



National Equine Health Survey (NEHS) 2017

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NEHS 2017 in numbers

- 5235 people took part (5635 in 2016) and returned records for 15,433 horses (16,751 in 2016).
- 59% of horses were healthy (i.e. had no health problems recorded) and 41% of horses had one or more health problems recorded, compared to 62% and 38% respectively in 2016.
- The most frequent general disease syndrome recorded was skin disease, accounting for one third of all problems reported.
- The 'Top Five' broad categories of disease syndromes recorded were skin problems (31% of all syndromes recorded), lameness including laminitis (23%), metabolic diseases (8.1%), eye problems (7.6%), gastrointestinal diseases (7.5%).
- The Top Five individual disease syndromes recorded were proximal limb (non-foot) lameness (11.7% of all syndromes recorded), laminitis (6.5%), mud fever (6.1%), sweet itch (6.1%), and PPID ('Equine Cushing's Disease') (6.0%).
- Diseases of the foot, excluding laminitis, accounted for 22% of all lameness (31.9% in 2016) (5.1% of all syndromes reported; 10.5% in 2016).
- Laminitis was frequently reported with a prevalence of 6.5% of all syndromes (6.8% in 2016) (28% of all lameness; 20.7% in 2016); 49% of laminitis cases were first episodes and 51% were repeat episodes (42% and 58% respectively in 2016). These laminitis prevalence data are consistent with previous NEHS surveys.
- Skin problems, including wounds, were the most commonly reported (31.1%; 25.5% in 2016) of all syndromes. Sweet itch and mud fever accounted for 39.3% of all skin diseases (53% in 2016) and 12.2% of all syndromes (13.6% in 2016).
- Sarcoids and melanoma were commonly reported (5.3% and 1.9% respectively; 5.1% and 1.7% in 2016). Wounds accounted for 11.1% of skin problems reported (3.5% of all syndromes), and pinworm (*Oxyuris equi*) for 5.2% of skin problems (1.6% of all syndromes).
- Aside from skin disease, the other most frequently reported medical syndromes were metabolic diseases (8.1% of all syndromes reported), eye diseases (7.6%), gastrointestinal problems (7.5%), respiratory diseases (5.9%), PID/Equine Cushing's Disease (6.0% of all syndromes; 6.6% in 2016) and Recurrent Airway Obstruction/Heaves/Equine Asthma (5.0% of all syndromes; 5.6% in 2016).
- As in previous years, infectious respiratory diseases were infrequently reported (0.9%; 0.9% in 2016), with strangles the most frequently reported specific respiratory disease (17% of infectious disease returns; 57% in 2016).
- Also as in previous years, dental disease and back problems were frequently reported (5.6% and 5.5% of all syndromes reported respectively; 5.1% and 5.5% in 2016).
- 76.3% of horses were recorded as having a body (fat) score of 2.5-3.5 (76% in 2016), with 4.9% (5.5% in 2016) recorded as being thin (score 0-2.5) and 18.8% (18.6% in 2016) recorded as overweight (score 3.5-5).

- Nearly two thirds of respondents carried out worm (faecal) egg counts during the grazing season with the majority of people (39%) carrying these out at four-monthly intervals.

Survey method

- The ninth NEHS survey ran in May 2017. As in previous years, the survey was led by the Blue Cross, was conducted on-line and was open to respondents to complete for one week.
- The survey used the same format as previous years with owner-reported syndromic surveillance capturing a snap-shot of the spectrum of problems noted by owners for each horse under their care on the day they chose to complete the survey.
- The 2017 survey used the same broad disease syndrome descriptors to provide continuity of data with previous years. The 2017 contained fewer questions about specific causes of lameness and included supplementary questions on worm (faecal) egg counts and equine gastric ulcer syndrome. Supplementary questions were also included about which feed products respondents used.
- The disease syndrome descriptors were grouped into broad categories (eye problems, respiratory problems, internal medical problems, dental problems, lameness and laminitis, skin problems and back problems) to facilitate completion of the survey by respondents and a free text category to allow respondents to report other problems not listed in the syndrome descriptors.
- 43 individual disease syndrome descriptors covering the presenting signs for common diseases and the major body systems were used.
- Owners were asked to report their horses' fat (body score) using the 0-5 scoring system by assigning their horse to one of three descriptors: overweight (score > 3.5), ideal/normal weight (score 2.5-3.5); underweight (score 0-2.5).
- As in the surveys since 2014, a question was included on atypical myopathy with respondents asked to record the number of confirmed Atypical Myopathy cases they had had in the previous year.

