Increasing our knowledge of the factors that affect the lifespan of cats could enable us to make changes that lead to an improvement in their health and welfare. With this in mind, Dan O’Neill, Companion Animal Epidemiologist at VetCompass, along with colleagues from The Royal Veterinary College, UK, and The University of Sydney, Australia, carried out a study using data collected from the VetCompass database of veterinary practices in England to find out more about cats’ mortality and longevity. The study was recently published in the ‘Journal of Feline Medicine and Surgery’, the flagship publication of International Cat Care’s veterinary division.

**Definitions**

**Longevity**: the length or duration of life

**Mortality**: the relative frequency of deaths in a specific population

Graph 1: Percentage of cats in the study population that died within 1 year age bands. Photo courtesy of Dan O’Neill

cats that were more likely to experience an earlier death, and cats that survived to an older age.

**Mortality**

Cats that lived for less than 5 years

Almost half of the deaths in cats less than 5 years of age occurred due to trauma, and the majority of these were from road traffic accidents. The two other most common causes of death in this subpopulation of cats were viral infectious disorders (6.6%) and respiratory disorders (4.5%).
Cats that lived for 5 years or longer
Half of all mortalities in cats that lived for 5 years or longer were due to: renal disorder, non-specific illness, neoplastic disorder and mass-associated disorder.

The most common of these four causes was renal disorder, and this accounted for 13.6% of deaths. This finding emphasises the importance of carrying out routine health checks, especially in older cats, to increase the chances of detecting renal disease and optimise its management.

Neoplasia accounted for 12.3% of deaths in the study. The authors proposed, however, that it was possible that many of the deaths ascribed to non-specific masses (mass-associated disorders that did not have a more precise cause or origin specified; 11.6%) may have been undiagnosed neoplastic disorders. This suggests that neoplasia could account for up to a quarter of deaths in older cats. Although malignant neoplasia often shortens the lives of cats, routine veterinary evaluation in older cats is recommended, as earlier diagnosis may allow for treatments that could prolong life or improve palliative care.

Demographic risk factors
Purebred vs crossbred
The study found that crossbred cats lived for an average of 14.0 years, whereas purebred cats lived for an average of 12.5 years. It may be that, due to a smaller gene pool and inbreeding, purebred cats are more likely to succumb to recessive disorders, thus reducing their longevity. However, other genetic and non-genetic factors are likely to contribute as well.

It was also found that the longevity varied widely between each of the breeds. The Birman, Burmese, Siamese and Persian lived as long as or longer than crossbreds, whereas the Bengal, Abyssinian, Ragdoll, Maine Coon and British Shorthair breeds showed reduced longevity.

As a group, purebred cats, including the Maine Coon, were found to live on average 1.5 years less than crossbred cats. Photo courtesy of Animal Photography

These differences between the breeds may be due to differing breed bodyweights and predispositions to specific diseases.

Further investigation needs to be carried out in order to better understand and manage the difference in longevity between purebred and crossbred cats and the variation in longevity between different purebred cats.

Bodyweight
An increase in bodyweight was found to be associated with a decrease in longevity. Of the cats that died at 5 years of age or older, those weighing less than 3 kg were found to live, on average, 1.7 years longer than those weighing between 4 and 5 kg. This finding, however, may have been affected by the different breeds in the study and the effects of obesity.

Insurance status
An association was found between insurance status and longevity – the longevity of insured cats was 1.1 years less than non-insured cats. However, this finding was proposed to perhaps be due to fewer older cats being insured because of increasing costs or exclusions.

Neutering
Neutered females and males were found to live, on average, 0.6 and 1.7 years longer than entire female and male cats, respectively. There are various health benefits to neutering, such as reduced risk of asthma and abscesses, which would support this association. However, this finding should be interpreted cautiously as the age at neutering was not factored into the analysis.

Reference