



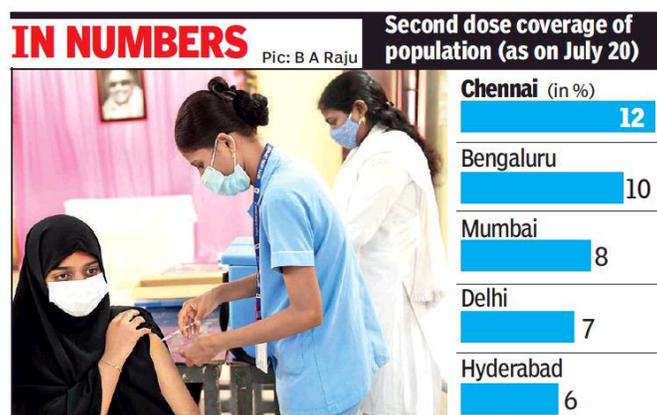
EVERYDAY CURRENT AFFAIRS –jULY 21,

TAMIL NADU

- **On July 20, Chief Minister M K Stalin - announced his government is working on a target to make Tamil Nadu a \$1 trillion (\$1 lakh crore) GDP economy by the year 2030.**
- ✓ The goal of making Tamil Nadu a \$1 trillion economy is part of a three-point target that the CM has defined for the government.
- ✓ The other two goals to achieve by the government before 2030 are - ensuring that the state attract Rs. 23 lakh crore in new investments and create new job opportunities for 46 lakh people
- ✓ On July 20, the CM launched the DMK government's first major Industrial Conclave, organized by the Guidance bureau, after it came to power in May 2021
- ✓ The state government has also unveiled an upgraded website 2.0 for single window clearance that has inculcated 100 more services across 24 departments
- ✓ It is further planning to add 210 services under the initiative by next March
- ✓ During the event, 35 new MoUs were signed in the presence of the CM to bring in more than Rs.17,141 crore in new investments and generate employment to 55,000 people.
- ✓ In addition, foundation stones were laid for 9 new projects involving an investment of Rs.4,250 crore and generating employment to over 21,600 people
- ✓ Further, the CM has inaugurated commercial production in 5 industrial units established with a combined investment of Rs.7,117 crore and employing close to 6,800 people.

- **Tamil Nadu government – has ordered the officials not to consider the salary and agriculture income while issuing the Other Backward Classes (OBC) certificates in the state**
- ✓ The State has issued an order recently stating that salary and agriculture income need not be taken into account while calculating annual income ceiling of Rs.8 lakh for parents of non-creamy layer category

- ✓ The government has directed revenue officials and collectors to issue the certificate without insisting on income details.
 - ✓ OBC certificates are required for candidates from backward communities to apply for admissions to central educational institutions and jobs.
 - ✓ The order, however, does not cover six categories, including people occupying constitutional posts and service and professional categories identified by the Centre in 1993.
 - ✓ The move will ensure the state beneficiaries avail 27% reservation for OBCs offered by the Union government in its educational institutions and jobs
- **On July 20, Chief minister M K Stalin - has written to Prime Minister Narendra Modi urging the government to not proceed with the recently proposed Indian Marine Fishermen Bill, 2021 during the current session of the Parliament.**
- ✓ According to CM, many provisions in the proposed bill go against the interests of the local fishermen communities
 - ✓ Also, certain clauses infringe upon the rights conferred to the states under the State List of the 7th Schedule of Constitution of India.
 - ✓ According to the CM, the disturbing clauses in the proposed bill include criminalisation and imprisonment of fishermen, use of force against fishermen, levy of charges and levy of huge penalties.
 - ✓ Citing these factors, the CM urged the PM not to move the Bill and subject it to a wider debate and discussions.
 - ✓ The fishermen have already been protesting over the last few days against the Centre's proposed Bill.
- **Chennai - has vaccinated the highest percentage of eligible population with two doses of Covid-19 vaccine in comparison to other metropolitan cities like Mumbai, Bengaluru, Delhi and Hyderabad**
- ✓ This is based on an analysis done by the Greater Chennai Corporation based on data collected from CoWIN portal.



- ✓ As on July 20, 9.11 lakh people have received both doses of the vaccine in Chennai.

