

SAVING LIVES and PROTECTING PEOPLE from PARASITIC DISEASES

Parasitic diseases can be transmitted to people:



by insects or other animals



through contaminated food, soil, or water



through blood or organ donation



from mother to baby

Many parasitic diseases can be prevented. If they do occur, fast and accurate diagnosis is critical for appropriate treatment.

Photo credit: BK Kapella

WHY CARE?

Parasitic diseases, including malaria and neglected tropical diseases (NTDs), cause devastating illness among a billion people and economic burden around the world and in the United States, threatening local populations, businesses, travelers, and American defense forces.



619,000 people died from malaria in 2021, and millions become ill each year, including about 2,000 returning travelers in the United States each year



1 billion people have NTDs that cause blindness, malnutrition, anemia, and disfigurement



300,000 people in the United States are infected with the parasite that causes Chagas disease, and **300 infected babies are born every year**



Toxoplasmosis, a leading cause of foodborne illness, affects more than **40 million people** in the United States and can cause acute and chronic illness, and death

DEMONSTRATED SUCCESS FROM SCALING UP INTERVENTIONS



Globally, **2 billion malaria cases and 11 million malaria deaths were averted between 2000 and 2021**



More than 600 million people no longer require interventions against several NTDs



Global control efforts have reduced the number of people with Guinea worm disease to **13 in 2022**

Improved education and awareness in the United States helps protect Americans from Chagas disease

CDC's EFFORTS

CDC's Division of Parasitic Diseases and Malaria translates science into action.



Ensuring prevention, diagnosis, and treatment of parasitic diseases in the United States

Working with healthcare providers to deliver life-saving diagnosis and treatment of parasitic diseases in the United States and disseminating up-to-date, data-driven guidelines and recommendations for public health partners and the public



Reducing the global burden of malaria

Reducing global deaths, illness, and risk of malaria by providing scientific leadership and support to ensure effective disease prevention, control, and elimination programs



Reducing the global burden of priority NTDs

Developing tools and approaches to better detect, prevent, and control NTDs and assisting countries with implementing their programs

SPOTLIGHT ON KEY CDC ACCOMPLISHMENTS AND ACTIVITIES



Co-implements with U.S. Agency for International Development (USAID) the U.S. President's Malaria Initiative in 27 countries across Africa and Southeast Asia



Conducts thousands of diagnostic tests each year, and offers DPDx, an online resource, to provide diagnostic assistance and training in laboratory identification of parasites



Serves as a global resource through its World Health Organization (WHO) Collaborating Centers for Guinea worm, malaria, and trachoma, as well as a world-renowned insectary and laboratories



Supports efforts to eliminate lymphatic filariasis in the Americas, including American Samoa (a U.S. territory), Haiti, and Guyana.



Employs a highly sensitive laboratory multiplex assay that can simultaneously detect infections from more than 30 viral, bacterial, and parasitic pathogens using a single, small blood sample



Uses Advanced Molecular Detection (AMD) methods to detect and characterize parasitic infections, and to monitor for malaria drug and insecticide resistance



Supports countries to prepare and respond to the threat of invasive *Anopheles stephensi* mosquitoes in Africa

WHAT'S NEEDED?

Modernize the diagnosis of parasitic diseases to keep pace with emerging threats and advances in technology

Increase awareness, education, and available data on parasitic diseases in the United States

Continue scale up of proven interventions

Expand and strengthen surveillance for data-driven decision making

Monitor and mitigate threats from malaria insecticide, drug resistance, and invasive vectors

Develop and deploy new tools and approaches

FOR MORE INFORMATION

To learn more about CDC's work to prevent, control, and eliminate parasitic diseases, visit www.cdc.gov/parasites

