# Ebola Characteristics Compared with Other Infectious Diseases

| | Ebola | Hepatitis C | HIV | Influenza - H1N1 Pandemic | Influenza - Seasonal | Lassa Fever | Malaria | Marburg | Measles | Pertussis | Polio | SARS | Tuberculosis |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Causative Agent** | Virus | Virus | Virus | Virus | Virus | Virus | Parasite | Virus | Virus | Bacteria | Virus | Virus | Bacteria |
| **Year first case identified** | 1976 | 1989 | 1981 | 2009 | Ancient disease | 1969 | Ancient disease | 1967 | Ancient disease | Ancient Disease | Ancient Disease | 2003 | Ancient Disease |
| **Primary mode(s) of transmission** | Direct contact* | Direct Contact* | Direct contact † | Airborne | Airborne | Direct contact*, ingestion or inhalation | Vector-borne (mosquito) | Direct contact* | Airborne | Airborne | Fecal-oral | Airborne | Airborne |
| **Asymptomatic Transmission** | No | Yes | Yes | Yes | Yes | Unlikely | Yes | No | No | No | Yes | Unlikely | Yes |
| **Incubation Period** | 2-21 days | 2 weeks- 6 months | 10 years | 2-6 days | 1-4 days | 7-10 days | 7-30 days | 5-10 days | 7-21 days | 4-21 days | 3-35 days | 1-14 days | weeks to years |
| **Transmission potential (average # new cases generated by each case)** | 1.5-2.0 | 2-4 | 3-6 | 1.3–1.7 | 1.2-1.4 | n.d. | n/a | 1.6 | 12-40 | 16-18 | 6-7 | 3.6 | 1 - 40 |
| **Case Fatality Rate (estimate, range)** | 50% (25%-90%) | Unknown | 80-90% (untreated)∏ | 0.01% - 0.3% | <0.1% | 50% | ≤ 20% | 23-90% | 1-30% | ≤ 4% | Children: 3-5%; Adults: 15-30% | 13% < 60 yrs<br>43% > 60 yrs | 3.0 - 9.2% |
| **Available Vaccine to Prevent Infection** | Yes** | No | No | Yes | Yes | No | No | No | Yes | Yes | Yes | No | No |
| **Available Treatment** | No^ | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | No | No | Yes |
| **Can Be Cured?** | No | Yes | No | No | No | No | No | No | No | Yes | No | No | Yes |
| **Immunity after infection?** | Likely | No | No (can be infected with >1 strain) | Partial | Partial | Unknown, potential | No (possibility for re-infection) | Unknown, potential | Yes | No | Yes | Unknown | No (possibility for relapse) |
| **Annual cases worldwide per year (latest year estimate)** | 8‡ | n.d. | 2.1 million | 24% of global population (2009-2010) | 3-5 million | 100,000-300,000 | 207 million | Few; Largest outbreak (Angola, 2004-2005) yielded 252 cases | 226,722 | 16 million | 406 (in 2013) | 8,096 (in 2003) | 8.6 million |
| **Annual Deaths Worldwide per year (latest year estimate)** | 4‡ | 350,000-500,000 | 1.5 million | 284,000 (2009-2010) | 250,000-500,000 | 5,000 | 627,000 | Few; Largest outbreak (Angola, 2004-2005) yielded 227 deaths | 122,000 | 195,000 | None reported | 774 (in 2003) | 1.3 million |

**Notes:**

n.d. = no data

n/a = not applicable due to no human-to-human transmission, only vector-borne transmission

* Direct Contact refers to the primary route of infection being through bodily fluids such as blood and feces; also includes monther-to-child transmission

** An Ebola vaccine is available on an emergency use basis

† = Primary routes of transmission for HIV are sexual contact, blood-borne, and mother-to-child

^ Experimental treatments have been used to treat Ebola patients

‡ = In 2017, there was one reported outbreak (in DRC) with 8 cases and 4 deaths

∏ = Not fatal with early treatment

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