

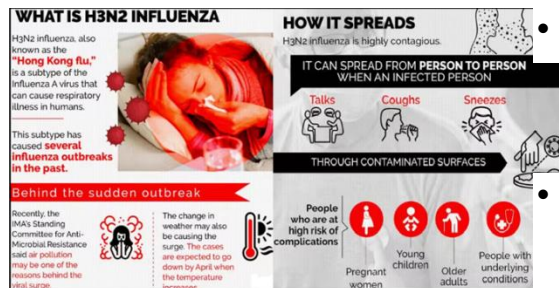
H3N2 VIRUS: INFLUENZA VIRUS KILLS 2, CENTRE ISSUES ADVISORY

Why in News?

- India has recorded 2 deaths, one each in Karnataka and Haryana, due to the **Influenza A subtype H3N2 virus**.

What is the H3N2 Virus?

- Influenza viruses, which cause the infectious disease known as **flu**, are of four different types: **A, B, C and D**.
- Influenza A** is further classified into different subtypes and one of them is the H3N2.
- According to the USA's Centers for Disease Control and Prevention (CDC), **H3N2 caused the 1968 flu pandemic** that led to the death of around one million people globally.
- The strains of the virus have dramatically evolved** in the past five decades as people born in the late 1960s and 1970s got infected by it as children.



What are the Symptoms/Cure/Preparedness of H3N2?

- Its symptoms are **similar to that of any other flu** (cough, fever, body ache and headache, sore throat, a runny or stuffy nose and extreme fatigue).
- According to the Indian Medical Association (IMA), an infection caused by H3N2 generally **lasts for 5-7 days** and usually preys on individuals **below the age of 15 years or above 50 years of age**.
- Self-hygiene** is the best way to thwart the spread of H3N2.



Oseltamivir, a drug used to treat H1N1, has been recommended by the World Health Organization for the treatment of H3N2 cases as well.

The Indian government has made the drug available through the public health system **free of cost**.

- The **Integrated Disease Surveillance Programme** of the National Centre for Disease Control of India is undertaking a real-time surveillance of cases of influenza-like/severe acute respiratory infections present in health facilities.

LANDSLIDE ATLAS OF INDIA

Why in News?

- The Indian Space Research Organisation (ISRO) recently released the Landslide Atlas of India, a

<p>Types of Movement</p> <p>Falls: Falls are rapid movements of rocks and boulders detached from steep slopes or cliffs along fractures, joints and bedding planes.</p> <p>Topple: It is the forward rotation of a mass of debris or rock out of a slope. The slope failure generally occurs point near the base of the block of rock.</p> <p>Slides: A slide is a downslope movement of material that occurs along a slip surface.</p> <p>Rotational slide: In this slide the slide movement is roughly rotational about an axis which is parallel to the ground surface and transverse across the slide.</p> <p>Translational slide: In this slide the landslide mass moves along a planar surface with rotation or backward tilting.</p>
<p>Types of Materials</p> <p>Rock: hard or firm mass.</p> <p>Debris: 20% to 80% of the particles are larger than 2mm, and the remainder is less than 2mm".</p> <p>Earth: material in which 80% or more of the particles are smaller than 2mm.</p> <p>Soil: an aggregate of solid particles, generally of minerals and rocks.</p> <p>Mud: material in which 80% or more of the particles are smaller than 0.06mm.</p>
<p>Types of flows</p> <p>Debris flow: It is a form of rapid mass movement in which a combination of loose soil, rock, organic matter, slush that flows downslope. They are commonly caused by intense precipitation or rapid snow melt.</p> <p>Earth flow: It is down slope viscous flow of fine grained material saturated with water.</p> <p>Mudflow: A mudflow is wet or viscous fluid mass of fine and coarse grained material flows rapidly along drainage channels.</p> <p>Creep: Creep is the slow, steady, downward movement of material under gravity occurs in large area.</p>
<p>Lateral Spreads: It is the lateral movement usually occur on very gentle slopes or flat terrain. The failure is caused by liquefaction due to earthquake.</p>

detailed guide identifying landslide hotspots in the country.

What is a Landslide and what Causes one?

