

**GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF HEALTH RESEARCH**

**LOK SABHA
UNSTARRED QUESTION NO. 3987
TO BE ANSWERED ON 19TH MARCH, 2021**

MUTATIONS OF COVID VIRUS

**3987. SHRIMATI MEENAKASHI LEKHI:
SHRI KIRTI VARDHAN SINGH:
SHRI Y.S. AVINASH REDDY:
SHRI KANUMURU RAGHU RAMA KRISHNA RAJU:**

Will the Minister of **HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) the number of mutations of the COVID-19 virus present in India;
- (b) whether the vaccines developed in India are effective against each of these mutations;
- (c) if so, the details thereof along with the efficacy rate of Covaxin and Covishield vaccines against each of the mutations;
- (d) whether the Government is undertaking research to better understand each of these new mutations of the virus, if so, the details thereof;
- (e) whether the Government has any reported cases of Covid strain from South Africa and Brazil across the country, if so, the details thereof and the steps taken by the Government in this regard to check the further spread of the infectious and fatal Covid strain of South Africa and Brazil; and
- (f) whether the Government proposes to bring about changes in the existing vaccines available in the country to check the further spread of these two mutant strains and if so, the steps initiated by the Government in this direction?

ANSWER

**THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND
FAMILY WELFARE
(SHRI ASHWINI KUMAR CHOUBEY)**

- (a): At present, there are four mutations of the COVID-19 virus in India, namely, U.K. variant 1, U.K. variant 2, South African variant and Brazil variant.
- (b) & (c): The efficacy of COVAXIN against SARS-CoV-2 has been examined. The efficacy rate of Covaxin and Covishield vaccines against each of the mutations is as under:

Strain	Covaxin	Covishield/Oxford
UK Strain	Non-significant difference in efficacy against UK Strain	Efficacy against symptomatic SARS-CoV-2 positive infection is 74.6% against UK strain
South Africa Strain	Analysis is ongoing	10% efficacy
Brazil Strain	Non-significant difference in efficacy against Brazil Strain	Effective

(d): Continuous monitoring of evolution of mutations is being done by the Indian SARS- CoV-2 Genomics Surveillance Consortium (INSACOG). Besides, National Institute of Virology (NIV) is continuously engaged in virus isolation of different SARS-CoV-2 strains for further research.

(e): Strains from South Africa and Brazil have been detected in travelers coming to India from the said countries. In order to curtail spread of these variants in India the Govt. has issued revised guidelines for International arrivals on 17" February 2021 which can be accessed at. <https://www.mohfw.gov.in/pdf/Guidelinesforinternationalarrivals17022021.pdf>. As per the guidelines, screening of passengers coming from South Africa, Brazil and UAE has been made very stringent to prevent spread of infection due to variants.

(f): The Oxford/ AstraZeneca have initiated tweaking of the vaccine to make it efficacious against the mutant strains particularly the South African variant. The need to change composition of Covaxin has not been felt yet in view of good efficacy of the vaccine against variants.