SA EQUINE
HEALTH & PROTOCOLS
EXPORTS SOUTH AFRICA

African horse sickness control

General surveillance

2025

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2025

Western Cape Government
FOR YOU

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Introduction

This report evaluates laboratory-based reporting of African horse sickness (AHS) across South Africa during 2025. We include both negative and positive test results that influenced the risk-based Area Status Declaration system for movement control of equids into and within the AHS controlled area (previous reports on the Area Status Declaration system can be found here). The purpose of AHS movement control is to limit the risk of AHS virus introduction into the controlled area.

An annual active-surveillance report covers the sentinel surveillance programme in the AHS free and surveillance zones. Surveillance is not limited to that programme: because AHS is a controlled (notifiable) disease, passive and other active surveillance occur nationally. Clinical investigations by veterinarians frequently include AHS testing and, since the adoption of RNA detection methods, PCR has become the test of choice.

In 2025, AHS testing was performed by Onderstepoort Veterinary Research (OVR), the Equine Research Centre – Veterinary Genetics Laboratory (ERC), and the Stellenbosch Provincial Veterinary Laboratory (SPVL). Through collaboration with these laboratories, and with support from the Department of Agriculture (DOA), the Western Cape Department of Agriculture, and the South African Equine Veterinary Association (SAEVA), SAEHP has had access to AHS test results since September 2017 and has captured them in the Equine Cause of Disease (ECOD) system since September 2018 (start of the 2018/19 AHS season). This report evaluates available data for the 2025 calendar year.

Data considerations

General data considerations have been discussed in previous reports. While this report focuses on laboratory-associated results, clinically diagnosed cases with an epidemiological link to a confirmed AHS case are also treated as cases for movement-control purposes even if no laboratory result exists.

In 2025, two clinically confirmed AHS cases and five additional suspect clinical cases were reported. We do not have data on the number of clinical investigations in which AHS was ruled out without laboratory testing. Differences in State-reported clinical case data are noted below.

Sentinel surveillance outputs are depicted in this report but are not discussed in detail as that programme is reported on in detail annually. Data are captured at the laboratory-report level; we assume horses on a single result report are from one epidemiological group but cannot verify this universally without further investigation.

Finally, totals here may differ from official DOA publications, which emphasise SR1 submissions and monthly disease returns. In 2025, DOA reported 233 cases, almost identical to the 232 cases presented in this report. Since this reporting comparison began in 2020, this is the closest alignment between the two values - historical comparisons since 2020 are summarised below.

Table 1: Comparison between this report AHS case totals and those reported by the national South African Government

Year	% of Government cases represented here
2025 **Year under review**	~100% (233 DOA vs 232 in this report)
2024	*~111%*
2023	*112%*
2022	*92%*
2021	*95%*
2020	*90%*

Results

General results

A total of 4519 individual horse laboratory test results were captured in 2025; 95% were negative and 5% were positive. A concise breakdown, with 2022-2024 data shown in parentheses, is provided below.

Table 2: Summary of AHS diagnoses (laboratory vs clinical)

Diagnosis method	AHS status			Total tested
	Confirmed	Suspect	Negative*	
Laboratory	**230** *(100;398;203)*	**6** *(6;4;1)*	4283 *(2018;2392;1350)*	**4519** *(2124;2794;1554)*
Clinical	**2** *(2;2;7)*	**5** *(2;11;74)*	NA	**7** *(4;13;81)*
Total	**232** *(102;400;210)*	**11** *(8;15;75)*	**4283** *(2018;2392;1350)*	**4526** *(2128;2807;1635)*

**Please note that previous years did not include sentinel surveillance which has now been included in 2025, so negative laboratory tests and overall test counts will be higher in this report as a result of that.*

Laboratory-confirmed cases increased year on year by 130% from 2024 to 230 confirmed.

Spatial and temporal depiction of AHS surveillance

To allow for areas and months to be compared this section only includes results from laboratory-based testing (n=4519) with the associated 230 confirmed AHS cases by laboratory testing (see Table 2).

