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Murine Typhus

A 75-year-old man from Kerala who recently travelled to Vietnam and Cambodia diagnosed with the bacterial disease murine typhus.

- Murine typhus is an infectious bacterial disease caused by the ***flea-borne bacteria Rickettsia typhi***.
- It is transmitted to humans through the bites of infected fleas.
- The disease is also known as endemic typhus, flea-borne typhus or flea-borne spotted fever.
- **Host** - Rodents like rats, mice and mongoose, are known to be reservoirs of the disease. The fleas can also live on other small mammals, including pets such as cats and dogs.
- Once a flea is infected, it can spread the disease ***for the rest of its life***.
- **Transmission** - The disease is spread when infected flea faeces come into contact with cuts or scrapes in the skin.
- Transmission can also happen through exposure of mucous membranes to infected flea faeces.
- Murine typhus is ***not spread*** from one person to another, or from person to fleas.
- **Prevalent areas** - The disease has been reported in coastal ***tropical and subtropical regions***, where rats are prevalent.
- In India, cases of murine typhus have been reported in the Northeast, Madhya Pradesh and Kashmir.
- **Symptoms** - Usually appear 7 to 14 days after the exposure and include fever, headaches, body aches, joint pains, nausea, vomiting, and stomach aches.
- Some people may later develop rashes on the skin, days after the initial symptoms.
- The illness seldom lasts longer than two weeks, but may last for months with complications if not treated.
- **Treatment** - There is ***no vaccine currently*** available against the disease.
- The antibiotic doxycycline is considered effective in therapy, but early diagnosis is vital for treatment.
- **Fatality** - Without timely treatment, the disease could turn severe in one or two weeks, and become fatal in rare cases.

*Both Murine and Scrub Typhus share overlapping symptoms, while Scrub Typhus caused by *Orientia tsutsugamushi* is generally more severe and widespread in the Asia-Pacific region.*

References

1. [The Indian Express | Murine Typhus](#)
2. [South First | Murine Typhus](#)

Dragon drones

Dragon drones have been used in the recent Russia-Ukraine War.

- Dragon drones essentially release a substance called ***thermite***, a mixture of aluminium and iron oxide.
 - Thermite is just one type of ‘incendiary weapon,’ with others including napalm and white phosphorous.
- When ignited (usually with the help of an electrical fuse), thermite triggers a self-sustaining reaction that is quite difficult to extinguish.
- These are known to emit a molten metal that burns at 2,427 degree Celsius (4,000 degrees Fahrenheit) and can even burn underwater.
- As it comes down, the mixture resembles the fire spewed by the mythical dragon.
- **Discovered in** - 1890s by a German Chemist and ***originally used to weld railway tracks.***
- On humans, it causes severe, ***possibly fatal***, burns and bone damage.
- There is little protection against thermite as it can burn through almost everything, including even metals.
- Dragon drones tend to be ***low-flying*** because thermite is more effective when it’s in close contact with the target.
- Under international law, thermite is not banned for military combat, but its use on civilian targets is prohibited.

References

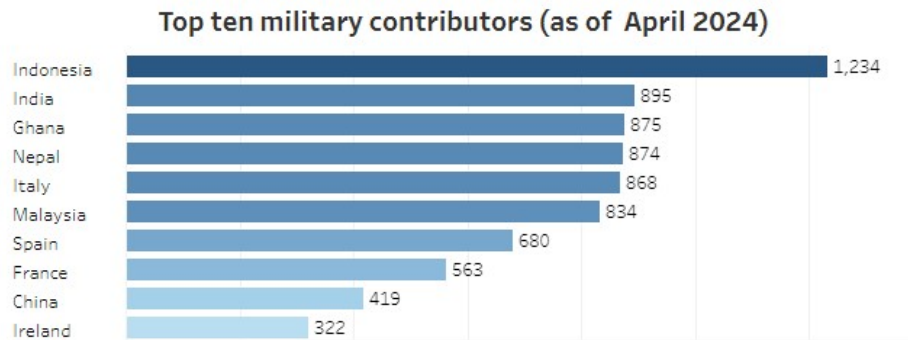
1. [The Indian Express | Dragon drones](#)
2. [Hindustan Times | ‘Dragon’ drones](#)

United Nations Interim Peacekeeping Force in Lebanon (UNIFIL)

Recently two members of a UN peacekeeping mission, operating along Lebanon’s border with Israel were injured.

