



World Organisation  
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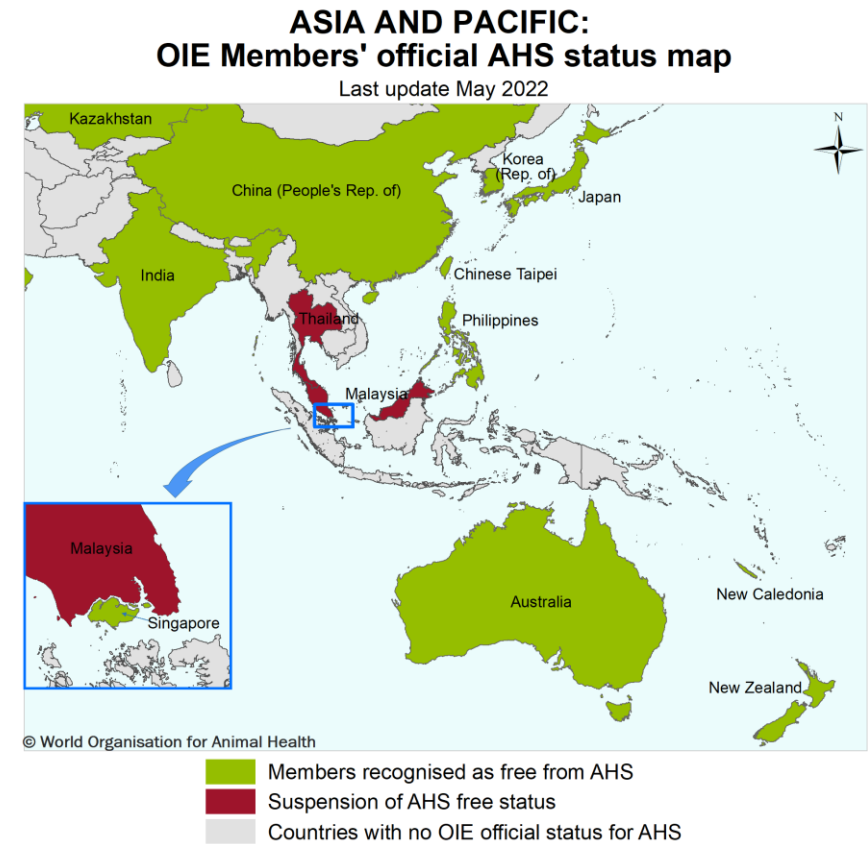
# African horse sickness (AHS) in the Asia-Pacific region

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WOAH

Kick-off meeting of the WOAH project to facilitate international horse  
movement in Asia and the Pacific region  
18 January 2023 at 16.00 (Tokyo time)

# Background

- African horse sickness: a vector-borne disease affecting equids
- Endemic in large parts of Africa, with some incursion in the past in South Europe, Middle East, South Asia
- One of the diseases for which the WOAAH has a procedure for official recognition of countries sanitary status
- Asia – Pacific region: Several countries officially recognised as historically free from AHS by the WOAAH

