

7. Short News

1. Gullian–Barré Syndrome

Recently two children died due to Guillain–Barré Syndrome (GBS) in Neemuch district, Madhya Pradesh.

Guillain–Barré Syndrome (GBS)

Nature– GBS is a rare autoimmune neurological disorder in which the immune system attacks the peripheral nerves, leading to muscle weakness and possible paralysis.

Epidemiology

1. Can affect people of any age.
2. More common in adults and males.
3. Incidence is about 1–2 cases per 100,000 population

Causes

1. Post-Infectious Trigger– In most cases, GBS occurs after a viral or bacterial infection
2. Bacterial Association– According to the World Health Organization (WHO), infection with *Campylobacter jejuni*, which causes gastroenteritis, is one of the most common risk factors
3. Viral Infections– GBS has also been linked to influenza, cytomegalovirus, Epstein–Barr virus, and Zika virus infections.
4. Vaccination– Certain vaccinations have been linked to GBS, though the risk is extremely low.

Common Symptoms

1. Initial Symptoms– Symptoms usually begin with tingling and weakness in the feet and legs, gradually spreading to the upper body, arms, and face
2. Common Manifestations– These include pins and needles sensation, back pain, leg pain, difficulty walking or climbing stairs, facial weakness, and double vision.
4. Severe Progression– In some cases, paralysis of the legs, arms, or facial muscles can occur
5. Severe Progression– In some cases, paralysis of the legs, arms, or facial muscles can occur
6. Complications– GBS can become life-threatening if it affects the autonomic nervous system, which controls vital functions such as heart rate and blood pressure.

Treatment

1. **No Definitive Cure**– There is no known cure for Guillain–Barré Syndrome.
2. **Primary Treatments**– Plasma exchange (plasmapheresis) removes antibodies attacking the nerves. Intravenous immunoglobulin (IVIG) therapy helps reduce immune system damage
7. **Supportive Care**– Patients may require ventilatory support, along with physical and occupational therapy during recovery.

2. Sammakka–Saralamma Jatara

Telangana is preparing for the biennial Sammakka–Saralamma Jatara from January 28, 2026, alongside large-scale redevelopment of the sacred precinct at Medaram.

About Sammakka–Saralamma Jatara – The Sammakka–Saralamma Jatara is a biennial tribal spiritual festival honouring Sammakka and her daughter Saralamma, ancestral goddesses of the Koya Adivasi community.

Location– The festival is held at Medaram village in Mulugu district, Telangana, inside the Eturnagaram Wildlife Sanctuary, part of the Dandakaranya forest belt, during the full moon of the Hindu month of Magh.

Historical Origins- The Jatara is rooted in Koya tribal legends where Sammakka and Saralamma resisted tax oppression by Kakatiya rulers, symbolising tribal resistance, sacrifice, and martyrdom. Koya Adivasi community is the largest tribal group of Telangana living mostly in Bhadrachalam and Odisha's Malkangiri districts, speaks the Dravidian-based Koya language (Koya Basha) and is famous for their traditional Bison-horn dance.

Religious Practices in Jatara- Follows animistic and kinship-based traditions, with no permanent temples or idols. Deities are symbolically brought from the forest for three days to live among the people.

Key Features- Devotees offer jaggery (Bangaram) instead of money, reflecting agrarian equality. Rituals are conducted by Koya tribal priests using sacred trees, bamboo totems, clan flags (dalgudda), and oral storytelling.

Scale- It is regarded as Asia's largest tribal festival, attracting over one crore devotees, second only to the Kumbh Mela in India.

Other Important Tribal Festivals in India

Nagoba Jatara (Telangana)- A major Gond tribal festival celebrated at Keslapur, marked by the Gusadi dance and ancestral serpent worship.

Murma Jatra (Jharkhand)- A cultural festival of the Oraon tribe celebrating tribal unity, heritage, and brotherhood with the Munda community.

Baneshwar Fair (Rajasthan)- Known as the "Tribal Kumbh," it is a major Bhil gathering at the Soma-Mahi River confluence in Dungarpur.

Hill Jatra (Uttarakhand)- An agrarian festival in the Sor Valley featuring masked dances symbolising agricultural cycles and folk deities.

Bastar Dussehra (Chhattisgarh)- A unique tribal celebration honouring local deities, distinct from mainstream Dussehra traditions.

3. Coconut Root Wilt Disease

The coconut root wilt disease, a phytoplasma threat with no cure, is rapidly destroying coconut plantations in South India.

About Coconut Root Wilt Disease

Nature of disease- Chronic, incurable phytoplasma disease affecting coconut palms, leading to gradual decline in productivity.

History- First identified over 150 years ago in Kerala, but still has no definitive cure.

Causal Agent- Phytoplasma (cell wall-less bacteria).

Major Affected Region- Predominantly Kerala; sporadic occurrence in parts of Tamil Nadu and Karnataka.

