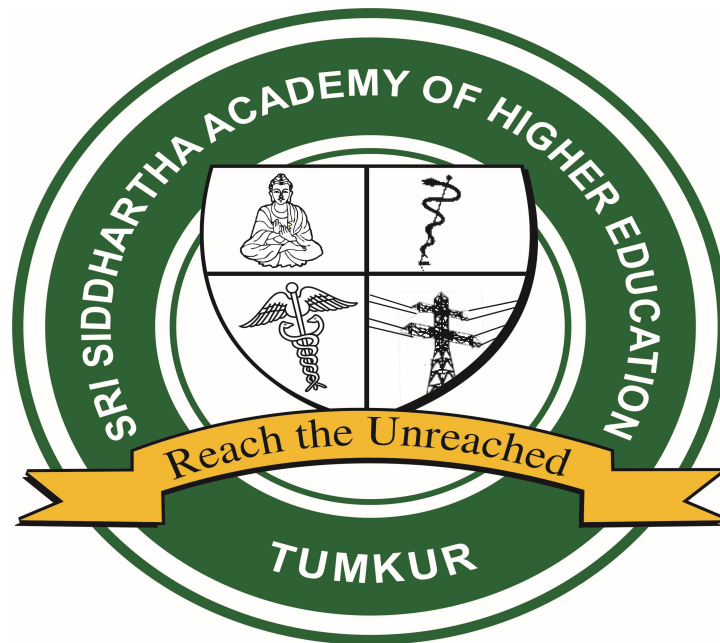


# Sri Siddhartha Academy of Higher Education



## COVID -19: BULLETIN:-3

16/05/2020

Under the **Guidance** of Honorable Vice Chancellor Dr. Balakrishna Shetty P, Sri Siddhartha Academy of Higher Education has prepared COVID-19 Bulletin.

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## POLITICAL SCENARIO

### USA

- US economy sinks 4.8% amid pandemic shutdowns
- US says Chinese hacking vaccine research: Reports
- New York becomes Ground Zero again
- The pandemic has left nearly 30 million unemployed in the US. Now, many are turning to charities for help.
- The vice-president says the virus task force may wind down by the end of May or early June.

### SPAIN

- Spain says it has overcome the 'toughest phase' of coronavirus as the country reports its lowest number of deaths in one day for more than a month.
- Restaurants can start opening their terraces from mid-May, but they must not be more than 30% full during the first phase
- Religious services can resume on a limited basis from 11 May, at no more than one third of the building's capacity
- Spain's health experts warn of second wave of Covid-19 cases from Costa del Sol to Costa Blanca in 10-15 days time

### ITALY

- Italian PM vows to reopen schools in September
- Italy's coronavirus deaths fall to lowest since lockdown began
- Italy's churches to reopen for mass from May 18<sup>th</sup>
- Italy speeds up reopening with cafes and restaurants allowed to open on May 18<sup>th</sup>
- Milan is a ticking coronavirus 'bomb' under phase two, virologist warns

### FRANCE

- France mandates masks for schools and transport
- Two months of Covid-19 lockdown will cost France €120 billion
- France to maintain tight international travel restrictions until at least June 15<sup>th</sup>
- Paris to roll out 50 km of cycle lanes to stop spread of Covid-19 on public transport

### GERMANY

- German Chancellor Angela Merkel has urged the nation to remain "clever and cautious" in handling the next phase of the coronavirus epidemic.
- Across Germany, the first pupils returned to the classroom in about half of all the country's 16 states
- German government set to introduce permanent 'right to work from home'
- Germany's Lufthansa to ramp up European flights in June

**UK**

- Prime Minister Boris Johnson says the UK is at point of "maximum risk" and he won't ease restrictions too quickly
- Emergency services and other authorities say travel to beaches and national parks will "cost lives".
- People will be allowed to exercise outside more than once a day, First Minister Mark Drakeford says.
- Transport for London says services will only be able to carry 13-15% of passengers compared to normal.

