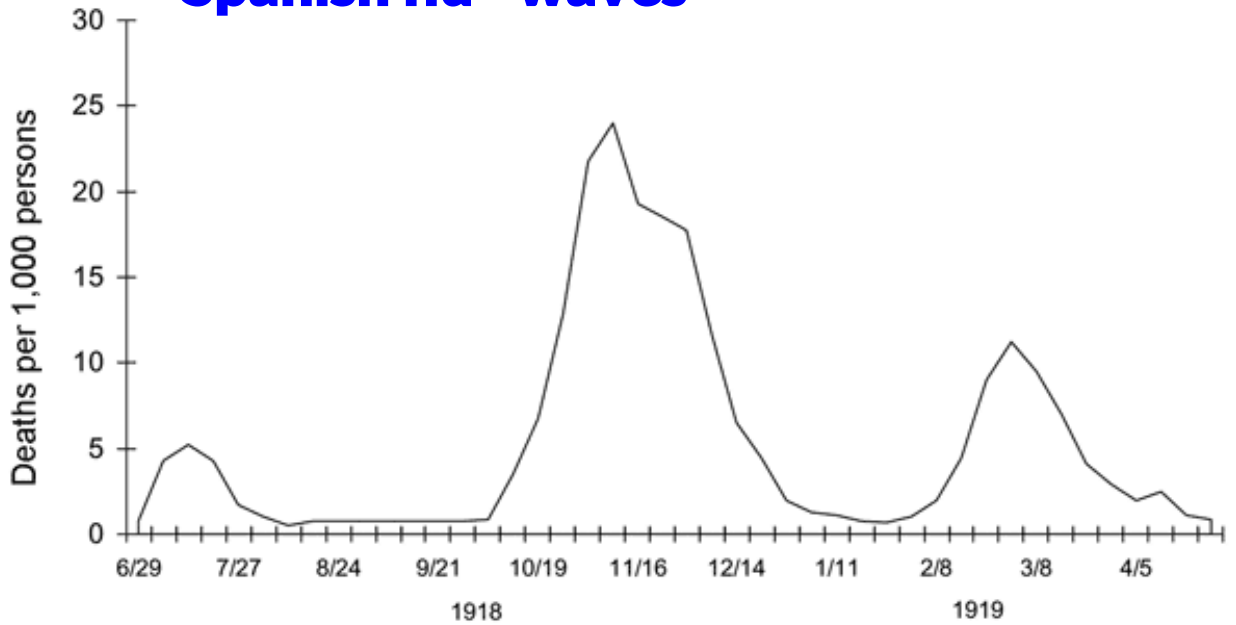


Spanish flu - waves



1919

INFLUENZA EPIDEMIC.—ADVICE TO SUFFERERS. COURSE OF TREATMENT.

A list of instructions for the guidance of persons who are attacked by influenza, or who suspect they have contracted the complaint, has been drawn up by Dr J. P. Frengley, acting-chief health officer, and Dr T. J. Hughes, district health officer, at Auckland. The instructions are as follows:

1. Go to bed directly you feel symptoms like pain, in the head and limbs, or a "cold."
2. Go to bed in a room not occupied by a person who is well, and stay there until the temperature returns to normal.
3. On going to bed take a drink of any kind as hot as possible, remove sheets, and lie between blankets.
4. Take light diet, such as milk, beef tea, soups, and gruel.
5. Don't depress yourself by looking at the bad side.
6. Remember the large majority of persons who take ill get well.
7. Only one member of the family of the house should visit the patient's room.
8. Don't allow people to come into your room and loiter there.

