

Disease considered as candidates for global eradication by the International Task Force for Disease Eradication¹

Disease	Current annual toll worldwide	Chief obstacles to eradication	Conclusion
Diseases targeted for eradication			
Dracunculiasis (Guinea worm disease)	<10,000 persons infected; few deaths	Sporadic insecurity	Eradicable WHA 44.5 (1991)
Lymphatic filariasis	120 million cases	Weakness of primary health care systems in Africa; increased national/international commitment needed	Potentially eradicable WHA 50.29 (1997)
Measles	780,000 deaths, mostly among children	Lack of suitably effective vaccine for young infants; cost; public misconception of seriousness	Potentially eradicable
Mumps	Unknown	Lack of data on impact in developing countries; difficult diagnosis	Potentially eradicable
Poliomyelitis	2,000 cases of paralytic disease; 200 deaths	Insecurity; low vaccine coverage; increased national commitment needed	Eradicable WHA 41.28 (1988)
Rubella	Unknown	Lack of data on impact in developing countries; difficult diagnosis	Potentially eradicable
Taeniasis/cysticercosis (pork tapeworm)	50 million cases; 50,000 deaths	Demonstration of elimination on national scale	Potentially eradicable
Diseases/conditions of which some aspects could be eliminated			
American trypanosomiasis (Chagas' disease)	10—12 million infected	Difficult diagnosis, treatment; animal reservoirs	Not eradicable; can stop vector-borne transmission to humans in some areas
Hepatitis B	250,000 deaths	Carrier state, infections in utero not preventable; need routine infant vaccination	Not now eradicable, but could eliminate transmission over several decades
Iodine deficiency disorders	Unknown	Inadequate surveillance, lack of environmental sources of iodine	Could eliminate iodine deficiency disorders
Malaria	>300 million cases; >1 million deaths	National and international commitment, weak primary health care systems; drug and insecticide resistance; non-specific diagnoses	Not now eradicable; elimination possible in Hispaniola
Neonatal tetanus	560,000 deaths	Inexhaustible environmental reservoir	Not now eradicable, but could prevent transmission
Onchocerciasis (river blindness)	37—40 million cases; 340,000 blind	Lack of macrofilaricide and test for living adult worms	Could eliminate associated blindness in Africa; and probably transmission in the Americas
Rabies	52,000 deaths	No effective way to deliver vaccine to wild animals that carry the disease	Could eliminate urban rabies
Trachoma	150 million cases; 6 million blind	Link to poverty; inadequate rapid assessment methodology and diagnostic test for ocular infection	Could eliminate associated blindness WHA 51.11 (1998)

¹ (Updated April 2008) CDC. Recommendations of the International Task Force for Disease Eradication. *Morbidity and Mortality Weekly Report* 1993; 42(RR-16):8. This report and summaries from ITFDE (II) meetings can be found at www.cartercenter.org.

Yaws and other endemic treponematoses	Unknown	Lack of political will, inadequate funding, weaknesses in primary health care systems	Could eliminate transmission nationwide, as shown by India*
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Diseases that are not eradicable now

Ascariasis (roundworm)	1 billion infected; 20,000 deaths	Eggs viable in soil for years; laborious diagnosis; widespread	Not now eradicable
Cholera	Unknown	Environmental reservoirs; strain differences	Not now eradicable
Diphtheria	Unknown	Difficult diagnosis; multiple-dose vaccine	Not now eradicable
Hookworm disease	740 million cases; 10,000 deaths	Increased national and international commitment; monitoring impact of interventions	Not now eradicable
Leprosy (Hansen's disease)	225,000 cases	Need for improved diagnostic tests and chemotherapy; social stigma; potential reservoir in armadillos	Not now eradicable
Meningococcal meningitis	614,000 cases; 180,000 deaths	Lack of serogroup A conjugate vaccine; cost	Not now eradicable
Pertussis (whooping cough)	40 million cases; 400,000 deaths	High infectiousness; early infections; multiple-dose vaccine	Not now eradicable
Rotaviral enteritis	80 million cases; 870,000 deaths	Inadequate vaccine	Not now eradicable
Schistosomiasis (bilharziasis)	200 million infected	Reservoir hosts; increased snail-breeding sites; need simple diagnostic test for intestinal disease	Not now eradicable
Tuberculosis	8–10 million new cases; 2–3 million deaths	Need for improved diagnostic tests, chemotherapy and vaccine; wider application of current therapy	Not now eradicable
Visceral leishmaniasis	500,000 cases	Inadequate surveillance, drug supply and knowledge of vector breeding sites; weak primary health care systems	Not now eradicable
Yellow fever	>10,000 deaths	Sylvatic reservoir; heat-labile vaccine	Not now eradicable

Diseases that are not eradicable

African trypanosomiasis	300,000—600,000 infected	Reservoir hosts; difficult treatment and diagnosis	Not eradicable
Amebiasis	500 million cases; 40,000—110,000 deaths	Asymptomatic infections; difficult diagnosis, treatment	Not eradicable
Bartonellosis	Unknown	Asymptomatic infections; difficult diagnosis, treatment	Not eradicable
Buruli ulcer	Unknown	Inadequate surveillance, early detection and treatment; need field diagnostic test and orally administered treatment	Not eradicable
Clonorchiasis	20 million cases in China alone	Animal reservoir; asymptomatic infections; carrier state	Not eradicable
Enterobiasis	Unknown	Widespread; mild disease	Not eradicable
Varicella zoster	3 million cases in USA alone	Latency of virus; inadequate vaccine	Not eradicable

*Because persons may be infected for decades and the organisms cannot be distinguished from those that cause venereal syphilis, elimination of transmission—not eradication—is the goal.