

Vaccinations permissions Report – AHS surveillance and free zone – 2017

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Introduction

Annual vaccination against African horse sickness (AHS) is compulsory in South Africa according to the Animal Diseases Act, 35 of 1984 (Anon. 1984), except in the AHS free and surveillance zones in the AHS controlled area in the Western Cape Province. Vaccination against AHS in the surveillance and free zones can only be performed following an application process and after written permission has been received to vaccinate from the Veterinary Services of the Western Cape. Permission to vaccinate will only be 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 reassortment/reversion to virulence and the risk of transmission during periods of increased vector activity (Weyer et al. 2016). The restricted vaccination period to a period of decreased vector activity mitigates this risk.

This report details the AHS vaccination permissions that were given for the 2017 AHS vaccination period in the AHS free and surveillance zone. During 2017 vaccination permissions were integrated into the same data system that is used in the Western Cape for equine disease surveillance, outbreak and movement data. For every application, the individual horses and their farm of origin, including location information, needed to be registered on the system. In addition, as is often the case with a new system, many of the initial applications were incomplete or incorrectly completed. All of the above resulted in a delay for the initial applicants (in total applications were processed in a median time of 16 days), which should not recur in 2018 as applicants will be more aware of the requirements and the majority of the horses will already be registered on the system through applications to vaccinate in 2017, and through the movement control system. In addition, in 2018, horse owners will be encouraged to submit applications for their individual horses instead of veterinary practices applying on their behalf. This should improve the quality of information that is received. A sample of the report is included here as an annexure and permissions to vaccinate are issued to both the applicant and the veterinarian associated with the application.

Process

Figure 1 illustrates the vaccination permissions process where application for individual horses is made to State Vet Boland who issues permissions on behalf of the Chief Director for Veterinary Services in the Western Cape. Applications to vaccinate between 1 June and 31 October 2018 will be accepted from 1 March 2018 and close on the 20th September 2018.

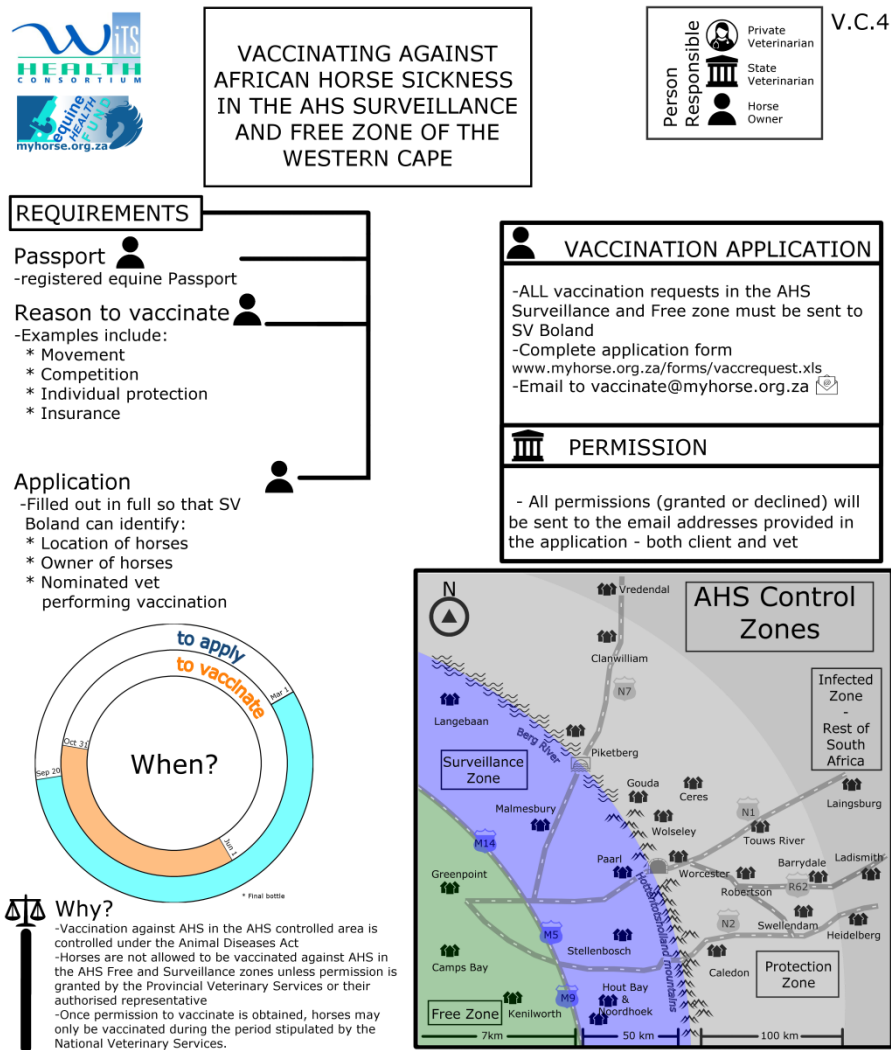


Figure 1: Infographic illustrating the vaccination application and permission process for the AHS surveillance and free zones of South Africa.

