RESULTS

RTA prevalence was 0.41% (95% confidence interval (CI): 0.38–0.44). Of the RTA cases, 615 (74.9%) were purebred, 322 (39.2%) were female, and 285 (54.8%) were insured. The median bodyweight was 17.0 (IQR: 9.1–26.9, range: 2.0–70.0) kg and the median age at diagnosis was 2.5 (IQR: 1.1–5.5, range: 0.0–17.0) years. After accounting for the effects of other factors using multivariable modelling, younger dogs had increased odds of an RTA event: dogs aged under three years showed 2.9 (95% CI 2.1–4.2, $P < 0.001$) times the odds and dogs aged between six and nine years showed 1.8 (95% CI 1.2–2.7, $P = 0.002$) times the odds of an RTA event compared with dogs aged over 14 years. Males had 1.4 (95% CI 1.2–1.6, $P < 0.001$) times the odds of an RTA event compared with females. Overall, 22.9% of cases died from a cause related to their RTA event. Of dogs with information

available, 34.0% underwent diagnostic imaging, 29.4% received intravenous fluid therapy, 71.1% received therapeutic pain relief, 46.0% were hospitalised and 15.6% had surgery performed under a general anaesthetic. Golden Retriever (OR: 0.2, 95% CI 0.1–0.7, $P = 0.006$), Shih-Tzu (OR: 0.5, 95% CI 0.2–0.9, $P = 0.030$) and West Highland White Terrier (OR: 0.4, 95% CI 0.2–0.8, $P = 0.015$) showed reduced odds of RTA compared with crossbred dogs.

CONCLUSION

This study identified important breed effects and demographic factors that were associated with RTA in dogs, notably being young and male. This information can assist preventive action by highlighting the subsets of dogs most at risk.

Breeder-reported canine perinatal mortality in the United Kingdom in 2013 and 2014

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This study aimed to determine current breeder-reported rates of canine perinatal mortality in the United Kingdom. For this study perinatal mortality was defined as the sum of stillbirths and neonate mortality, defined as the number of deaths from birth to 21 days of age.

An online survey was introduced to members of the Kennel Club Assured Breeders Scheme via email and social media. Breeders completed the survey anonymously, answering questions about one pedigree litter born during 2013 and 2014.

330 litters were reported representing 95 breeds and 2165 puppies. Perinatal mortality affected 47.6% of the litters. Excluding stillbirths, 27.9% of the litters suffered neonatal losses. Perinatal mortality at the puppy level was 16.5% with stillbirths accounting for 53% of these deaths. Of the puppies born alive, neonate mortality was 8.6% during the

first 21 days with 8.5% being lost in the first week of life. Stillborn rates for bitches aged 1–2 years at parturition was 3%, 2–3 years 34%, 3–4 years 31%, 4–5 years 17%, 5–6 years 10%, 6–7 years 4% and over 7 years of age 1%.

Dogs were categorised into small breeds (less than 30cm in height at the withers), medium (31–51cm) and large (over 52cm). Perinatal mortality for the small breeds was 15.6%, medium 13.3% and the large breeds 22.0%. Stillbirth rates for these groups were, small 6.25%, medium 8.21% and large 10.82%. Neonatal mortality up to 21 days of age was 10.0% in the small breeds, 5.5% for the medium and 12.8% for large breeds.

This survey reports similar rates and patterns to previous studies in that most puppy deaths occur close to birth. Excluding stillbirths, neonatal losses are mainly in the first week of life although much higher in medium and large than in small breeds. The stillbirth rates for large breed dogs is double that for the small breeds. Bitches aged between 2–4 years have significantly higher rates of stillbirths.

It is notoriously difficult to gather sensitive information from breeders. This is the first time that social media and online anonymous data collection has been employed to collect puppy mortality information and may be a useful method to expand this data collection on a wider scale with a prospective cohort study. Examining husbandry and breeder experience may give some insight to explain the mortality patterns seen.

Risk factors for road traffic accidents in the first year of a cat's life

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Road traffic accidents (RTAs) are a common cause of death and injury in domestic cats and a concern to many owners. This study assessed the potential risk factors for road traffic accidents in cats up to 12 months of age within a UK cat

cohort known as 'The Bristol Cats Study'. Data was obtained from three questionnaires, completed by cat owners when their cats were 8–16 weeks old, 6 months old and 12 months old. Information was gathered regarding environmental conditions, cat characteristics and owner management factors. Univariable and multivariable logistic regression analysis was used to assess potential associations between these factors and RTAs. Cats were only included in the study if they had outdoor access and if their owners had completed the questionnaire for 12 month old cats. Cats were excluded if they had left the study prior to reaching 12 months of age for any reason other than an RTA, or if the owner was not sure whether or not their cat had been involved in an RTA. Of 1264 eligible study cats, 49 (3.9%) had been involved in an RTA, of which 71.4% resulted in fatal injuries. Rural locations were