

50th

Faculty of Tropical Medicine
Mahidol University

Since 1960

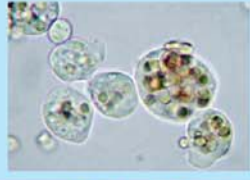


MAHIDOL UNIVERSITY

Wisdom of the Land

TROPICAL DISEASES A-Z

A



Amoebiasis

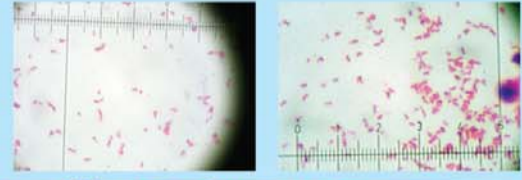
Cause *Entamoeba histolytica*, a single celled protozoa found throughout the world, especially in tropical countries.

How it is contracted Contracted by consuming contaminated food or water, including unclean enemas. It may pass into the blood stream, lymph system and from abscesses, such as in the liver.

Symptoms Abdominal pain, blood or mucus in the stool. Constipation and diarrhea. The parasite may be seen in the stool on exam.

Prevention Consume only clean food and water.

B



Bacillary dysentery

Cause *Shigella* spp. bacteria.

How it is contracted Consuming food or water contaminated with the bacteria, such as food prepared by a carrier of the bacteria.

Symptoms Fever, blood or mucus in the stool, diarrhea and abdominal cramps.

Prevention Consume only food that is freshly made. Wash hands after going to the toilet and before eating or drinking.

C



Chikungunya

Cause Chikungunya virus

How it is contracted From the bite of female *Aedes aegypti* or *Aedes albopictus* mosquitoes which have the virus from a previous blood meal. Some mosquitoes bite outside and others bite inside the home.

Symptoms Fever, joint pain, body aches.

Prevention Eliminate breeding sites for mosquitoes, such as standing water.

D



Dengue hemorrhagic fever

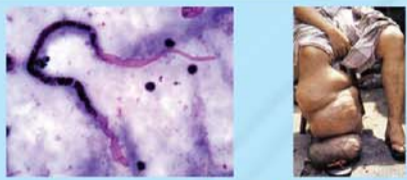
Cause Dengue virus

How it is contracted From the bite of female *Aedes aegypti* or *Aedes albopictus* mosquitoes which have the virus from a previous blood meal.

Symptoms Fever, headache, body aches, nausea, vomiting, sometimes rash and in more severe cases bleeding, shock and death.

Prevention Eliminate breeding sites for mosquitoes, such as standing water.

E



Elephantiasis

Cause In Asia, from the microfilaria of the parasites *Brugia malayi* and *Wuchereria bancrofti*.

How it is contracted From the bite of *Culex* or other mosquito species that have the parasite from a previous blood meal.

Symptoms Lymphadenitis, fever, swelling of legs, scrotum, feet, or breasts.

Prevention Eliminate breeding sites for mosquitoes, such as standing water.

F



Fasciolopsiasis

Cause The parasite *Fasciolopsis buski* in the small intestine. Eggs pass out in the stool, go into the water, hatch and pass into a fresh water snail where it develops further, passes into the water and attaches to water plants.

How it is contracted Consumption of water plants.

Symptoms Distended abdomen, abdominal pain, diarrhea, nausea and vomiting.

Prevention Do not eat uncooked water plants or unboiled water.

G



Gnathostomiasis

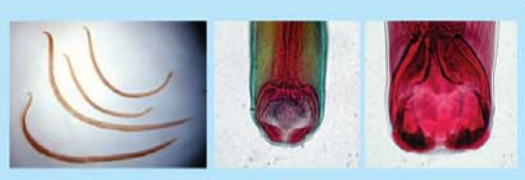
Cause The parasite *Gnathostoma spinigerum*.

How it is contracted From consumption of raw food, such as fish, snake or frog, which has the parasite.

Symptoms Swelling or red bumps on the skin with itching and sometimes pain.

Prevention Avoid consuming raw food.

H



Hookworm infection

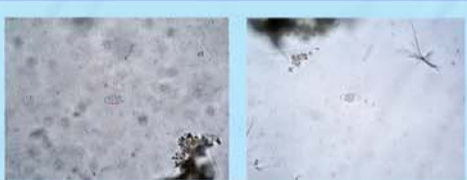
Cause The parasites *Ancylostoma duodenale* and *Necator americanus*.