Summaries of location (Province and Municipality) and reason for testing

Figure 1 shows the temporal spread of testing per province during the 2025 calendar year with a comparison to 2021 through 2024 in **Figure 2**, although note that different y-axis scales are used in the latter. The epidemic curve of laboratory confirmed AHS cases is overlaid in the main plot of **Figure 1**. The provincial and municipal breakdown of testing is spatially shown in Figure 3 and **Figure 4** respectively.

Gauteng (n=1226) and the Western Cape (n=2821) tested the most horses accounting for ~90% of all testing during the year. Generally sampling across provinces remained stable compared to previous years with the moderate declines in the Eastern Cape Province and KwaZulu Natal, and the large increase in Gauteng. Sampling generally follows the AHS epidemiologic pattern with most samples taken in March, April and May – and this pattern is particularly evident for the diagnostic and pre-movement testing. The total AHS cases in the country rose by 130% from 2024's levels and this is likely to account for the 118% increase in diagnostic testing for the year.

There are three primary reasons for testing for AHS in South Africa – diagnosis of disease (clinical investigation), movement control (including pre-export testing) and sentinel surveillance. The facetted panels in **Figure 1** show the temporal distribution for each reason depicted over 2025. While sentinel sampling remains fairly constant the diagnostic and movement associated testing follows the disease trend.

