



Havana Syndrome

Why in News

Recently, the **US Federal Bureau of Investigation (FBI)** has said that dealing with the issue of [Havana Syndrome](#) is a top priority and that it will keep investigating the cause and how to protect staff.

Key Points

▪ About:

- **In late 2016**, a few diplomats from the USA and their employees had **reported certain usual symptoms** during their stay in Havana, Cuba.
- They **experienced some odd physical sensations** and heard peculiar sounds, after which they started feeling sick.
- The US had even **accused Cuba of carrying out sonic attacks**. But Cuba denied the accusations of the sonic attacks and refused awareness of any such illness or syndrome.
- Ever since many bodies and institutions have been researching the cause of the Havana syndrome and many plausible factors have been discovered till date.
- The **symptoms of the syndrome include** Nausea, Severe headaches, Fatigue, Dizziness, Sleep problems, Hearing loss.
 - A few of those who had been affected more faced chronic issues like vestibular processing and cognitive problems.
- In 2020, a [report](#) by the National Academies of Sciences (NAS), US **found directed microwave radiation to be the plausible cause** of the Havana syndrome.

▪ Microwave Weapons:

- **Direct Energy Weapon (DEW):**
 - They are a **type of direct energy weapons**, which aim highly focused energy in the form of sonic, laser, or microwaves, at a target.
 - They release **electromagnetic radiation** which causes sensations in the human body.
 - **Electromagnetic radiation** heating the water in the human body makes a person feel dizziness and nausea.
- **Countries with Microwave Weapons:**
 - **A number of countries** are thought to have developed these weapons to target both humans and electronic systems.
 - China had first put on display its microwave weapon, **called Poly WB-1**, at an air show in 2014.
 - The US has also developed a **prototype microwave-style weapon**, which it calls the **“Active Denial System”**, which is the first non-lethal, directed-energy, counter-personnel system with an extended range greater than currently fielded non-lethal weapons.
- **India’s Plans for Directed Energy Weapons:**

- Recently, the [Defence Research and Development Organisation \(DRDO\)](#) has announced its plans to develop (DEWs) using high-energy lasers and microwaves.
- **Development of DEWs** is seen as particularly important in the context of India's worsening security environment, especially its ties with China.
- **Concerns:**
 - These weapons are a **cause of concern** as they can affect both machines and human beings.
 - They can **cause long-term damages** without leaving a single mark on the human body.

What is Havana syndrome?

The medical mystery named for the Cuban city where U.S. diplomats first experienced sudden, debilitating symptoms in 2016 has been reported by Americans serving in several other countries.

Acute symptoms (often occurring suddenly) may include:

Loud sounds (sometimes described as chirping, clicking or screeching) and pain in one or both ears; many felt the sensations came from a particular direction or were felt when in a specific location

Tinnitus, hearing loss

Intense pressure or vibration inside the head

Difficulty with memory or concentration

Visual disturbances

Nausea

Unsteady gait, loss of balance, vertigo/dizziness

Chronic symptoms (can last weeks, months or longer) may include:

Headache

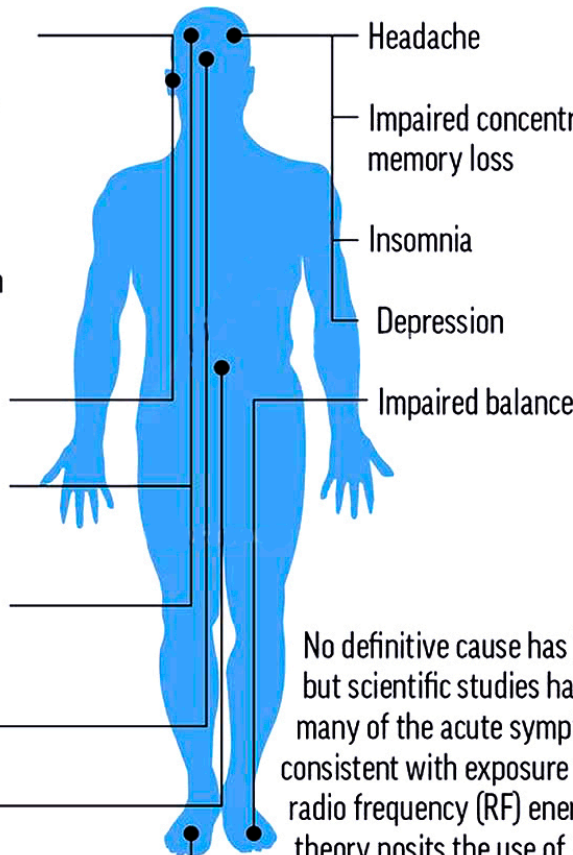
Impaired concentration, memory loss

Insomnia

Depression

Impaired balance

No definitive cause has been found, but scientific studies have noted many of the acute symptoms are consistent with exposure to directed radio frequency (RF) energy. One theory posits the use of RF energy by a U.S. adversary as a weapon or a tool of espionage.



[Source:IE](#)

