



Merck Animal Health News from the Equine Biosurveillance Program

Spring 2023 Vol. 4, No. 1

Our Equine Biosurveillance Program continues to gain popularity as it enters its 4th year!

Over time, participating practices have learned how to better utilize the program's offerings in terms of diagnostic support. In fact, they are further capitalizing on the free testing Merck Animal Health offers them through the program. We're also seeing more and more interest from practices which have yet to join the program. In practice, this translates into ever more frequent requests for information about the program's benefits and terms.

We're very pleased by the enthusiasm our program is generating throughout Canada. More specifically, we're thrilled to be able to help equine practitioners obtain quick laboratory testing during outbreaks of acute respiratory disease, but also to be able to contribute to better knowledge of the epidemiology of pathogens causing these outbreaks.

As in previous editions, this issue presents up-to-date data collected through our program (from the year 2022).

You will also find an overview of data collected since the program's launch in spring 2019 so as to provide a broader perspective.

We hope this data will be useful to you, and we invite you to continue to get the most out of our program developed for the benefit of practices like yours.

Enjoy!

Analysis Results for Samples Received Between January 1 and December 31, 2022





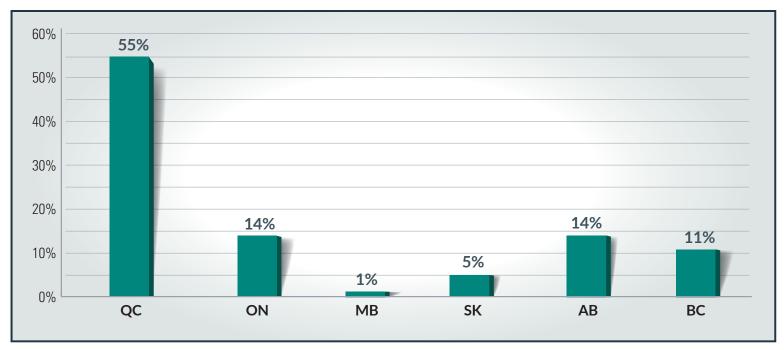
Percentage of samples

positive for at least
one of the program's
targeted pathogens

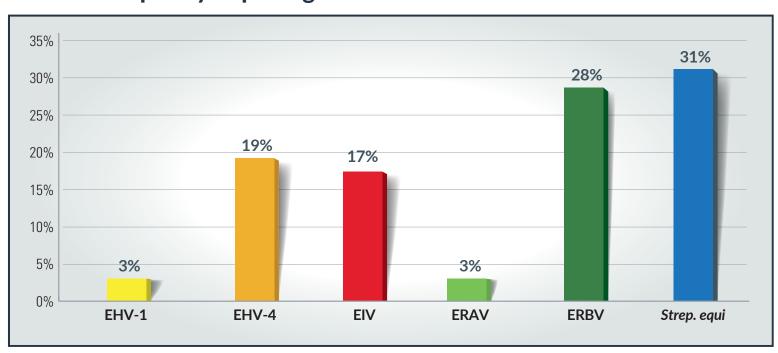




Origin of samples submitted in 2022

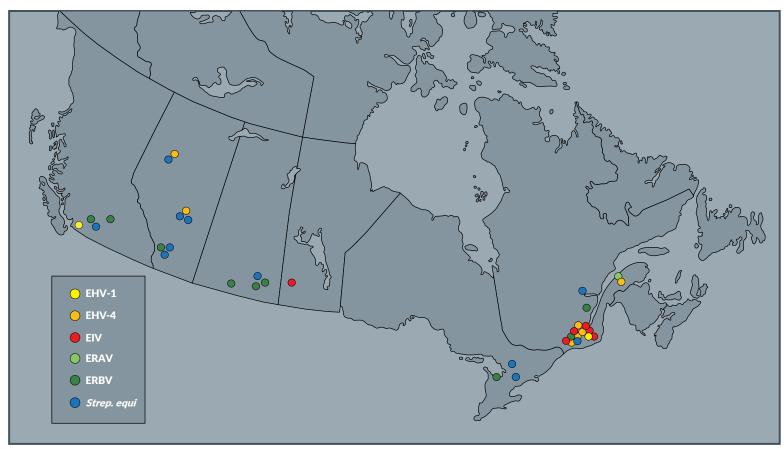


Relative frequency of pathogens identified in 2022





Location of positive results in 2022



Demographic data on horses testing positive for targeted pathogens in 2022

Pathogen	Median Age (Years)	Min. – Max. Age (Years)	Transport*	Occupation				
				Racing	Shows	Pleasure	Repro.	Unknown
EHV-1	6.0**	6.0**	0%	0%	100%**	0%	0%	0%
EHV-4	1.0	0.25 - 3.0	0%	0%	43%	29%	14%	14%
EIV	13.0	3.0 - 20.0	33%	0%	50%	33%	17%	0%
ERAV	2.0**	2.0**	100%**	0%	100%**	0%	0%	0%
ERBV	2.0	1.0 - 15.0	0%	0%	30%	50%	10%	10%
Strep. equi	9.0	0.5 - 24.0	9%	0%	18%	55%	18%	9%
All cases of resp. illness	3.0	0.25 - 24.0	11%	0%	36%	42%	14%	8%

 $^{^{*}}$ Horse transported within the 14 days preceding the onset of clinical signs.

^{**}Only one horse.