- UNIFIL is an international body assigned to prevent violations along the border between ***Lebanon and Israel.***
- **Established by** - UN Security Council (UNSC) in March 1978, days after Israel invaded Lebanon.
- It is supposed to report breaches to the UN Security Council.
- It consists of more than 10,000 civilian and military personnel from 50 countries including India.
- The group is charged by the UN with keeping out of the area any weapons or fighters.
- Although they are armed, the peacekeepers are generally restricted to using force only

when their safety or the safety of civilians is in immediate danger.



- **Location** - It is located in the South of Lebanon. UNIFIL's presence stretches from the **Litani River to the Blue Line**.
 - Blue Line is a 120km "border" drawn up by the UN between Lebanon and Israel.
- Its headquarters is Naqoura in the southwest.



- **Fund** - UNIFIL (United Nations Interim Force in Lebanon) receives its funding through a dedicated account which is approved annually by the United Nations General Assembly.

References

1. [Indian Express | UNIFIL](#)
2. [UN | UNIFIL](#)

Central Drugs Standard Control Organisation (CDSCO)

The Central Drugs Standard Control Organisation (CDSCO) has met safety, efficacy, and quality indicators for a functional vaccine regulatory system by the World Health Organization (WHO).

- The Central Drugs Standard Control Organization (CDSCO) is the Central Drug Authority for discharging functions under ***the Drugs and Cosmetics Act.***
- **Functions**
 - Regulatory control over the import of drugs,
 - Approval of new drugs and clinical trials,
 - Meetings of drugs consultative committee (DCC) and drugs technical advisory board (DTAB),
 - Approval of certain licenses as central license approving authority
- It will also coordinate the activities of ***state drug control organizations.***
- CDSCO also plays a key role in drug surveillance and monitoring adverse drug reactions.
- **Ministry** - Ministry of Health & Family Welfare.
- **Head Quarters** - New Delhi.
- It has 6 zonal offices, 4 sub zonal office, 13 Port offices and 7 laboratories.
- The ***Drugs Controller General of India (DCGI)*** is the head of the Central Drugs Standard Control Organization (CDSCO).
- **Vision** - To Protect and Promote public health in India.
- **Mission** - To safeguard and enhance the public health by assuring the safety, efficacy and quality of drugs, cosmetics and medical devices.

Reference

[New Indian Express | Central Drugs Standards Control Organization](#)

Kaimur Wildlife Sanctuary (KWLS)

The central government has given its in-principle approval to develop the Kaimur Wildlife Sanctuary (KWLS) into Bihar's 2nd tiger reserve.

- It is the largest wildlife sanctuary in Bihar.
- It is located in the Kaimur hills range.
- **Established in** - 1982.
- The KWLS is bounded in the north and west by Uttar Pradesh, in the south by Jharkhand and in east by Bihar.
- **Waterfalls** - Karkat and Telhar.
- This sanctuary is a plateau situated between the Son River, bordering Jharkhand to the south, and the Karmanasa River, bordering Uttar Pradesh to the west.
 - The Oraon tribe is believed to have originated from this plateau.
- Kaimur Hills plateau is connected to the Bandhavgarh-Sanjay-Guru Ghasidas-Palamau

tiger meta-population landscape

- **Species** - The sanctuary supports sizable populations of leopard, sloth bear, chital, sambar, wild pig, nilgai, and chowsingha, besides about 70 species of birds.

Reference

[Down to Earth | Kaimur Wildlife Sanctuary \(KWLS\)](#)