Results (demographic information)

- 5235 people took part in the 2017 survey (5635 in 2016, 4,951 in 2015; 3,675 in 2014 and 1,246 in 2012) maintaining a high level of participation.
- Records were returned for 15,433 horses (16,751 in 2016, 14,952 horses in 2015; 11,002 in 2014; and 4,730 in 2012)
- Most respondents kept or owned a single horse (40.3%; 39.6% in 2016), 30.4% kept or owned 2 horses (29.8% in 2016), 13.4% 3 horses (14.2% in 2016) and 15.9% (16.3% in 2016) of respondents returned records for more than 3 horses. These data are similar to previous years and reflect previous data from the National Equine Database records showing that the majority of UK horses and ponies are single ownership.
- Most horses (94%; 90% in 2016) were kept in livery yards (47.2%; 46.7% in 2016) or private yards (46.7%; 43.3% in 2016). These are similar figures to last year, which suggests that NEHS continues to sample a population representative of the general UK horse and pony population. Only 0.3% of returns were from welfare charities (0.3% in 2016) and 0.3% (0.2% in 2016) from RDA establishments which suggests that data from these sectors are not a source of bias in the overall dataset (Fig. 2). Dealer yards made up just 0.04% of returns (0.1% in 2016) and there were some sectors not represented.
- The most frequent activity horses were used for was leisure and hacking (38.2%; 36.8% in 2016; 37.4% in 2015 and 37% in 2014). 13.1% of horses were used for equestrianism (10.7% in 2016; 21.7%

in 2015 and 18% in 2014), 3.8% used for showing (4.1% in 2016), 3.6% were riding club horses (3.5% in 2016), 2.1% were pony club (2.5% in 2016) and 0.2% were from racing (1.2% in 2016).

- Broad geographical coverage of the UK was achieved, again an important point when extrapolating NEHS data to the national herd.
- The distribution of ages of animals included in the survey was similar to previous years and was normally distributed with ages being recorded for almost all returns (88%; 97.5% in 2016). As in previous years, the majority of animals (31%) were in the age range 5-10 years old suggesting that the NEHS dataset is broadly representative of the national equine population.
- Native ponies formed the biggest single breed/type group (33.7%; 36% in 2016), of which 18% were Shetland or Shetland types. 17.6% (17% in 2016) of horses were recorded as Thoroughbred types, 13.5% (14% in 2016) were Warmbloods and a further 19% (14% in 2016) were recorded as 'other horse types'.
- Taken together, these results suggest that NEHS 2017, as with previous years, collected data that were valid and representative of the majority of the UK horse industry in the three key areas of age, type of use and geographical distribution.
- As with the previous surveys, the majority 59% (62% in 2016; 64% in 2015; 63% in 2014 and 62% in 2013) of horses were returned as healthy, reinforcing a consistent overall picture that a snapshot of equine health is that around two thirds of horses are disease free at any particular time.