Summary of Data Collected Since the Program Began (April 2019 to December 2022)

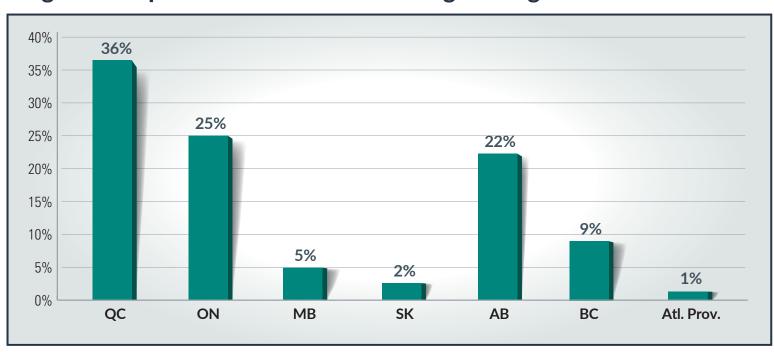




Percentage of samples

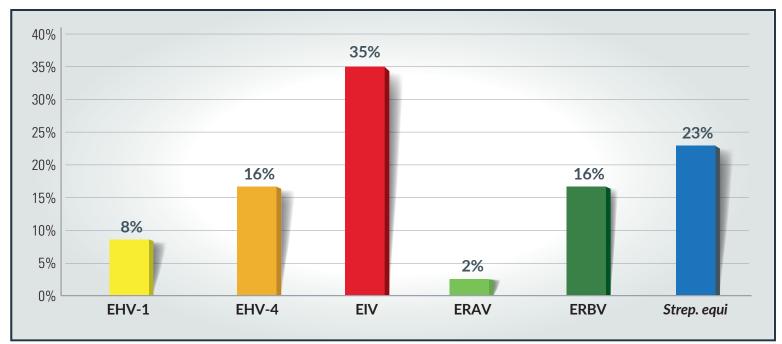
positive for at least
one of the program's
targeted pathogens

Origin of samples submitted since the Program began

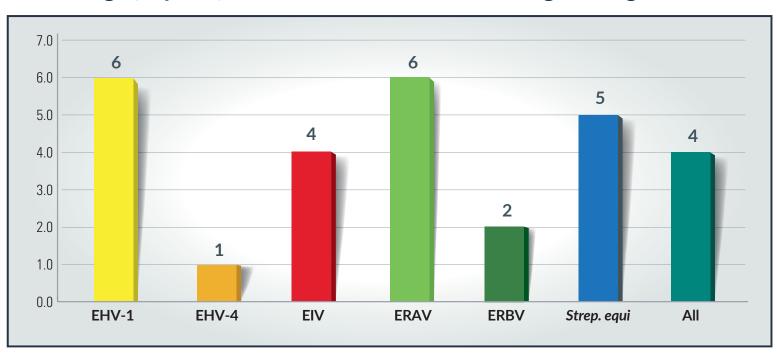




Relative frequency of pathogens since the Program began



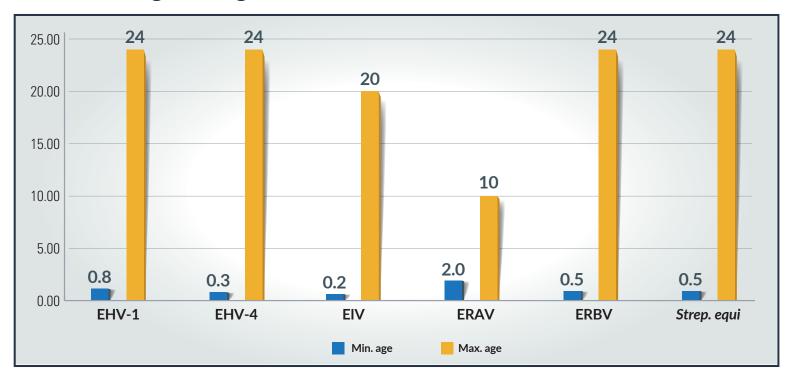
Median age (in years) of cases detected since the Program began



Merck Animal Health News from the Equine Biosurveillance Program



Minimum and maximum age (in years) of cases detected since the Program began



Demographic data on horses testing positive for targeted pathogens since the Program began

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Pathogen	Racing	Shows	Pleasure	Repro.	Unknown	Transport*	
EHV-1	33%	25%	42%	0%	0%	8%	
EHV-4	25%	29%	29%	13%	4%	17%	
EIV	27%	25%	42%	4%	2%	47%	
ERAV	0%	67%	33%	0%	0%	33%	
ERBV	4%	28%	52%	8%	8%	16%	
Strep. equi	17%	26%	48%	3%	6%	26%	
All cases of resp. illness	21%	27%	43%	5%	4%	29%	

^{*}Horse transported within the 14 days preceding the onset of clinical signs.

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Reminder of Inclusion Criteria to Submit a Sample to the Merck Animal Health Equine Biosurveillance Program



The sampled horse **must** demonstrate:

 An acute onset of unexplained fever: T ≥38.6°C (101.5°F)

The horse must <u>also</u> demonstrate <u>one or more</u> of the following clinical signs:

- Nasal discharge
- Cough
- Acute onset of neurological signs, such as ataxia, recumbency, etc.

These criteria **must** be met for the sample to be tested as part of the program.

Questions or comments?

The Merck Animal Health Equine Biosurveillance Program was developed to suit the needs of equine practitioners. However, if you have questions or suggestions for improvements, feel free to contact our Technical Services veterinarian, Dr. Serge Denis, at:

Serge Denis DMV

serge.denis@merck.com Cell: 514-730-6802

We thank you for participating in the Merck Animal Health Equine Biosurveillance Program, which benefits the entire community of veterinarians involved in equine practice across Canada.

