

# African horse sickness control

Vaccination permissions 2020 season

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## Introduction

Annual vaccination against African horse sickness (AHS) is compulsory in South Africa (Animal Diseases Act, 35 of 1984) except in the AHS free and surveillance zones in the AHS controlled area in the Western Cape Province. Vaccination against AHS in these zones can only be performed following written approval from the Veterinary Services of the Western Cape Department of Agriculture (WCDOA). Permission to vaccinate against AHS is only granted for vaccination to be performed between 1 June and 31<sup>st</sup> October each year. This vaccination period is based on the potential for vaccine virus re-assortment/reversion to virulence and the risk of transmission during periods of increased vector activity<sup>1</sup>. The restricted vaccination period mitigates this risk.

The process for vaccination permissions is summarized and available online  $here^2$ . This report briefly summarises the vaccination permission applications that were received and the descriptive statistics of those permissions that were issued. Permissions are given on an individual horse basis, with horses associated with specific holdings, and the information is analysed as such.

## Summary of permissions issued

The total permission applications received are shown in Table 1 with their comparisons to previous seasons. Historically there are approximately 1100 applications received each year totaling an associated 7300 horses, and permissions are given for approximately 96%. It is likely that COVID-19 restrictions and impacts had an influence on the 2020 season as numbers were slightly lower than previous years. By far the majority (206 of 215 – 95.8%) of declined applications in 2020 related to invalid or non-existent passports – this is similar to previous years.

Table 1: Number of applications received for vaccination permissions with associated horses. Granted applications are shown with a percentage of the total in brackets.

Year	Applications received/Associated holdings	Total horses applied for	Total horses granted
2017	1078/647	7183	6893 (96%)
2018	1117/606	7277	7058 (97%)
2019	1108/610	7330	7044 (96%)
2020	976/567	6691	6476 (97%)

Thirty-nine veterinarians and veterinary practices were registered as the associated vet likely to perform the vaccination, with the top 5 practices responsible for vaccinating 78.13% of the permission granted horses (n= 6476), and the top 10 practices responsible for 90.5% of all permission granted horses.

AHS Vaccination permissions report: 2020 season



Weyer, C.T. et al., 2016. African horse sickness caused by genome reassortment and reversion to virulence of live, attenuated vaccine viruses, South Africa, 2004–2014. Emerging Infectious Diseases, 22(12).

<sup>2</sup> http://jdata.co.za/myhorse/documents/infographics/Vaccination%20Schema/1.%20Vaccinating%20against%20AHS%20in%20the%20Free%20and%20Surveillance%20Zone.pdf

Table 2 shows the reasons that were provided by applicants (granted horses only) when requesting permission to vaccinate. The majority (89.4%) were to enable horses to comply with AHS movement requirements. This is also similar to previous years.

Table 2: Reasons provided for the vaccination of horses.

Overarching reason	Count
Movement requirements – current and for future events	5789 (89.4%)
Individual protection (owner and yard)*	667 (10.3%)
Insurance	20 (0.3%)
Total	6476

\*Individual protection is cited when owners/yard managers believe that the risk to their horse (based on movement risk or prior involvement in outbreaks) justifies vaccination.

We now have four years of detailed, individual horse information for the vaccination permission process in the AHS controlled area. 4457 (4556 in 2018-2019) horses that were granted permission in 2020 had also been granted permission in 2019, making up 68.8% (62.1% in 2018-2019) of the total for the year. 2211 horses were granted permission to be vaccinated in 2017, 2018, 2019 and 2020, accounting for 34.1% of permission granted horses in 2020. There are currently 16318 horses registered in the AHS surveillance and free zone.

#### Conclusion

Vaccination coverage within the AHS controlled area, including the AHS surveillance and free zone continues to be fairly comprehensive with approximately 40-50% of the known population being vaccinated based on permissions requested during any year. 13342 different horses have been vaccinated in the AHS surveillance and free zone in the last 4 years (i.e. since 2017). A high number of those horses though are associated with repeat requests from year to year, and also since vaccination is a prerequisite for movement into the controlled area, any new adult horses entering the controlled area will be vaccinated already.

#### **References and Acknowledgements**

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