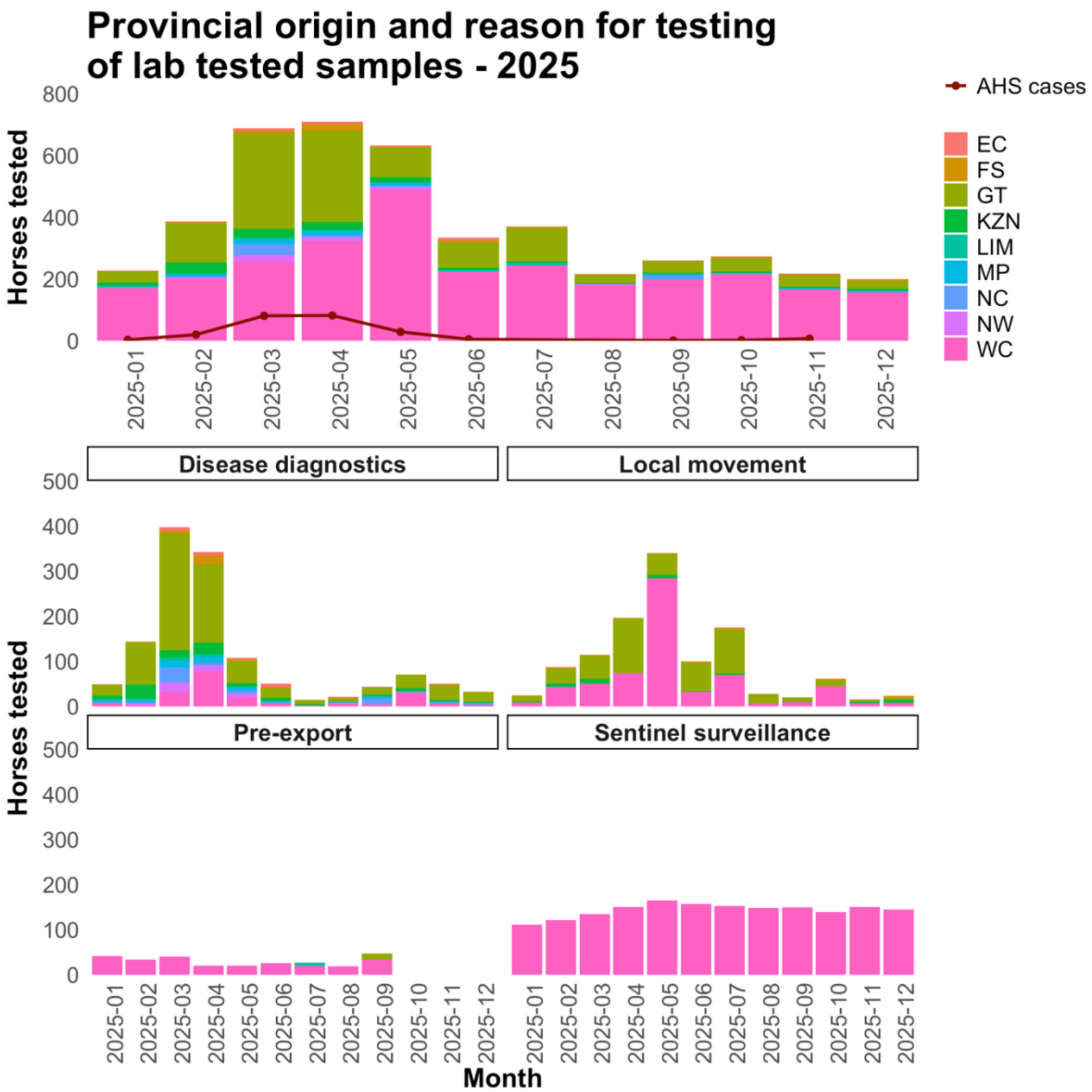

Figure 1: Monthly testing by province for 2025 with the epidemic curve of lab-confirmed cases overlaid (top panel). The four panels below reflect the testing performed by purpose – disease diagnostics, local movement, pre-export screening and sentinel surveillance. ***EC – Eastern Cape; FS – Free State ;GT – Gauteng; KZN – KwaZulu Natal; LIM – Limpopo; MP – Mpumalanga; NC – Northern Cape; NW – North-West; WC – Western Cape***