- ✓ This forms 15% of the eligible population (59.45 lakh) and 12% of the total population (78.53 lakh).
 - ✓ Bengaluru comes at the second place after Chennai, with 15% of eligible population and 10% of total population vaccinated with both doses.
 - ✓ In Mumbai, the corresponding figures of percentage of eligible population and total population vaccinated with both doses is 11 and 8.
 - ✓ Delhi and Hyderabad have 10% & 7% and 8% & 6% of eligible population and total population vaccinated respectively.
 - ✓ However, in Bengaluru, 60% of eligible population has been vaccinated with a single dose, while in Chennai this stands at 45%
- **The State veterinary university – has warned that several dogs in Chennai had started testing positive for the highly contagious ‘canine parvovirus’**
- ✓ The affected dogs have shown symptoms of virus with fatigue, vomiting and bloody diarrhea
 - ✓ The cases of the viral infection has nearly doubled in Chennai over the last three-four weeks, with increased number of dogs dying due to the infection
 - ✓ Several pet owners have delayed vaccinations for their dogs amidst the Covid-19 pandemic and this has worsened the situation.
 - ✓ The Parvo virus is most commonly transmitted either by direct contact with an infected dog, or indirectly, by the fecaloral route.
 - ✓ As per studies, the virus can live in ground soil for up to a year.
 - ✓ Unvaccinated pets can be at risk when they play with infected dogs or come in contact with the virus when they go for walks.

ABOUT THE VIRUS

➤ Parvovirus mainly infects puppies that are not vaccinated, say veterinarians

➤ **Cases have risen from 1,200/ year to 3,152 in the last couple of years**, say Madras Veterinary College hospital authorities

➤ The virus outbreak is more during rainy days in **June and July and November and January**, they say

➤ **Contact with non-vaccinated animals or stray dogs** may

cause the virus to spread among pets, the experts caution

➤ **Puppies must get vaccine at 6th week** and booster doses at a three-week interval

➤ Symptoms include vomiting and loose stools with foul smell

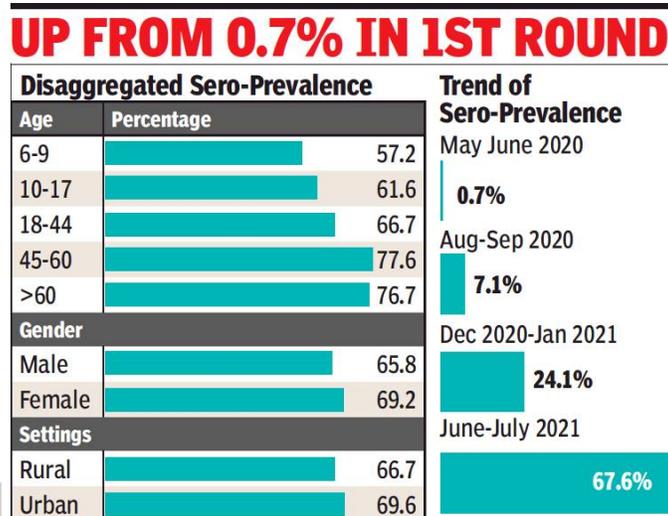


- ✓ In 2019, up to 74% of the dogs brought to the university hospital were infected with the virus.
- ✓ As per the medical records, the number of canine parvo cases was the highest at 84% in June and July.
- ✓ In rainy months between November and January, it ranges between 76-80%.

- ✓ While the primary vaccination is given at the 6th week, three more boosters are given in 3-week interval is mandatory to protect household puppies against this viral infection.

NATIONAL

- **India – has acquired antibodies against the SARS-CoV2 virus for about 67.6% of its general population**
- ✓ This was revealed by the findings of the fourth national sero survey



- ✓ The highest sero positivity of 77.6% was found in the 45-60 age group and not the younger 18-44 age profile.
- ✓ Children showed the lowest exposure to Covid compared to other age groups.
- ✓ However, more than half the children in the 6-17 age group had antibodies.
- ✓ The sero-positivity was 57.2% in the 6-9 years age group, while 61.6% in the 10-17 age group showed presence of antibodies.
- ✓ Of all the individuals surveyed, 62.2% have not been vaccinated.
- ✓ Of those surveyed, 24.8% had taken one dose and 13% were fully vaccinated.
- ✓ As much as 10.5% of surveyed healthcare workers were unvaccinated.
- ✓ The sero-prevalence among healthcare workers stood at 85.2%.
- ✓ The latest national survey was conducted during the last 10 days of June to first week of July and included children from six years of age as well as vaccinated people.
- ✓ The survey was carried out among 28,975 people that include 7,252 healthcare workers across 70 districts and 21 states of the country.
- ✓ These are the same districts where the first three rounds of the sero survey were conducted.
- ✓ Sero positivity was 81% among people who had taken one vaccine dose and 89.8% among those who received both doses.
- ✓ The prevalence of SARS-CoV2 antibodies was slightly higher among females at 69.2%, as against men with 65.8% sero-positivity.