Risk management principles for dentistry

During the COVID-19 pandemic



Version 1.22 October 2021

Elimination
(screening)

Engineering controls
(facility)

Administrative controls
(policies and procedures)

PPE and additional infection
control considerations
(protecting the worker)



Appendix 1. Examples of risk management controls in a dental context

CATEGORY	SOME EXAMPLE CONTROL MEASURES
Elimination (screening)	<p>Screen all patients, workers and visitors for clinical and epidemiological risk factors for COVID-19</p> <p>Do not treat suspected or confirmed COVID-19 patients when care can be appropriately deferred</p>
Engineering controls (facility)	<p>Use signage to enhance screening protocols, implement 'check in', and deliver key messages such as respiratory hygiene</p> <p>Remove high touch items such as toys and magazines from communal areas</p> <p>Provide facilities for hand hygiene (such as alcohol-based hand rub) and respiratory hygiene (such as tissues)</p> <p>Identification and frequent cleaning of high touch surfaces</p> <p>Review and optimise air flow, ventilation, and air quality (including consideration of availability of negative pressure facilities in area)</p>

Are you feeling unwell?



If you have any of these symptoms:

STEP 1) Please do not come to work. Contact your supervisor as soon as possible.

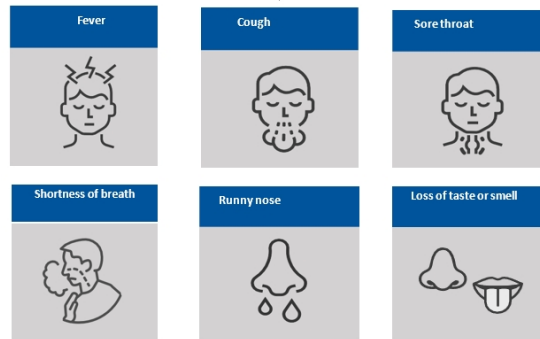
STEP 2) Get tested for COVID-19 and self-isolate until you receive your results.

Note that requirements for isolation vary with jurisdiction.

Criteria
for staff:

Stay home
when
unwell !

COMMON SYMPTOMS



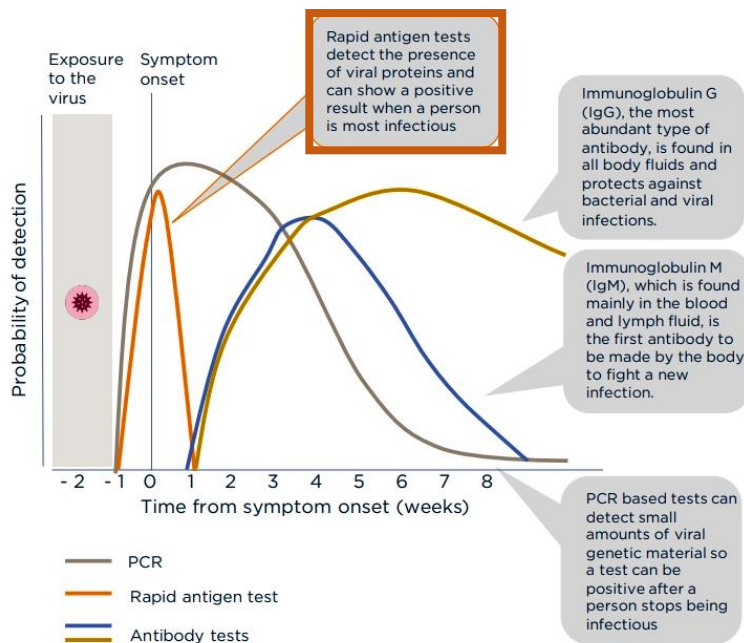
Other reported symptoms include fatigue, muscle pain, joint pain, headache, diarrhoea, nausea/vomiting, loss of appetite.

Risks if working when unwell:

- High viral load: spread more likely
- Spread of infection to other staff and to patients
- Absentee impact expands if other staff also become infected
- Suboptimal performance
- Poor decision making
- Workplace accidents and incidents

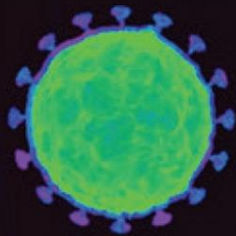
Staying home if you are unwell and remembering to practice good hygiene can help to protect our at risk patients and our dental team.

