



# INTERNATIONAL TASK FORCE FOR DISEASE ERADICATION

## *What is the International Task Force for Disease Eradication?*

Inspired by the successful eradication of smallpox in 1977, The Carter Center established the International Task Force for Disease Eradication (ITFDE) in 1988 to evaluate disease control and prevention and the potential for eradicating other infectious diseases.

The task force is chaired by Dr. Donald R. Hopkins, vice president of health programs at The Carter Center, and composed of scientists and notable international health organizations from around the world, including the U.S. Centers for Disease Control and Prevention, the World Health Organization, UNICEF, and the World Bank. Other members are experts in specific diseases.

## *What is the difference between eradication, elimination, and control?*

The ITFDE evaluates diseases using the following definitions (for more information see [http://www.cartercenter.org/health/itfde/program\\_definition.html](http://www.cartercenter.org/health/itfde/program_definition.html)):

**Eradication:** Reduction of the worldwide incidence of a disease to zero as a result of deliberate efforts, obviating the necessity for further control measures. True eradication is rare and usually entails eliminating the microorganism itself or removing it completely from nature.

Between 1988 and 1992 the task force concluded that six diseases—dracunculiasis, poliomyelitis, mumps, rubella, lymphatic filariasis, and cysticercosis—could

be eradicated. Measles was added to this list in 2002.

**Elimination:** Refers to cessation of transmission of a disease in a single country, continent, or other limited geographic area, rather than global eradication (e.g., polio in the Americas). It also is theoretically possible to “eliminate” a disease in humans while the microbe remains at large in the environment (e.g., neonatal tetanus). Although a disease itself may remain, a particularly undesirable clinical manifestation of it may be prevented entirely (e.g., blindness from trachoma) or new transmission interrupted (e.g., infectious yaws). Elimination also can refer to control of a disease or its manifestations to a level that it is no longer considered “a public health problem,” as an arbitrarily defined qualitative (e.g., onchocerciasis in West Africa) or quantitative (e.g., leprosy incidence below one case per 10,000 population) level of disease control.

In 2008, The Carter Center supported two task force recommendations: to encourage cooperation between the Dominican Republic and Haiti to eliminate lymphatic filariasis and malaria from Hispaniola and to convene the first program review for Buruli ulcer programs in Benin, Cote d’Ivoire, Ghana, and Togo.

**Control:** Reduced incidence or prevalence of a disease or condition; control measures are still required.

## *What determines whether a disease can be eradicated?*

According to the International Task Force for Disease Eradication, two of the



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primary factors that determine whether a disease can be eradicated are scientific feasibility and political support. The following are some of the conditions that make it scientifically feasible to eradicate a disease:

- **Epidemiologic vulnerability:** A disease could be considered vulnerable if it does not spread easily; if there is a natural cyclical decline in prevalence; if there is a naturally induced immunity; if it is easily diagnosed; and if the duration of any relapse potential is short.
- **Availability of an effective and practical intervention:** Such interventions could include a vaccine or other primary preventive measure, a curative treatment, or a means of eliminating vectors. Ideally, intervention should be effective, safe, inexpensive, long lasting, and easily deployed.
- **Demonstrated feasibility of elimination:** A disease that has been documented to have been eliminated from an island or other geographic unit could be a candidate for eradication.

Even if it is scientifically feasible to eradicate a disease, there are nonscientific conditions that must be considered, such as:

- Perceived burden of the disease
- Expected cost of eradication
- Synergy of eradication efforts with other interventions
- Necessity for eradication rather than control