How it is contracted The eggs pass out into the stool, hatch, then the parasite penetrates the skin and migrates to the small intestine.

Symptoms Easily tired, pale, blood lost to the parasite in the intestine.

Prevention Wear shoes.

I



Isosporiasis

Cause From the parasite *Isospora belli*.

How it is contracted From consuming food or drink contaminated by the stool of a carrier of this parasite.

Symptoms In those with immune problems can cause chronic diarrhea and even death.

Prevention Consume cooked food and clean water. Wash hands well before eating and after using the toilet.

J



Japanese Encephalitis

Cause From the *Japanese encephalitis* (JE) virus

How it is contracted Spread by the bite of the *Culex* mosquito, especially *C. tritaeniorhynchus*. Pigs are often reservoirs for the JE virus. The virus is frequently found in northwestern Thailand.

Symptoms Fever, vomiting, headache, muscle spasticity, loss of consciousness, even death.

Prevention Eliminate breeding sites for mosquitoes, especially standing water.

K



Kala-Azar (Visceral leishmaniasis)

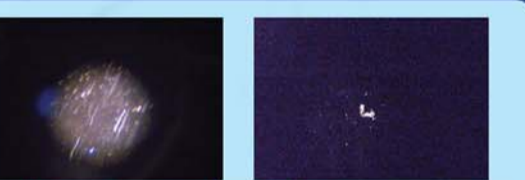
Cause From the protozoa *Leishmania*, such as *L. braziliensis*.

How it is contracted From the bite of the *Phlebotomus* sandfly that has been infested; more often seen in the Middle East.

Symptoms Sores on skin, hepato- or spleno-megaly, anemia, fatigue, leukopenia and death.

Prevention Avoid bites of the Sandfly by wearing long pants and long sleeves and using insect repellent.

L



Leptospirosis

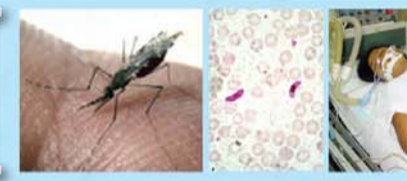
Cause From the bacteria *Leptospira* spp.

How it is contracted The bacteria enters through sores in the skin or from prolonged exposure to water contaminated with infected rat urine.

Symptoms Fever, chills, body aches, jaundice, easy bleeding, liver and kidney failure.

Prevention Avoid exposure to contaminated water, wear shoes, wear gloves when coming into contact with rat urine.

M



Malaria

Cause From the protozoa parasite *Plasmodia*, such as *P. falciparum* or *P. vivax*.

How it is contracted From the bite of female *Anopheles* spp. mosquitoes, such as *An. dirus*, that have the parasite.

Symptoms Fever, headache, nausea, vomiting, abdominal pain, and death due to complications, such as cerebral malaria, renal failure, liver failure and pulmonary edema.

Prevention Avoid mosquito bites, wear long sleeves, use mosquito repellent, use a mosquito net.

N



Negleriasis

Cause From the amoeba *Negleria fowleri*.

How it is contracted By aspirating water contaminated with the amoeba, which may enter the nose. It more often affects children.

Symptoms Fever, nausea, vomiting, headache, meningitis, coma and death.

Prevention Swim in clean water, avoid aspirating unclean water.

O



Opisthorchiasis

Cause From the parasite *Opisthorchis viverrini*.

How it is contracted From eating raw fish contaminated with the developing parasite metacercaria.

Symptoms Distended abdomen, especially the epigastrium and right upper abdomen, hepatomegaly, hepatic insufficiency, cancer of the common bile duct or liver cancer.

Prevention Eat only cooked fish.

P



Paragonimiasis

Cause From the parasite *Paragonimus heterotaeus*.

How it is contracted By eating raw crab or shrimp that is infected with the parasite.

Symptoms Chronic cough, sputum, rust colored or blood tinged sputum.

Prevention Eat only cooked crab or shrimp.

Q



Q Fever

Cause From the bacteria *Coxiella burnetii*

How it is contracted A tick is the vector. It may be found in goat meat or milk of goats, cows or buffalo that have the bacteria *C. burnetii*

Symptoms Fever, chills, headache, body aches, fatigue, sore throat, nausea, vomiting, abdominal pain, diarrhea, chest pain and pneumonia. The bacteria may infect the lungs, heart, kidneys and may cause death.