- A landslide is defined as the movement of a mass of rock, debris, or earth down a slope.
- Landslides are a type of "mass wasting," which denotes any downslope movement of soil and rock under the **direct influence of gravity**.

- Landslides occur mainly in mountainous terrains where there are conducive conditions of soil, rock, geology and slope.
- **Natural Causes** that trigger it include heavy rainfall, earthquakes, snow melting and undercutting of slopes due to flooding.
- Landslides can also be caused by **Anthropogenic Activities** such as excavation, cutting of hills and trees, excessive infrastructure development, and overgrazing by cattle.
- In India, rainfall-induced landslide events are more common.

How are Landslides Classified and Mapped?

- Landslides are broadly classified based on the –
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How Prone is India to Landslides?

- India is considered **among the top five landslide-prone countries in the world.**
- In India, **at least one death per 100 sq. km is reported in a year due to a landslide event.**
- Rainfall variability pattern is the single biggest cause for landslides in the country, with the Himalayas and the Western Ghats remaining highly vulnerable.
- Excluding snow covered areas, **approximately 12.6 per cent of the country's geographical land area (0.42 million sq. km) is prone to landslides.**
 - As many as 66.5 per cent of the landslides are reported from the North-western Himalayas,
 - About 18.8 per cent from the North-eastern Himalayas, and
 - About 14.7 per cent from the Western Ghats.

About Landslide Atlas of India:

- The Landslide Atlas of India is prepared by the **National Remote Sensing Centre (NRSC).**
- NRSC is one of the primary centres of Indian Space Research Organisation (ISRO), Department of Space (DOS).
- NRSC has created a **pan-India database of ~80,000 landslides those occurred during last two decades using satellite data.**
- This database contains both seasonal landslides and event-based landslides.
- It is a rich collection of landslide inventory which will help user departments in prioritisation of developmental activities in tectonically and ecologically sensitive mountainous areas in India.

What does the Landslide Atlas Suggest?

- Uttarakhand, Kerala, Jammu and Kashmir, Mizoram, Tripura, Nagaland and Arunachal Pradesh reported the highest number of landslides during 1998 – 2022.
- **Mizoram topped the list, recording 12,385 landslide events in the past 25 years, of which 8,926 were recorded in 2017 alone.**
- Likewise, 2,071 events of the total 2,132 landslides reported in Nagaland during this period occurred during the 2017 monsoon season.
- Manipur, too, showed a similar trend, wherein 4,559 out of 5,494 landslide events were experienced during the rainy season of 2017.

- Of the total 690, Tamil Nadu suffered 603 landslide events in 2018 alone.
- Among all these states, an alarming situation is emerging from Uttarakhand and Kerala.
 - **Uttarakhand** –
 - Uttarakhand’s fragility was recently exposed during the land subsidence events reported from Joshimath since January.
 - The state has experienced the **second highest number (11,219) of landslides since 1998.**
 - **Kerala** –
 - Kerala has been consistently reporting massive landslides since it suffered the century’s worst floods in 2018.
 - The year-wise landslide events here are 2018 (5,191), 2019 (756), 2020 (9) and 2021 (29).
- **Most Vulnerable District?**
 - From the events and images obtained, the NRSC ranked **Rudraprayag** in Uttarakhand at the top of 147 vulnerable districts.
 - It has the highest landslide density in the country, along with having the highest exposure to total population and number of houses.

NATIONAL BAMBOO MISSION

Recently, the National Workshop of Bamboo Sector Development was conducted under the National Bamboo Mission (NBM) in New Delhi on 10th March 2023.



About National Bamboo Mission:

- It is a Centrally Sponsored Scheme started in the year 2006-07 and was subsumed under the Mission for Integrated Development of Horticulture (MIDH), for the years 2014-15 and 2015-16.
- MIDH is a **Centrally Sponsored Scheme** implemented from 2014-15 for the **holistic development of horticulture** in the country, covering fruits, vegetables, root and tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew and cocoa.
- The aim of the National Bamboo Mission will focus on the development of bamboo in limited States where it has social, commercial and economical advantages. in the

- **Nodal Ministry:** Department of Agriculture & Cooperation (DAC) under the **Ministry of Agriculture & Farmers Welfare.**
- Bamboo is majorly grown in North Eastern region and States including Madhya Pradesh, Maharashtra, Chhattisgarh, Odisha, Karnataka, Uttarakhand, Bihar, Jharkhand, Andhra Pradesh, Telangana, Gujarat, Tamil Nadu and Kerala.
- **Benefits of the Mission:**
 - The initiative would assist farmers, local craftspeople, and other persons involved in the bamboo industry, including allied sectors, both directly and indirectly.
 - The initiative aims to reduce the import of bamboo goods while also increasing farmer income.
 - It establishes a full value chain for the expansion of the bamboo sector.