Spread- Transmitted by insect vectors (especially whiteflies) and wind. Rapidly expanding due to climate change (erratic temperatures) and new pest populations.

Key Symptoms-

1. Flaccidity (drooping) of leaflets
2. Yellowing and narrowing of leaves
3. Reduced root system and poor nut setting

Impact on yield- Coconut production may decline by 30–80% over time; palms may survive long but remain uneconomical.

Management Strategy– No curative treatment; focus on integrated disease management (IDM)

1. Vector control (systemic insecticides)
2. Balanced nutrition (especially N, K, Mg)
3. Intercropping, soil health improvement
4. Removal of severely affected palms

4. Kaziranga Elevated Corridor Project

Recently, the Prime Minister laid the foundation stone for the ₹6,957-crore Kaziranga Elevated Corridor to enhance wildlife safety and connectivity.

Kaziranga Elevated Corridor Project – The Kaziranga Elevated Corridor Project is a major wildlife-friendly infrastructure initiative designed to ensure safe animal movement across Kaziranga National Park and Tiger Reserve while improving regional connectivity.

Objective– To reduce wildlife–vehicle collisions, especially during the monsoon season.

Key Features

1. Part of the four-laning of the Kaliabor–Numaligarh stretch of National Highway–715.
2. Includes about 34.45 km of elevated corridors and bypasses at Jakhlabandha and Bokakhat.
3. Designed in compliance with Supreme Court directions and Wildlife Institute of India recommendations.

Significance– The project balances conservation and development by safeguarding wildlife corridors, reducing road accidents, promoting ecotourism, and generating local employment.

Kaziranga National Park and Tiger Reserve – Kaziranga is globally renowned for its exceptional biodiversity and is a flagship conservation landscape of India.

Location– Situated in **Assam**, it spans the districts of Golaghat, Nagaon, Sonitpur, Biswanath, and Karbi Anglong, along the floodplains of the Brahmaputra River.

Recognition– It was recognised as Assam's first National Park in 1974. Declared a Tiger Reserve in 2007 under Project Tiger, it lies within the Eastern Himalayan biodiversity hotspot and is a UNESCO World Heritage Site (Since 1985).

River– It is surrounded by the Brahmaputra River, with Diphlu, Mora Diphlu, and Mora Dhansiri as major tributaries.

Vegetation– The park consists of alluvial grasslands, wetlands, and tropical forests

Animals– Kaziranga hosts the world's largest population of one-horned rhinoceroses, along with tigers, elephants, wild water buffalo, and swamp deer.

5. Bio-Safety Level-4 (BSL-4) Laboratory

Recently, the foundation stone for its first state-funded Bio-Safety Level-4 laboratory was laid in Gandhinagar, Gujarat.

Bio-Safety Level-4 (BSL-4) Laboratory – A BSL-4 laboratory represents the highest tier of biological containment infrastructure, designed to handle the world's most dangerous and infectious pathogens. BSLs are containment standards (BSL-1 to BSL-4) that dictate increase in stringency from BSL-1 (minimal risk, standard practices) to BSL-4 (high-risk, exotic agents like Ebola, requiring maximum containment suits and isolated facilities). The BSL-4 laboratory at Gandhinagar, Gujarat is India's first fully state-funded and state-controlled BSL-4 civilian facility.

Objective– To strengthen India's preparedness against deadly infectious diseases by enabling advanced research, rapid outbreak response, and development of diagnostics, vaccines, and therapeutics for high-risk pathogens.

Key Features

1. High-Containment Infrastructure- Includes BSL-4, BSL-3, BSL-2, Animal Bio-Safety Level-4 (ABSL-4), and ABSL-3 modules with advanced safety utilities.
2. Institutional Framework- Operates under the Gujarat Biotechnology Research Centre, which played a key role in genome sequencing during the COVID-19 pandemic.
3. Global Standards- Developed in compliance with international biosafety guidelines issued by the Centers for Disease Control and Prevention, National Institutes of Health, Department of Biotechnology, and Indian Council of Medical Research.
4. Zoonotic Research Capability- ABSL-4 facility enables animal disease research and vaccine development within India.

Significance- The lab will act as a national health shield by reducing dependence on foreign facilities, removing research bottlenecks, enhancing real-time outbreak control, and boosting India's biotechnology and public health security.

Biosafety Laboratory Network of India - India has steadily expanded its biosafety infrastructure to improve epidemic preparedness and biomedical research capacity.

Major Laboratories and Purpose

1. National Institute of Virology, Pune- India's only functional civilian BSL-4 lab for deadly human pathogens.
2. Defence Research and Development Organisation, Gwalior- Defence-sector BSL-4 facility for strategic biosecurity research.
3. ICAR-National Institute of High Security Animal Diseases, Bhopal- ABSL-3+ lab, proposed upgrade to ABSL-4, for zoonotic diseases.
4. Virus Research and Diagnostic Laboratories (VRDL) Network- 154 BSL-2 and 11 BSL-3 labs across India for epidemic surveillance and response.