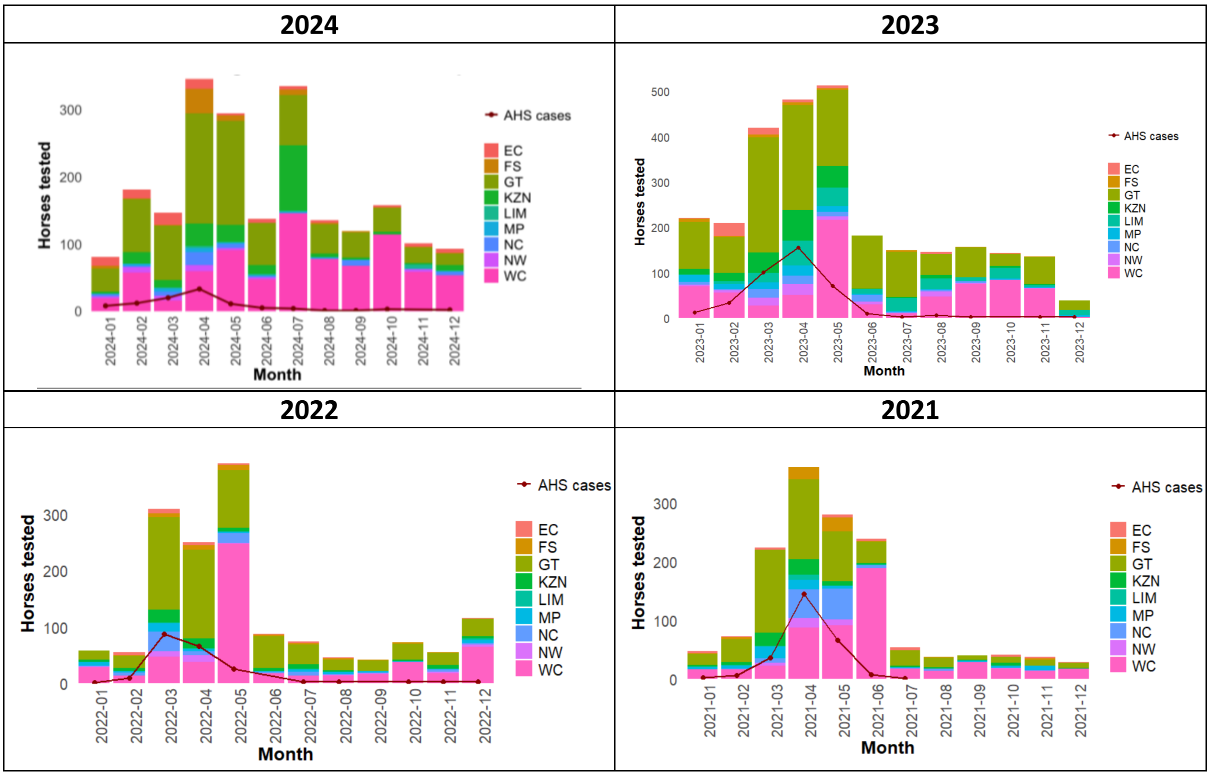

Figure 2: Historical monthly testing by province: 2021–2024.

Figure 5 and **Figure 6** shows positive case distribution by Province and Municipality respectively. Occurrence followed an expected pattern most cases occurred in Gauteng (n=123). Compared to previous years there was a general absolute increase in cases across the country with the exception of the Eastern Cape. The increase in Gauteng is particularly significant, especially in light of relatively low cases in KwaZulu Natal and the Eastern Cape Province.

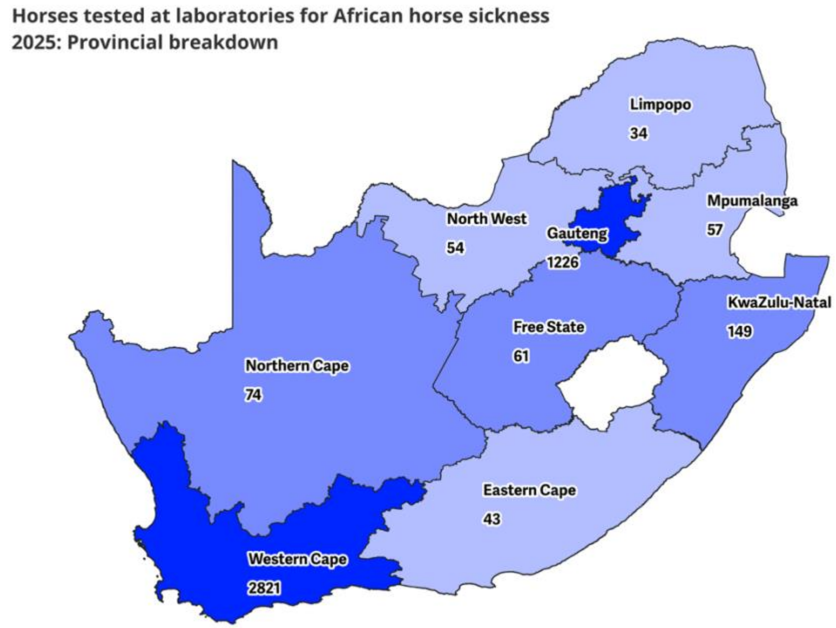

Figure 3: Spatial distribution of tests in 2025 by province.

