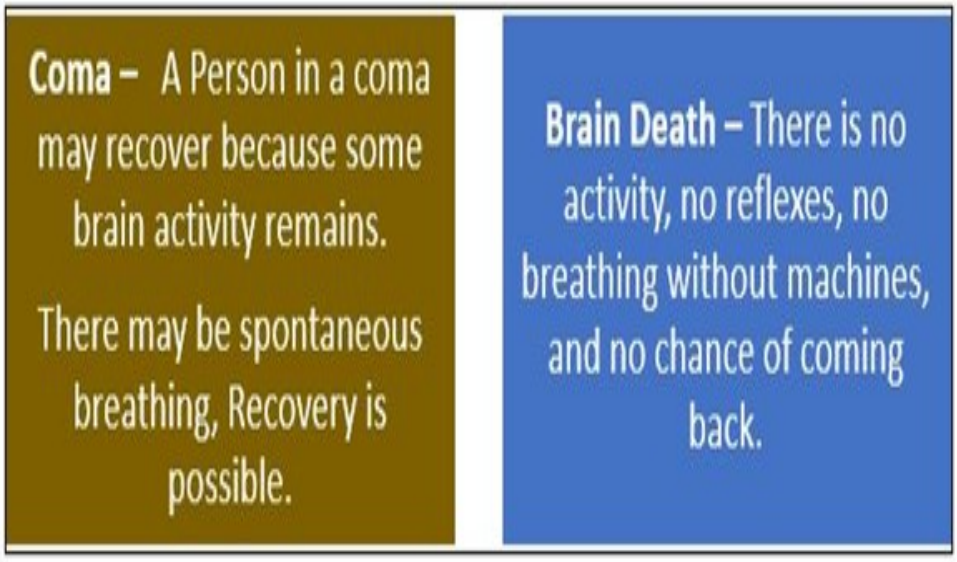
Brain Death

Prelims – *Current events of national and international importance| General Science.*

Why in News?

Recently, World organ donation day is observed on August 13, to raise awareness about organ donation lifesaving impact and encourage people to pledge their organs with the theme, "Answering the Call".

- **Condition –** Brain death is the ***irreversible loss of all brain functions,*** including the brainstem, which controls vital processes like breathing.
- **Difference between Coma and Brain death**



- **Legal Requirements –** Regulated by Transplantation of Human Organs and Tissues Act (THOTA), 1994 in India.
- It regulates the removal, storage, and transplantation of human organs and tissues for therapeutic purposes.
- It also aims to *prevent commercial dealings* in human organs and tissues.
    - **Provisions**
        - Two independent brain death tests in adults, at least six hours apart.

- Four doctors, none connected to the transplant team, must certify.
- All results recorded on a legal form (Form 10).

Test For Confirmation of Brain Death
• Checking for no response to touch, pain, or voice. • Absence of all brainstem reflexes (no blinking, no pupil reaction, no gag reflex). • An Apnea test to confirm the brain no longer controls breathing. • Scans like EEG or cerebral blood flow studies to confirm

- **Societal prospects** – Organ donation and transplantation, ethical considerations, and cultural and religious beliefs.
- Hospitals have dedicated transplant coordinators to guide families through the emotional moment, answer questions, and ensure decisions are made with both clarity and compassion.
- Once brain death is declared and certified, organ donation needs to happen quickly.
- **Pre-requisite for Organ Donation –** A functioning ventilator and constant ICU care are essential to maintain breathing, blood circulation, and oxygen supply, keeping organs alive and healthy until transplantation.
- **Challenges –** Lack of awareness about brain death and coma leads refusal for donation.
- Prolonged delays can lead to inflammation, loss of circulation, and irreversible damage to organs.

Reference

Business Standard| Brain Death

Related News – Defining the Point of Death | Organ Transplantation | Irregularities in Organ Transplantation

SHANKAR IAS PARLIAMENT
Information is Empowering