**RUSSIA**

- Russia's coronavirus lockdown measures may be gradually lightened as soon as May 12
- About 2% of Moscow residents — or more than 250,000 people — have the coronavirus, the mayor of the Russian capital said on Saturday, citing test results.
- Starting May 12, Moscow residents will be required to wear face masks and gloves in all public places and transport, Sobyenin said.
- The opening of Russia's new Orthodox mega-cathedral dedicated to the Armed Forces has been indefinitely postponed due to the coronavirus.

**CHINA**

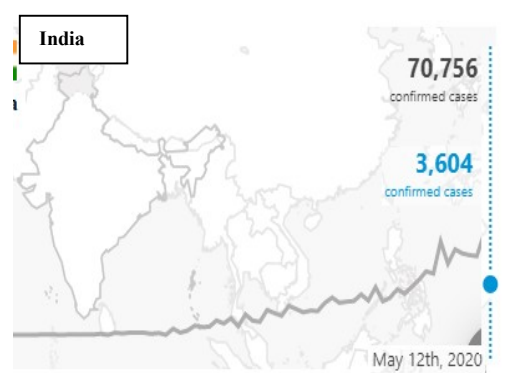
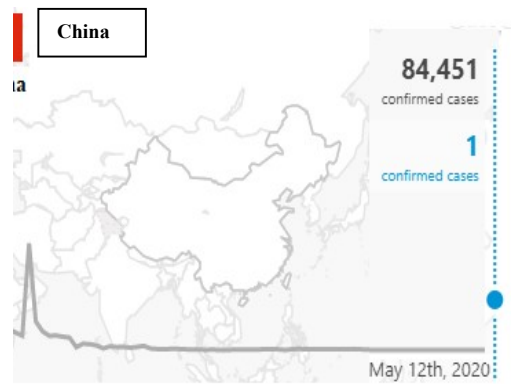
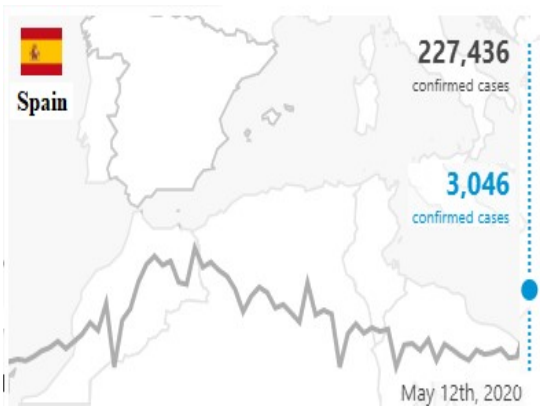
- Scientists have poured cold water on speculation that the virus could have been engineered in a Wuhan laboratory.
- More self-driving cabs are being launched in China at a time when people are worried about public transport.
- Car makers in China are tapping into health concerns by launching vehicles with anti-virus features.
- As China continues easing restrictions, new virus clusters in Wuhan and elsewhere have emerged.

**INDIA**

- Coronavirus: India 12th worst-hit nation as cases set to cross 75,000-mark
- Lockdown 4.0 in new form, with new rules: PM
- Coronavirus home quarantine cannot be restricted to 14 days: Delhi HC
- India Gifts Bangladesh 1 Lakh HCQ Tablets, 50,000 Surgical Gloves
- Special trains for migrant workers, a success
- The Union Health Ministry has formed central public health teams which will be deployed to 20 worst-hit districts in different states that are reporting the maximum numbers of COVID-19 cases.

## EPIDEMIOLOGY SCENARIO

### Confirmed cases of COVID-19 till 12th May 2020



\*Numbers in black – Total confirmed cases

\*\*Numbers in blue – Confirmed cases on 12<sup>th</sup> May 2020

## **Tobacco use and COVID-19**

- WHO has issued a Statement on Tobacco use and COVID-19. Tobacco smoking is a known risk factor for many respiratory infections and increases the severity of respiratory diseases. A review of studies by public health experts convened by WHO found that smokers are more likely to develop severe disease with COVID-19, compared to non-smokers.

