUS Disease

RESEARCH & FACT BASED DENTAL TREATMENT PROTOCOL

Closing Down Process

Follow all normal closing down procedures – but each person has a designated role to play

You must allow 30mins for surgery to settle – whilst this is in process other areas can be being closed down and cleaned.

1. Runner cleans down the surgery
2. Clean nurse closes down surgery
3. All clean down decontamination, stairs, handrails, general deep clean everywhere
4. Check windows are shut/ fire exit door is shut and secure
5. Clinical bins are taken out immediately
6. After your team have finished for the week, ensure you have bleached down chairs and table in staff rooms, kettle, fridge, microwave, coffee machine, cups, cutlery etc ready for the next team to begin their week.
7. Re-count all stock levels used and report back to Practice Manager



Important Disclaimer

COVID-19

RESEARCH & FACT BASED DENTAL TREATMENT PROTOCOL

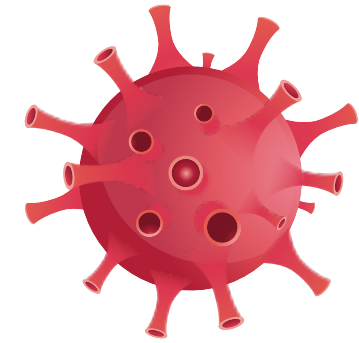
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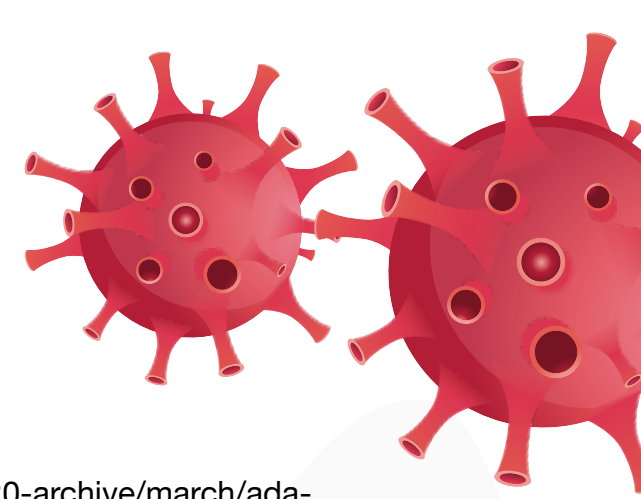
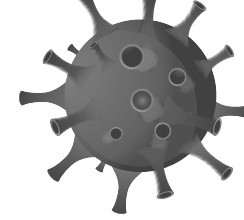
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Discussion **References**

