Postmortem examination of horses dying while engaged in equine sport is important to understand. A review of those findings with trainers, veterinarians, and others involved in the care of horses undergoing postmortem examinations is an important educational tool for both those with direct care of the horses as well as event organizers and regulators. Authors' address: California Horse Racing Board, 1010 Hurley Way, Sacramento, CA 95825; e-mail: amvale@ucdavis.edu; *Corresponding and presenting author. © 2021 AAEP.
medical director or an official veterinarian. The safety steward frequently interacts with trainers on the backside of the racetrack, is generally well received, and serves as a “contact person” for trainers during the review process.

Gather and Review Information

For the CHRB program, the safety steward interviews the jockey or exercise rider and submits an accident report. Video footage from the race, workout, or barn surveillance is reviewed. The trainer is requested to provide training records for the expired horse, which includes exercise, medication, and shoeing history for a minimum of 60 days prior to the date of death of the horse. Additional information is collected from various sources, including racing records (past performances, result chart), regulatory veterinarian examination records, official veterinarian’s list history, and timed workout history. Attending veterinarians provide a summary medical record covering a minimum of 60 days; however, 1 year or longer of medical records is generally requested and provided. This includes a history, physical examination findings, interpretation of diagnostic imaging and laboratory findings, and treatments and medications administered or dispensed. Copies of laboratory data and diagnostic imaging may be requested and require client authorization. The official veterinarian also reviews veterinary confidential reports (medication form submitted daily to the official veterinarian), the health and racing soundness record, and the final postmortem examination (necropsy) report. The official veterinarian identifies key training, veterinary care, and horse health information relevant to the injury event and creates a questionnaire. Most of the questions are shared with the trainer and attending veterinarian in advance so they can prepare for the meeting and provide the most accurate information.

Conduct Trainer and Attending Veterinarian Meetings

The CHRB protocol is that the safety steward contacts the trainer of the expired horse to appear before the postmortem examination review panel and shares the questionnaire and postmortem exam (necropsy) report. The attending veterinarian is interviewed by the entire panel or just the official veterinarian. Owners, racing managers, assistant trainers, additional veterinarians, previous trainers, or any CHRB licensee may be questioned at the discretion of the postmortem examination review panel. Interviews are conducted in person or remotely via video conference or phone call. Trainer interviews are recorded so the discussion can be reviewed if needed. When scheduling the meetings and again at the beginning of the meeting, it should be emphasized that the discussion is not an investigation nor interrogation, but rather an educational opportunity (to educate the trainer and learn from the trainer). During questioning, panel members must remember this point to avoid confrontations as the educational opportunity is minimized if the trainer or veterinarian is fearful of sharing information. After questioning, the trainer is presented with images from the postmortem examination as well as case examples clearly demonstrating similar pre-existing pathology (if appropriate to the case). Examples of diagnostic imaging that could detect such lesions are presented and discussed. Video footage may also be reviewed and discussed.

Submit a Report

Upon completion of all interviews and collaboration, the panel submits a written report to the CHRB executive director, which is then shared with the horse’s owner and trainer. The report contains findings and recommendations for improvements to prevent similar injuries. If there is a potential animal welfare violation or other concern, the case is referred for a full investigation by CHRB investigators (sworn peace officers). Redacted summaries of each postmortem exam review are posted on the CHRB website under the veterinary tab: www.chrb.ca.gov/postmortem_summaries.html.

3. Discussion

Over a 10-month period, 63 equine postmortem reviews were conducted by the CHRB. Pre-existing pathology at the site of the fatal injury is a re-occurring finding at postmortem examination; however, some of the pre-existing pathology is not readily apparent. The majority of trainers and attending veterinarians are agreeable and willing to actively participate in the review process and interviews. Initially, many trainers did not display good working knowledge of anatomy or grasp the significance of major pre-existing lesions (e.g., palmar/planatar osteochondral disease lesions). At the end of the interview, many trainers express gratitude for the educational opportunity despite the difficult conversation. One author uses the technique of motivational interviewing. This strategy utilizes compassion, open-ended questions, reflective listening, and clarifying statements to engage the trainer. This communication technique can assist in modifying the trainer’s behavior (related to equine care, treatment, and diagnostics) with the goal of preventing future fatalities. This approach can initially be difficult for some individuals in a regulatory role accustomed to an adversarial relationship with horsemen. Given the CHRB postmortem review program is viewed as a fact-finding tool for preventing future injuries, the current objectives include developing standardized questionnaires and performing statistical analysis for risk factor identification and hypothesis generation. This technique can easily be modified for horses in different types of competitions (endurance riding, 3-day eventing, barrel racing, polo, etc.) or other uses (carriage and working horses). Ideally, a postmortem examination (necropsy) is performed; however, a postmortem review
can still be beneficial in cases where this is not performed.

4. Conclusion
Equine fatalities associated with competition attract significant public attention. Equine post-mortem review programs will allow the equine industry to proactively acknowledge and learn from these tragic events.

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Declaration of Ethics
The Authors have adhered to the Principles of Veterinary Medical Ethics of the AVMA.

Conflict of Interest
The Authors have no conflicts of interest.

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