

# 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.

## WHY CARE?

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



**409,000 people died from malaria in 2019**, 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



**Malaria deaths** in Africa were **reduced by 44%** between 2000 and 2019



**600 million people** no longer require interventions against several NTDs



Global control efforts have reduced the number of people with Guinea worm disease to below **30 in 2020**

**Improved education and awareness in the United States** is also helping 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 24 countries and the Greater Mekong Subregion



Conducts thousands (more than 4,000 in 2020) 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 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 (AMD) methods to detect and characterize parasitic infections, and to monitor for malaria drug and insecticide resistance



Assesses the pilot implementation of a new malaria vaccine (RTS,S) in western Kenya

## 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 United States

**Continue scale up** of proven interventions

**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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