## Report on the 2013 African Horse Sickness outbreaks: update no 2



# agriculture, forestry & fisheries

Department: Agriculture, Forestry and Fisheries **REPUBLIC OF SOUTH AFRICA** 

Report by Dr Grietjie de Klerk

Directorate: Animal Health

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### **Reported outbreaks**

African Horse Sickness outbreaks are recorded from 1 September to 31 August of each year. Forty two (42) African Horse Sickness (AHS) outbreaks were reported since the start of the 2013 AHS cycle on 1 September 2012 as can be seen in Table 1.

Table 1: Reported African Horse Sickness outbreaks: 1 September 2012 to 23 January 2013.

Province	Outbreaks
Eastern Cape Province	19
Gauteng	9
Free State	0
Limpopo	0
KZN	8
Mpumalanga	4
North West Province	2
Northern Cape Province	0
Western Cape Province	0
TOTAL (1 September 2012 to 23 January 2013)	42

The distribution of the reported outbreaks is illustrated in Figure 1. The first outbreaks started in North West Province, Mpumalanga, Gauteng and in KZN during the October 2012 to December 2012 period with spread of disease to the ECP during January 2013.



Figure 1: Reported AHS Sickness outbreaks: 1 September 2012 to 11 January 2013

#### Serotypes detected in the current season

Serotypes 2, 4 and 6 were detected in samples submitted in the current season as can be seen in Figure 2. The serotypes were determined by RT-PCR at the Equine Research Centre, University of Pretoria (Test not DAFF approved).



Figure 2: AHS virus serotypes detected in the 1 September 2012 to 23 January 2013 period

#### Weather patterns and predictions

Favourable climatic conditions (summer rainfall) will increase the breeding and spread of the *Culicoides* vector and therefore the spread of AHS. Higher than average rainfall occurred in Gauteng, Northern Limpopo, KZN, parts of the NCP, the southern portion of the ECP and the western portion of the WCP during the July 2012 to October 2012 period. The percentage of normal rainfall is illustrated in Figure 2 and the dark blue areas received equal or more than a 100% above average rainfall.



The rainfall measured in the southern portion of the ECP, early in the season, could explain the high number of outbreaks that are occurring in ECP. It could also explain the absence of reported AHS outbreaks in the northern portion of the ECP (former Transkei).



Figure 4: Rainfall prediction for the February 2013 to April 2013 period

Information supplied by the South African Weather Service predicts higher than normal rainfall for the next three months over most of South Africa. A small area on the border between the WCP and the ECP could receive a slightly lower than normal to a slightly higher than normal rainfall.

## Precautions to limit outbreaks

Owners are encouraged to vaccinate their animals annually to limit the impact of the disease. All horses in RSA (except in the AHS free and surveillance zones in the Western Cape Province) must be vaccinated annually using a registered vaccine at the cost of the owner. The African Horse Sickness Vaccine from Onderstepoort Biological Products (Reg No, G116, Act 36 of 1947) is currently the only registered vaccine. It is important administer the vaccine **before** the start of AHS outbreaks.

It is advisable to stable horses at least two hours before sunset and keep them stabled for at least two hours after sunrise. This is the time period when the *Culicoides* midges are most active and known to be feeding. As *Culicoides* midges also colonize around stagnant water sources, all efforts should be made to prevent such pooling of water and to move animals away from these sources.

To prevent the introduction of the AHS virus into the AHS free zone which is part of the AHS controlled area of the WCP; all movements of horses to the AHS controlled areas area are subject to State Veterinary movement control (permit). The local State Veterinarian will advise on the AHS status of the relevant areas.

## **Reporting of outbreaks**

African horse sickness is a controlled animal disease in terms of the Animal Diseases Act, 1984 (Act 35 of 1984). Reporting of AHS outbreaks to State Veterinary Services is compulsory according to the Animal Disease Act, 1984 (Act 35 of 1984). Please contact the relevant Provincial Director, Veterinary Services, if the contact details of the State Veterinarian are unknown.

(http://www.daff.gov.za/vetweb/Contacts/Contact%20list%20Provincial%20Directors.htm).