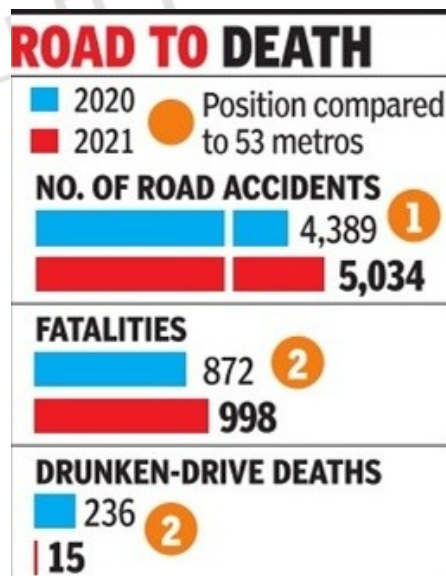




## **FIVE** **RYDAY CURRENT AFFAIRS-august**

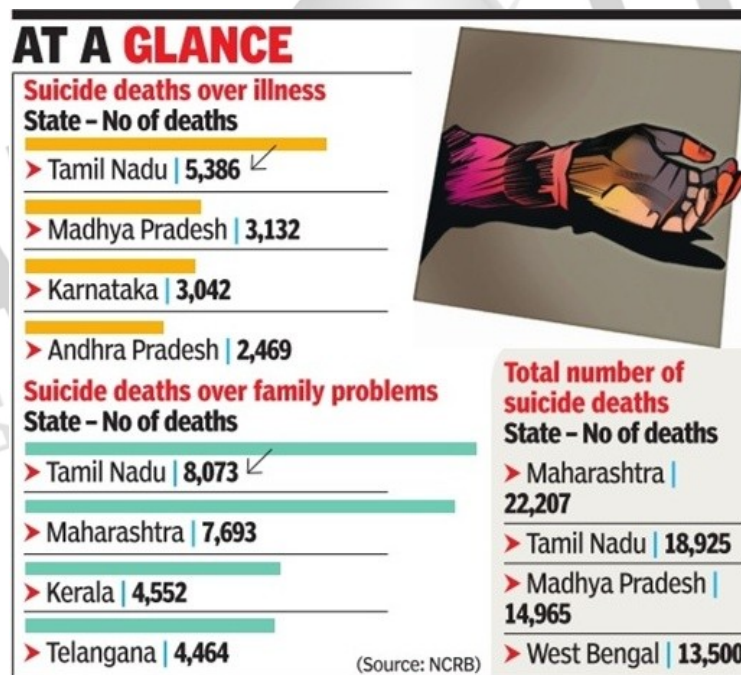
### **TAMIL NADU**

- **Tamil Nadu - reported a rise in road accident fatalities in 2021 for the first time in three years, according to the National Crime Records Bureau (NCRB) Report 2021 released on August 29**
- ✓ Chennai topped in road accidents among the metros for the third year in a row and stood second with respect to the total number of road accident deaths last year
- ✓ A total of 15,384 people lost their lives in road accidents in Tamil Nadu last year, compared to 14,527 in 2020
- ✓ The numbers had been falling for two years before that — from 18,394 in 2018 to 18,129 in 2019.



- ✓ Of the 55,400 vehicular crashes reported in 53 cities in 2021, around 5,000 occurred within Chennai metropolitan area.
- ✓ Further, NCRB reports suggest that there has been a 15% increase (872 to 998) in the number of road accident fatalities in 2021 compared to the previous year.

- ✓ On a positive note, there has been a sharp decline in the number of drunken driving deaths.
    - ✓ In 2020, as many 236 people died while driving under the influence of alcohol or drugs, while the fatalities fell to 15 in 2021.
    - ✓ Chennai was second in the country when it came to drunken-driving deaths, while Jabalpur topped the country with 41 such deaths.
  - ✓ To obtain the data regarding the drunken driving deaths, the Centre has rolled out an online system for recording details named, IRAD.
  - ✓ The NCRB report attributed 93% of the accidents to speeding and dangerous driving, particularly by two-wheelers.
  - ✓ As per the report, majority (59.7%) of road accidents in the country in 2021 were due to speeding, which claimed 87,050 lives.
- **Tamil Nadu - reported 18,295 suicides in 2021, the second most in the country behind Maharashtra's 22,207**
- ✓ The number of suicides in Tamil Nadu, 11.5% of the national figure, is a 0.5% increase against the figure in 2020 and 0.5% less than the national average.