WHAT IS NATIONAL STARTUP ADVISORY COUNCIL (NSAC)?

The Union Minister of Commerce and Industry will chair the sixth meeting of the National Startup Advisory Council (NSAC) in New Delhi today, March 11.



About National Startup Advisory Council:

- It was constituted by the Department for Promotion of Industry and Internal Trade (DPIIT) under **the Union Ministry of Commerce and Industry.**
- **Objective:** To advise the Government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country to drive sustainable economic growth and generate large-scale employment opportunities.
- **Composition of the council**
 - **Chairman:** Minister for Commerce & Industry.
 - **Ex-officio Members:** Nominees of the concerned Ministries/Departments/Organisations not below the rank of Joint Secretary.
 - Besides the ex-officio members, the council has non-official members, representing various stakeholders such as founders of successful startups, veterans who have grown and scaled companies in India

- NSAC is playing an important role in identifying areas of intervention for the expansion of the startup ecosystem and ideating and nurturing national programs under the Startup India initiative.

What is the Startup India initiative?

- Startup India is a flagship initiative of the Government of India, intended to catalyse startup culture and build a strong and inclusive ecosystem for innovation and entrepreneurship in India.
- It was launched in 2016.

WHAT IS CYCLONE FREDDY?

World Meteorological Organisation recently announced the constitution of an expert committee to evaluate the intensity and lifespan of Cyclone Freddy, which is on track to set a record as the longest-lasting tropical cyclone on record.



About Cyclone Freddy:

- **Origin:** It originated off the **northern coast of Australia** and became a named storm on February 6, 2022.
- It **crossed the entire South Indian Ocean and traveled more than 8,000 kilometers**, affecting Mauritius and La Réunion, before making **landfalls in Madagascar two weeks later and then Mozambique.**
- Freddy was the **first tropical cyclone in the Southern Hemisphere to undergo six separate rounds of rapid intensification.**
- It also **holds the record for all-time accumulated cyclone energy (ACE)** (storm strength during its lifetime) **for the Southern Hemisphere.**
- Freddy is **fuelled by the energy provided by the warm ocean surface**, consistently sourcing heat and moisture throughout its lifetime.

What is a Tropical Cyclone?

- It is a **rapidly rotating storm originating over warm tropical oceans** from where it draws the energy to develop.

- It has a **low-pressure center** and **clouds spiraling towards the eyewall** surrounding the "eye", the central part of the system where the weather is normally calm and free of clouds.
- Its **diameter is typically around 200 to 500 km** but can reach 1000 km.
- The winds **blow counterclockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.**
- A tropical cyclone **brings very violent winds, torrential rain, high waves,** and, in some cases, very destructive storm surges and coastal flooding.

WHAT IS THE U.S.-INDIA INITIATIVE ON CRITICAL AND EMERGING TECHNOLOGY (ICET)?

India's Minister of Commerce and Industry and U.S. Secretary of Commerce welcomed the recently launched U.S.-India initiative on Critical and Emerging Technology (iCET).



Why in News?

- Recently, the National Security Advisors of India and the US led the inaugural meeting of the iCET in Washington, DC.