- ✓ Covid exposure among those surveyed was slightly higher in urban areas at 69.6%, whereas 66.7% in rural areas showed prevalence of antibodies.

SCIENCE, TECHNOLOGY & ENVIRONMENT

- **China - unveiled a maglev train capable of a top speed of 600kmph on July 20.**
- ✓ This maximum speed makes the train as the fastest ground vehicle to run globally.
- ✓ It was self-developed by China and manufactured in the coastal city of Qingdao.



- ✓ The train can travel with two to 10 carriages, each holding more than 100 passengers
- ✓ Using electro-magnetic force, the maglev train “levitates” above the track with no contact between body and rail.
- ✓ China has been using the technology for almost two decades on a very limited scale.
- ✓ Shanghai has a short maglev line running from one of its airports to town.
- ✓ At 600 kmph, it would only take 2.5 hours to travel from Beijing to Shanghai by train, which is a journey of more than 1,000 km.
- ✓ By comparison, the journey would take 3 hours by plane and 5.5 hours by high-speed rail.
- ✓ Countries from Japan to Germany are also looking to build maglev networks, although high costs and incompatibility with current track infrastructure remain hurdles to rapid development

DEFENCE

- **On July 20, the Union government - had issued the tender for the long-pending Rs.50,000 crore (almost \$7 billion) mega diesel-electric submarine-building programme called ‘Project-75 India (P-75I)’**



- ✓ Under the project, six new-generation conventional stealth submarines will be constructed with foreign collaboration
- ✓ The tenders are launched as part of the long-term plan to counter China's expanding naval presence in the Indian Ocean Region (IOR).
- ✓ The defence ministry issued the RFP (request for proposal) to defence shipyard Mazagon Docks (MDL) and private ship-builder Larsen & Toubro
- ✓ These agencies will in turn will tie-up with one of the five shortlisted foreign companies to submit techno-commercial bids for the P-75I project
- ✓ The foreign ship-builders are Naval Group-DCNS (France), Rosoboronexport (Russia), ThyssenKrupp Marine Systems (Germany), Navantia (Spain) and Daewoo (South Korea).
- ✓ The selection of the winning bid after submission and the signing of the actual contract is likely to take over a year from now.
- ✓ Thereafter, it will take another seven years for the first new submarine to roll out
- ✓ The selected foreign firm will have to provide transfer of technology (ToT) for vessel design, maintenance and set up the production line in India.
- ✓ The other five submarines will subsequently roll out one per year, as per the proposed timeline.
- ✓ The submarines will be equipped with a total of 18 land-attack cruise missiles and heavyweight torpedoes as well as with fuel-cell based air-independent propulsion (AIP) for greater underwater endurance.
- ✓ Earlier, on June 4, the Rajnath Singh-led Defence Acquisitions Council had approved the P-75I
- ✓ It will be the first project under the "strategic partnership" policy promulgated in May 2017 to boost indigenous defence production.
- ✓ P-75I was first granted 'acceptance of necessity' way back in November 2007.
- ✓ As per approved plans, India should have at least 18 diesel-electric conventional submarines, six nuclear-powered attack submarines (called SSNs) and four nuclear-powered submarines armed with nuclear-tipped ballistic missiles (called SSBNs)

SPORTS

- **Athletes from Haryana and Punjab - are once again leading the country's representation at the Olympics this year too.**
- ✓ The two states, with just 4.4% share of India's population, have together sent 50 athletes to the Tokyo Games, accounting for 40% of the Indian contingent.

State/UT	No. in squad	% Share in	
		Population	Squad
India	127	100	100
Haryana	31	2.2	24.4
Punjab	19	2.2	15
Tamil Nadu	11	5.6	8.7
Kerala	8	2.6	6.3
Uttar Pradesh	8	16.9	6.3
NE minus Assam (5 from Manipur)	7	1.2	5.5
Maharashtra	6	9.1	4.7