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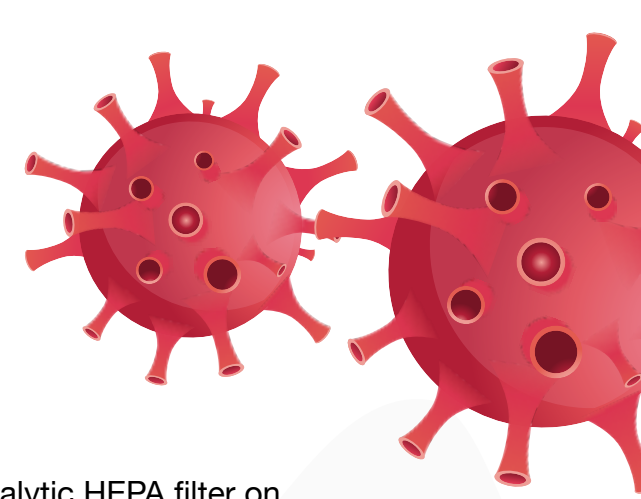
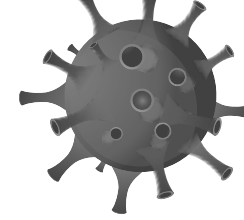
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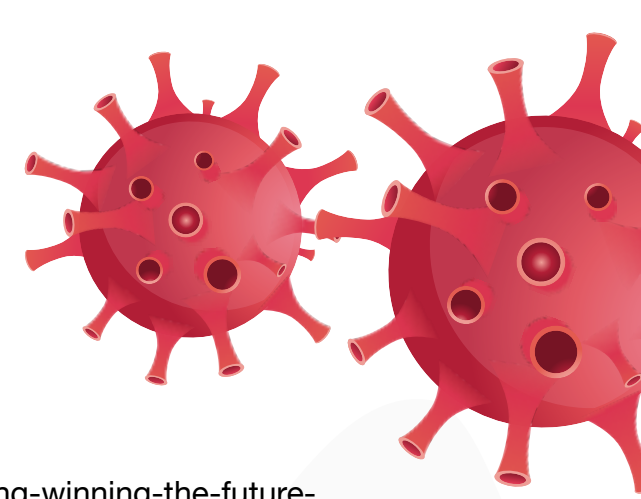
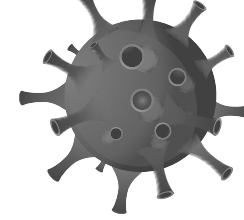
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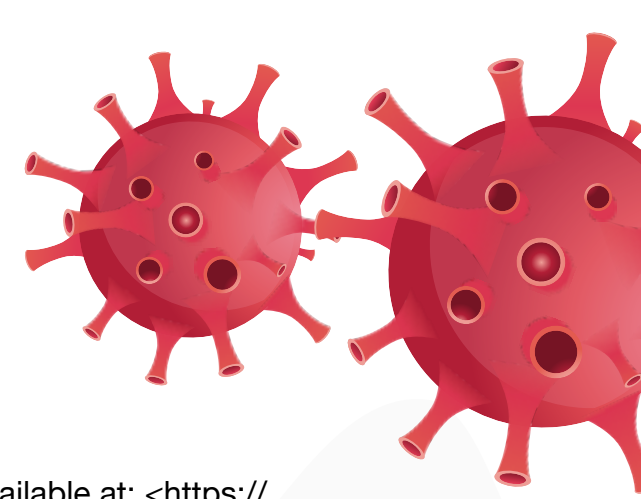
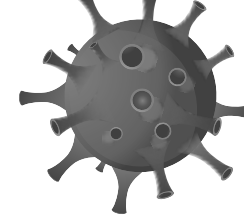
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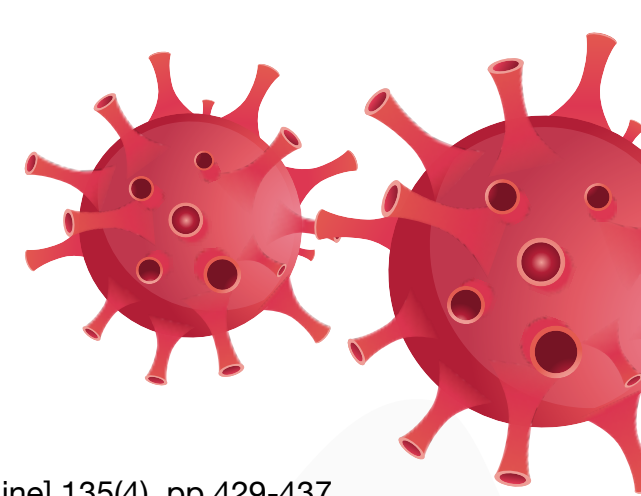
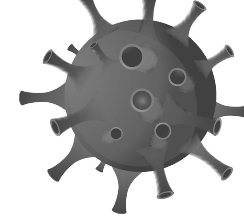
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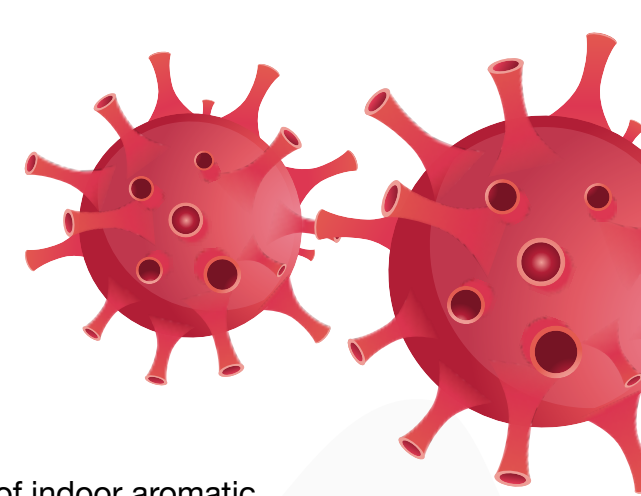
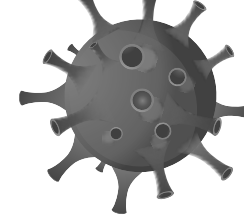
