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Morbidity and Mortality in Amur, Sumatran, and Malayan Tigers (*Panthera tigris altaica*, *Panthera tigris sumatrae*, and *Panthera tigris jacksoni*) Between 1973–2014

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ABSTRACT

Tigers (*Panthera tigris*) are the largest cat species and are native to varying regions of Asia depending on subspecies.² They are listed as endangered on the International Union for Conservation of Nature's Red List due to habitat development, fragmentation, and increased human interactions.² Three subspecies of tigers (Amur, Sumatran, and Malayan; *Panthera tigris altaica*, *P. t. sumatrae*, and *P. t. jacksoni*) are often kept in zoological institutions as part of a species survival plan. To date, there has not been a comprehensive analysis of morbidity and mortality in these subspecies of tigers in North America although infectious, congenital, and neoplastic disease have been previously published in these tiger species in human care.^{1,3,4} This retrospective study evaluated the records from 96 institutions prior to 2014 for causes of morbidity and mortality. At the time of submission, 76/140/4 Amur/Sumatran/Malayan tiger records, respectively, were reviewed. The most common causes of morbidity included oral disease (18.4%), gastrointestinal disease (15.8%), integumentary disease (11.8%), and renal disease (10.3%). The most common causes of mortality included renal disease (31.4%), trauma (12.9%), and neoplastic disease (10.0%). These findings should help guide future management, care, and research to improve care overall for tigers in human care.

ACKNOWLEDGMENTS

The authors thank all the zoos and veterinarians who contributed records to this project. The authors also thank Dr. Doug Armstrong for his role in this project.

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