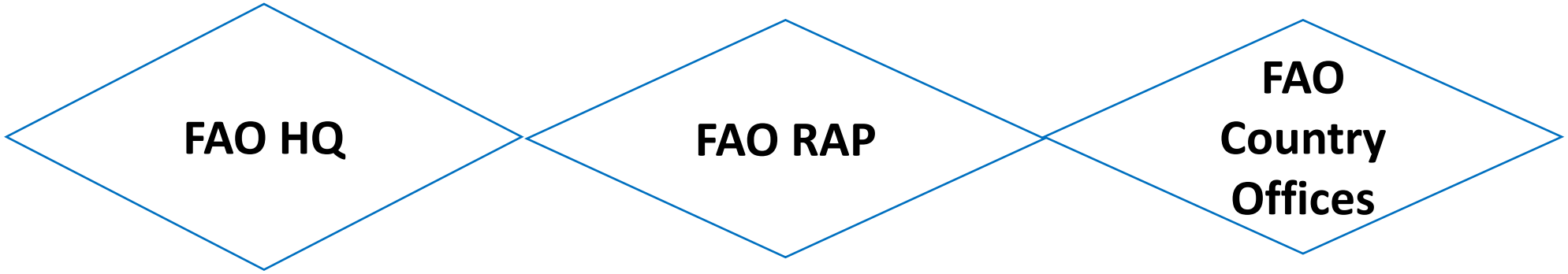
Food and Agriculture Organization of the United Nations

FAO available support for FMD SAT1 Emergency Preparedness

FAO Specialized programmes at central and decentralized levels



- Animal Health and Production Programme (FAO RAP)
- Emergency Management Center (EMC)
- European Commission for the Control of Foot-and-Mouth Disease (EuFMD)
- Emergency Prevention System (EMPRES) for Animal Health

Practical support and guidance to progressive FMD control in endemic countries and addressing emerging threats in endemic and FMD-free countries

FAO Recent Actions

Rapid risk assessment: foot-and-mouth disease (FMD) virus serotype SAT1

- Dec 2025 and Feb 2026: [Rapid risk assessment: foot-and-mouth disease (FMD) virus serotype SAT1 covering Africa; Central, South and Western Asia]

- 15 April 2026: [FAO alert to countries in Asia and the Pacific to enhance preparedness for FMDV SAT1]


Food and Agriculture Organization of the United Nations

alert

FAO ALERTS COUNTRIES IN ASIA AND THE PACIFIC TO ENHANCE PREPAREDNESS FOR FOOT-AND-MOUTH DISEASE SAT1

15 April 2026

Key facts:

1. FMD is a highly contagious viral disease affecting cattle, sheep, goats, pigs and other cloven-hoofed animals. Although not a threat to human health, FMD severely impacts food security, livelihoods, national and international markets.
2. There are seven FMD virus serotypes (A, O, C, SAT1, SAT2, SAT3 and Asia1). Immunity from infection or vaccination is serotype-specific and will not provide protection against the other serotypes.
3. Clinical signs: Affected animals develop fever and blisters/sores on their feet, in the mouth, nose, snout and teats. Depression, loss of appetite, weight loss, lameness and drop in milk production are observed. Some animals may be subclinically infected, particularly small ruminants. Younger animals may die due to sudden heart failure.
4. Transmission is via the respiratory or oral route. Infected animals shed virus in all excretions and secretions (e.g. saliva, urine, faeces and milk). FMD commonly spreads by animal movements, but can also be spread by contaminated clothing, footwear, equipment and vehicles. The virus can survive in the environment and animal products.
5. Diagnosis: Not only in FMD free countries, but also in endemic countries, suspected FMD in a newly affected area should be confirmed by a laboratory. Laboratory diagnosis is also required to determine the causative serotype. Appropriate samples for virus confirmation include vesicular fluid or epithelium.
6. Prevention: The frontline defence against FMD is robust biosecurity, awareness raising and surveillance. If vaccines are available, it is critical that they are matched to the circulating strain(s).