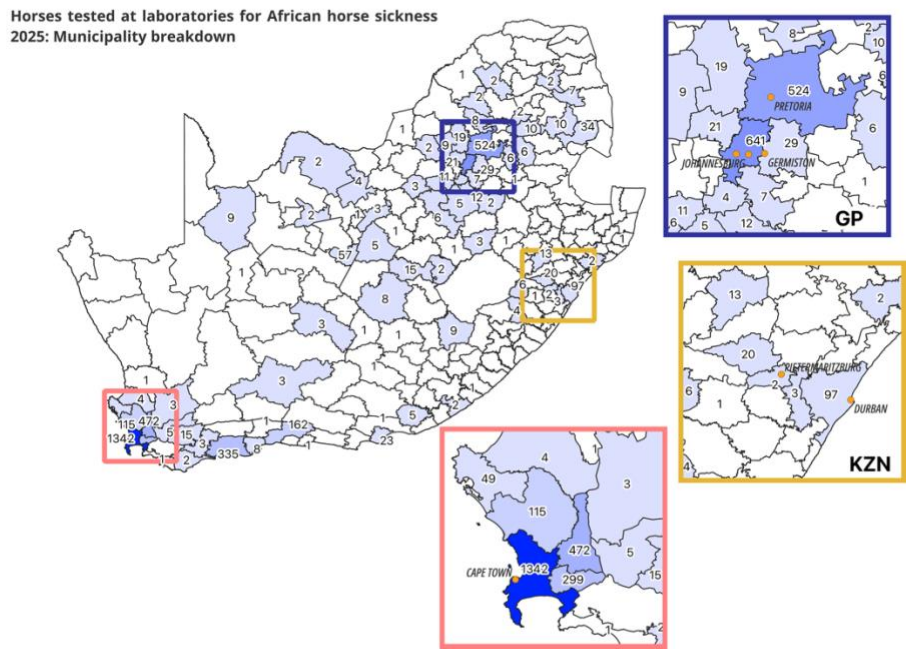

Figure 4: Spatial distribution of tests in 2025 by municipality. Highlighted locatins are in the Gauteng (GP), KwaZulu-Natal (KZN) and Western Cape regions where higher volumes of tests were performed.

