**Diseases transmitted by mosquitoes:**

**What is mosquito?**

It is one of the most important insects transmitting diseases among humans as they are instrumental in having them get infected with diseases due to their bearing for viruses and parasites.

**How are diseases transmitted by mosquitoes?**  
When the mosquito bearing the disease-causing viruses, parasites, or worms "microorganisms" stings the human, it transfers them to their body by injecting the saliva bearing the microorganisms to their skin.

Transmitting the diseases to another can be averted by fighting mosquito, keeping the infected clear of the healthy or giving inoculations to the healthy when they are likely to pick up the infection.   
   
**Major Diseases Transmitted by Mosquitos:**  
• Malaria  
• Dengue Fever  
• Yellow Fever  
• Chikungunya fever  
• Filariasis

**Mosquitoes carry different classes of microorganisms, causing several diseases, including:**

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| Type | Diseases Resulting from their Transmitting to Humans​ |
| Parasites | Anopheles transfers the parasite causing the malaria, the most widespread worldwide. |
| Viruses | • Aedes aegypti transmits the virus causing many diseases such as dengue fever, yellow fever, and Chikungunya fever.  • Other types of mosquitoes transfer the viruses triggering cerebral fever, rift valley fever, and west Nile virus​ |
| Nematodes | Some types of mosquitoes transfer these nematodes instrumental in triggering Filariasis characterized by swelling in parts of the human body.​ |

**Definition and Symptoms Characterizing the Diseases Transmitted by the Mosquitos:**

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| Diseases | Definition | Symptom |
| Malaria | It is an infectious disease triggered by parasitic microorganism called protozoans; it is picked up by mosquitoes. This parasite creeps into the red blood cells in the human body and destroys them. ​ | • High body temperature and shiver • Sweating • Headache • Nausea and Vomiting • Diarrhoea |
| Dengue fever | It is a viral disease transmitted by; a type of mosquito called Aedes aegypti​ | • High body temperature • Severe headache • Severe pains behind the eyes • Joint and muscle pains • Rash • Nose or gum bleeding or spots under the skin |
| Chikungunya Fever​ | It is a viral disease spread by the mosquitoes, and it is mostly endemic in Africa, Asia, and Indian Subcontinent. However, the mosquitoes transferring the disease, in the last’s decades, moved to Europe and the Americas​ | • Sudden appearance of fever along with severe pains, mostly resulting in crippling the infected person greatly. • Muscle pains • Headache • Rash ​ |

**Diagnosis:**  
The type of the mosquito-transmitted disease can only be identified by conducting blood-related tests; to pinpoint the type of microorganisms and in turn its treatment.

**Treatment:**

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| Malaria | There a group of drugs used for treating the malaria and taken according to the type of the parasite and the place of the incidence in the world. Also, some of these drugs have encountered resistance by the parasites and are not effective.  Group of drugs treatment the malaria: • Chloroquine • Quinine sulfate • Hydroxychloroquine • Mefloquine • atovaquone+proguanil​ |
| Dengue fever | There are no specific treatment for the dengue fever virus but physicians turn for the following ways: • Giving the drugs inhibiting pains and lowering temperature: avoiding giving sedatives triggering an increase in the hemophilia such as aspirin, ibuprofen, or naproxen. • Stressing on drinking enough fluids to make up for the dehydration that could occur due to the vomiting recurrence, high body temperature.  And in the critical conditions, the patient remains under the healthcare in the hospital; to receive the proper treatment. • Intravenous fluids making up for the dehydration and salt deficiency. • Monitoring the vital signs especially the blood pressure. • Blood transfusion when needed. |
| Chikungunya Fever​ | There is no a specific treatment for Chikungunya fever but the aim of treatment is to diminish the associated symptoms with the joint pains included.​ |

**Prevention from the diseases transmitted by the mosquitoes:**  
Infection with these diseases can be prevented by:  
• Fighting the mosquitoes  
• Taking the available precautions for protection against the mosquito stings such as wearing long-sleeved clothing, covering the legs in the places where the insects are rampant, and using the insect repellent cream.  
• Using mosquito nets when sleeping outdoors.  
• Avoiding travelling to the places where insect-transmitted diseases are rife as much as possible, and make a point of taking the required vaccines or drugs to be protected against them when travelling such as yellow fever and malaria.