

FACTS ON COVID-19 NEW VARIANTS

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- Due to constant mutations, viruses change and new variants of viruses occur.
- Currently, several variants of the virus causing COVID-19 are circulating globally

UK variant: The United Kingdom identified a variant called B.1.1.7.

South African variant: In South Africa, another variant called B.1.351 emerged independently of B.1.1.7.

Brazil variant: In Brazil, a variant called P.1 emerged. It was identified in travelers from Brazil, who were tested during routine screening at an airport in Japan, in early January.

Following facts were obtained through a personal communication

Prof Neelika Malavige MBBS (Col.), MRCP (UK), AFHEA, DPhil (Oxon), FRCP (Lond), FRCPATH (UK) Professor in Immunology and Molecular Medicine):

Sri Lankan lineage B.1.411

This SARS-CoV2 variant was responsible for the outbreak since the second wave, which started from end of September 2020. This variant was assigned a unique lineage and is now referred to as the Sri Lankan lineage

UK variant B.1.1.7

Initially identified from the UK is now detected from 82 countries, including many Asian countries such as (South Korea, Thailand, Hong Kong, Bangladesh, Singapore, India, Malaysia and Pakistan).

Studies from UK have shown that this variant is likely to be 30-70% more transmissible than other variants.

This variant was seen to cause community outbreaks in countries such as New Zealand, which is thought to have the best COVID-19 control programs.

Implications on vaccine efficacy: The Oxford/Astrazeneca and Pfizer vaccine have been shown to be effective B.1.1.7 and there is no reduction of the efficacy of these two vaccines against this variant. The efficacy of other vaccines against this variant has not been studied.

Important facts to know about these variants

- ❖ Spread more easily and quickly than other variants, which could lead to more cases of COVID-19.
- ❖ The increased number of cases will put more strain on health care resources, lead to more hospitalizations, and other complications.
- ❖ Little known about the virulence of the new strains, which require more studies.
- ❖ Studies suggest that current vaccination in Sri Lanka (Covishield) is protective against the variant (B.1.1.7.) identified.
- ❖ Since new variant of COVID-19 is spread mainly through close contact from person to person, prevention is similar.

TO PROTECT YOURSELF AND OTHERS, AVOID BEING EXPOSED TO THIS VIRUS.

Steps to slow the spread:



- ❖ **Stay at least 6 feet away from others**, whenever possible. Very important!
- ❖ **Cover your mouth and nose with a mask** when around others
- ❖ **Wash your hands** often with soap and water. If soap and water are not available, use a hand sanitizer that contains at least 60% alcohol.
- ❖ **Avoid crowded indoor spaces** and ensure indoor spaces are properly ventilated by keeping doors & windows opened.
- ❖ Stay home and **isolate from others when sick.**
- ❖ **Routinely clean and disinfect frequently touched surfaces** and take other steps to stop the spread at home.

Selecting Masks

- People should wear masks in public settings, at events and gatherings, and anywhere they will be around other people.

When selecting a mask:



- ❖ Have two or more layers of washable, breathable fabric masks or surgical masks
- ❖ Completely cover your nose and mouth
- ❖ Fit well against the sides of your face and don't have gaps
- ❖ Have a nose wire to prevent air from leaking out of the top of the mask
- ❖ Two masks are advocated for people wearing cloth masks.
- ❖ Use only one medical procedure masks (Surgical Masks / Disposable Face Masks)

Don't:



- Don't use masks made of fabric that makes it hard to breathe
- DO NOT choose masks that have exhalation valves or vents which allow virus particles to escape
- DO NOT choose masks that are intended for healthcare workers, including N95 respirators or N95 respirators

How NOT to wear a mask:



Around your neck On your forehead On your chin Only on your nose Under your nose



Dangling from one ear



On your arm

- Correct and consistent mask use is a critical step to reduce their risk of getting and spreading COVID-19 combined with other measures
- Masks work best when everyone wears them
- But all masks will not provide the same protection.

Protection depends on:

- How well a mask fits,
- How well it filters the air,

How many layers it has are all important to consider when choosing which mask to wear.

Types of Masks:

1. Fabric Masks

- Cloth masks can be made from a variety of natural and synthetic fabrics and fibers with multiple layers of tightly woven, breathable fabric.

2. Medical Procedure Masks (Surgical Masks / Disposable Face Masks)

- A medical procedure mask can be worn underneath a cloth mask (forming a “double mask”) for improved fit and filtration.
- However, a **medical procedure mask should not be worn underneath a second medical procedure mask.** (Do not wear two medical procedure masks together!)

3. KN95 Masks (also known as KN95 Respirators)

- **Note: Do NOT wear KN95 masks with exhalation valves since they allow respiratory droplets containing the virus to escape.**

4. NIOSH-Approved N95 Respirators

- N95 respirators should be reserved for healthcare personnel and for other workers who are required to wear them for protection against other hazards.

WAYS TO INCREASE MASK PROTECTION: IMPROVE FIT AND FILTRATION:

<p>Improve fit to help prevent air from flowing freely around the edges of the mask instead forcing air to flow through the mask.</p>	<p>Improve filtration to cause more respiratory droplets containing the virus to be captured by the mask.</p>
	 <p>Wearing Two Masks (Wearing a “Double Mask”)</p> <ul style="list-style-type: none"> ✓ Wearing a second mask(fabric) on top of a first mask can improve fit by pressing the inner mask closer to the face, thereby reducing the amount of air that leaks around the edges of the masks. ✓ Improve filtration by adding more layers of material to reduce the number of respiratory droplets containing the virus that come through the masks.
<ul style="list-style-type: none"> • But, Do Not combine two medical procedure masks to create a “double mask.” • Medical procedure masks are not designed to fit tightly and wearing a second medical procedure mask on top of the first medical procedure mask does not help to improve the fit. • Do not combine a KN95 mask with any other masks. You should only use one KN95 mask at a time, and you should not use any type of second mask on top of or underneath a KN95 mask. • To improve fit, can use a mask fitter or brace over a medical procedure mask in order to reduce leakage of air around the edges of the mask.  <ul style="list-style-type: none"> • Or to wear two masks (“double mask”), which can be done by wearing a cloth mask over a medical procedure mask. 	

Article prepared using CDC (cdc.gov) website. Figures are copied from the CDC website.