Close to one billion children worldwide are infected by soil-transmitted helminths, better known as worms. Infected children are nutritionally, physically, and cognitively impaired—robbing them of their full human potential.

There are multiple global efforts to eliminate this burden, primarily by mass drug treatment. Logically, these treatment efforts focus on administering medication at schools to reach a large number of children at one time. But for pastoralist families, who are often semi-nomadic, there are large gaps in coverage. These hard to access children are critical to global campaigns for their own health and to eliminate a source that can later reinfect already treated children.

Fortunately, the Allen School has worked for several years with pastoralist communities in connection with our partners in the Serengeti Health Initiative. Dr. Felix Lankester developed a strategy to link rabies vaccination of dogs in the pastoralist communities with mass drug treatment to eliminate worms. At first glance, these two efforts, vaccination of dogs and drug treatment of children, may appear incongruous, however Dr. Lankester knew that years of rabies vaccination campaigns had gained the trust of the pastoralist communities and that this would allow unique access.

With funding from the Bill & Melinda Gates Foundation, Dr. Lankester has implemented this strategy to improve the health of children and dogs in rural Tanzania.
Tanzania Continued

worms, which infect over a billion people, are the world's leading cause of physical and intellectual growth retardation. If our research shows that these programs are improved by being administered together, it could have an impact on global efforts to eliminate these two diseases.

On the first day of field activities, having set up our dual clinic in the center of a Maasai village called Oldonyorwa in the Loliondo District (just east of the Serengeti National Park), we were doubtful whether anybody would to turn up. However, with the rain holding off and a blue sky overhead, we were surprised and delighted to see Maasai villagers coming for treatment, many bringing their children and their dogs with them. And by the end of the first day we had vaccinated just under a 100 dogs and dewormed over 400 people. Not bad for a first day.

The project will eventually target 24 villages, some of which will receive dog vaccination and deworming separately, whilst the rest will receive the integrated approach. This will allow us to determine whether linking the interventions has an impact on coverage. We are also collecting socio-economic data that will enable us to quantity whether taking an integrated approach to improving animal and human health results in time and cost savings.

We are now approaching the half way mark for the project and although we are some way off analyzing the data to see what impact the integrated strategy has on the delivery of these two important health interventions, we have noticed one really interesting finding. Many primary school age children whose parents have not been able to afford to enroll them in school are bringing their dogs to our clinics. As a result, their dogs are being vaccinated and dewormed separately, whilst the rest will receive the integrated approach. This will allow us to determine whether linking the interventions has an impact on coverage. We are also collecting socio-economic data that will enable us to quantify whether taking an integrated approach to improving animal and human health results in time and cost savings.

More than 60,000 people die worldwide from rabies each year. Most contract the disease from a dog bite.