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TRANSMISSION OF HUMAN PARASITES TO WILD GREAT APES

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Protozoan and helminth parasites pose persistent threats to public and veterinary health. These pathogens are often characterized by the potential to produce large numbers of transmissive stages and enjoy environmental robustness. Consequently, environmental routes of transmission of such parasites affecting humans and livestock are important and well established. The close phylogenetic relationship between humans and nonhuman primates, coupled with the exponential expansion of human populations and human activities within primate habitats, results in exceptionally high potential for pathogen exchange; however, non-human primate exposure to such parasites remains largely unknown. Fortunately, a broad range of immunological, microscopical and molecular methods are now available for detection of these pathogens in the environment. Here, we will provide an overview of available field protocols and diagnostics for detecting infective forms of parasitic pathogens in water, soil, and vegetation. We will also present case studies from Congo and Tanzania where such efforts have been important to ape health and conservation.

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