



# Teknik Diagnosis COVID - 19



**Rizka Oktarianti Ainun Jariah S.Si.,M.Sc**  
**Prodi DIII Teknologi Laboratorium Medis**



## Course Objectives

---

- ⦿ Memberi informasi mengenai macam-macam teknik diagnosis COVID-19 di Indonesia
- ⦿ Memberi gambaran tentang prinsip, teknik, dan prosedur masing-masing teknik diagnosis COVID-19
- ⦿ Memberi informasi kelebihan dan kekurangan masing-masing teknik

# China pneumonia outbreak: Mystery virus probed in Wuhan

🕒 3 January 2020



Coronavirus pandemic



The outbreak has occurred in the city of Wuhan

# Delta Variant Blamed for Dramatic Covid Surge in Indonesia

BY : NATASIA CHRISTY WAHYUNI, HERU ANDRIYANTO  
JULY 08, 2021

**Jakarta.** The government confirmed on Thursday the highly transmissible Delta variant is the main culprit behind the ongoing dramatic spike in newly coronavirus cases and deaths.

Indonesia set a new record in the highest number of daily Covid-19 cases with 38,391 new cases in the past 24 hours, taking the country's total to 2.4 million, government figures show.

In all but one day, daily Covid numbers in Indonesia have been reaching a new high since the beginning of the month.

