



# Preface

## Getting Prepared



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*Editor*

One constant in veterinary practice is “change,” and in the case of infectious diseases, not only is our understanding of potential pathogens improving—a positive change—but also many features of the pathogens are changing, perhaps posing new clinical challenges. Antimicrobial resistance is an increasingly concerning feature in managing bacterial diseases in horses of all ages, including *Rhodococcus equi*. Dr Sanz provides context for management options, including active surveillance, and reviews considerations in adjunct plasma administration. As for *Clostridioides difficile*, a contentious name change has been made, and the recent detection of “human isolates” in companion animals has raised the possibility of (reverse) zoonotic transmission of *C difficile*, emphasizing the need for a One Health approach in equine practice. Drs Kuttappan, Mooyottu, and Sponseller summarize disease associated with *C difficile* and review recent findings spanning several equine enteric clostridial diseases. Dr Burgess provides a complete synopsis of *Salmonella* from the standpoint of clinical disease, shedding, risk factors, mitigation approaches, and public health concerns, while Dr Taylor reviews the known causative agents of Potomac Horse Fever and treatment approaches, and Dr Kopper reviews rotaviral diarrhea, providing an update on a ruminant-like group B rotavirus outbreak that appeared in 2022 in central Kentucky. Another RNA virus, also prone to change, is the fodder of Dr Pusterla’s exposé and pertains to equine coronavirus; however, he provides a word of caution regarding SARS-2 and the potential for adaptation to the equine host. Drs Ruby and Janes review infectious causes of equine placentitis and abortion and provide helpful suggestions to optimize obtaining a diagnosis. Drs Stewart, Wang, and Wise review another RNA virus causing high mortality in horses and having zoonotic potential, Hendra virus, and the very real threat it poses to humans and other outdoor animals. Dr Luethy provides a complete overview of the clinical and public health considerations of the main encephalomyelitis-causing arboviruses (Eastern equine encephalitis virus [EEE], Western equine encephalitis virus [WEE], Venezuelan equine encephalitis virus [VEE], and

West Nile virus [WNV]) affecting horses, and in some cases, humans. Dr Boyle summarizes the past 10 years of advances in managing *Streptococcus equi* subspecies *equi* infection with an emphasis on containing spread. Drs Oliver, Conrado, and Nolen-Walston review Equine Granulocytic Anaplasmosis, a disease well characterized in horses in 1969 and then in humans 25 years later, necessitating an eventual name change of the pathogen from *Ehrlichia equi* to *Anaplasma phagocytophilum*. Dr Pelzel-McCluskey reminds us of the equine practitioner's role in containing spread of Vesicular Stomatitis Virus (VSV), another RNA virus that is also an arbovirus. The recent northward incursion of VSV suggests a possible expansion of the range of the vector or vectors within the United States. In sum, the clinical landscape of equine infectious diseases is ever evolving, requiring an updated awareness of the field.

One of the earliest infectious disease experts, Louis Pasteur, stated that, "in the fields of observation, chance favors only the prepared mind." I very much appreciate the expertise and effort these authors put forth to better prepare us for another day of clinical observation.

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