- ✓ Haryana alone has 31 athletes in the contingent, nearly 25% of the total, while Punjab has 19 representing it.
- ✓ Tamil Nadu comes in at the third place, having sent 11 athletes to Tokyo, comprising 8.7% of the contingent.
- ✓ The top five is completed by Kerala and Uttar Pradesh – each state contributing 8 athletes to India's cause.
- ✓ Uttar Pradesh, which is nearly 17% of India's total population, is contributing 6.3% of the country's Tokyo Olympics contingent
- ✓ Kerala with a population share of 2.6% has a representation of 6.3% in the Olympics squad.
- ✓ For Haryana, 9 out of India's 19-member women's hockey squad, 7 wrestlers (three men, four women), 4 boxers (three men and one woman) and 4 shooters (two men, two women) make up the numbers.
- ✓ Punjab has 11 out of India's 19-member men's hockey squad alongwith 2 shooters (a man and woman), 3 from athletics (two men, one woman), 2 women's hockey team members, and 1 boxer.
- ✓ Tamil Nadu has 5 from athletics, 3 from sailing, 2 table tennis players and 1 from fencing.
- ✓ Kerala, known for its legacy in athletics, has six in track and field events out of the eight, with one each is in swimming and the men's hockey team.
- ✓ With a total of 127 athletes, India is sending its largest-ever contingent to the Olympics
- ✓ They will take part in 18 disciplines - archery, athletics, boxing, badminton, equestrian, fencing, golf, gymnastics, hockey, judo, rowing, shooting, sailing, swimming, table tennis, tennis, weightlifting and wrestling.

PEGASUS SPYWARE – A REPORT

- **The French Government – has initiated investigation on the suspected widespread use of the Pegasus spyware to target journalists, human rights activists and politicians in multiple countries.**
- ✓ As per a report, cellphones of French President Emmanuel Macron and 15 members of the French government may have been among potential targets in 2019 of surveillance by spyware made by the Israel-based NSO Group.

ON LIST: 10 PMs, 3 PRESIDENTS, A KING
Washington Post revealed on Tuesday that the list of probable Pegasus spyware **targets included current and former heads of state and governments**

Sitting Presidents	 Emmanuel Macron (France)	 Barham Salih (Iraq)	 Cyril Ramaphosa (South Africa)
Sitting PMs	 Imran Khan (Pakistan)	 Mostafa Madbouly (Egypt)	 Saad-Eddine El Othmani (Morocco)
King	 Morocco's Mohammed VI		

Seven ex-PMs, who according to time stamps on the list were placed there while still in office

- ✓ This leaked database of more than 50,000 cellphone numbers was obtained by Paris-based journalism agency 'Forbidden stories' and human rights group, Amnesty International
- ✓ The list of targets was then shared with 16 news organizations - The Wire, Le Monde, The Guardian, The Washington Post and others - as part of an investigation named the Pegasus Project
- ✓ India was among the 10 countries in the list with the most numbers and Mexico topped the list with 15,000 numbers.
- ✓ Indian ministers, opposition leaders, government officials, journalists, activists and businessmen also figure in the leaked list of around 300 targeted people in India
- ✓ A majority of targeted people was also from West Asian Arab countries such as Bahrain, UAE, and Saudi Arabia, with Pakistan, Hungary and France being the other prominent countries on the list.
- ✓ The NSO group, an Israeli cyber intelligence company, sells the spyware named Pegasus to governments across the world.
- ✓ This spyware can be used to spy on phones that run on iOS and android systems.

- ✓ It got widespread attention in 2019 when WhatsApp alerted several users that a spyware had compromised their phones.
- ✓ The investigation by Amnesty International and French media group Forbidden Stories has found that while most NSO servers are in Europe, 3 are located in India and used as attack infrastructure.

WHAT DATA CAN PEGASUS MALWARE STEAL?

Pegasus can exploit weaknesses in messaging apps to steal data without any interaction from the user. Once installed, Pegasus can access almost any data on a phone

VULNERABLE APPS

- SMS
- Emails
- Calling
- Calendar
- GPS data
- Contacts
- WhatsApp chats
- Photos & videos
- Microphone
- Activate camera
- Internet browser

300 Indian numbers tracked

An investigation by Amnesty International and French media group Forbidden Stories found that of the **50,000** numbers potentially targeted by Pegasus since 2016, **300** have been identified as belonging to Indian journalists, activists, business executives and opposition politicians. Altogether:

1,000 numbers from the full list identified	600 politicians and government officials
50 countries' citizens	189 journalists, including 40 from India
85 human rights activists	
65 business executives	



Saudi journalist **Jamal Khashoggi**, who was assassinated in Turkey in 2018, was a Pegasus target along with his fiancée and wife