9



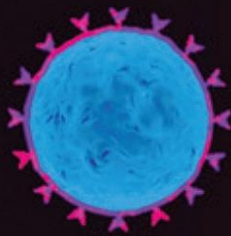
<https://www.apemedical.com.au/wp-content/uploads/2021/08/APE-Antigen-PoC-Testing-Flyer-0821-v1-1.pdf>

A BRIEF HISTORY LESSON



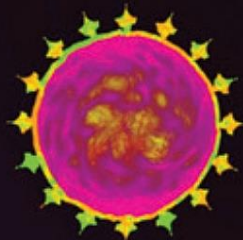
HCoV-NL63 (ALPHA-COV)

2004



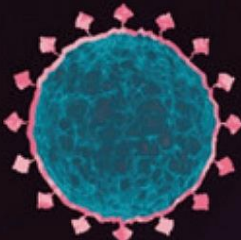
HCoV-HKU1 (BETA-COV)

2005



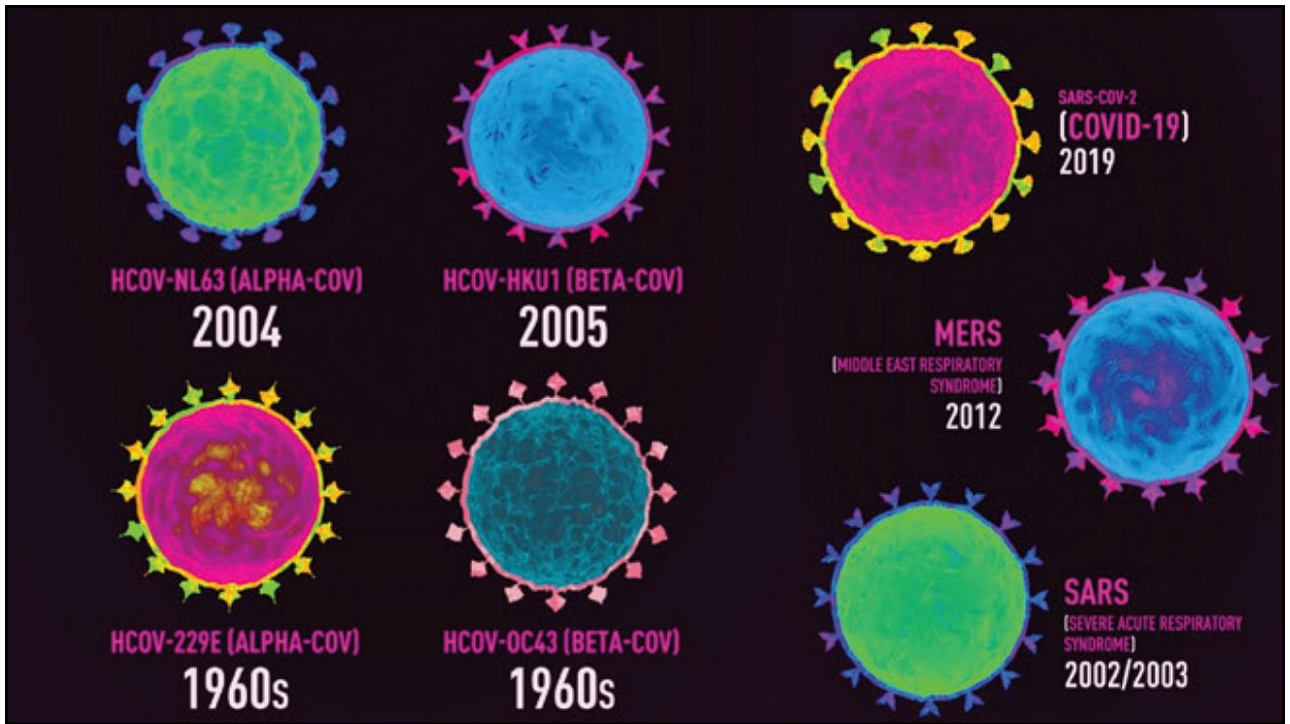
HCoV-229E (ALPHA-COV)