- ✓ Tamil Nadu topped the country in suicides due to family feuds, with 8,073 such deaths, followed by Maharashtra with 7,693.
- ✓ In the category of suicides due to illness, Tamil Nadu tops the list with 5,386, followed by Madhya Pradesh with 3,132, Karnataka with 3,042 and Andhra Pradesh with 2,469.
- ✓ Across the country, the number of suicides includes 25.6% daily wagers, 14.1% housewives, 12.3% self-employed people, 9.7% salaried professionals, 8.4% unemployed people, and 8% students.

# NATIONAL

- A new edition of 'Crime in India', the annual report of the National Crime Records Bureau (NCRB) - was released on August 29, for crime-related statistics in 2021
- ✓ The report presents statistics on offences ranging from crimes against women to economic and financial crimes

## Road crashes

- ✓ Road crashes in India claimed 426 lives per day or 18 every hour, which is the highest ever in any calendar year.
- ✓ A total of 1.56 lakh road fatalities were recorded during the last year, surpassing the number of people killed during the pre-pandemic year of 2019
- ✓ The data show that out of every 100 persons killed in road crashes, at least 44 were two-wheeler occupants.
- ✓ Their overall number stood at 69,240, an increase of 18% more than 2019.
- ✓ Uttar Pradesh saw the highest number of deaths (24,711) in traffic accidents

## Two wheeler and pedestrian fatalities

- ✓ Tamil Nadu alone had nearly 12% share of the all two-wheeler deaths in the country, followed by Uttar Pradesh (10%).
- ✓ A comparative analysis of last four years data shows that the share of two-wheeler occupants' death has increased from 35.7% in 2018 to 44.5% in 2021.
- ✓ The latest NCRB report also shows that fatalities of pedestrians stood at 18,900 in 2021, which is an increase of nearly 60% from the pre-pandemic year of 2019.

## CRIME SCORE OF 103.4/LAKH LOWEST

Crimes in 2021	Murder	Attempt to murder	Rape	Assault of women	Dacoity	Theft
Kolkata	45	135	11	127	3	1,246
Delhi	454	752	1,226	1,023	25	1.98L
Mumbai	162	349	364	644	16	7,820
B'luru	152	371	117	357	36	6,066
Chennai	161	304	45	73	20	4,054
Hyd	98	192	116	177	11	2,419

➤ Kolkata's crime score of 103.4 is lowest among cities with 2 million+ population

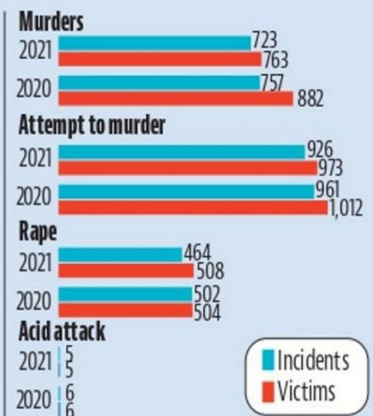
➤ Followed by Pune (256.8), Hyd (259.9), Kanpur (336.5), B'luru (427.2), Mumbai (428.4)

## CRIME CHART

### TOTAL NUMBER OF CRIMES

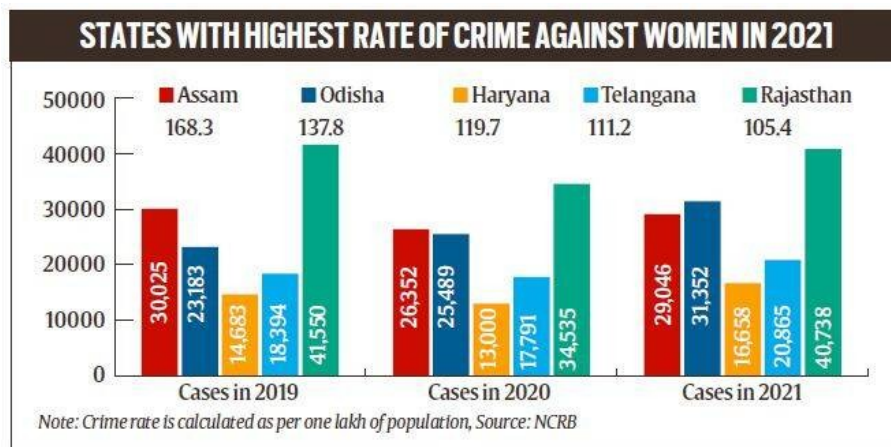


### CRIMES AGAINST CHILDREN



- ✓ The share of pedestrians in overall road deaths also continuously increased from 6.9% in 2018 to 12.2% during last year.
- ✓ Among all states, Bihar had a massive share of nearly 15% of all pedestrian deaths in the country during 2021.





