

Morbidity and Mortality in Amur, Sumatran, and Malayan Tigers (*Panthera tigris altaica*, *Panthera tigris sumatrae*, and *Panthera tigris jacksoni*) Between 2015–2021

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ABSTRACT

Tigers (*Panthera tigris*) were prevalent throughout Asia in the early 20th century, numbering as many as 100,000 individuals.¹ As of 2014, tigers are listed as endangered and there may be fewer than 3,200 living adults in the wild.² It is important to establish a healthy population of tigers in human care to safeguard the species against the uncertain future of today's wild populations. The Associations of Zoos and Aquariums (AZA) has established Species Survival Programs for three tiger subspecies: Amur (*Panthera tigris altaica*), Sumatran (*Panthera tigris sumatrae*), and Malayan (*Panthera tigris jacksoni*).³ To date, there has not been a comprehensive analysis of the morbidity and mortality factors faced by these tiger subspecies in human care. This retrospective study reviewed tiger medical records from multiple institutions from 2015–2021 to evaluate causes of morbidity and mortality. Preliminary data from 44 reviewed tiger medical records indicated that the most common causes of morbidity were integumentary disease (45%), gastrointestinal disease (36%), musculoskeletal injury (25%), and oral/periodontal disease (20%). Thirteen tigers were deceased at the time of study; the most common causes of morbidity in the deceased tigers included renal disease (31%), neoplasia (15%), and musculoskeletal disease (15%). Continued evaluation of disease processes affecting tigers in human care is needed to guide future management and conservation of the species.

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