1960s

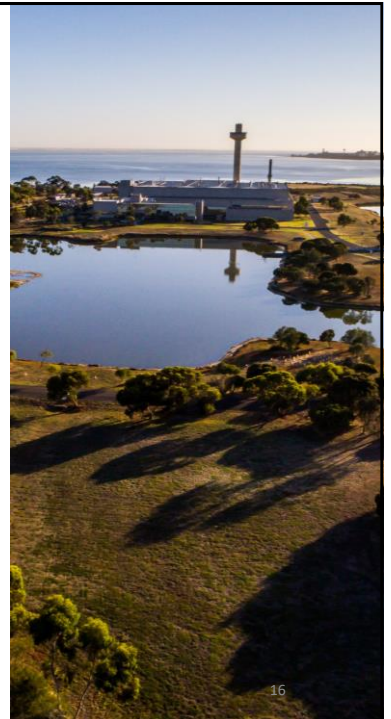
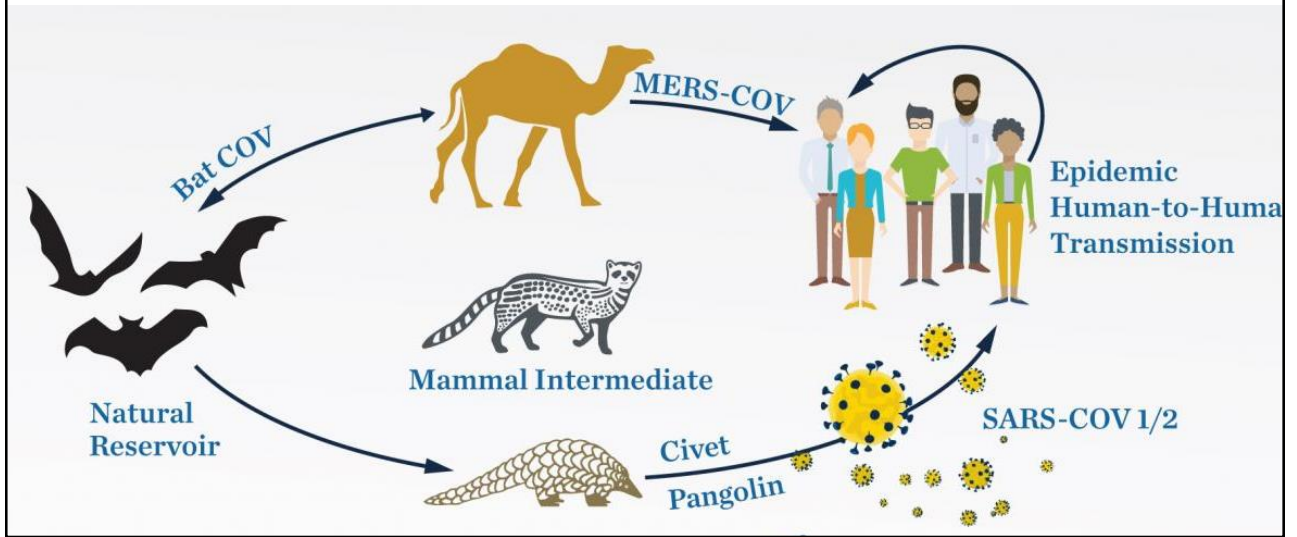