## **India**

- SARS-CoV-2 (COVID-19) Testing: A total of **1854250** samples have been tested as on 13 May 2020.
- ICMR has initiated a multi-center clinical trial, titled “A Phase II, Open Label, Randomized Controlled Trial to Assess the Safety and Efficacy of Convalescent Plasma to Limit COVID-19 Associated Complications in Moderate Disease.” (**PLACID Trial**). The sample size of the study is 452. As of 11th May, 2020, ICMR has approved 35 institutions in the PLACID Trial.
- The PLACID trial protocol has been registered with the Clinical Trial Registry of India (CTRI). The study has also received approval from the COVID-19 National Ethics Committee (CONEC). The generic protocol for this study has also been approved by the DCGI, CDSCO. The clinical trial liability insurance has been bought centrally by ICMR.
- The therapy involves taking antibodies from the blood of a person who has recovered from COVID-19 and transfusing those antibodies into an active coronavirus patient to help activate the immune system to fight the infection.

## CLINICAL SCENARIO

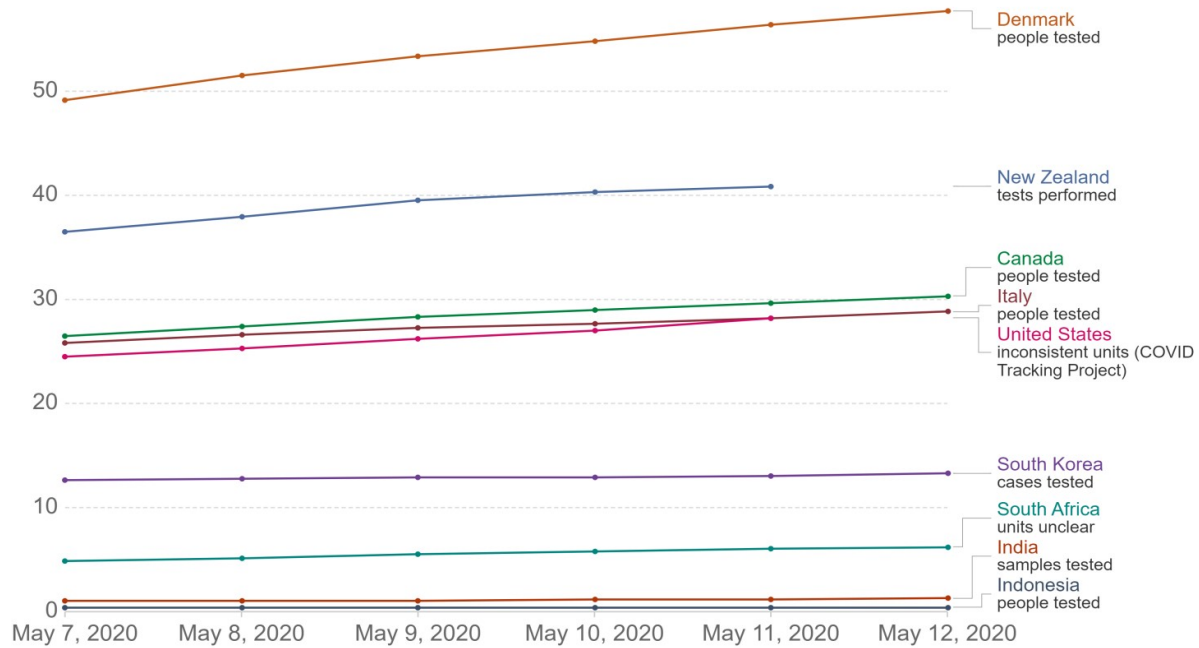
- Olfactory and gustatory disorders are prevalent symptoms in European COVID19 patients, who may not have nasal symptoms. The sudden olfactory and gustatory dysfunctions need to be recognized by the international scientific community as important symptoms of the COVID-19 infection.
- Coronavirus infection: Now add pinkeye to list of atypical symptoms of Covid-19
- Course in Pregnancy: Maternal course - Available data from multiple small series generally suggest that pregnancy and childbirth do not increase the risk for acquiring SARS-CoV-2 infection, do not worsen the clinical course of COVID-19 compared with nonpregnant individuals of the same age, and most infected mothers recover without undergoing delivery.
- TB, Malaria & AIDS toll may rise as focus shifts to Covid-19
- Sanitise hospitals, not shut them: Health Department
- Ayushman Bharat: 1,000 hospitals added.
- AIIMS, many others seek nod for plasma trials.
- Stanford, IIT alumni develop 'intelligent robot' for chemical-free disinfection of public places.
- CSIR-NAL develops Non-Invasive Ventilator to treat COVID-19 patients
- A Pandemic benefit: The expansion of telemedicine.
- Navy develops solution for remote monitoring of Covid patients in ICU
- Delhi: Mask, Covid app must for bus travel
- Nearly half of Delhis 86 Covid-19 victims under 60 years old.