- ✓ According to NSO, it has 60 government agency clients in 40 countries and does not include any nongovernmental agency as its software clients
- ✓ NSO maintains that it sells its software “for the sole purpose of saving lives through preventing crime and terror acts.”
- ✓ The main point of Pegasus is its ability to invade a phone without a click from the targeted user in its latest versions.
- ✓ In its earlier versions, Pegasus operators sent text messages containing a malicious link, which if clicked on would open a malicious web page to download and execute the malware.
- ✓ Once a vulnerability is found, Pegasus can infiltrate a device using the protocol of the app.
- ✓ It gets into most messaging systems including Gmail, Facebook, WhatsApp, FaceTime, Viber, WeChat, Telegram, Apple’s built-in messaging and email apps, and others.
- ✓ Basically, Pegasus can spy on every aspect of the target’s life
- ✓ It is modular malware, means that, after scanning the target’s device, it installs the necessary modules to read the user’s messages and mail, listen to calls, capture screenshots, log pressed keys, exfiltrate browser history, contacts, etc.

- ✓ Pegasus could even listen to encrypted audio streams, read encrypted messages and has audio recording capabilities, as it can steal messages before they were encrypted

JEFF BEZOS'S SPACE TRAVEL – A REPORT

- **Amazon founder Jeff Bezos, the world's richest man - became the planet's wealthiest "astronaut" on July 20, after travelling to outer space in his own rocket to mark a new era in private space travel.**



- ✓ The space travel comes 9 days after Virgin Galactic founder Richard Branson flew on a similar suborbital trajectory
- ✓ Bezos took with him to outer space his own brother Mark, and the world's oldest and youngest space-farers, on a 10 minute-journey that established new records.
- ✓ Wally Funk, 82, who trained as a Nasa astronaut in the 1960s but didn't make the launch cut, became the oldest person in space.
- ✓ Oliver Daemen, an 18-year-old physics student from the Netherlands whose father paid for his flight, became the youngest.
- ✓ Daemen got on the ride because an unnamed billionaire — who paid \$28 million for it — dropped out.
- ✓ Bezos, 57, along with his crew was launched into space in a capsule lifted by the New Shepard rocket made by his own firm Blue Origin, at its facility in West Texas
- ✓ Bezos is a self-confessed space buff who was mesmerised by the Apollo 11 moon landing
- ✓ The flight was a milestone for the company Blue Origin that Bezos started over 20 years ago
- ✓ The spaceflight came on the anniversary of Neil Armstrong and Edwin "Buzz" Aldrin, becoming the first humans to walk on the moon, on July 20, 1969.
- ✓ New Shepard is named for Alan Shepard, who in 1961 became the first American in space.
- ✓ The capsule reached 351,210 feet altitude or 66.5 miles (roughly 106km)
- ✓ According to astronauts, space begins after passing the 62-mile (100km) height

- ✓ The crew returned to earth in a journey which lasted 10 minutes and 10 seconds — five minutes short of Alan Shepard's Freedom 7 flight.
- ✓ The passengers spent four minutes floating in zero gravity and enjoying the view from the largest windows ever used in space travel.

Photos: AFP, Reuters, AP

BEZOS'S 'BEST DAY EVER': TO SPACE AND BACK

- Jeff Bezos blasted into space on Tuesday on his rocket company Blue Origin's flight, becoming the **second billionaire after Richard Branson in just over a week to ride his own craft to space**
- The Amazon founder was accompanied by his brother Mark Bezos, 18-yr-old paying customer Oliver Daemen from the Netherlands, and 82-yr-old aviation pioneer Wally Funk from Texas — the **youngest and oldest persons to ever fly into space**
- Named after US's first astronaut, **Blue Origin's New Shepard rocket soared on 52nd anniv of Apollo 11's Moon landing**. Bezos's flight lasted 10 mins and 10 secs — 5 mins shy of Alan Shepard's Freedom 7 flight in 1961
- **Space flight reached an altitude of 106 km, 16 km higher than Branson's July 11 ride**

“Best day ever!... Every astronaut who's been up into space, they say that it changes them... they look at it and they're kind of amazed and awestruck by the Earth and its beauty, but also by its fragility, and I can vouch for that”
 —Jeff Bezos after the touchdown

Blue Origin's rocket (centre) carrying Jeff Bezos & his crew being launched from the spaceport in Texas; the billionaire floating in space (top); Bezos & his crew jubilate after touchdown (above)

- ✓ Richard Branson's Virgin Galactic managed an altitude of 56 miles and took 90 minutes from take-off to landing.
- ✓ And unlike Branson's piloted rocket plane, Bezos' capsule was completely automated and required no staff on board for the up-and-down flight.
- ✓ Elon Musk's SpaceX is the third company that is involved in the space travel.
- ✓ Nasa has chosen SpaceX's Starship for the first human mission to the moon powered by private enterprise