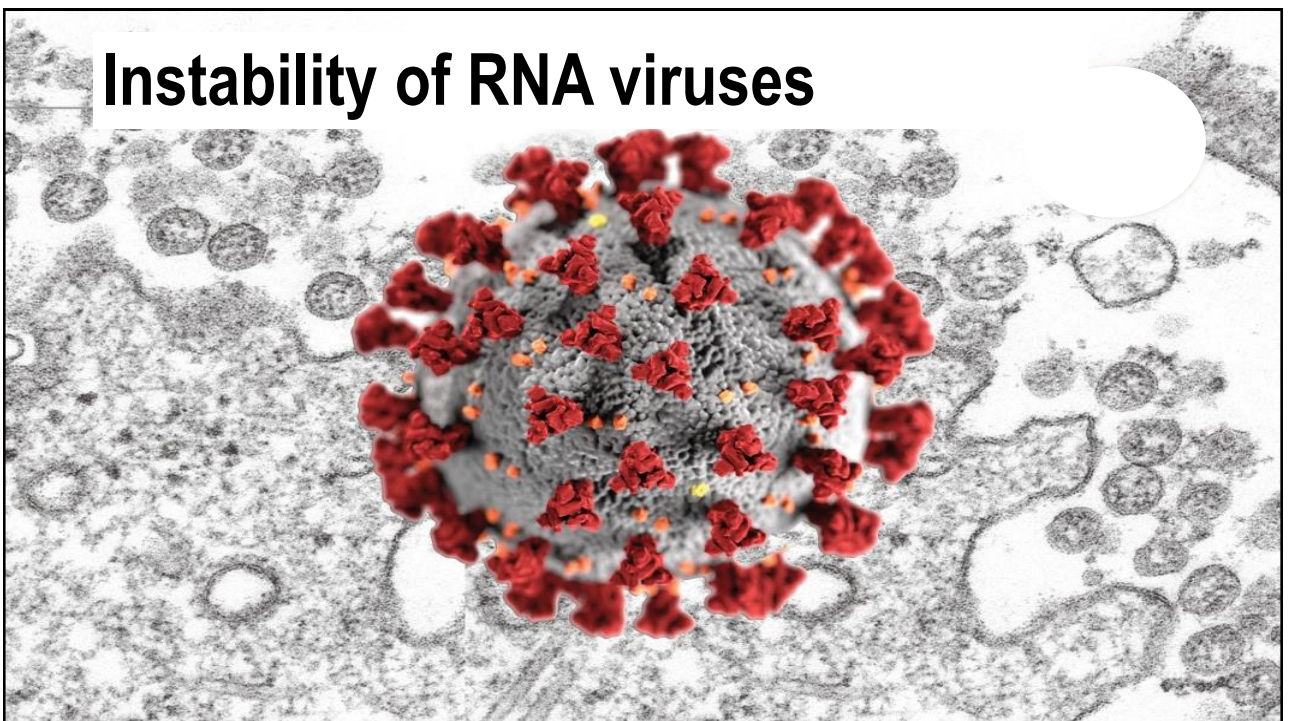