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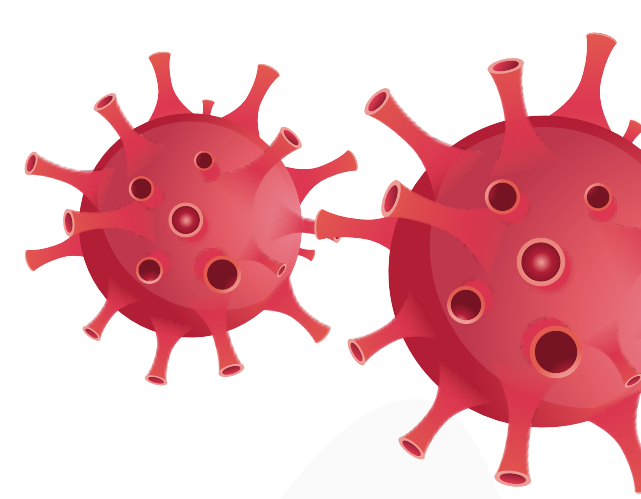
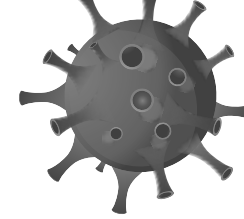
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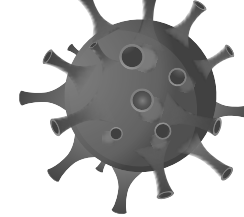
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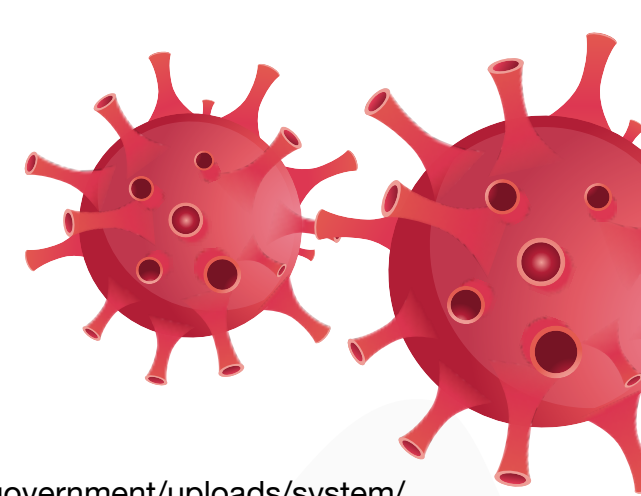
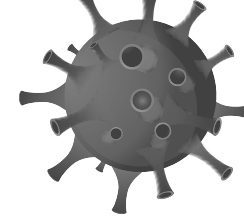
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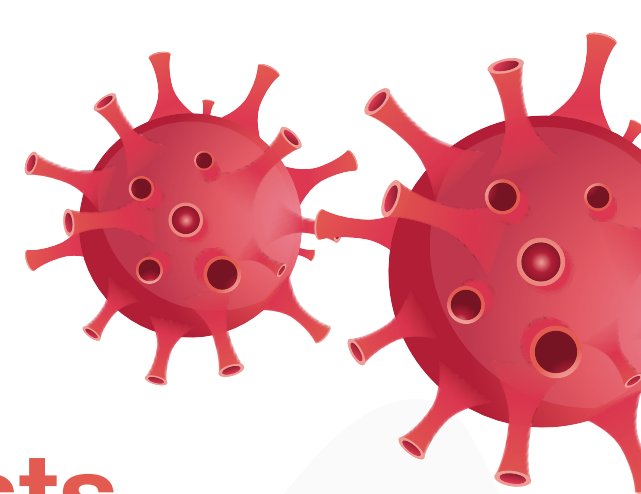
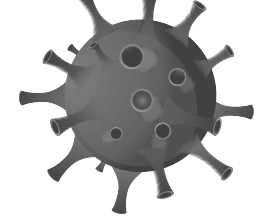
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to create this document.**

From all of us at the IDDA, we hope you all
KEEP SAFE.

