



## State of Art for Helminthiasis in Northern Thailand

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### Abstract

Worldwide, foodborne infections are emerging as a major public health problem, with more than 50 million people being infected. The following estimates are based on the World Health Organization (WHO) between 1975-1986. Clonorchiasis and Opisthorchiasis: 19 million infected. Paragonimiasis: 3.2 million infected Fasciolopsiasis: 10 million infected Ascariasis: 1 billion infected Hookworm: 900 million infected Trichuriasis: 500-800 million infected Strongyloidiasis: 35 million infected. Ministry of Public Health in Thailand has established a national plan to promote and coordinate interaction and intervention among provincial public health sectors. The purpose of these studies intended to investigate the prevalence and associated factors with helminthiasis. The investigators observed and conducted reliable information regarding the nature and prevalence of helminthiasis in the remote area of Thailand. This study investigated children and their parent on parasitic diagnostic by using formalin-ether concentration and simple smear techniques. The Identification of the parasites was observed under light microscopes. The results showed that the overall prevalence of helminthiasis among the Thai hill tribe people was 15.4%. The majority of the stool sample was 63.2 % of children aged below 15 years old. The helminthiasis prevalence of *Ascaris lumbricoides*, *Taenia* spp., and hookworm were 11.10%, 2.60%, and 1.70% respectively. The study showed that the prevalence of helminthiasis is still high and requires the health education program in the remote area. The investigators would propose the health promotions and behavioral investigations that can help solve the problems based on learning ability of development and self-consciousness on the individual level *and* community for the prevention and control of parasitic worms' infection. The diagnosis of these diseases mostly relies on parasitological techniques and only a limited number of drugs are currently available for treatment, most of which are nonspecific. This paper reviews the most important emerging helminthiasis and discusses the biological, medical, and epidemiological features, current treatments, and molecular techniques, especially polymerase chain reaction-based methods that provide sensitive, rapid, and quantitative analytical tools in order to clarify the current epidemiology of these infections and for both effective diagnosis and treatment in developing countries.

**Keywords:** *Helminthiasis, Remote area, Ascaris lumbricoides*

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