

# SAVING LIVES *and* PROTECTING PEOPLE *from* PARASITIC DISEASES

Parasitic diseases can be transmitted to people:



by insects or animals



through blood or  
organ donation



from mother to baby



through contaminated  
food or water

Fast and accurate diagnosis is critical for appropriate treatment of these infections.

## WHY CARE?

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



**435,000 people died from malaria in 2017,** and millions become ill each year, including almost 2,000 returning travelers in the United States.



**1 billion people are infected with NTDs** that cause blindness, malnutrition, anemia, and disfigurement.



**300,000 people in the U.S. are infected with 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 U.S. and can cause acute and chronic illness, and death.

## DEMONSTRATED SUCCESS

Scale up of proven interventions has led to:



**Malaria deaths in Africa were cut by more than half.**



**400 million people** no longer require treatment for NTDs.



Guinea worm infections have dropped to fewer than **30 worldwide** annually.

**Improved education and awareness in the United States** is also helping protect Americans from Chagas disease and neurocysticercosis.

## CDC's EFFORTS

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



### Protecting Americans

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.



### Eliminating the Global Burden of Malaria and NTDs

Reducing global deaths, illnesses, and risks of malaria and NTDs by providing scientific leadership and support to ensure data-driven, effective disease control and elimination programs.



### Advancing Research

Conducting research to develop tools and approaches to better detect, prevent, and control parasitic diseases, mitigate drug and insecticide resistance, and accelerate progress towards elimination.

## SPOTLIGHT ON KEY CDC ACCOMPLISHMENTS AND ACTIVITIES



Co-implements with USAID the President's Malaria Initiative in 24 countries and the Greater Mekong Subregion



Conducts more than 7,000 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 WHO centers of excellence for Guinea worm, malaria, and trachoma, and world-renowned insectary and laboratories



Leads Malaria Zero efforts to eliminate malaria from Haiti, and efforts to eliminate lymphatic filariasis from Haiti and American Samoa



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 methods to modernize development of new tests for parasitic infections and to monitor for malaria drug and insecticide resistance

## WHAT'S NEEDED?

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

**Increase awareness, education, and available data** on parasitic diseases in the U.S.

**Continue scale up** of proven interventions in countries

**Expand and strengthen** surveillance for data-driven decision making

**Monitor and mitigate** threats from malaria insecticide and drug resistance

**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](http://www.cdc.gov/parasites)

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**U.S. Department of Health and Human Services**  
Centers for Disease Control and Prevention