- India sends 88 nurses to help UAE fight Covid-19.
- Without nurses, other health workers, we will not win the battle against epidemics:  
Harsh Vardhan.
- Corona interruptions may up AIDS deaths.

## LABORATORY TESTING SCENARIO

### Total COVID-19 tests per 1,000 people

Our World  
in Data



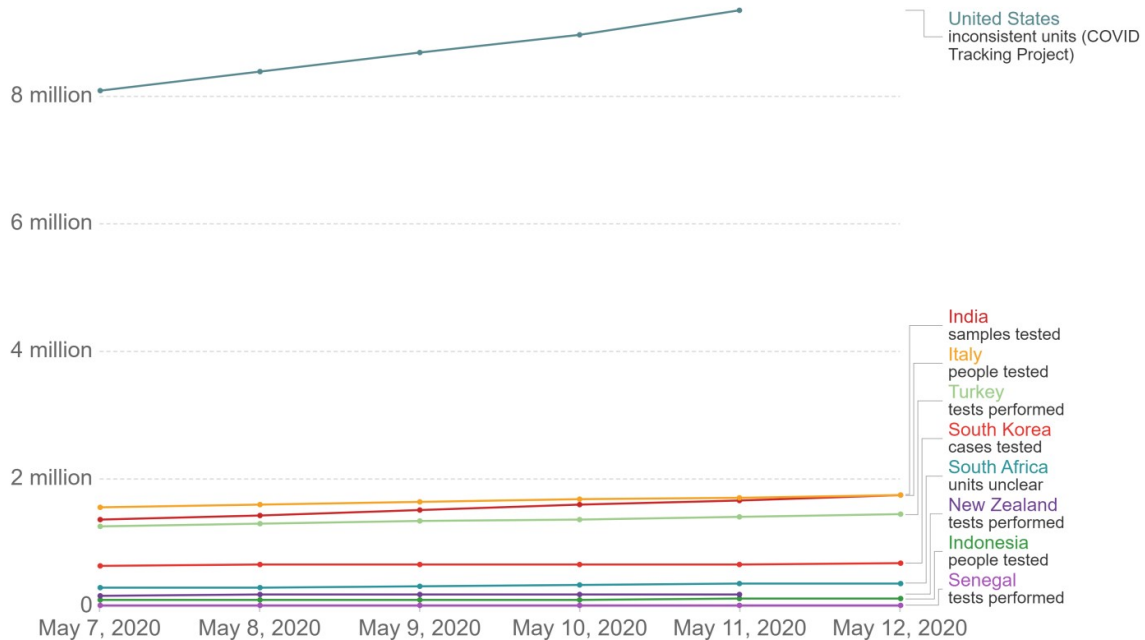
Source: Official sources collated by Our World in Data

Note: For testing figures, there are substantial differences across countries in terms of the units, whether or not all labs are included, the extent to which negative and pending tests are included and other aspects. Details for each country can be found at the linked page.

