



SOIL-TRANSMITTED HELMINTH INFECTION

What is Soil-transmitted helminth infection?

- Soil-transmitted helminth (STH) infection, commonly referred to as intestinal worms, generally affects the poorest communities. Transmission occurs when eggs of the parasite are present in human feces and then contaminate the soil in areas with deficient sanitation systems.
- The causative agents of the infection are nematode species (*Ascaris Lumbricoides*, *Trichuris trichiura*) and uncinaria species (*Necator americanus* and *Ancylostoma duodenale*) that enter human beings in the form of eggs in contaminated food, or in the form of *Ancylostoma* larvae that penetrate the skin, primarily as a result of walking barefoot on contaminated soil.
- Infection is most frequent in children and women. In pregnant women it produces anemia and the risk of bearing children with low birthweight, while infected children suffer physical, nutritional, and cognitive deterioration due to poor absorption of micronutrients and anemia. This occurs because the worms feed on the host's tissues, especially blood, leading to loss of iron and proteins.
- STH infections have a major impact on the social and economic development of communities where prevalence rates are high, since they affect adults' ability to work and cause school absenteeism among children.
- Mildly infected people are usually asymptomatic. More severe infections can cause a variety of symptoms, including diarrhea, abdominal pain, general malaise, and weakness.
- Good hygiene practices like hand washing and personal cleanliness are measures that prevent infection. In at-risk areas, the use of footwear is also important to prevent children from becoming infected when walking on contaminated soil.

Key Data

- Globally, 1.5 million people are infected by soil-transmitted helminths, making this the most common infection in the world.
- In the Americas, STH infections are present Region-wide, affecting an estimated one-third of the population. Nearly 46 million children between the ages of 1 and 14 are at risk of infection by these parasites. The countries with the greatest presence of helminthiasis are Brazil, Colombia, Mexico, Bolivia, Guatemala, Haiti, Honduras, Nicaragua, Peru, and the Dominican Republic.
- It is essential to improve and increase access to basic sanitation facilities, such as ventilated pit latrines and septic tanks in order to ensure proper disposal of human feces. One gram of feces from an infected individual can contain up to 100 parasite eggs.
- PAHO/WHO recommends mass administration of antiparasitic drugs – albendazole or mebendazole – to pre-school and school-age children, women of childbearing age, and adults who work in agriculture or mining in at-risk areas.

PAHO/WHO Response

- In 2015, PAHO/WHO published *Operational Guidelines for the Implementation of Integrated Deworming Activities* to reduce the sequelae and prevalence of STH infections in the countries of the Americas.
- In 2016, through Resolution CD55.R9, the PAHO Directing Council approved the *Plan of Action for the Elimination of Neglected Infectious Diseases and Post-elimination Actions 2016-2022*. The plan's objectives include reducing the disease burden of soil-transmitted helminth infections.
- PAHO/WHO provides the antiparasitic drugs albendazole and mebendazole to the affected countries, free of charge, for periodic large-scale deworming programs.
- In 2017, WHO published the guide *Preventive chemotherapy to control soil-transmitted helminth infections in at-risk population groups*.