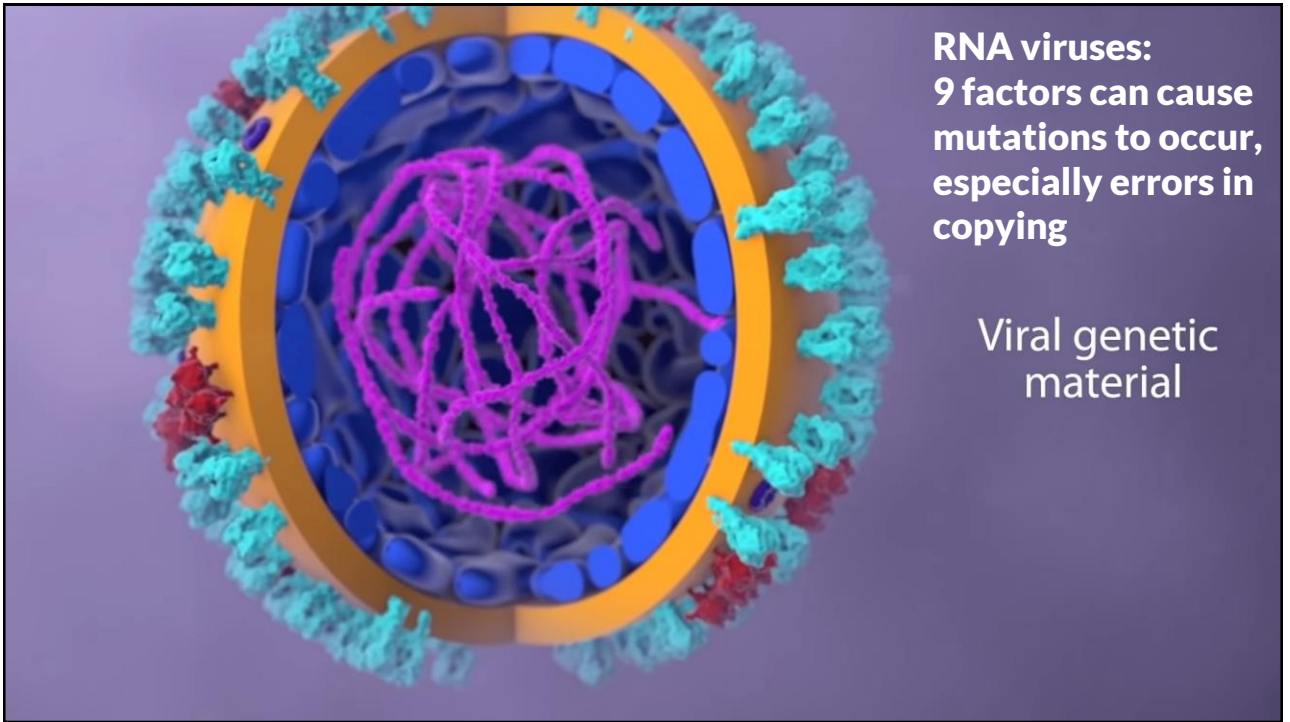
HCoV-OC43 (BETA-COV)