OurWorldInData.org/coronavirus • CC BY

### Total COVID-19 tests

Our World  
in Data



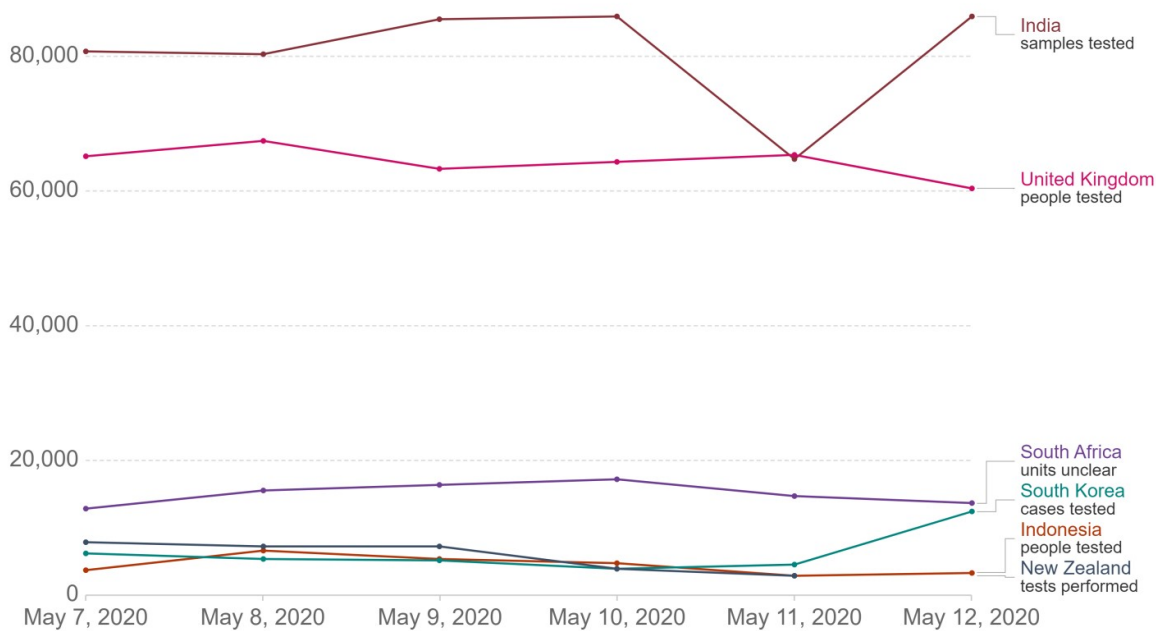
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OurWorldInData.org/coronavirus • CC BY

## Daily COVID-19 tests

Because not all countries report testing data on a daily basis, daily test figures are not available for some countries in our dataset.



Source: Official sources collated by Our World in Data

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Note: For testing figures, there are substantial differences across countries in terms of the units, whether or not all labs are included, the extent to which negative and pending tests are included and other aspects. Details for each country can be found at the linked page.

### Recent Update

- Expression of the SARS-CoV-2 cell receptor gene *ACE2* in a wide variety of human tissues, *ACE2* is expressed in various human tissues in addition to the lungs, indicating that SARS-CoV-2 may infect other tissues aside from the lungs.
- NT-proBNP might be an independent risk factor for in-hospital death in patients with severe COVID-19.
- COVID-19 mRNA clearance ratio was identified significantly correlated with the decline of serum creatine kinase (CK) and lactate dehydrogenase (LDH) levels. Furthermore, COVID-19 mRNA clearance time was positively correlated with the length of hospital stay in patients treated with either IFN- $\alpha$  + lopinavir/ritonavir or IFN- $\alpha$  + lopinavir/ritonavir + ribavirin.
- Coronavirus envelope protein (**E**): Current knowledge: Data shows that **E** is involved in critical aspects of the viral life cycle and that CoVs lacking **E** make promising vaccine candidates.
- Researchers have used yeast cells to create a synthetic version of the SARS-CoV-2 genome much more quickly than other methods can achieve. The SARS-CoV-2 genome is