### **Crimes against women**

- ✓ Over 4.28 lakh cases of crimes against women were registered during 2021, reflecting an increase of 15.3% over 2020 (3.71 lakh).
- ✓ In 2021, the crime rate registered per lakh women population was at 64.5 in 2021 and much higher in comparison with 56.5 in 2020, 62.3 in 2019 and 58.8 in 2018.
- ✓ Amongst the majority of the crimes against women, 31.8% or 1.36 lakh cases were registered under 'cruelty by husband or his relatives'
- ✓ With 56,083 cases, Uttar Pradesh topped the list of crimes against women, followed by Rajasthan (40,738) and Maharashtra (39,526).
- ✓ Nagaland reported the lowest number of crimes against women with 5.5% rate in 2021.
- ✓ Delhi accounted for the highest rate of crimes against women in 2021 among the Union territories
- ✓ Delhi also recorded the highest crime rate of 101.7 per lakh population against elderly persons among all the states and UTs.
- ✓ Gujarat reported highest chargesheeting of cases (95.9%) followed by Puducherry (93%) and Andhra Pradesh (92.9%).

### **Crimes against children**

- ✓ The latest data released by the National Crime Records Bureau reflects the growing vulnerability of children with over 1.49 lakh cases of crime against children registered during 2021.
- ✓ This reflects a sharp increase of 16.2% over 2020 (1.28 lakh cases).
- ✓ In terms of percentage, kidnapping and abduction accounted the maximum of 45% of the crimes.
- ✓ The crime rate registered per lakh children population was 33.6 in 2021 in comparison with 28.9 in 2020.

### **Suicides**

- ✓ As per the latest NCRB report, India reported 1,64,033 suicide cases in 2021, with Maharashtra (22,207) topping the list.

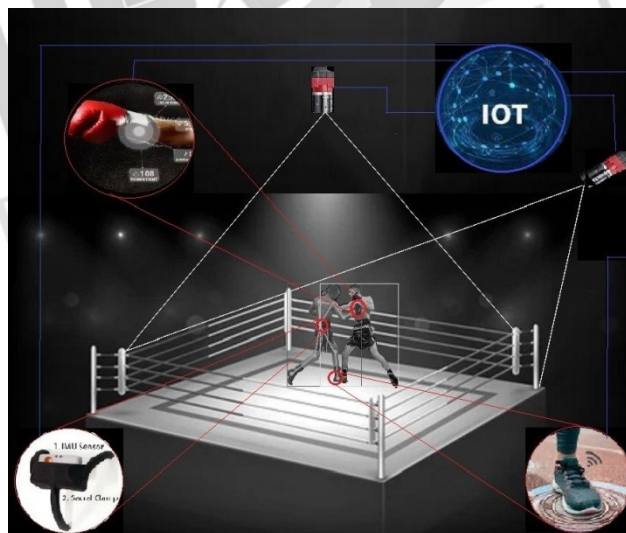
- ✓ The states that followed Maharashtra on the list are Tamil Nadu (18,925), Madhya Pradesh (14,965) and West Bengal (13,500).

### **UAPA cases**

- ✓ Jammu and Kashmir (289) registered the most Unlawful Activities (Prevention) Act (UAPA) cases under the 'special and local laws' in 2021, followed by Manipur (157), Assam (95), Jharkhand (86) and Uttar Pradesh (83)

### **Communal riots**

- ✓ Jharkhand and Maharashtra filed the highest cases of communal riots last year with 100 and 77 cases respectively
  - ✓ The NCRB, functioning under Union Home Ministry, was established in January 1986 with the aim of establishing a body to compile and keep records of data on crime
  - ✓ The NCRB report contains data received from the 36 states and Union Territories across the country.
- **Researchers at the Indian Institute of Technology Madras (IIT-M) and Inspire Institute of Sports (IIS), Karnataka - are developing a cost-effective boxing analytics platform called 'smartboxer'.**



- ✓ Smartboxer is being developed as a multi-version software by the Centre of Excellence for Sports Science and Analytics at IIT-M
- ✓ It will provide feedback and performance assessments using Internet of Things (IoT) enabled wearable sensors and video cameras to the boxers and their trainers
- ✓ This technology will act as a bridge between the coach and the elite athlete to identify, understand and improve performance.
- ✓ Smartboxer will be deployed at IIS, Bellary, and based on feedback, changes will be incorporated into the analytics platform.

