Mosquitoes, Vectors of Disease
an Aspect of Human / Nature

Quick Facts
- Up to 700 million people are infected and more than a million die each year from mosquito-borne illness.
- Diseases transmitted by mosquitoes include: malaria, yellow fever, and Zika fever.
- Zika may result in newborn microcephaly due to the destruction of different parts of the brain.
- Mosquitoes can carry infectious diseases from several different classes of microorganisms, including viruses and parasites.
- In 2015, it was reported that, due to climate change, mosquitoes had started to spread to historically rare diseases to Europe - malaria to Greece, West Nile virus to Eastern Europe and chikungunya to Italy and France.

Selected Resources
This book traces the social and environmental determinants of human infectious diseases from the Neolithic to the present day. Despite recent discoveries of new pathogens, the major determinants of these emerging infections are ancient and recurring and include changing modes of subsistence, shifting populations, environmental disruptions, and social inequalities.

Diseases and conditions (CDC)
http://www.cdc.gov/DiseasesConditions/

Facts about Microcephaly
http://www.cdc.gov/ncbddd/birthdefects/microcephaly.html

Vector-borne infectious diseases, such as malaria, dengue fever, yellow fever, and plague, cause a significant fraction of the global infectious disease burden; nearly half of the world’s population is infected with at least one type of vector-borne pathogen. Vector-borne plant and animal diseases, including several newly recognized pathogens, reduce agricultural productivity and disrupt ecosystems throughout the world. These diseases profoundly restrict socioeconomic status and development in countries with the highest rates of infection, many of which are located in the tropics and subtropics.

February 2016

Although medicine and sanitation in modernized countries are more advanced than ever before, over the past three decades we have seen the emergence of some 30 new diseases, such as HIV, SARS, and Ebola. Lyme Disease, Hepatitis C, Legionnaires’ Disease, and even Jacob-Creutzfeldt, the human form of a disorder we know as Mad Cow, has made headlines. We are also facing a resurgence of diseases once thought nearly eradicated, including tuberculosis and smallpox, and the persistence of rare disorders such as leprosy. Link explains the extent of new, resurgent, and resistant diseases defying the abilities of science and medicine, or often finding strength in globalization or other facets of modernization.


As vectors of diseases such as malaria, yellow fever, encephalitis, and dengue fever, mosquitoes forced open a new chapter in the history of medical entomology. This book traces this saga and the parallel efforts of civic groups in New Jersey’s Meadowlands and along San Francisco Bay’s east side to manage the dangerous mosquito population.


The ease and speed of travel, tourism, and international trade connect once-remote areas with one another, eliminating many of the geographic and cultural barriers that once limited the spread of disease. The book discusses the global emergence, establishment, and surveillance of infectious diseases; the complex relationship between travel, trade, tourism, and the spread of infectious diseases; national and international policies for mitigating disease movement locally and globally; and obstacles and opportunities for detecting and containing these potentially wide-reaching and devastating diseases.

WHO Disease Outbreak News
http://www.who.int/csr/don/en/

WHO Zika virus

February 2016