# Havana Syndrome

January 13, 2021 In News

> Mystery illness suffered by US diplomats in Cuba was most likely caused by directed microwave radiation, a US government report has found.

## The 'Havana syndrome'

- In late 2016, US diplomats in Havana reported feeling ill after hearing strange sounds and experiencing odd physical sensations in their hotel rooms or homes.
- The symptoms included nausea, severe headaches, fatigue, dizziness, sleep problems, and hearing loss, which have since come to be known as "Havana Syndrome".
- Cuba had denied any knowledge of the illnesses even though the US had accused it of carrying out "sonic attacks", leading to an increase in tensions.

## **Possible factor: Microwave Weapons**

- "Microwave weapons" are supposed to be a type of direct energy weapons, which aim highly focused energy in the form of sonic, laser, or microwaves, at a target.
- People exposed to high-intensity microwave pulses have reported a clicking or buzzing sound as if seeming to be coming from within your head.
- It can have both acute and long-term effects without leaving signs of physical damage.
- These weapons are considered to be the cause of the "syndrome" whose symptoms include nausea, dizziness, fatigue, and cognitive difficulties.

## How did researchers deduce that?

 The researchers have examined four possibilities to explain the symptoms – infection, chemicals, psychological factors and microwave energy.

- The experts examined the symptoms of about 40 government employees.
- The report concluded that directed pulsed RF (radio frequency) energy appears to be the most plausible mechanism in explaining these cases among those that the committee considered.

### NAS report on the 'Havana syndrome'?

- The NAS report, titled "An assessment of illness in US government employees and their families at overseas embassies", by a committee of 19 experts in medicine and other fields examined four possibilities to explain the symptoms – infection, chemicals, psychological factors and microwave energy on examining reports of about 40 government employees.
- The report concluded that "directed pulsed RF energy appears to be the most plausible mechanism in explaining these cases among those that the committee considered".
- By calling it "directed" and "pulsed" energy, the report leaves no room for confusion that the victims' exposure was targeted and not due to common sources of microwave energy, such as a mobile phone. The report also mentions that the immediate symptoms that patients reported – including sensations of pain and buzzing sound – apparently emanated from a particular direction, or occurred in a specific spot in a room.

## Limitations of the Report

- Firstly, the report solely focuses on events surrounding the US embassy in Havana since the information made available on patients from China was "too sparse and fragmentary to be able to draw any substantive conclusions about these cases," the committee notes.
- Moreover, among all the victims, not everyone reported the same symptoms and the panel had limited access to

personalised data because of potential security concerns or ongoing active investigations.

 It also said the findings were affected by the government's slow and uneven response to the incidents wherein patients were evaluated by various methods and clinicians at different points in their illness.