- ✓ The research involves using sensor-embedded gloves to analyse punch force, wireless foot insoles with a pressure sensor to record ground reaction force, wireless EMG sensors to record movement in the boxer's lower body and inertial measurement unit to record movement in the boxer's upper body.
- ✓ Boxing is one of the sports shortlisted by the Indian government to focus its efforts on to increase the country's medal tally in 2024 Olympics.

## PERSONALITIES

- **AR Rahman, the Oscar Award-winning musician - has been honoured by naming a street after him in Markham city in Canada's Ontario state.**



- ✓ Celebrated musician AR Rahman is currently in Canada for his music tour and the music maestro thanked Mayor Frank Scarpitti in his recent tweet
- ✓ Rahman said his name means “merciful”, a quality of God, and hoped it brings peace and prosperity to Canada
- ✓ The city of Markham had announced that a street will be named in Rahman's honour back in November 2013

## SCIENCE, TECHNOLOGY & ENVIRONMENT

- **NASA's Artemis 1 launch - has been postponed due to a malfunctioning RS-25 engine on the Space Launch System (SLS) rocket.**
- ✓ NASA had to delay the launch of the 322-foot (98-meter) SLS rocket due to a temperature issue detected in one of the four RS-25 engines before the scheduled liftoff from the Kennedy Space Center in Cape Canaveral, Florida
- ✓ The alternative dates for launch for the Artemis 1 mission are September 2 and September 5.
- ✓ Artemis I is an uncrewed mission that will be the first in a series of complex missions to the Moon, eventually taking humans back to Moon



- ✓ The Artemis 1 will be the maiden flight in the Artemis space program

## MISSION ABORTED

### Mission Artemis I postponed over engine-cooling problem

- Nasa on **Monday postponed its mission Artemis I**, the test launch of the rocketship it plans to use for future astronaut flights to the moon, **due to an engine-cooling problem**
- The space agency said the **problem surfaced as fuel tanks of the Space Launch System (SLS) rocket were being filled with super-cooled liquid oxygen** and hydrogen propellants
- But one of the **four main engines failed to cool down as expected**
- The **launch was called off at 08:35am EDT (1235 GMT), two minutes after the targeted launch time**, as the 32-storey-tall rocket and its

Orion capsule awaited liftoff from the Kennedy Space Center in Cape Canaveral, Florida

- The mission was a **six-week, uncrewed flight of Orion around the moon** and back to Earth for a splashdown in the Pacific
- **NASA did not give a new launch date** for the two-stage rocket but said its first available opportunity was Friday, September 2
- Artemis I uses the Block 1 configuration, which stands **322 feet, taller than the Statue of Liberty, and weighs 5.75 million pounds**. During launch and ascent, SLS will produce 8.8 million pounds of maximum thrust

**322 ft** new rocket is shorter and slimmer than the Saturn V rockets that hurled 24 Apollo astronauts to the moon a half-century ago, but produces 15% more thrust

The rocket will power Orion to a speed of **24,500 miles per hour** to send it to the Moon

**RELATED REPORT, P 12**

- ✓ It aims to send humans back to the moon after 50 years since the Apollo 17 mission in 1972.
- ✓ In Artemis 1, three Mannequins equipped with sensors are standing in for a crew for the mission
- ✓ Artemis 1 mission consists of Nasa's new super-heavy rocket, the Space Launch System (SLS), which has never been launched before, and the Orion Multi-Purpose Crew Vehicle (or Orion MPCV), which has only flown in space once.
- ✓ SLR is the most powerful rocket ever built by NASA weighing 2,500 tonnes and is capable of carrying six astronauts for up to 21 days in space.
- ✓ The uncrewed Artemis 1 mission, however, may last as long as 42 days.
- ✓ Over the course of the six-week-long mission, it will travel 450,000 Km from Earth and 40,000 Km beyond the Moon's far side.
- ✓ The Artemis program has been named after Apollo's mythological twin sister and daughter of Zeus in ancient Greek mythology.
- ✓ The main objective of the programme is to launch a manned mission to the south pole region of the moon by 2024.
- ✓ The programme is to be implemented in three parts - Artemis I, Artemis II and Artemis III at an estimated cost of \$35 billion
- ✓ It is led by the United States space agency, NASA, and involving three other partner agencies - European Space Agency (ESA), Japan Aerospace Exploration Agency (JAXA), and Canadian Space Agency (CSA).
- ✓ In recent years, China has successfully landed three robotic missions on the Moon.

- ✓ India and an Israeli spacecraft also sent landers in 2019, although both crashed, while a South Korean orbiter is on its way.