About the U.S.-India initiative on Critical and Emerging Technology (iCET):

- It was **launched** by the US President and Indian Prime Minister **on the sidelines of the Quad summit on May 2022.**
- **Goal:** To **elevate and expand Indo-U.S. strategic technology partnership and defense industrial cooperation** between the governments, businesses, and academic institutions of the two countries.
- The initiative will be **spearheaded by the National Security Council Secretariat in India and the US National Security Council.**
- The initiative would help **forge links** between the government, academia, and industry **in areas such as AI, quantum computing, 5G/6G, biotech, space, and semiconductors.**
- Under iCET, the two sides have identified **six focus areas** of co-development and co-production:
 - strengthening **innovation ecosystems;**

- **defense innovation** and technology cooperation;
 - resilient **semiconductor supply chains**;
 - **space**;
 - **STEM** (science, technology, engineering, and math) talent;
 - **next-generation telecom**;
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INDIA-BANGLADESH FRIENDSHIP PIPELINE (IBFP)

Prime Ministers of India and Bangladesh will jointly inaugurate the maiden cross-border oil pipeline between the two countries.



About India-Bangladesh Friendship Pipeline (IBFPL):

- IBFPL will carry **diesel** from Assam-based Numaligarh Refinery Ltd's (NRL) marketing terminal at Siliguri in West Bengal to the Parbatipur depot of Bangladesh Petroleum Corporation (BPC).
 - IBFPL is **5 Kilometers long**, out of which **126.5 kilometer pipeline is in Bangladesh** and **5 kilometers in India**.
 - The pipeline has a **capacity of one million metric tonnes per annum (MMTPA)**.
 - The total project cost for the construction of the IBFPL is **Rs 377.08 crore**.
 - The project is built **under grant assistance from the government of India**.
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SAUDI ARABIA AND IRAN AGREE TO RESTORE TIES

Why in news?

- Iran and Saudi Arabia agreed to re-establish diplomatic relations and reopen embassies after seven years of tensions.
- This major diplomatic breakthrough was negotiated after the talk between Iran and Saudi Arabia which was hosted by China.

Why Saudi Arabia and Iran are bitter rivals?

- **Struggle for regional dominance**

- Saudi Arabia and Iran - two powerful neighbours - are locked in a fierce struggle for regional dominance.
- Historically Saudi Arabia, a monarchy and home to the birthplace of Islam, saw itself as the leader of the Muslim world.
- However, this was challenged in 1979 by the Islamic revolution in Iran.
 - The revolution created a new type of state in the region - a kind of revolutionary theocracy - that had an explicit goal of exporting this model beyond its own borders.
- **Religious differences**
 - The decades-old feud between them is exacerbated by religious differences.
 - They each follow one of the two main branches of Islam - Iran is largely Shia Muslim, while Saudi Arabia sees itself as the leading Sunni Muslim power.
- **Series of events further increased tension**
 - **2011 – Arab Spring**
 - The Arab Spring saw protest movements against the status quo across the Middle East.
 - Saudi Arabia accused Iran of inciting protests in Bahrain against the royal family.
 - **2011 – Syrian war**
 - Shia-ruled Iran backed President Bashar al-Assad and provided him with military forces and money to battle Sunni rebels.
 - Sunni-majority Saudi Arabia backed the rebel groups.
 - **2015 – War in Yemen**
 - When the civil war in Yemen began in 2015, Saudi Arabia backed its internationally recognised government and targeted Houthi rebel strongholds. The Houthis are aligned with Iran.
 - **2015 – Mecca stampede**
 - A stampede in Mecca during the annual Hajj pilgrimage in 2015 further inflamed tensions.
 - Iran accused the Saudi government of mismanaging the most important event in the Muslim calendar.
 - **2016 – Saudi Arabia cuts ties**
 - After the stampede in Mecca, Saudi Arabia executed prominent Shia leader Nimr al-Nimr, a critic of the Saudi government.

- Protesters in Tehran stormed the Saudi embassy. Riyadh then cut ties with Tehran.
 - **2017 – Qatar blockade**
 - Another regional rupture took place in June 2017 when Saudi Arabia and its allies (United Arab Emirates, Bahrain and Egypt) imposed a blockade on Qatar.
 - They said Qatar was too close to Iran and supported “terrorism”.
 - **2019 – Attacks on Saudi targets**
 - Saudi Arabia blamed Iran for a series of attacks on targets in the kingdom, including one that struck the heart of the country’s oil industry, temporarily halving the kingdom’s crude production.
 - **2020 – Qassem Soleimani killed**
 - When the Iranian military commander Qassem Soleimani was killed in a US drone strike in Baghdad, official Saudi media celebrated the attack.
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