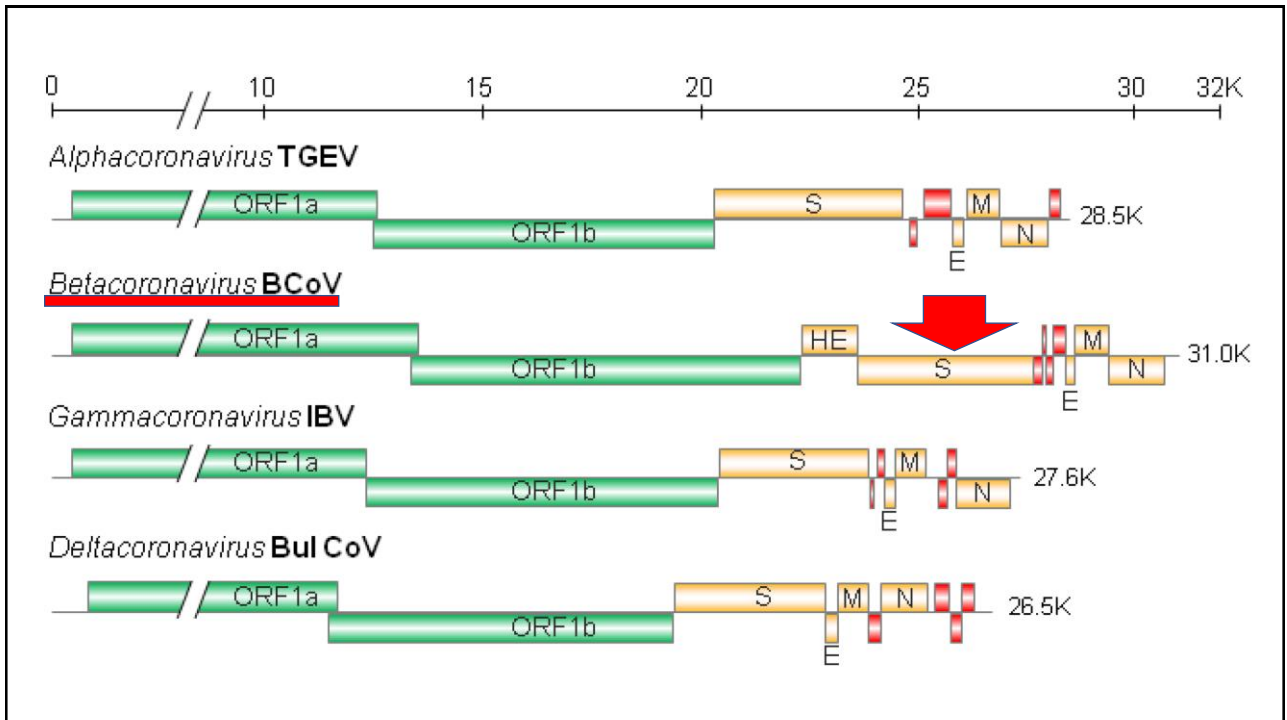
1960s



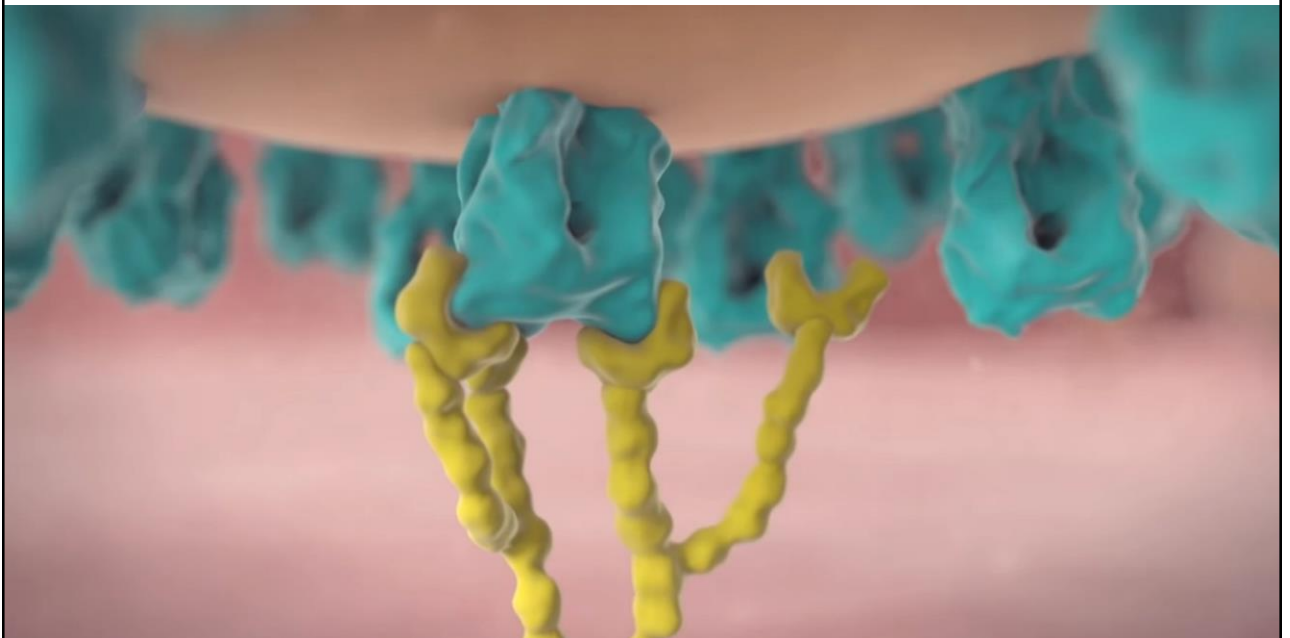
Zoonotic infections with intermediate hosts