Source: CNN, NYT, AFP; Photos: Reuters, Getty Images

## TO THE MOON AND BACK

**T**welve men walked on the Moon between 1969 and 1972, but since the final Apollo mission, the lunar surface has been undisturbed by human footsteps. Nasa now plans to send astronauts back to the Moon this decade in a series of spaceflights called the Artemis programme. The first launch is on Monday, with a test flight that has no crew members aboard. Eventually, Nasa will send astronauts for a weeklong stay near the moon's south pole, where water in the form of ice has been detected. The crew will include the first woman and the first person of colour to walk on the Moon, Nasa said. Artemis, in Greek mythology, was the twin sister of Apollo and a goddess associated with Moon

**4,50,600 KM**  
Distance Artemis I mission will travel from Earth

**2.1M KM**  
Total distance it will cover

**6 WEEKS**  
Approximate duration of mission

**READY & STEADY TO GO:** Nasa's next-generation moon rocket, the Space Launch System (SLS) with its Orion crew capsule perched on top, on launch pad 39B at Cape Canaveral, Florida. The launch is scheduled during a two-hour launch window that opens at 8.33am ET (6:03pm IST) on Monday

**Artemis I** Will carry into space three mannequins named Helga, Zohar and Commander Moonikin Campos. Helga and Zohar contain plastic models of radiation-sensitive organs, such as the uterus and the lungs, so that scientists can study how radiation in space may affect future astronauts. They will travel inside a spacecraft called Orion, specially designed to protect human crew members and experiments in space

On 20th July, 1969, American astronaut Edwin 'Buzz' Aldrin became the second man to walk on the Moon during the Apollo 11 mission

**8-14 days** | Time it'll take to get from Earth to Moon

**2.6 million kg** | Weight of Space Launch System at liftoff, equivalent to 8 fully loaded 747 jumbo jets

**322 feet** | Height of the Artemis I rocket stack

**3 min, 40 sec** | Time for the rocket to lift off and go into orbit

**4 million kg** | Thrust the Space Launch System produces to leave Earth's atmosphere. That's equal to the combined thrust of 126 of the largest civil aircraft, the Airbus A380

**2** | rocket boosters blast Space Launch System out of Earth's gravitational pull, detach 2 min after liftoff

**453,600+ kg** | Solid propellant (PBAN, ammonium perchlorate and aluminum powder) fill the twin rocket boosters alone. And it's all used up within two minutes

**1 hour 53 seconds** after liftoff, the rocket will be 3,860 km above Earth. The remaining upper stage of the Space Launch System will detach and Orion will complete the trip to the moon without the rocket

**39,400 kmph** | Speed at which Orion will enter Earth on return

**2,760°C** | Temperature that Orion's heat shield will endure as it returns, half as hot as the surface of the sun

## APPOINTMENTS

- German luxury giant Mercedes-Benz - is appointing an Indian, Santosh Iyer, for the first time to head its domestic operations
- ✓ This makes it an all-Indian affair in the luxury car industry with Indians steering operations at all top companies.



- ✓ Santosh Iyer is set to become the MD & CEO of Mercedes India from January next year



- ✓ Already, the managements in companies such as BMW, Audi, Jaguar Land Rover and Volvo are being headed by Indians, this being the first such instance.
- ✓ While operations at Audi India are headed by Balbir Singh Dhillon (brand head), Volvo's Indian business is managed by Jyoti Malhotra (MD), JLR by Rohit Suri (president & MD), and BMW by Vikram Pawah (president & CEO).
- ✓ However, car companies such as Maruti Suzuki, Hyundai, Toyota, and Honda are all headed by foreign nationals

## NATIONAL DAY

### ➤ National Small Industry Day – August 30



- ✓ The day is observed every year to celebrate the rise and development of small-scale businesses for the economic development of the country
- ✓ In August 2000, the Indian government formulated a comprehensive policy package for the small-scale industries (SSI) in the country
- ✓ It was then decided that August 30 would be dedicated to the SSI.
- ✓ The Ministry of Small Scale Industries declared this day in 2000 and this day was observed for the first time, on August 30, 2001
- ✓ For the first time, the Ministry of Small-Scale Industries organised a convention for entrepreneurs in the national capital on August 30, 2001
- ✓ The small-scale industry sector contributes as much as 40% to the gross industrial value of the country's economy

- ✓ National Small Industries Corporation Limited, a Mini Ratna government agency was established by the Ministry of Micro, Small and Medium Enterprises in 1955
- ✓ The central government has launched various initiatives such as the CHAMPIONS portal, UDYAM, and National SC-ST Hub, that contribute to making the MSMEs stronger and more stable.