Prevention Avoid tick bites, keep the house clean, avoid non-pasteurized milk.

R



Rabies

Cause The rabies virus.

How it is contracted It is a central nervous system disorder with the virus found in saliva of mammals. Is spread by the bite of, or contamination with, the saliva of an infected animal, which spreads through the nerves to the brain.

Symptoms Brain infection, confusion, nausea, spasms, weakness, inability to swallow, death in all cases.

Prevention Avoid exposure to the saliva of a contaminated animal. Prevent with a vaccine.

S



Scrub typhus

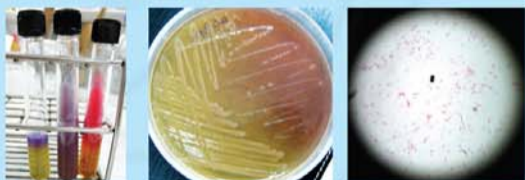
Cause From the bacteria *Rickettsia*, specifically *Orientia tsutsugamushi*.

How it is contracted The vector is a young tick, that feeds on the blood of animals. If bitten by an infected tick it will cause a sore similar to a small burn on the skin.

Symptoms Fever, headache, lymphadenopathy, heart or lung disease and death.

Prevention Avoid the bite of the tick, keep pets and house clean.

T



Typhoid

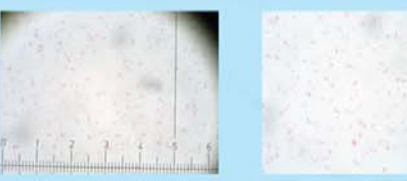
Cause From the bacteria *Salmonella typhi*.

How it is contracted From consuming food contaminated with the bacteria.

Symptoms Fever, chills, lethargy, abdominal pain, nausea, vomiting, diarrhea or constipation; complications include bleeding from the gastrointestinal tract and perforation.

Prevention Eat only well cooked food and drink clean water.

U



Undulant fever

Cause From the bacteria *Brucella* spread from animals, such as cows, buffalo, pigs, cats and dogs.

How it is contracted Eating food contaminated with the bacteria, drinking contaminated milk from goats, cows.

Symptoms Vomiting, diarrhea, chronic fever for months, muscle weakness, joint pains, weight loss

Prevention Eat only clean food, avoid non-pasteurized milk, wash hands after touching farm animals.

V



Vibrio Cholera

Cause The bacteria *Vibrio cholerae* which has many types, such as El Tor or 0139.

How it is contracted The bacteria is in the stool or vomitus of those infected. This can then contaminate food or water or can be spread by flies.

Symptoms Profuse watery, diarrhea causing dehydration and electrolyte abnormalities severe enough to cause death.

Prevention Wash hands well before eating and prevent food from being contaminated by flies.

W



West Nile fever

Cause West Nile virus.

How it is contracted The reservoirs are birds, such as wild birds or crows, and is spread to humans by the culex mosquito; seen in America.

Symptoms Fever, headache, body aches, lymphadenitis, rash and encephalitis which can cause death.

Prevention Avoid mosquito bites, use a mosquito net, wear long sleeves. Remove mosquito breeding places.

X



Xerophthalmia Vitamin A deficiency

Cause Deficiency of vitamin A.

Symptoms Color blindness at night, dry conjunctiva, eye ulcers, dry cornea, blindness.

Prevention Eat food that has vitamin A, such as egg yolks, milk, yellow fruits or vegetables and morning glory.

Y



Yellow fever

Cause Yellow fever virus.

How it is contracted Spread by the bite of the *Aedes* mosquito, found in Africa and South America.

Symptoms Fever, headache, body aches, chills, vomiting, possible bleeding, melena, jaundice and renal failure.

Prevention Yellow fever vaccine.

Z



Zoster (herpes zoster)

Cause Varicella zoster virus, the same virus causing chickenpox, is reactivated when the immune system is depressed.

Symptoms Vesicles and pustules on the skin along the distribution of a nerve. It causes burning pain.

Prevention Zoster vaccine; keep the immune system strong by getting adequate rest and eating a healthy diet.

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