



SOIL-TRANSMITTED HELMINTH INFECTION

Key Data

- Soil-transmitted helminth (STH) infection, commonly referred to as intestinal worms, generally affects the poorest and most disadvantaged communities. Transmission occurs when eggs of these parasites are present in human feces and then contaminate the soil in areas with deficient sanitation systems. The causative agents are the nematode species *Ascaris Lumbricoides* and *Trichuris trichiura* and the uncinaria species *Necator americanus* and *Ancylostoma duodenale*, which infect humans through the ingestion of raw agricultural foods contaminated with eggs of these parasites or, in the case of children, by playing barefoot on contaminated soil.
- Infection is most frequent in women and children. In pregnant women it produces anemia and the risk of bearing children with low birthweight, while infected children suffer physical, nutritional, and cognitive deterioration.
- STH infections have a major impact on the social and economic development of communities where prevalence rates are high, due to their impact on adults' ability to work and because they increase school absenteeism among children. The health determinants that influence the transmission of these infections are closely associated with deficient sanitary conditions, hygiene, and access to safe water. Several studies demonstrate that improving these conditions may drastically reduce the number of infections caused by STHs.
- PAHO/WHO recommends mass administration of the antiparasitic drugs albendazole or mebendazole to the following population groups in areas at risk for STH infection: pre-school age children (ages 1 to 4) and school-age children (ages 5 to 14), women of childbearing age (including pregnant women in the second and third trimesters and breastfeeding women).
- The frequency with which the antiparasitic drug should be administered depends on the prevalence of infection in the at-risk area: once a year in low-risk areas (prevalence rates between $\geq 20\%$ <math>50\%) and twice a year in high-risk areas (prevalence rates $> 50\%$). Additional recommendations are to promote access to safe water, basic sanitation, and health education.
- Globally, 1.5 million people are infected by STHs, making this the most common infection in the world.
- In the Americas, STH infections are present Region-wide and are estimated to affect one out of three people. Nearly 46 million children between the ages of 1 and 14 are at risk of infection by these parasites, 58% of them in three countries – Brazil, Colombia, and Mexico – and 36% in seven other countries – Bolivia, Guatemala, Haiti, Honduras, Nicaragua, Peru, and the Dominican Republic.

PAHO/WHO Response

- In 2001, the World Health Assembly adopted Resolution [WHA54.19](#) to reduce mortality and morbidity and improve the health and development of communities affected by STH infection, as well as communities affected by schistosomiasis, by ensuring access to the essential drugs for combating these two diseases.
- In 2013, the World Health Assembly adopted [Resolution WHA62.12](#) urging Member States to implement interventions to combat neglected tropical diseases (including soil-transmitted helminth infections) and reach the goals set forth in the [road map](#) for addressing these diseases.
- 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 burden of disease due to STH infections, taking an integrated approach that includes periodic large-scale deworming, improved access to drinking water and basic sanitation, and health education.
- In 2017, WHO published the guide *Preventive chemotherapy to control soil-transmitted helminth infections in at-risk population groups*.