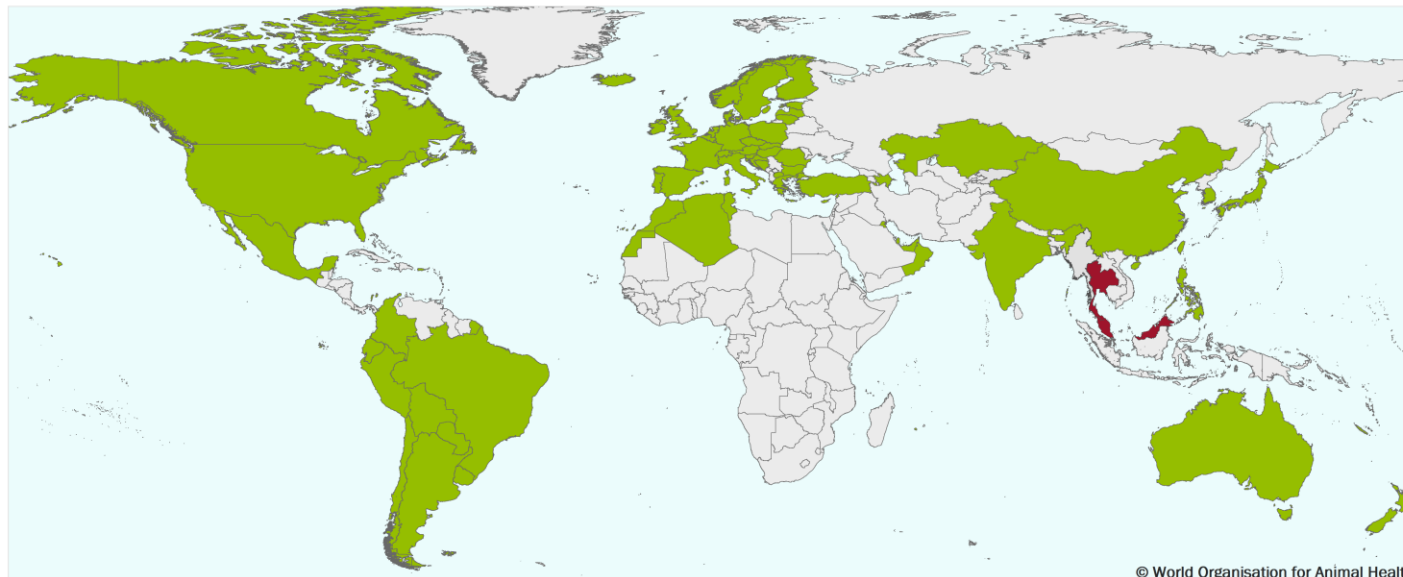


# Worldwide distribution of AHS

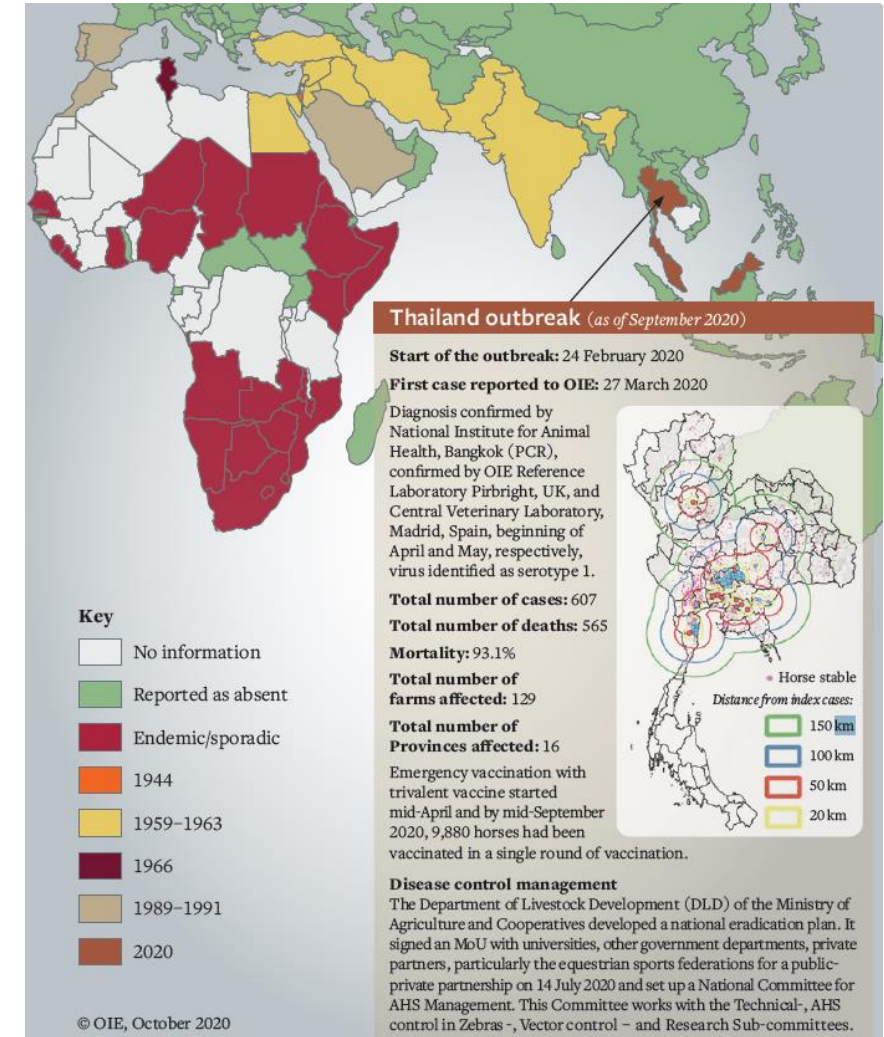
- AHS is the only horse-related disease with official status recognition by the WOAAH
- AHS was absent in Asia-Pacific for more than 50 years (1963 Pakistan, 1959 India)