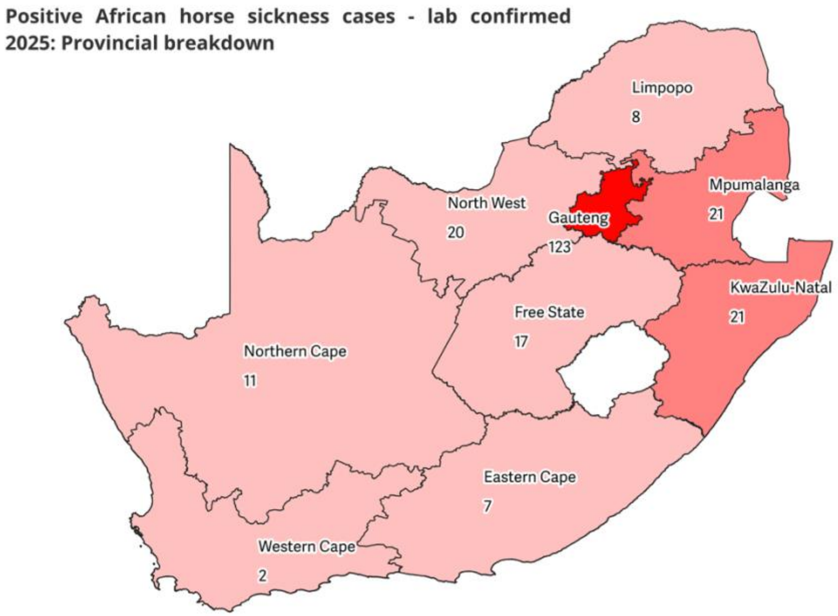

Figure 5: Positive cases of AHS by province

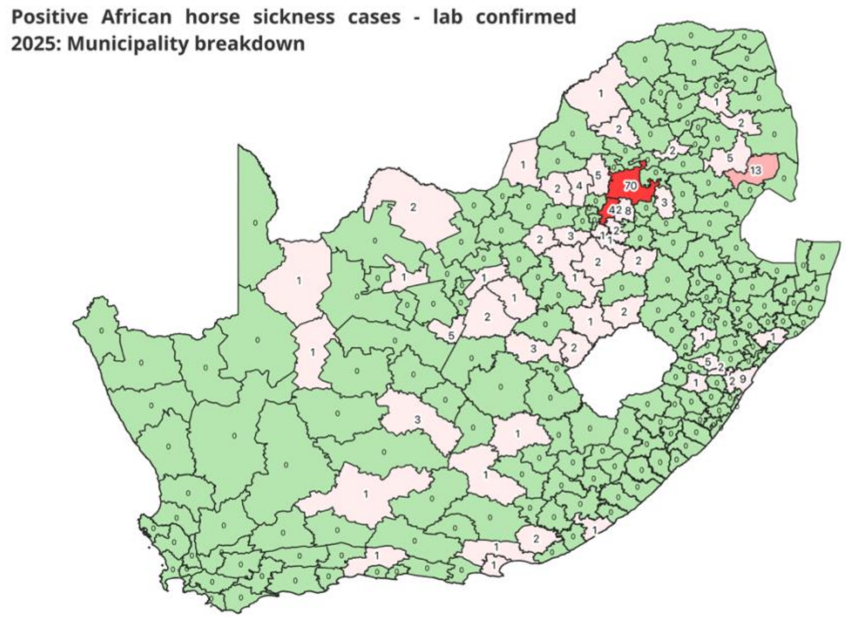

Figure 6: Positive cases of AHS by municipality

AHSV-type specific results

In 2025, SAEHP collaborated with the Equine Research Centre (University of Pretoria) to facilitate AHSV-type specific testing of positive AHS samples from that year. A total of 191 typing results were identified from 169 positive samples. Detailed findings are presented in **Figure 8**. All nine types were detected in South Africa in 2025. Type 9 was at the highest relative frequency of identified types (n=35; 18.3%), while Types 2, 3, 4, 6, and 7 each accounted for more than 10% of all positive results.

Gauteng accounted for the majority of results (59%; n=113), with the type distribution mirroring the national trend. In this province, Type 7 (19.5%) and Type 9 (15.9%) were the most common. Notably, AHSV-6 and AHSV-7 were strongly associated with Gauteng: 60% of the 25 positive AHSV-6 samples and 71% of AHSV-7 samples originated from this province.

AHSV Type 1 (n=10; 5.2% of total positives) was only detected in Gauteng and North West provinces.

AHSV Type 8 (n=7) occurred at the lowest frequency in 2025: identified in the Eastern Cape, Mpumalanga, and Gauteng. The Eastern Cape, although relatively unaffected by AHS in 2025, reported only sporadic cases of AHSV-3, AHSV-4, AHSV-8, and AHSV-9.

Mpumalanga had the third highest number of positive type results (n=16; 8.4%), but did not record any cases of AHSV-6 or AHSV-7, despite these types being present in other provinces with similar testing volumes. Consider that Gauteng borders Mpumalanga, and AHSV-6 and AHSV-7 were detected in high proportions there.

KwaZulu-Natal, the second most affected province (n=18; 9.4%), had no positive results for AHSV-2 or AHSV-4, even though these types were reasonably well distributed in other provinces. KZN was most affected by AHSV-9.

The temporal occurrence of each AHSV type is depicted in **Figure 7**. Most types followed general disease occurrence patterns (see **Figure 1**) – of interest may be the occurrence of AHSV-2 which was the only type detected after the winter months.

