African Horse Sickness (AHS) in Thailand
Around 71% (3,866 horses out of 5,484) of horses in risk area (50km from infected farm) were vaccinated.
AHS situation in Thailand

8th June 2020

Disease occurs in 12 provinces; 27 districts in Thailand

<table>
<thead>
<tr>
<th>Province</th>
<th>#Farm</th>
<th>#Sick</th>
<th>#dead</th>
<th>≥ 4 wks</th>
<th>≥ 3 wks</th>
<th>≥ 2 wks</th>
<th>≥ 1 wks</th>
<th>&gt; 3 days</th>
<th>farms w/ new cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nakhon Ratchasima</td>
<td>56</td>
<td>460</td>
<td>436</td>
<td>50</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>Phetchaburi</td>
<td>21</td>
<td>44</td>
<td>40</td>
<td>16</td>
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<td>4</td>
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<tr>
<td>Saraburi</td>
<td>17</td>
<td>44</td>
<td>33</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Prachuap.</td>
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<td>19</td>
<td>19</td>
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<tr>
<td>Ayuttaya</td>
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<td>3</td>
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<td>1</td>
<td>1</td>
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<td>0</td>
<td></td>
</tr>
<tr>
<td>Chachoengsao</td>
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<td>0</td>
<td>0</td>
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<td>2</td>
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</tr>
<tr>
<td>Nakornnayok</td>
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<td>0</td>
<td>2</td>
<td>0</td>
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</tr>
<tr>
<td>Chonburi</td>
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<td>6</td>
<td>5</td>
<td>1</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>Chaiyaphum</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Ratchaburi</td>
<td>1</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Lopburi</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>121</td>
<td>597</td>
<td>556</td>
<td>94</td>
<td>11</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Number of new AHS cases (sick/dead)

- Total number of sick horses: 597
- Total number of dead horses: 556

Average 14 new cases/day

Not found new cases/day in the previous week
National Eradication plan of AHS in Thailand

แผนปฏิบัติการกำจัด
โรคการโรคแอฟริกาในม้า
(African Horse Sickness; AHS)
เพื่อคืนสถานภาพปลอดโรคจากองค์การโรค
ระบาดอัตราระหว่างประเทศของประเทศไทย
Timeframe of National Eradication plan of AHS in Thailand

Phase 1: Outbreak response phase
Apr – Sep 2020

Phase 2: Surveillance and prevention phase
Oct 2020 – Sep 2022

Phase 3: Reinstall AHS free status of Thailand
2022 – 2023
Phase 1: Outbreak response phase: Apr – Sep 2020

1. Integrated collaboration
2. Risk animal management: movement control, disease control
3. Effectively disease surveillance and control measures in Equidae
4. Vector control
5. Risk communication
6. Stakeholders collaboration and educated
7. International collaboration

Phase 2: Surveillance and prevention phase: Oct 2020 – Sep 2022

2. Equidae registration
3. Vector control
4. Clinical surveillance, Serological surveillance
5. Vector surveillance
6. Good farming management system >> Good agriculture practice
7. Development of disease surveillance system

Phase 3: Reinstate AHS free status of Thailand: 2022 – 2023
Public-Private Partnerships (TEF Suggestion)

3 Common Goals to Create PPP in Thailand

**Stakeholders in Horse Industry:**
- Identify by Horse Association*
- Equestrian
- Polo
- Racing
- Military
- National ID ของ DLD
  (beach, entertainment, leisure horses and also mules, donkeys, camels, zebras)

**Main responsibility:**
1. Report to OIE
2. Disease control (Movement, Vaccination, Census, Surveillance)
3. Import/Export Policy - for OIE & EU Audit

**Horse Industry + Veterinary Services (DLD)**

**Re-instate Free Status from OIE**

**Control Measurement on Zebra**

**Eradicate AHS Disease from Thailand**
Integrated collaboration

- Multisectoral collaboration:
  - University
  - Private sector:
    - Thailand Equestrian Federation
    - Thai Horse Racing Association
    - Thailand Polo Association

Official sector:
- Zoological park organization
- Royal stable Unit
- Department of National park, wildlife and plant Conservation

National Committee for AHS management
Approved by Ministry of Agriculture and Cooperatives

Technical Subcommittee

Vector control and research Subcommittee

AHS control in Zebra Subcommittee
Risk animal management: movement control, disease control

- 59 Animal Quarantine stations
- 31 International Animal Quarantine stations

https://newemove.dld.go.th/req
Disease surveillance and control measures in Equidae

Case definition of AHS

- Body temp > 38.5
- Depressed
- Sudden death
- Anorexia
- Conjunctival Edema

Notify DLD for further investigation and sampling collection

Outbreak response area

Risk assessment / Public relations

Disease surveillance

- Clinical surveillance
- Vector surveillance
- Active surveillance

In risk animal: Camel, Zebras, other Equidae

Vector control

Vaccination campaign

movement control

In risk animal: Camel, Zebras, other Equidae
National Eradication plan of AHS in Thailand

Outbreak response area planning for disease control purposes

1. Infected Zone: 20 km. radius from index point
2. Protection Zone: 50 km. radius from index point
3. Risk Zone: 100 km. radius from index point
Targeted province for AHS vaccination campaign
19 Provinces

- Nakhon Ratchasima
- Prachub kirichun
- Chonburi
- Phetchaburi
- Ratchaburi
- Sakaew
- Saraburi
- Lopburi
- Ayutthaya
- Nakornnayok
- Nonthaburi
- Ang-thong
- Singburi
- Chachoengsao
- Prachinburi
- Nakornprathom

Following control measure of vaccination campaign: Infected zone (20 km) and Protection zone (50 km)

Multi-Criteria Decision Analysis (MCDA) Procedure: Risk area analysis

Purpose: To limit outbreak area

Nakornratchasima: 101 stables
Ayutthaya: 19 stables
Phathumtani and Bangkok: 37 stables
Kanchanaburi: 1 stable

Outer protection Zone (50 km)
How to Vaccinate? : DLD Procedures

Netted before vaccination

Disinfectant program and insecticide control

Horse in netted urban

Horse identification by microchip
Registration in National identification database of DLD

Sampling, AHS testing

Ready for vaccination

Health check

Negative

Sampling, AHS testing
Temporary Vaccine Bank?