WOAH Members' official African horse sickness status map

Last update May 2022

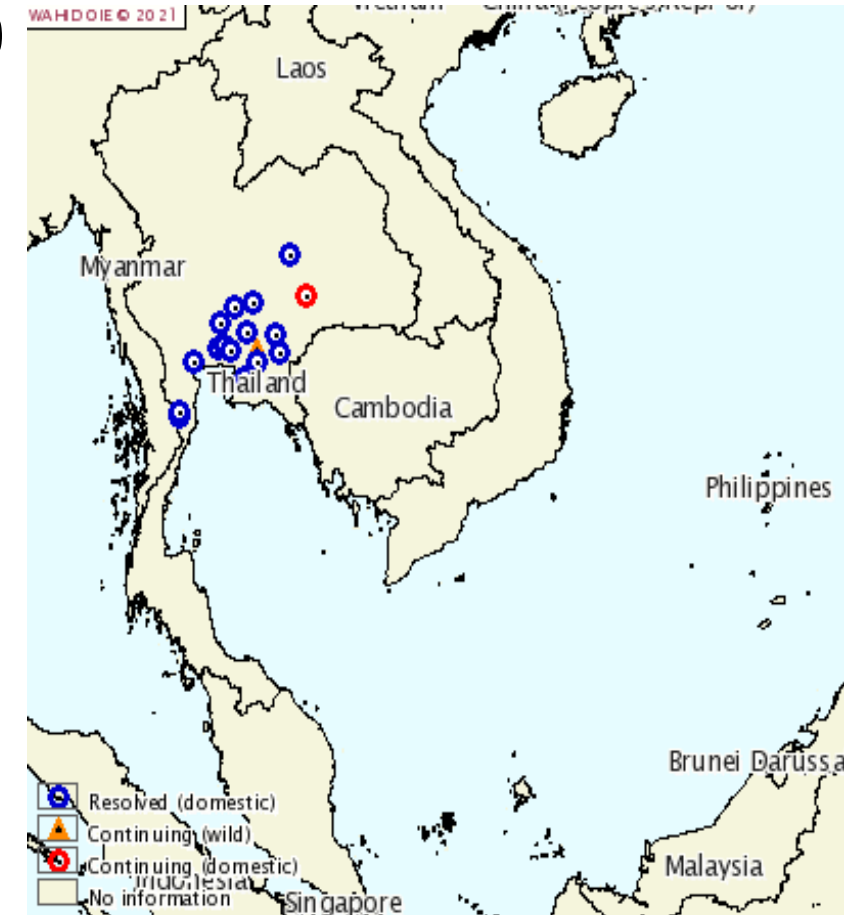


- Members recognised as free from AHS
- Suspension of AHS free status
- Countries without an official status for AHS



# AHS in Thailand

- The first outbreak started in February- March 2020 with total of 17 outbreaks.
- Horses: 610 cases and 568 deaths and Chapman's zebras (zoo): 2 cases and 2 deaths
- Serotype 1 detected. Sequencing results samples related to virus field strains originating from the Republic of South Africa and Namibia.
- Zebras imported into Thailand from South Africa in July 2019, January 2020, and March 2020.