Results

For the 2017 vaccination season a total of 1078 applications were received to vaccinate 7183 individual horses on 647 holdings. Permission was granted for 6893 (96%) horses and declined for 290 horses. The primary reason permission was declined was where the horse did not have a passport or the passport did not comply with the minimum requirements.

Forty veterinarians were registered as the associated vet likely to perform the vaccination, with the top 5 practices responsible for vaccinating 67% of the horses.

Table 1 shows the reasons that were provided by applicants when requesting permission to vaccinate. By far the majority (96%) were to enable horses to comply with AHS movement requirements.

Table 1: Reasons provided for the vaccination of horses.

| Overarching reason | Specific reason | Count | Aggregated count |
|--|------------------------------|-------|------------------|
| Movement requirements – current and for future events | Future breeding | 320 | 6912 |
| | Racing | 533 | |
| | Future export | 16 | |
| | Competition body requirement | 576 | |
| | Competition | 4331 | |
| | Movement | 1136 | |
| Individual protection* | | | 266 |
| Insurance | | | 3 |
| Not provided | | | 2 |
| Total | | | 7183 |

*Individual protection is cited when owners believe that the risk to their horse (based on movement risk or prior involvement in outbreaks) justifies vaccination. They make up a small volume of the total requests

Conclusion

Vaccination coverage within the AHS controlled area, including the AHS surveillance and free zone has been relatively wide spread. This observation was first made by Sinclair et al. during the 2004 Stellenbosch outbreak (Sinclair et al. 2006). When the AHS surveillance program was reviewed in 2013, it was estimated that there were 14000 horses (total used in Sergeant et al. 2016) on 1400 properties in the free and surveillance zone. There are currently a total of 11565 horses registered on 943 properties in the equine dataset for the same area. As the AHS control system develops, it is estimated that by 31 October 2018, the number of registered horses on the data system will be close to the original estimate of 14000 horses. According to the vaccination permissions, vaccination coverage in the free and surveillance zone for the 2017 vaccination season would be in the region of 50%.

References and Acknowledgements

We are grateful to both horse owners and veterinarians for their patience during the transition to an amalgamated AHS vaccination permissions system. It is expected that the process will be quicker and smoother in 2018. Major advantages to having a centralised format include improved traceability and simpler reporting as the database can easily be queried. In addition, the database will support integrated research for the various methods of AHS control.

We are grateful for the continued support of the Western Cape Veterinary Services who assist in this program and in particular Drs Gary Bührmann and Aileen Pypers from State Vet Boland who reviewed this report, and Liezel Langeveldt and Lugen Govender who assisted in data capture. The authors of this document form part of the Wits Health Consortium – Equine Health Fund team who assist and are authorized to perform regulatory work of this kind. From the same team we acknowledge Danielle Pienaar, Esthea Russouw and Gillese de Villiers who performed much of the data processing for the vaccination permission system.

Literary sources listed below:


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Sergeant, E.S. et al., 2016. Quantitative Risk Assessment for African Horse Sickness in Live Horses Exported from South Africa. *PloS one*, 11(3), p.e0151757. Available at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0151757>.

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Annexure: Example of a permission report



Western Cape Government
Agriculture

Ref. 2017_311_726

African Horse Sickness Control: Permission to Vaccinate Horses

In terms of the regulations issued under the Animal Diseases Act, 1984 (Act 35 of 1984) and in compliance with the EU Commission Decision 2008/698/EC, permission is hereby granted for the vaccination of the horse(s) listed below using a registered African horse sickness vaccine.

Horses may only be vaccinated between 1 June and 31 October 2017 by a registered veterinarian and the vaccination must be recorded in the passport of the horse.

Holding ID: 12345
Holding Name: [Redacted]
Holding Address: [Redacted]

Client Corresponding Email: [Redacted]
Private Vet and Corresponding Email: [Redacted]

Horse ID, Name and Passport Details


| DECISION: granted | Total for Decision: 10 |
|--|------------------------|
| svbid:15257; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15255; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15261; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15262; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15260; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15254; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15253; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15258; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15256; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |
| svbid:15259; Name: [Redacted]; Passport: [Redacted]; Microchip: [Redacted] | |

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Private Veterinarian listed

Client requesting permission

Elsenburg



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Authorised Official

Place Stellenbosch

Report Date 10/08/2017 18:17:06