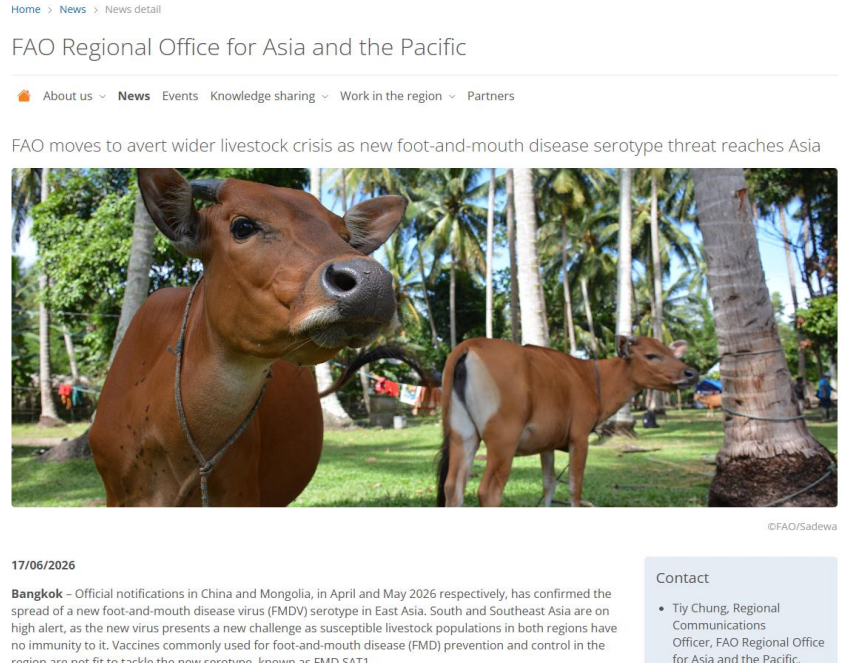
The Food and Agriculture Organization of the United Nations (FAO) is warning countries across Asia and the Pacific about the increased risk of foot-and-mouth disease (FMD) virus serotype SAT1, following recent reports of SAT1 detection in China and growing concerns over its possible presence in the Russian Federation, along with the ongoing spread of SAT1 beyond its historically endemic range.

These developments follow the progressive expansion of FMD virus serotype SAT1 during 2025–2026 outside sub-Saharan Africa, with confirmed outbreaks reported in parts of Europe, the Near East, North Africa and West Asia. In April 2025, FAO issued a regional alert in response to the detection of FMD virus serotype SAT1 in Iraq, including cases in cattle and water buffaloes, as well as Bahrain, which detected infected livestock during import quarantine. A second alert followed in November 2025 as the epidemic expanded to Azerbaijan, Egypt, Kuwait and Türkiye. Both alerts highlighted the high risk posed by the introduction of the exotic SAT1 serotype into regions with largely naive livestock populations and called for heightened surveillance, biosecurity and preparedness measures. Since then, the virus has continued to spread at an alarming rate in different directions with outbreaks confirmed in Cyprus, Greece, Israel, Lebanon, Palestine, and recently in China.[1,2] FAO also published a rapid risk assessment on the further spread of FMD virus serotype SAT1.

In addition to the seven FMD virus serotypes, there are distinct topotypes within each serotype that can have important implications for vaccine matching and the effectiveness of vaccination strategies. The current regional epidemiological situation is complicated by the co-circulation of at least two SAT1 topotypes: topotype I, which is closely related to viruses circulating in East Africa, and topotype III, which is closely related to strains included in some vaccines.

- Under publication:

FMD SAT1 Asia and Pacific Economic Impact Assessment



- 1 June 2026: [mobilized resources through a TCP to provide emergency preparedness support to help countries in South and Southeast Asia]

Available emergency support through FAO

- ✓ Support with supplies for preparedness and response activities (Laboratory and diagnostic supplies, PPE, disinfectants, etc.)
- ✓ Technical advice and assistance on risk assessment and emergency preparedness
- ✓ Technical consultations and dialogue on strategic and policy options for FMD response and control options
- ✓ Deployment of FMD subject matter experts' missions at national levels to support emergency response and control actions
- ✓ Multiple capacity building and workforce development (including multiple open access online FMD related courses through the FAO Virtual Learning Center)
- ✓ Collaboration and engagement with key international and regional partners, including platforms to fosters multi-stakeholder coordination, information sharing and harmonization of actions
- ✓ Resource mobilization to assist regional cooperation and control efforts and strengthening preparedness

Technical Cooperation Project (June 2026-June 2027)

Preparedness for emerging FMD virus serotype SAT1 in South and Southeast Asia

Cambodia, Indonesia, Lao PDR, Philippines, Pakistan, Thailand, Viet Nam

- Earlier detection: strengthening surveillance and early warning systems assess risk pathways for introduction
  - *Upcoming virtual training session on 24 June 2026 on the use of the Risk Monitoring Tool to identify the most likely routes and sources for the introduction of FMDV SAT1 and inform immediate planning of risk-mitigation measures*

- Rapid diagnosis: laboratory diagnostic and viral characterization capacity for rapid and accurate identification of new FMD strains

- Timely response: rapid implementation of disease control measures tailored to the new viral serotype


FAO
Thank you