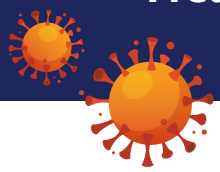
Frequently Asked Questions when Caring for Patients with COVID-19 from SARS-CoV-2 Variants of Concern (VOC)



1. What are the variants of concern and how do they differ from each other?

All viruses naturally develop mutations over time. COVID-19 is caused by the virus SARS-CoV-2. Variants of concern (VOC) have mutations in the virus spike protein, which may make them more transmissible or evade our immune responses. There are a number of variants of concern. The 3 most prevalent ones currently in BC are the B.1.17 (first identified in UK), B.1.1.28/P.1 (first identified in Brazil/Japan), and the B.1.351 (first identified in South Africa).

2. Should a patient be positive for the "wild-type" strain, what is the risk to them to also test positive for a VOC?

At this time, we do not know the risk of a 2nd infection with a variant of concern. With the new mutations in the spike protein, it is possible for patients who have been infected by a wild-type strain to be re-infected.

3. For patients with VOC should I be wearing an N95 mask? When would be appropriate?

- All patients with active COVID-19, including variants of concern, are placed on contact/droplet precautions at minimum.
- All health care workers should perform a point of care risk assessment (PCRA) before contact with every patient, every time even if the patient has been placed on Additional Precautions as more PPE may be required depending on the situation. (e.g. when a health care worker assesses the risk and identifies that they are providing care to a patient with an acute infection with significant respiratory symptoms (within first 10 days of symptom onset) in a closed or crowded space where the patient is unable to wear a mask, one may choose to don a N95 respirator that has been properly fit tested).
- At minimum, respirators (i.e. N95) are recommended for use where aerosol-generating medical procedures (AGMPs) are in place for a suspect/confirmed COVID-19 patient.

Please see below table comparing a surgical ASTM level 3 mask with an N95 respirator.

Understanding the Difference

	Surgical Mask	N95 Respirator
		
Filtration	Does NOT provide the wearer with a reliable level of protection from inhaling smaller airborne particles and is not considered respiratory protection.	Filters out at least 95% of airborne particles including large and small particles.
Intended Use and Purpose	Fluid resistant and provides the wearer protection against large droplets, splashes, or sprays of bodily or other hazardous fluids. Protects the patient from the weariers respiratory emissions.	Reduces wearer's exposure to particles including small particle aerosols and large droplets (only non-oil aerosols).
Face Seal Fit	Loose-fiiting.	Tight-fitting.
Leakage	Leakage occurs around the edge of the mask when user inhales.	When properly fitted and donned, minimal leakage occurs around edges of the respirator when user inhales.

Adapted from: cdc.gov/niosh/npptl/pdfs/UnderstandDifferenceInfographic-508.pdf

4. I am feeling anxious about getting the COVID variant originating from Brazil (P.1) in particular. Is it appropriate for me to wear an N95 plus a surgical mask overtop?

- No, it is important to recognize the optimal way to prevent airborne transmission is to use a combination of interventions from across the hierarchy of control, not just PPE alone.
- An N95 respirator is a respiratory protective device designed to achieve a very close facial fit and very efficient filtration of airborne particles.
- Correct and consistent mask use is a critical step everyone can take to prevent COVID-19. Surgical masks are not designed to fit tightly and wearing a surgical mask on top of the respirator does not help to improve the fit. It is more important to pay attention to the fit than the number of masks you are wearing.

5. Is it appropriate to wear two surgical masks for all COVID patients?

- The BC Provincial Infection Prevention and Control and Workplace Health and Safety COVID-19 Task Group, along with the Public Health Agency of Canada, do not recommend double masking in health care settings. Medical masks are designed to be used as a single personal protective equipment (PPE) item in health care settings.
- Wearing extra layers of PPE may affect fit and may increase breathing resistance, and complicates doffing procedures. Ensure that the mask you are wearing is well fitted. If there are challenges with fit, contact Occupational Health and Safety. If a properly fitting surgical mask cannot be provided, then a respirator may have to be used as an alternative.

6. What precautions do staff need to take when providing care to a patient with a VOC?

Staff should take all precautions currently in place to prevent COVID-19. There is no need to change any practices (hand hygiene, appropriate PPE, PCRA, environmental cleaning).

7. What is the effectiveness of the Pfizer and Moderna vaccines against the VOC?

Data is still emerging regarding the effectiveness of the vaccines against variants of concern. The Pfizer and Moderna vaccines should still be effective against the B.1.17 strain, but with different mutations in the B.1.351 and P.1 strains, the effectiveness may be reduced for those variants. Clinical effectiveness studies are ongoing. Despite being vaccinated, HCW should remain vigilant regarding their infection control precautions given the new variants.

8. Should a patient with a VOC want to walk in the hallway or leave the unit, how should staff respond?

For all patients with active COVID-19 patient should remain in their room, unless required for clinical care (e.g. medical imaging, physiotherapy, etc.). However, if they want to leave the room, it is important to ensure that they wear a mask ensure physical distancing from others and perform hand hygiene.

9. Should patients with VOC be in private rooms or can they be in 'mixed' rooms? Can patients with the same variant be cohorted in the same room?

At this time, there is no evidence to suggest that we need to place patients with COVID positive variants in private rooms and we do not have the capacity to consistently cohort patients.

10. Will IPAC conduct contract tracing on patients who were sharing a room with a patient who tests positive for a VOC?

As with any patient newly identified with COVID-19, IPAC will conduct contact tracing of roommates and follow-up as necessary. Depending on the type of exposure, that may lead to no further action, addition of contact/droplet precautions or requirement for a single room. In these cases, IPAC will leave notes in Cerner to detail the type of exposure and any additional precautions required.

11. Do staff who provide care to a patient with a variant strain need to be segregated from other red zone staff?

No, staff do not need to be cohorted from other staff in the red zone.

12. Do staff who work on 7B who are caring for patients with VOC need to be segregated from other staff patients caring for COVID-19 non-variant?

No. It is important to ensure that staff are asymptomatic prior to coming to work, be mindful of their practices in the breakroom, and continue the currently recommended precautions preventing transmission. Current practice is there is a dedicated Break/change room for RED zone staff and yellow zone staff. On 7A, there will be separate break rooms and change rooms for those staff caring for green zone patients and yellow zone patients.