

THE THIRD COVID WAVE

Corona virus in an area can remain as an epidemic or mutate and be very virulent and spread cross borders.

This happened in 2020 January and the world has experienced a pandemic.

There is usually a time gap of 15-16 weeks between two waves in an epidemic, Similarly after the pandemic, which started in 2000 and extended to 2021 and still going on, it was previously believed that the second wave of coronavirus, which peaked during the initial weeks of May, 2021 would be shortly followed by the third wave of the virus, around the months of August to September.

However, multiple studies and sero-surveys conducted across states in India are now pointing at a delayed outlook- with the third wave expected to hit the country months later, around December, which comes attached with some worries and hopes.

The third wave of Covid in India.

An organisation of top Indian doctors has warned that a third wave of Covid is inevitable as travel restrictions ease across the country. This has raised concern among the general too as Lockdowns may extend and it can be more dangerous although these are still speculations.

Daily new cases in India have fallen to just over 40,000 in recent weeks, down from the peaks of 400,000 in May.

The research report says that India achieved its second wave peak on 7th May.

report - COVID-19: The race was heading towards a to finishing line (help of vaccinations and lockdowns) - prepared by SBI Research, claims that the Covid third wave peak will arrive in the month of September 2021.

Delta variant of COVID-19

In recent months, it was observed by many COVID health carers (doctors) that cases were detected with symptoms and signs of frank COVID. Even radiological evidence was confirmatory, but surprisingly they came with a negative SAARS Co-v 2 report.

A doubt struck that that this could be a variant and samples from different hospitals cross country were sent to Virological Institutes.

Ultimately research proved that this was a new mutant – The Delta mutant, namely B.1.167 which was more dangerous than SAARS CoV2.

It responded little to existing treatment protocols, was rapidly progressive and death tolls were much higher. Also they were less susceptible to major vaccines.

It has been making headlines as it has spread across the world. This so-called Delta variant, which is also known as B.1.617.2, was first identified in India in December 2020.

It was suspected but later proved that Covid is not transmitted through water treatment and sewage. Currently, there is no evidence about the survival of the COVID-19 virus in Drinking-water or sewage.

But the good thing was that the morphology and chemical structure of the COVID-19 virus are similar to those of other human coronaviruses for which there are data about both survivals in the environment and effective inactivation measures.

Viruses mutate all the time and most changes are inconsequential. Some even harm the virus. But others can make the disease more infectious or threatening - and these mutations tend to dominate.

A mutation is elevated from a "variant of interest" to a "variant of concern" (VOC) when it shows evidence of fulfilling at least one of several criteria, namely

- Easy transmission
- More severe illness
- Reduced neutralisation by antibodies
- Reduced effectiveness of treatment and vaccines.

India's health ministry says studies showed that the so-called **Delta plus** variant - also known as AY.1 - spreads more easily, binds more easily to lung cells and is potentially resistant to monoclonal antibody therapy, a potent intravenous infusion of antibodies to neutralise the virus. The variant is related to the Delta, an existing variant of concern, which was first identified in India last year and is thought to have driven the deadly second wave of infections this summer in India.

But leading virologists have questioned the labelling of Delta plus as a variant of concern, saying there was no data yet to prove that the variant was more infectious or led to more severe disease compared to other variants.

The health ministry says the Delta plus variant, first found in India in April, has been detected in around 40 samples from six districts in three states - Maharashtra, Kerala and Madhya Pradesh.

At least 16 of these samples were found in Maharashtra, one of the states hardest hit by the pandemic.

Delta plus has also been found in nine other countries - USA, UK, Portugal, Switzerland, Japan, Poland, Nepal, Russia and China - compared to the original highly contagious Delta strain, which has now spread to 80 countries.

SUMMARY OF THIRD WAVE IN CHILDREN

The second wave of coronavirus saw many paediatric cases of COVID-19 come forward and cause infections amongst children, who were once considered to be less affected.

The manner of infections and the rise in cases made many believe that after senior citizens, younger, healthy people, the next wave would be much detrimental for kids. However, it may not be the case as there is no scientific proof to support the same.

As per experts, the third wave being dangerous for kids, or affecting them in larger numbers does not have any scientific backing yet, and is based on speculative matters.

Doctors have also repeatedly stressed on the fact that kids who do end up catching COVID-19 do get milder forms of the disease, recuperate early and have better recovery odds. Most importantly already trials of vaccines of companies like Pfizer (6-17 years) have proved successful in children and presently the next company, Cadilla, is spearheading the trial of their vaccine on 12-18 year age group. However as of now children, in India are still not under recommendation of vaccination till 18 years of age.

From sero-surveys conducted across states like Maharashtra and UP, data has suggested that over 80% of the kids have been exposed to the virus in one way or the other.

With a prevalence of antibodies, it is unlikely that the third wave or any emerging variants would be extremely problematic for children in the coming months.