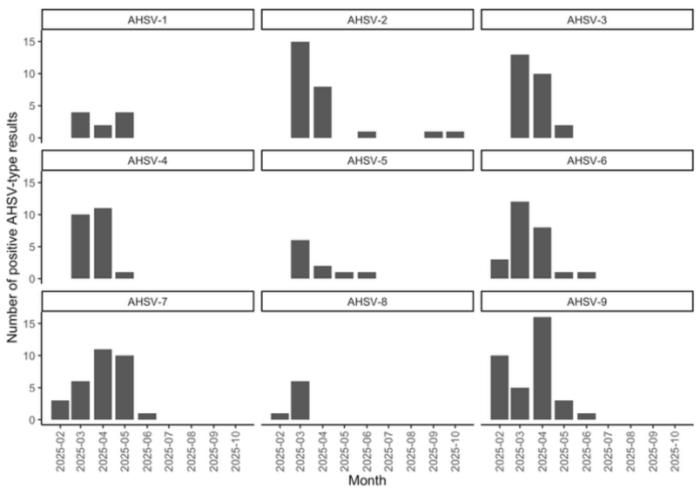

Figure 7: Temporal occurrence of AHSV types in 2025

Province	Results	Between Province Percentage (BPP)	AHSV-1			AHSV-2			AHSV-3			AHSV-4			AHSV-5			AHSV-6			AHSV-7			AHSV-8			AHSV-9		
			Results	Within Province Percentage (WPP)	BPP	Results	WPP	BPP	Results	WPP	BPP	Results	WPP	BPP	Results	WPP	BPP	Results	WPP	BPP	Results	WPP	BPP	Results	WPP	BPP	Results	WPP	BPP
GT	113	59.2	8	7.1	80	15	13.3	57.7	17	15	68	11	9.7	50	4	3.5	40	15	13.3	60	22	19.5	71	3	2.7	42.9	18	15.9	51.4
KZN	18	9.4	0	0	0	0	0	0	1	5.6	4	0	0	0	2	11.1	20	4	22.2	16	3	16.7	9.7	0	0	0	8	44.4	22.9
MP	16	8.4	0	0	0	3	18.8	11.5	1	6.3	4	5	31.3	22.7	1	6.3	10	0	0	0	0	0	0	2	12.5	28.6	4	25	11.4
FS	14	7.3	0	0	0	3	21.4	11.5	1	7.1	4	2	14.3	9.1	1	7.1	10	1	7.1	4	4	28.6	12.9	0	0	0	2	14.3	5.7
NC	11	5.8	0	0	0	3	27.3	11.5	3	27.3	12	1	9.1	4.5	1	9.1	10	2	18.2	8	0	0	0	0	0	0	1	9.1	2.9
NW	10	5.2	2	20	20	2	20	7.7	1	10	4	0	0	0	1	10	10	1	10	4	2	20	6.5	0	0	0	1	10	2.9
EC	4	2.1	0	0	0	0	0	0	0	0	0	1	25	4.5	0	0	0	0	0	0	0	0	0	2	50	28.6	1	25	2.9
LIM	4	2.1	0	0	0	0	0	0	1	25	4	1	25	4.5	0	0	0	2	50	8	0	0	0	0	0	0	0	0	0
WC	1	0.5	0	0	0	0	0	0	0	0	0	1	100	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	191	100	10	5.2	100	26	13.6	100	25	13.1	100	22	11.5	100	10	5.2	100	25	13.1	100	31	16.2	100	7	3.7	100	35	18.3	100

Figure 8: Detailed AHSV-type results across Province and AHSV type in 2025. Row and Column percentages reflect the within and between province spread of results respectively.

Laboratory involvement

Figure 9 shows the breakdown of testing performed at the different laboratories for diagnostic purposes, movement control and sentinel surveillance. The ERC remains the mainstay of most AHS testing for the year. The monthly sentinel testing in the AHS surveillance zone was also tested at ERC again in 2025 where the same cohort of horses are tested from month to month and which approximately accounts for ~38% of the total number of tests performed. Compared to 2024 the number of samples tested for diagnostic purposes increased 55% from 854 samples tested to the 1327 in 2025.