# AHS in Thailand

- Control measures implemented:
  - movement control inside the country
  - zoning
  - surveillance within and outside containment and/or protection zone
  - control of vectors and vector surveillance
  - **Vaccination in response to the outbreaks:** more than 10,000 equids vaccinated
- Public private partnership (PPP) established
  - MoU signed between DLD and horse industry and 17 agencies, including the Department of National Parks, Wildlife and Plant Conservation



# AHS in Malaysia

- 1 outbreak detected in August 2020 by RT-PCR test at the national lab (Veterinary Research Institute, Ipoh)
- 5 horses affected in 1 farm that were killed and disposed of.
- The WOAAH Ref Lab. confirmed AHS serotype 9.



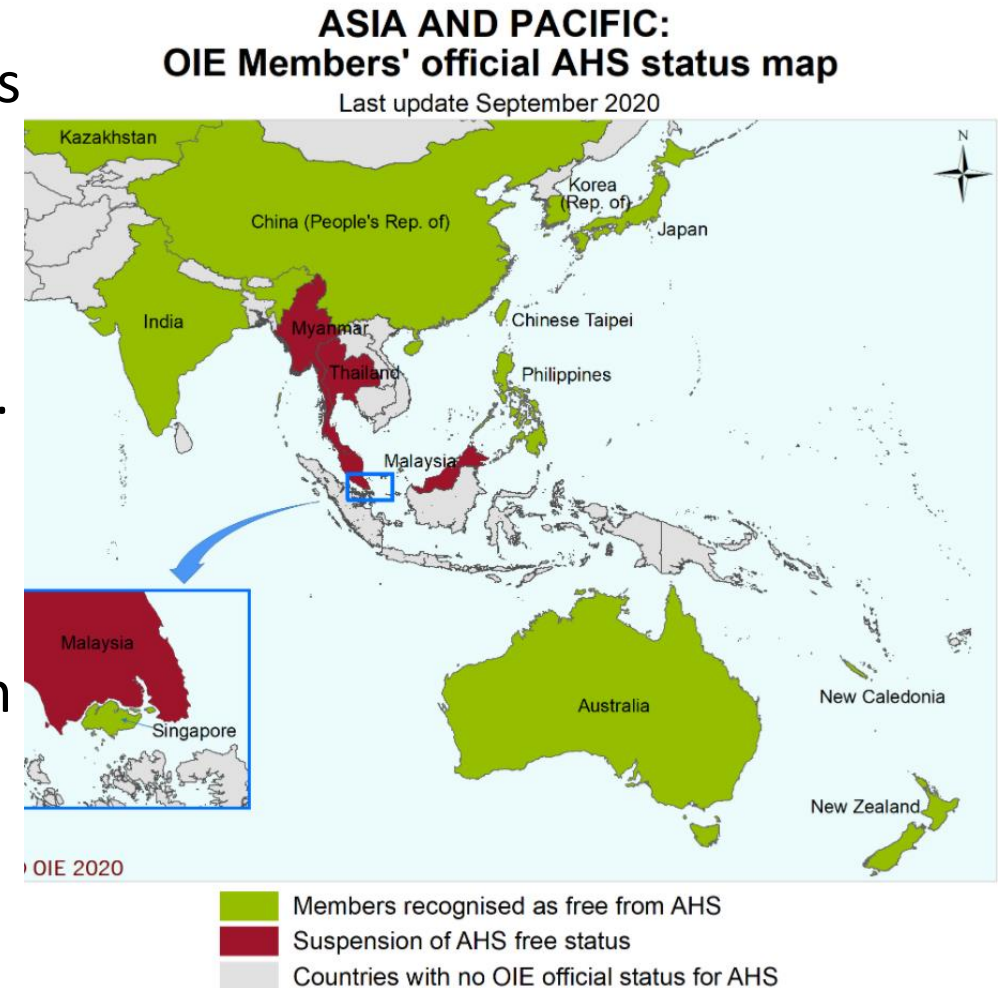
# AHS in Malaysia

- Control measures implemented:
  - movement control inside the country
  - zoning
  - surveillance within and outside containment and/or protection zone
  - control of vectors and vector surveillance
  - **stamping out of positives and contacts**
  - **vaccination remains prohibited**
  - Epidemiological investigation to determine the source of infection were not conclusive.



# AHS status in the Asia and Pacific region

- China, Singapore, India, New Caledonia, Philippines, Australia and New Zealand are recognised by WOAHA as AHS free countries
- AHS free status **suspended:**
  - **Myanmar** status withdrawn since November 2021.
  - **Thailand** suspended from 27 March 2020 due to AHS outbreaks
  - **Malaysia** suspended from 6 August 2020 due to an outbreak
  - Thailand and Malaysia were previously recognised as historically AHS free countries





# Maintenance of AHS free status

- All countries officially recognised with AHS-free status should provide their annual reconfirmations for maintenance of free status
- Specific surveillance requirements for maintenance of status are required for countries neighbouring a country with undertermined free status (infected)