composed of RNA, but the protocol developed by Joerg Jores and Volker Thiel at the University of Bern in Switzerland and their colleagues uses a dozen overlapping stretches of the SARS-CoV-2 genome converted into DNA. The team inserted these DNA fragments into cells of the yeast *Saccharomyces cerevisiae*, which stitched them into a complete viral genome.

## THERAPEUTIC SCENARIO

### Current Status as far as management of Novel Corona Virus is concerned

- At present, there are no specific treatments for COVID-19. WHO recommends four treatments for COVID 19 with drugs i.e Remdesivir, Lopinavir/ ritonavir, Lopinavir/ ritonavir with interferon beta -1a, and chloroquine or hydroxychloroquine,

### Covid- 19 Registered Trails and Analysis

- By mapping interactions between human proteins and the new coronavirus, researchers have pinpointed 29 potential treatments using drugs already approved by the Food and Drug Administration (FDA) for a wide range of other conditions. The research also identifies dozens of potential drug candidates, including 29 already approved by the FDA for treating cancer, type 2 diabetes, and schizophrenia, among other conditions.
- Firms across the healthcare sector are working day and night to develop the first approved treatment for patients with Covid-19 — and, in the UK, BerGenBio looks to be a leading name in this particular race. **Bemcentinib** is the first of six potential Covid-19 treatments being entered into the ACCORD study, and testing involving 120 participants — including 60 hospitalised coronavirus patients and 60 control group patients receiving standard of care treatment — has already started across six NHS hospital trusts in the UK. Bemcentinib binds to AXL receptor tyrosine kinase — an enzyme that has been linked to some aggressive types of cancer, as well as drug resistance and immune evasion — in the body, reducing its activity. Due to its ability to enhance the body's response to an infection, the once-a-day small molecule drug is now being considered a viable candidate in treating SARS-CoV-2, the virus that causes Covid-19. BerGenBio — which was founded in 2008, and describes itself as a “world leader” in treating aggressive cancers with AXL inhibitors — has anticipated that the most relevant “top line” data from trialling bemcentinib will be available within a matter of months.
- Indian Pharmaceuticals Cadila has successfully tested its leprosy drug named Sepsivac, on four COVID-19 patients at PGIMER, Chandigarh. Sepsivac contains heat-killed Mycobacterium W (Mw), an immunomodulator.
- Glenmark Pharmaceuticals has initiated Phase-3 clinical trials in India on antiviral tablet Favipiravir, for which it received approval from India's drug regulator DCGI in late April.
- One medication that has shown promise is a heartburn drug that contains the active ingredient in Pepcid. A study of 1,536 patients found those who took it were more likely to survive, but researchers cautioned it could have been just a coincidence.
- India is working on four traditional medicines to treat coronavirus infection and the trials will start within a week, the four candidates are—Ashwagandha, Yashtimadhu, Guduchi Pippali and AYUSH-64. But most are used to boost immunity.

- India is working on four traditional medicines to treat coronavirus infection and the trials will start within a week.
- Madagascar's president has surprised many observers when he announced that herbal tonic made from certain traditional plants grown on the large island country have the potential to cure Covid-19. Madagascar has reported 193 Covid-19 cases and no deaths. Despite the reservations, several African countries, including Nigeria, Guinea-Bissau, Equatorial Guinea and Liberia, have already ordered Covid-Organics, which is produced from the artemisia plant - the source of an ingredient used in a malaria treatment - and other Malagasy plants.