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Handler training improves decontamination of working canines with oil-based exposure in field conditions using disposable kits

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ABSTRACT

Exposure to contaminants in the field is a reality for deployed canines. To date, there is no data evaluating the benefits of training for handlers associated with canine decontamination efforts. The objective of our work was to investigate the impact of handler training on the reduction of oil-based contaminants in working canines. Canine teams (*n* = 10) were randomly assigned to either TRAINED or UNTRAINED groups. Each team (handler and dog) in the TRAINED group received 30-minutes of interactive training using an illustrated guide on proper utilization of equipment provided. Teams in the UNTRAINED group received the same equipment and illustrated guide but no interactive training. Decontamination efforts were measured using an oil-based pseudo-contaminant (GloGerm®, Moab, UT) topically applied to four anatomical locations: cranial neck, between the shoulder blades, left medial hindlimb and left hind paw with pre- and post-washing images collected from a fixed distance of 20 inches. Visual assessment of contaminant reduction was scored as follows: 0 = <24% contaminant reduction; 1 = 25-50% contaminant reduction; 2 = 51-75% contaminant reduction; and 3 = >76% contaminant reduction. No score discrepancies >1 were reported between reviewers. Trained handlers were more effective at contamination reduction (P = .0093) as compared to their untrained counterparts. These results indicate that handlers, when properly trained, can achieve reduction of oil-based contaminants with a disposable decontamination kit and a garden hose.