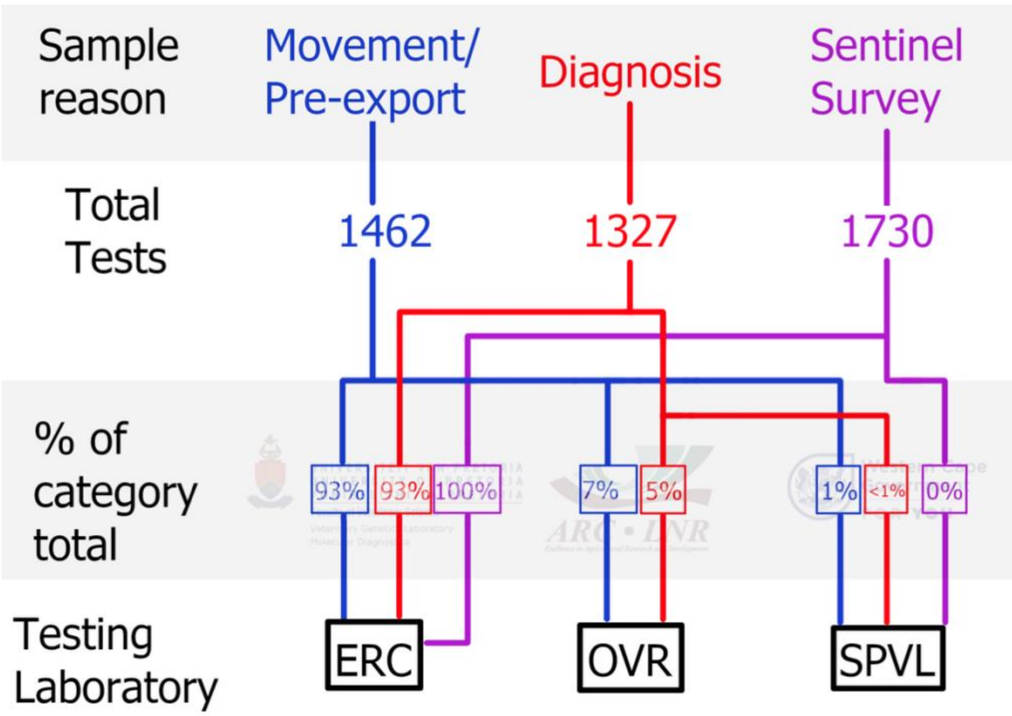

Figure 9: Reason for sampling breakdown by laboratory in 2024.
ERC – Equine Research Centre – Veterinary Genetics Lab;
OVR – Onderstepoort Veterinary Research;
SPVL – Stellenbosch Provincial Veterinary Laboratory

Discussion and acknowledgements

This seventh consolidated annual report combines positive and negative AHS results nationwide, providing a baseline for testing volumes, reasons for testing, and laboratory contributions. These insights support continual refinement of South Africa's risk-based AHS control approach.

AHS case totals rose in 2025 compared to 2024, although not quite up to the levels seen in 2023, with most cases still in Gauteng. The Eastern Cape was less affected than expected. Testing volumes also increased, likely reflecting higher disease occurrence and greater diagnostic demand. Based on weather data summarised from the annual South African

Weather Service report[i], South Africa had a warm year in 2025 with above-normal rainfall and widespread flooding across most of the country, especially the eastern provinces like KwaZulu-Natal—conditions that typically favour midge populations and elevate AHS transmission risk. The notable exception was the Western Cape, which trended dry to drought-stricken by year-end, a pattern that would generally suppress midge activity and AHS risk in that region.

This is the first time AHSV type analysis has been included in this report. While the findings are exploratory, several interesting patterns were noted. Type-specific testing in 2025 showed considerable AHSV diversity, with all nine types identified nationally. Although AHSV-9 was the most frequently detected type, substantial activity of Types 2, 3, 4, 6 and 7 was also observed. Gauteng accounted for most detections and appeared to be particularly important for AHSV-6 and AHSV-7 circulation. Differences between provinces suggest that AHS activity was not uniform across the country and was likely influenced by factors such as horse populations, movement patterns, local vector conditions, and surveillance activity. While underreporting in the Eastern Cape is possible, the pattern seen there (sporadic occurrence across multiple AHSV types) may suggest repeated introductions with limited onward spread. The detection of AHSV-2 later in the season than other types is also notable and may be worth monitoring in future years.

We thank DOA and Provincial Veterinary Services for ongoing access to laboratory results, and OVR, ERC, and SPVL for making their data available to the Boland State Veterinary Office, on whose behalf SAEHP performs this analysis. The ECOD system, developed with SAEVA, underpins reporting of equine diseases and syndromes in South Africa. SAEHP continues to maintain ECOD.

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[i] https://www.weathersa.co.za/Documents/Corporate/Annual%20State%20of%20the%20Climate%202025_15042026114512.pdf