# Highlights of activities in response to AHS Outbreaks



## Knowledge sharing



## Capacity building



## Coordination and communication



### Webinars

Clinical signs, epidemiology,  
transmission & diagnosis  
Laboratory diagnosis  
Outbreak investigation  
Vector surveillance  
Creation of webpage dedicated to  
AHS

### Trainings and networking's

Trainings – TOT on outbreak  
investigation, epi study design, GIS,  
cross-border risk assessment, simulation  
modelling etc.  
Networking with AHS Reference  
Laboratories  
Establish Public-Private-Partnership

### Coordination Meeting & Communication

Regional Consultation Meeting – June 2020 –  
Epi and Lab, & need assessment  
Regional Coordination & update meeting

- Sanitary situation, preparedness, vector  
surveillance
- WOAH com materials



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# WOAH Tools and Guidelines

## Regional Activities

- [Situational Update of AHS](#)
- [AHS-related Webinars](#)
- [Regional Consultation for AHS](#)
- [Regional Coordination Meeting for AHS](#)

## AHS Communication and Preparedness Materials

## Disease Status in Asia and the Pacific

<https://rr-asia.woah.org/en/projects/african-horse-sickness/>

## International Standards on AHS

- [Terrestrial Animal Health Code – Chapter 12.1 Infection with African horse sickness virus](#)
- [Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2019 – Chapter 3.1.5 African horse sickness](#)

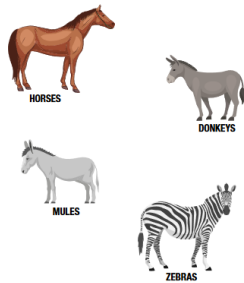
## AHS in Asia: Technical guidelines and regional studies

- [AHS: Guidelines on preparedness and implementation of emergency vaccination in the Asian region](#)
- [AHS vector control – infographic](#)
- [AHS: Guidelines for the practical control of viral transmission by reducing vector–host contact in the Asian context](#)
- [Regional study: Husbandry and movement patterns of equids in South-East Asia and the People's Republic of China \(23 Mar 2022\)](#)



# Highlights of activities in response to AHS Outbreaks

African horse sickness (AHS) is a viral disease of horses, donkeys, mules and zebras. It can kill up to **95%** of affected equids.



