Neglected Parasitic Infections in the United States

Most people think of parasitic diseases occurring in poor and developing countries, something they might pick up on an overseas trip. However, parasitic infections still occur in the United States, and in some cases, affect millions of people. Often they can go unnoticed, with few symptoms. But many times these infections cause serious illnesses, including seizures, blindness, infertility, heart failure, and even death.

Anyone, regardless of race or economic status, can become infected, although minorities, immigrants, and people living in poor or disadvantaged communities appear to be most at risk. The good news is that most of these infections can be prevented, and many are treatable. However, these infections are often undetected and untreated. Why? Most people do not know they are infected or at risk, or don't have access to appropriate care. And often, health care providers are unfamiliar with these parasitic infections, and may not diagnose or treat them appropriately. We have limited understanding about how many people are infected, or who is most at risk.

There is still a lot we don't know about these infections…but we know enough to act now.

Triatomine bug, which can carry the parasite that causes Chagas disease.

The Five Targeted Infections

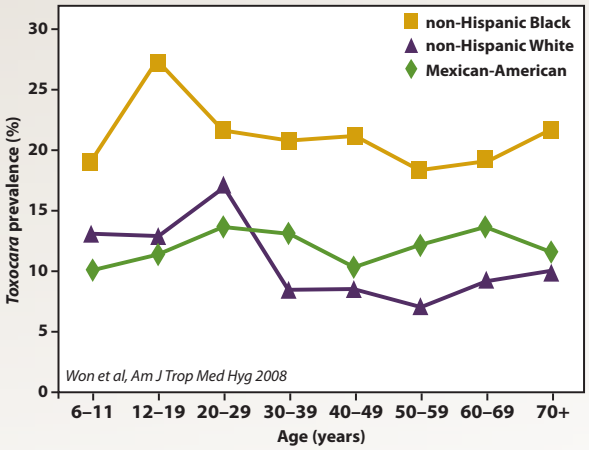
CDC has targeted five parasitic infections as priorities for public health action, based on the numbers of people infected, the severity of the illnesses, or our ability to prevent and treat them. These include Chagas disease, neurocysticercosis, toxocariasis, toxoplasmosis, and trichomoniasis.

CDC's Role

CDC is working to protect people from these health threats by increasing awareness among physicians and the public, synthesizing the existing data to help us better understand these infections, improving diagnostic testing, and for some infections, distributing the needed but otherwise unavailable drugs for treatment.

Center for Global Health
Division of Parasitic Diseases and Malaria

Toxocara seroprevalence by age and race/ethnicity NHANES III



Almost 14% of the U.S. population has been exposed to the parasite.

Did You Know?

- Chagas disease can cause heart failure and death, most commonly among Latin American immigrants.
  - » It is estimated that there are over **300,000 people** living in the United States who are infected with the parasite that causes Chagas disease. More than **300 infected babies** are born **every year** in the United States.
- Neurocysticercosis is the single most common infectious cause of seizures in some areas of the United States.
  - » **2,000 people** are diagnosed with neurocysticercosis **every year.**
- Toxocariasis is a parasitic infection of cats and dogs.
  - » At least 14% of the U.S. population has been exposed to *Toxocara* (NHANES III data, see graph). Every year an estimated **70 people**, most of them children, are blinded by toxocariasis. The true numbers are believed to be even higher.
- Toxoplasmosis is a leading cause of foodborne illness and death.
  - » More than **60 million people** in the United States are chronically infected. Infections in pregnant women can lead to birth defects in their babies and infections in immunocompromised individuals can be deadly.
- Trichomoniasis is a major cause of infertility and preterm labor in women, and low birthweight in babies.
  - » Every year **8 million people** are **newly** infected with trichomoniasis in the United States.

Working Toward a Solution

Although more work needs to be done, CDC and its partners have made progress in the fight against Neglected Parasitic Infections. We have:

- Trained almost 300 physicians and nurses nationwide through Chagas disease continuing medical education units
- Released over 200 doses of nifurtimox, one of the medicines used to treat Chagas disease
- Conducted a web-based survey of ophthalmologists to estimate national burden of eye disease due to ocular toxocariasis
- Improved a laboratory test used for diagnosis of neurocysticercosis
- Ongoing projects that include a pilot study to determine likelihood of mother-to-child transmission of Chagas disease, in addition to a survey of pediatricians to measure familiarity with visceral toxocariasis.

There is still more to do to minimize the harmful impacts of these infections. Critical gaps remain, including the need for:

- Increased outreach and education, especially among health care providers
- New and improved tests for screening and diagnosis
- Improved prevention methods

With some relatively small investments in these areas, we can achieve our goal to reduce or even end avoidable suffering of people living in the U.S., and the associated costs of these infections to our communities and our health care system.

For more information on Neglected Parasitic Infections, please visit www.cdc.gov/parasites/npi.html