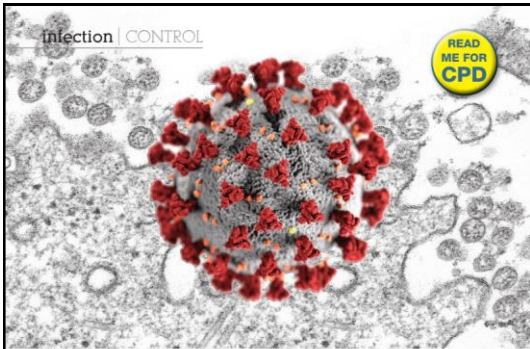






ACE-2 binding of the spike protein





COVID-19: What is likely to happen in the next part of the pandemic journey

By Emeritus Professor Laurence J. Walsh AO



As various parts of Australia begin reopening, it's important to consider what the next 12 months may hold in terms of the pandemic. Based on the history of previous pandemics and on current public health planning strategies for pandemic management, a number of predictions can be made about what the next year may bring.

Mutation

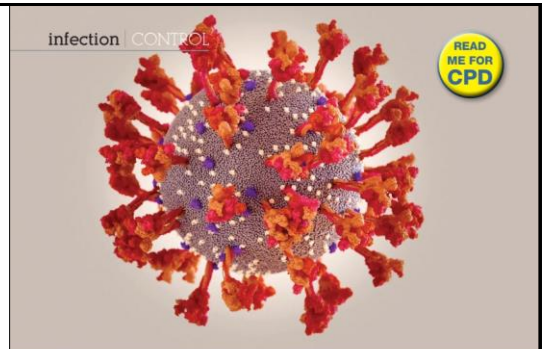
The SARS-CoV-2 virus will continue to mutate^{1,2} and the designations will progressively move through the Greek alphabet. Due to replication errors that are typical for RNA viruses, spontaneous small mutations will occur frequently. Some

of these may have no effect on the transmission and virulence of the virus and will largely pass unnoticed from a public health perspective. Other mutations will reduce the likelihood of transmission of the virus, particularly those that lower the affinity of binding of the virus to the ACE-2 receptor of human cells. Yet other mutations will make the virus more readily transmitted, or more stable in the environment. Typically, during the multiple waves of a viral pandemic, the virus becomes more readily transmitted but less virulent with successive waves of infection. This pattern was seen with the Spanish flu 100 years ago and with the swine flu in 2009.

Spontaneous small mutations, also known as antigenic drift, occur with human influenza viruses, so the same is expected for this particular coronavirus.¹

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Into 2022 and the next phase of the COVID-19 pandemic

By Emeritus Professor Laurence J. Walsh AO



During the summer of 2021-2022, Australian borders reopened, and at the same time, the omicron variant of the SARS-CoV-2 coronavirus (CoV) entered the country and began to spread rapidly. This article provides a summary of current thinking on the progress of the COVID-19 pandemic and the likely issues that will surface during the 2022 calendar year. The discussion begins with considering where we have come from and where we are at present. This is summarised numerically in Figure 1 which shows data for COVID-19 deaths and COVID-19 vaccinations for Australia. Severe cases, defined as those requiring hospitalisation, are around 14% of all confirmed cases for viral variants before omicron.

Naturally circulating coronaviruses

It is now considered the four endemic coronavirus strains that circulate globally: HCoV-229E, HCoV-OC43, HCoV-NL63 and HCoV-229E.^{1,2} The profile of symptoms that these viruses cause are similar to human influenza viruses and include fever, cough, headache and muscle aches.³

These coronaviruses were first discovered in 1966, with the most recent of the four strains being discovered in 2014.^{4,5} Along with human influenza viruses, coronaviruses typically cause human respiratory tract infections during the winter months, which coincides with the time of year when people are more likely to spend long periods of time indoors.

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