

a pathogen picks a tissue, a route, and a set of symptoms that follow from both

Pathogens and the diseases they cause

Typhoid

bacterium *Salmonella typhi*, spread through contaminated food and water

Common cold

Rhinovirus, infects the nose and airway but not the lungs, spreads through droplets and contact

Malaria

Plasmodium, a protozoan, transmitted by the bite of an infected female *Anopheles* mosquito

Amoebiasis

Entamoeba histolytica, a protozoan, spread through contaminated food and water

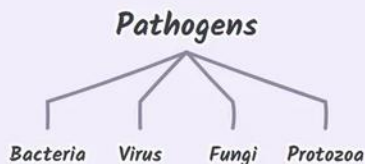
Ascariasis

Ascaris, a roundworm, spread through contaminated food, water and soil

Ringworm

dermatophytic fungi, spread by contact with an infected person, animal, or shared towels and clothing

Pathogens, sorted by kind



four broad kinds of disease-causing organism; the diseases above are examples across them, not a strict one-to-one map

Malaria, in a little more detail *

- *Plasmodium* is injected into the bloodstream when an infected female *Anopheles* mosquito bites, multiplies first inside liver cells, then goes on to infect red blood cells
- the classic recurring fever of malaria is tied to the rupture of infected red blood cells, which releases haemozoin, not to the mosquito bite itself, which is only when the infection begins
- *Plasmodium falciparum* causes the most severe, potentially fatal form of the disease