



EVERYDAY CURRENT AFFAIRS – JULY 14, 2026

NATIONAL

India setting new medical benchmarks: Min

- Defence Minister Rajnath Singh on Monday asserted India is setting new benchmarks in medical research and developing indigenous solutions to global health challenges through gene therapy and nuclear medicine.
- “Today, India’s health system has emerged as more self-reliant, accessible, affordable, modern and people-centric as compared to earlier times. Today, India is developing indigenous solutions to global health challenges through gene therapy, nuclear medicine, and other modern technologies,” Singh said.
- The Lok Sabha MP from Lucknow said the country’s scientists have successfully demonstrated an indigenous gene therapy to treat haemophilia, and scientists at an institute in Pune have developed a nanomedicine for breast cancer.
- “In 2024, we developed Nafithromycin - the first indigenous macrolide antibiotic. It will prove highly effective in the treatment of Community-Acquired Bacterial Pneumonia,” Singh said.
- The minister also hailed CAR-T (Chimeric Antigen Receptor T-cell) therapy for its “extremely useful” treatment of cancer.
- “We have developed the world’s most affordable CAR-T cell therapy. Treatment that was previously limited to only a few developed nations and the wealthy is now becoming available in India at a very low cost,” he said.

- CAR-T, or Chimeric Antigen Receptor T-cell, therapy is a highly personalised immunotherapy that reprograms a patient's own immune cells to destroy cancer cells. "India's health sector has witnessed unprecedented transformation over the last 12 years. Under the leadership of PM Modi, our govt's goal is to build a healthcare system that is accessible, affordable, and quality-driven," Singh said.

STATE

Sahitya Akademi awardee Poomani passes away

- Sahitya Akademi Awardwinning Tamil writer Poomani, one of the most celebrated chroniclers of the karisal bhoomi – the rainfed black-soil tracts of southern Tamil Nadu – died after a prolonged illness on Sunday night in Chennai. He was 79. He is survived by his wife, two sons and a daughter.
- His fiction portrayed with remarkable realism and empathy the lives, struggles and aspirations of the people of the karisal region, particularly in present-day Virudhunagar district.
- Poomani received the Sahitya Akademi Award in 2014 for his monumental novel Agnaadi, an epic narrative set against the backdrop of the Sivakasi (1899) and Kazhugumalai (1895) communal riots.
- Poomani's literary career spanned several decades, during which he produced a remarkable body of work, including the novels Piragu, Vekkai, Neivedhyam, Kommai, Vaikkaal, and Agnaadi, besides acclaimed short-story collections such as Kizhisal. Vekkai was adapted into the National Award-winning film Asuran by director Vetrimaaran, starring Dhanush in the lead role.

AWARDS

Vairamuthu conferred Jnanpith Award

- Tamil poet and lyricist R. Vairamuthu was on Monday conferred the 60th Jnanpith Award for the year 2025.
- He is the third Tamil literary gure to receive the award, after a gap of 24 years. Earlier recipients include the late writers Akilan and Jayakanthan.

- Mr. Vairamuthu won the Sahitya Akademi Award in 2003 for Kallikattu Ithikasm.
- The award was presented by politician and scholar Karan Singh at a ceremony in New Delhi. As part of the honour, Mr. Vairamuthu received a cash prize of 11 lakh, a bronze statue of Vagdevi (Goddess Saraswati), and a citation.

India Wins Five Gold Medals At International Physics Olympiad 2026

- India created history at the 56th International Physics Olympiad (IPhO) 2026.
- All five members of the Indian team won gold medals.
- India finished jointly at the top along with China, Kazakhstan, Russia, South Korea, and Taiwan.
- The Olympiad was held in Bucaramanga, Colombia.
- A total of 381 students from 87 countries participated in the competition.
- India's gold medal winners were Kanishk Jain, Riddhesh Anant Bendale, Rishit Garg, Shresth Suraiya, and Svarit Joshi.
- The achievement marked India's 27th participation in the International Physics Olympiad.
- According to HBCSE, every Indian participant has won either a gold or silver medal for the past decade.
- The team received intensive theoretical and laboratory training through the HBCSE Physics Olympiad Cell.
- The performance further strengthened India's reputation in global science education and Olympiad competitions.

