

## African Swine Fever

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### Why in News

Nagaland has not reported fresh cases of **African Swine Flu** in the last two weeks.

- The disease was first reported in November-December, 2019 from the **areas of China bordering Arunachal Pradesh**.
- Earlier in April 2020, there were reported deaths of pigs due to the **Classical Swine Fever (CSF)**.

## African swine fever (ASF)



**The virus is highly resistant to low temperatures** and can survive for extended periods of time in the blood, feces and tissue of infected animals.

ASF is a **highly contagious**, transboundary viral disease (*Asfarviridae* family, *Asfivirus* genus).

According to the OIE, **24%** of its member countries (48 out of 200) **have reported the disease** as present since 2016.

Typical clinical signs of ASF are similar to those of classical swine fever (which is endemic in several countries of the Americas); therefore, a **laboratory test** is required to distinguish them.

The **peracute** form of the virus causes sudden death with few signs.

African swine fever can be transmitted through **direct contact** between sick and healthy animals. It can also be transmitted **indirectly** through feed containing meat from infected animals (the virus can remain infectious for 3 to 6 months in uncooked pork products); **biological vectors** such as ticks of the genus *Ornithodoros*; and contaminated **inanimate objects** (fomites) that can transmit the virus.

Global alarms went off in August 2018, when an ASF outbreak was first reported in **China**. The disease swept through the entire Asian country and spread to **Mongolia, Vietnam, Cambodia and Hong Kong**.

According to official data for this period, more than **2.5 million domestic pigs** have died or been killed—67.6% of them in Asia over the past 10 months.

Between 2016 and May 2019, there were a total of **10,211 outbreaks in Africa, Europe and Asia**.

It can affect both domestic and wild pigs (wild boars and peccaries). **It is harmless to humans.**

Symptoms include **fever, loss of appetite**, low energy, abortion, internal hemorrhages, visible hemorrhages, and even death.

### Key Points

- **About:**

- It is a **highly contagious and fatal animal disease** that infects and leads to an acute form of hemorrhagic fever in domestic and wild pigs.
- **Other manifestations of the disease include** high fever, depression, anorexia, loss of appetite, hemorrhages in the skin, vomiting and diarrhoea among others.
- It was **first detected in Africa in the 1920s**.
  - Historically, outbreaks have been reported in **Africa and parts of Europe, South America, and the Caribbean**.
  - However, **more recently (since 2007)**, the disease has been reported in **multiple countries across Africa, Asia and Europe, in both domestic and wild pigs**.
- The **mortality is close to 100%** and since the **fever has no cure**, the only way to stop its spread is by culling the animals.
- ASF is **not a threat to human beings** since it only spreads from animals to other animals.
- ASF is a disease **listed in the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code** and thus, reported to the OIE.

- **Classical Swine Fever:**

- **CSF**, also known as **hog cholera**, is an important disease of pigs.
- It is one of the most economically-damaging pandemic viral diseases of pigs in the world.
- It is **caused by a virus of the genus Pestivirus of the family Flaviviridae**, which is closely related to the viruses that cause bovine viral diarrhoea in cattle and border disease in sheep.
- Mortality is 100%.
- Recently, the **ICAR-IVRI developed a Cell Culture CSF Vaccine** (live attenuated) using the **Lapinized Vaccine Virus** from foreign strain.
  - The new vaccine has been found to induce protective immunity from day 14 of the Vaccination till 18 Months.

## **World Organisation for Animal Health**

- OIE is an **intergovernmental organisation responsible for improving animal health worldwide**.
- It has 182 Member Countries. **India is one of the member countries**.
- OIE **develops normative documents relating to rules that Member Countries can use to protect themselves** from the introduction of diseases and pathogens. One of them is the **Terrestrial Animal Health Code**.
- OIE standards are recognised by the **World Trade Organization** as reference international sanitary rules.
- It is headquartered in **Paris, France**.

**Source: DTE**