Results (disease syndrome information)

- For the broad categories of disease syndromes, skin problems were the most frequently reported (31% of all syndromes recorded), followed by lameness including laminitis (23%), metabolic diseases (8.1%), eye problems (7.6%), gastrointestinal diseases (7.5%). This continues trends in previous NEHS surveys with lameness and skin diseases being the two most frequently reported disease syndromes. In 2016 lameness (including laminitis) accounted for 32.9% of all syndrome returns and skin diseases for 25.5%.
- Other commonly-reported broad syndromes were metabolic disease (8.1%; 8.5% in 2016); gastrointestinal problems (7.5%; 5.9% in 2016); eye problems (7.6%; 3.2% in 2016), and respiratory problems (5.9%; 7% in 2016).
- The five most frequently reported individual disease syndromes were proximal limb (non-foot) lameness (11.7% of all syndromes recorded), laminitis (6.5%), mud fever (6.1%), sweet itch (6.1%), and PPID ('Equine Cushing's Disease') (6.0%). In 2016, these accounted for 15.6% (proximal limb lameness), 6.8% (laminitis), 6.8% (mud fever), 6.8% (sweet itch) and 6.6% (PPID).
- Other commonly-reported syndromes included dental problems (5.6%; 5.1% in 2016), back problems (5.5%; 5.5% in 2016); sarcoids (5.3%; 5.1% in 2016); recurrent airway obstruction/heaves/equine asthma (5.0%; 5.6% in 2016); wounds (3.5%; 3.0% in 2016); medical colic (3.2%; 3.6% in 2016); and equine gastric ulcer syndrome (3.0%; 2.7% in 2016).
- **Lameness**
 - Lameness (all causes) was the second largest category of problems reported (23.4%; 32.9% in 2016).

- The prevalence of laminitis (first episodes and repeat episodes) was 6.5% of all syndromes reported (6.8% in 2016) and accounted for 28% of all lameness (20.7% in 2016). The overall prevalence of laminitis was similar to previous years (6.4% in 2015 and 7.1% in 2014).
 - The incidence of first occurrences and repeat episodes of laminitis were similar (3.3% and 3.2% of all syndrome reports, respectively; 14.3% and 13.7% of all lameness, respectively). In previous years, repeat episodes have been more frequently reported than first occurrences with a ratio of approximately 1.5: 1.
 - Foot lameness not due to laminitis accounted for 5.1% of all syndromes reported (10.5% in 2016) (22% of all lameness; 31.9% in 2016). Information about specific causes of foot lameness, e.g. white line disease, bruising and corns, navicular syndrome and coffin joint degenerative joint disease was not recorded in NEHS 2017.
 - Lameness due to problems in the more proximal limb accounted for 11.7% of all syndromes reported (15.6% in 2016), (50.0% of all lameness; 47.4% in 2016). Information about specific causes of proximal limb lameness, e.g. flexor tendon and suspensory ligament problems, manica flexoria injuries, suspensory ligament injuries and degenerative joint disease was not recorded in NEHS 2017.
 - Overall, as in previous years, lameness due to problems in the limbs proximal to the foot were more common causes of lameness than problems in the foot (not including laminitis) (11.7% vs 5.1% of all syndromes reported; 15.6% vs 10.5% in 2016).
- **Internal medical problems**
 - The overall prevalence of individual internal medical problems was similar to previous years with PPID ('Equine Cushing's Disease') the most prevalent syndrome reported (6.0% of all syndromes (6.6% in 2016). This is similar to the high prevalence of PPID reported in 2015 (6.4%) and 2014 (5.6%).
 - Gastrointestinal diseases accounted for 7.5% of all syndromes reported (5.9% in 2016). Equine gastric ulcer syndrome (EGUS) accounted for 3.0% of all syndromes (39% of all gastrointestinal reports). Management records were provided for 448 horses affected by EGUS: 9% of these horses were permanently stabled, 60% were part turned out/part stabled and 31% were permanently turned out. Medical colic accounted for 3.2% of all syndromes reported (2.9% in 2016) and surgical colic for 0.5% of all syndromes (0.5% in 2016). The ratio of medical (those which required medical intervention only) to surgical colic (those which required interventions other than medical management) was 6 medical: 1 surgical, a very similar proportion to previous years.
 - Stereotypical behaviours were reported with a prevalence of 1.2% (1.4% in 2016) making them a relatively common problem.
 - Liver disease was reported with an overall prevalence of 0.7% of all syndromes (0.7% in 2016), tying up and other muscle problems as 0.5% (0.5% in 2016) and neurological problems as 0.4% (0.4% in 2016).
 - Diseases with high impact such as equine grass sickness (EGS) and atypical myopathy (AM) were reported with low frequency. EGS had an overall reported prevalence of 0.1% (0.1% in 2016; 0.1% in 2015, 0.2% in 2014) and an approximate prevalence of AM of 0.2% (0.2% in 2016; 0.4% in 2015 and 0.1% in 2014), although it should be noted that like strangles AM is captured over a full year rather than the snapshot from the NEHS data collection week in May.

