



SA EQUINE
HEALTH & PROTOCOLS
EXPORTS SOUTH AFRICA

African horse sickness control

Vaccination permissions

2022

JD Grewar, CT Weyer, D Carter & LS van Helden
2022



**Western Cape
Government**
FOR YOU

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 31st 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 activity¹. 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. The number of unique applications and horses applied for have decreased over the years with 2022 the lowest to date at 890 applications for 6530 horses. In 2022 the majority (86 of 123 – 70%) of declined applications in 2022 related to invalid or non-existent passports, with only 3 (down from 24 in 2021) horses declined due to incomplete applications.

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%)
2021	920/568	6775	6643 (98%)
2022 (this report)	890/529	6530	6407 (98%)

Thirty-nine veterinarians and veterinary practices were registered as the associated vet likely to perform the vaccination (same as 2020 and up from 37 in 2021), with the top 5 practices responsible for vaccinating 79.4% of the permission granted horses (n= 5086 of 6407), and the top 10 practices responsible for 91.3% of all permission granted horses.

Table 2 shows the reasons that were provided by applicants (granted horses only) when requesting permission to vaccinate. The majority (91.1%, up from 89.4% in 2021) were to enable horses to comply with AHS movement requirements. This is also similar to previous years.

¹ 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).

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

Table 2: Reasons provided for the vaccination of horses.

Overarching reason	Count
Movement requirements (current and for future events)	5839 (91.1%)
Individual protection (owner and yard) *	538 (8.4%)
Insurance	30 (0.4%)
Total	6407

*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 six years of detailed, individual horse information for the vaccination permission process in the AHS controlled area. 4271 horses that were granted permission in 2022 had also been granted permission in 2021 (compared to 4195 in 2002 - 2021 and 4457 in 2019 -2020), making up 66.7% (63.14% in 2020-2021) of the total for the year. Across six years: 1369 horses were granted permission to be vaccinated in 2017 through 2022, accounting for 21.3% of permission granted horses in 2022. There are currently 18347 horses registered in the AHS surveillance and free zone.

When vaccination permissions are requested it is for prospective vaccination, and follow up verification of said vaccination is not specifically undertaken. Below we evaluate the horses that have been granted vaccination permission since 2017, and to query the movement database to establish what percentage of those granted permission would reasonably have required it. Since 2017: a total of 16549 individual horses have obtained permission to be vaccinated. Of these, 67.2% have moved in a fashion that would have required AHS vaccination. Of the remaining 32.8%: the primary reason permission was requested was on the basis for movement or competition (83.2%) and individual horse/yard protection (15.6%).

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. 16549 different horses have been vaccinated in the AHS surveillance and free zone in the last 6 years (i.e., since 2017). A high number of those horses 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

We are grateful to both horse owners and veterinarians for their patience during the vaccination permission season. We are grateful for the continued support of the Western Cape Veterinary Services who assist in this program and in particular Dr Gary Buhrmann from State Vet Boland. We acknowledge team members from the SAEHP: Danielle Pienaar; Esthea Russouw; Marie van der Westhuizen; Johanne Jacobs and Lizel Germishuys who performed much of the data processing for the vaccination permission system.