# Statistics



## Indonesia

Total cases

**3.8M**

+30,788

Recovered

-

Deaths

**115K**

+1,432

## Worldwide

Total cases

**206M**


Recovered

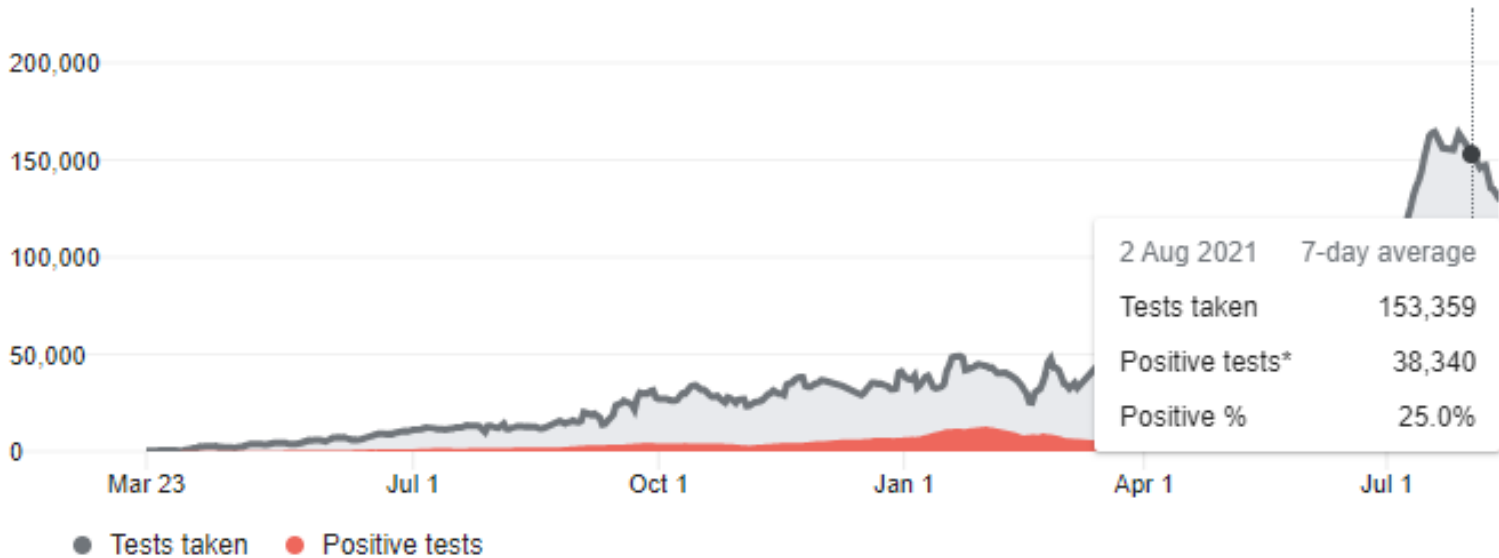
-

Deaths

**4.35M**

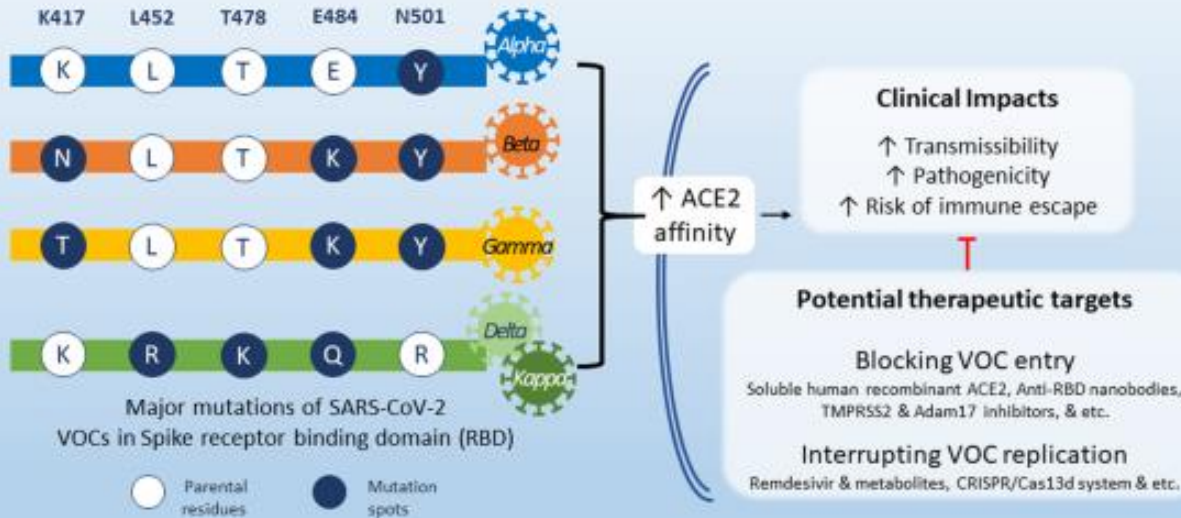
From [Our World in Data](#) · Last updated: 2 days ago · Based on 7-day average

 Indonesia ▾    All time ▾



\* Positive tests are estimated by multiplying tests taken by the positivity rate. Positive tests may not be equal to positive cases because of reporting differences and people taking multiple tests. · [About this data](#)

# Struktur SARS-CoV 2



# Teknik Diagnosis COVID-19 :

1. Reverse Transcriptase (RT) – PCR → Gold Standard
2. Rapid Antigen COVID-19 Test
3. Rapid Antibody of COVID-19 Test
4. Immunoassay test (ELISA)
5. GeNose Rapid Test
6. Culture Virus Test
7. Supporting tools : Oxymeter



Quiz :

Metode apa yang menjadi  
*Gold Standard* diagnosis  
COVID-19 ?





## References :

- ① <https://news.google.com/covid19/map?hl=en-ID&mid=%2Fm%2F03ryn&gl=ID&ceid=ID%3Aen>
- ② <https://www.nature.com/articles/d41586-021-02084-7>
- ③ Kumar KSR, Mufti SS, Sarathy V, Hazarika D and Naik R (2021) An Update on Advances in COVID-19 Laboratory Diagnosis and Testing Guidelines in India. *Front. Public Health* 9:568603. doi: 10.3389/fpubh.2021.568603
- ④ Naqvi, A., Fatima, K., Mohammad, T., Fatima, U., Singh, I. K., Singh, A., Atif, S. M., Hariprasad, G., Hasan, G. M., & Hassan, M. I. (2020). Insights into SARS-CoV-2 genome, structure, evolution, pathogenesis and therapies: Structural genomics approach. *Biochimica et biophysica acta. Molecular basis of disease*, 1866(10), 165878. <https://doi.org/10.1016/j.bbadis.2020.165878>



**Thank you.**