- **Respiratory diseases**
 - Recurrent airway obstruction/heaves/equine asthma was again the most frequently recorded respiratory problem (5.0% of all syndromes reported; 5.6% in 2016) and accounted for 84% of all respiratory problems (79% in 2016). RAO/heaves equine asthma has been reported with high prevalence in each NEHS survey (6.7% in 2015 and 6.9% in 2014) confirming the importance of this respiratory problem to the UK horse population.
 - Infectious respiratory disease was much less frequently reported (0.9% of all syndromes; 0.6% in 2016) with strangles accounting for 17% of all reported infectious respiratory disease (58% in 2016), 0.2% of all syndromes (0.3% in 2016).
- **Skin diseases**
 - As in previous years, skin diseases were commonly reported and were the most frequently reported broad category of disease in 2017.
 - Sweet itch and mud fever were the most frequently reported individual syndromes within this category accounting for 39.3% of all skin disease (53.2% in 2016).
 - Sweet itch and mud fever each accounted for 6.1% of all returns (6.8% in 2016), making them important individual diseases.
 - Sarcoids were again frequently reported (5.3% of all returns), a similar figure to previous years (5.3% in 2016; 5.6% in 2015). Melanoma was reported in 1.9% of returns, again a similar figure to previous years (1.7% in 2016; 1.7% in 2015).
 - Wounds were again a commonly reported problem, accounting for 3.5% of all returns (3% in 2016; 4% in 2015 and 3.9% in 2014).
- **Eye diseases**
 - Ocular problems accounted for 7.6% of all syndromes returned (3.2% in 2016), reinforcing the importance of eye disease in the equine population.
 - Ocular discharge was the most common eye problem reported (54.2% of all ocular problems; 4.1% of all syndromes).
 - Cataract was frequently reported (11.3% of all ocular problems; 0.9% of all syndromes); uveitis was reported in 6.5% of all ocular problems (0.5% of all syndromes); corneal disease in 5.1% of all ocular problems (0.4% of all syndromes). These data are the same as for NEHS 2016.
- **Back problems**
 - As in previous years, back problems were frequently reported and accounted for 5.5% of all returns (5.5% in 2016; 7% in 2015, 7.7% in 2014).
 - Consistent with reports from the scientific literature, a quarter (26%) of horses with back problems were also showing signs of lameness (which may or may not have been directly connected).
- **Dental disease**
 - Dental disease accounted for 5.6% of overall syndromes (5.1% in 2016), confirming the importance of dental disease in the general UK horse population. 54% of horses with dental problems were treated by a veterinarian and 46% received attention from an equine dental technician.
 - 86% of horses received regular dental checks with approximately two thirds receiving annual checks and one third receiving checks every six months.

- **Body score**
 - Consistent with previous years, respondents reported that the majority of horses had a body score (fat score) in the ideal range of 2.5-3.5 (76.3% of horses; 76% in 2016). 4.9% (5.5% in 2016) were reported as being thin (score <2.5) and 18.8% (18.6% in 2016) were reported as being overweight (score >3.5).

- **Worm (faecal) egg counts**
 - There was a range of different practices in relation to worm (faecal) egg counts, with 37% of respondents never carrying out WECs and 63% conducting WECs during the grazing season. The majority (39%) of those who carried out WECs did so at four-monthly intervals; 22% did so at 8-12 week intervals and 2% did so at six-weekly intervals.