The disease is spread by tiny flying insects: midges, also called *Culicoides*



**For more information:**

OIE regional webpage on AHS:  
<https://fr-asia.oie.int/en/projects/african-horse-sickness/>  
 Check the latest information on the evolution of AHS in the region:  
 • Consult the WAHIS platform: [www.oie.int/wahis\\_interface](http://www.oie.int/wahis_interface)  
 • Subscribe to WAHIS alerts: [www.oie.int/wahis\\_alerts](http://www.oie.int/wahis_alerts)

**Contact us:**

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## African horse sickness

a new threat to South East Asia



## African horse sickness (AHS) controlling the vector to stop the spread

AHS is a deadly disease of equids (horses, donkeys, mules, zebras). It is transmitted through midges which act as **vectors**.

### REDUCING THE RISK OF TRANSMISSION THROUGH AN INTEGRATED CONTROL PROGRAMME



### IMPLEMENTING ADEQUATE MEASURES

#### CHEMICAL APPROACH

- Apply daily a topical **insect repellent** and **insecticide** on equids, and residual insecticide on surfaces, netting and transport vehicles.
- Place automatic insecticide dispensers in the establishment, when possible.

#### USE THE RIGHT PRODUCTS AND KNOW HOW TO COMBINE THEM

**INSECT REPELLENT:** deters insects from approaching or settling. FOR EXAMPLE: DEET based compounds.

**INSECTICIDE:** kills insects. FOR EXAMPLE: pyrethroid based compounds such as cypermethrin.

#### PHYSICAL BARRIERS

- Keep equids in stables between dusk and dawn.
  - Cover stables and transport vehicles with appropriate netting.
  - Install a double-door to enter/exit the stable.
- MEANWHILE, MAKE SURE TO RESPECT THE WELFARE OF STABLED EQUIDS.**



#### ECOLOGICAL FACTORS

- Keep facilities clean and clear of dung.
- Turn off lights in stables at night-time.

# AFRICAN HORSE SICKNESS

OIE guidelines for the practical control of viral transmission by reducing vector-host contact in the Asian context



## African horse sickness

OIE Guidelines on preparedness and implementation of emergency vaccination in the Asian region



## African horse sickness a new threat to the region

Newly introduced in South East Asia, this disease threatens horses, donkeys, mules and zebras. It appeared in Thailand in early 2020 and could spread to YOUR COUNTRY.

African horse sickness (AHS) is a viral disease which can kill up to 95% of affected equids

It is spread by tiny flying insects, midges, also called *Culicoides*



#### When to suspect AHS?

- Fever (39.4°C/103.1°F)
- Difficulty to breathe, spasmodic coughing, dilated nostrils with frothy fluid oozing out
- Swelling of the suprascapular fossa, eyelids, facial tissues, neck, thorax, trachea or shoulders
- Redness of conjunctiva
- Mortality of equids (horses, donkeys, mules and zebras)



#### What to do in case of AHS suspicion?

- Contact the Veterinary Services.
- Prevent further spread of the disease by asking the animal owners/keepers to:



3. In the absence of specific treatment, you can provide supportive treatment to affected equids.



## Husbandry and movement patterns of equids in South-East Asia and the People's Republic of China



# Relevant Information

- WOAH Terrestrial Animal Health Code:  
<https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access/>
- WOAH Terrestrial Manual:  
<https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-manual-online-access/>
- WOAH African horse sickness resources:  
<https://www.woah.org/en/disease/african-horse-sickness/#ui-id-1>
- WOAH Asia-Pacific regional webpage on AHS:  
<https://rr-asia.woah.org/en/projects/african-horse-sickness/>
- Check the latest information on the evolution of LSD in the region:  
Consult the WAHIS platform: <https://wahis.woah.org/#/home>  
Subscribe to WAHIS alert:  
<https://www.woah.org/en/what-we-do/animal-health-and-welfare/disease-data-collection/info-list/>





# THANK YOU

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Kick-off meeting of the WOAH project to facilitate international horse movement in Asia and the Pacific region  
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