SCIENCE & TECHNOLOGY

Study finds efficient way to filter nuclear wastewater

- In 2023, Japan began a decades-long and controversial process — it began releasing treated wastewater from the ruined Fukushima nuclear power plant into the Pacific Ocean. The water had been filtered to remove most heavy radioactive elements, yet one particular contaminant remained:
- tritium. Tritium is a radioactive isotope of hydrogen. When it bonds with oxygen, it forms tritiated water, or HTO. Because tritiated water is chemically

almost identical to regular water, it is extremely difficult to separate the two. For many decades, officials in the global nuclear industry have opted to dilute tritiated water, i.e. mixing it in large quantities of regular water.

- In absolute terms, the treated wastewater will make up only 0.000000000189% of the Pacific Ocean's volume even after all of it is released. However, the effects of the tritiated water are expected to be more apparent in the waters flanked by South Korea and China. M.V. Ramana, professor at the University of British Columbia, had also told The Hindu in 2023 that tritium is "easily absorbed by the bodies of living creatures" and "rapidly distributed ... via blood".
- A new study published in Environmental Science & Technology may finally offer a way to efficiently clean tritiated water. The research team, from across China, achieved this using a metal-organic framework, work on which won the Nobel Prize for chemistry last year.
- The current most practical way to remove tritium from tritiated water is water distillation, i.e. boiling water and separating the components based on their slightly different boiling points. But the difference is so feeble that operators need a distillation tower hundreds of metres tall, which is expensive, uses large amounts of energy, and impractical for the millions of tonnes of water stored at Fukushima.
- Current distillation towers use systems called packings – materials inside the tower that provide surfaces where steam and liquid can interact. Until now, these packings were passive: they just sat there and let gravity do the work. In the new study, the researchers made the packing material 'active'. They coated a stainless-steel mesh with a metal-organic framework called NH₂-MIL-101(Cr). A metal-organic framework is like a microscopic sponge. It has a very high surface area: the study found that adding NH₂-MIL-101(Cr) increased the available area of the packing by 32-fold. Second, the chromium-oxygen clusters inside the framework 'grabbed' tritium atoms from the liquid and swapped them with regular hydrogen atoms, with nitrogen and hydrogen attachments also facilitating this swapping.
- The results were staggering. In laboratory tests, the team found that the modified packing achieved a separation efficiency of 42.5 theoretical plates per meter – a record-setting figure in the world of chemical engineering. At an industrial height of 10 m, the new material would be 134-times more effective than the current best-reported material. It is also one-million-times more effective than the standard commercial packings in the industry today.

- “This strategy provides a new approach for improving the detritiation of tritiated water and reducing tritium releases to natural water bodies,” the researchers wrote in the paper. “More broadly, the results highlight the potential of programmable porous materials to address challenging isotope-contaminant separations and contribute to safer and more sustainable management of nuclear energy systems.”

SPORTS

India Wins Historic First Women's Test At Lord's Against England

- India defeated England by 270 runs in the first-ever women's Test at Lord's Cricket Ground.
- The match was played from 10-13 July 2026.
- The Indian team was captained by Harmanpreet Kaur.
- The victory marked India's first women's Test win at Lord's.
- Yastika Bhatia scored 113 runs, becoming the first woman to score a Test century at Lord's.
- Her century earned her a place on the Lord's Batting Honours Board.
- Fast bowler Kranti Goud claimed a five-wicket haul.
- She became the first woman to feature on the Lord's Bowling Honours Board.
- India's all-round performance showcased its growing strength in women's Test cricket.
- The victory is considered one of the biggest milestones in Indian women's cricket history.

