Appendix E

Glossary of Acronyms and Terms

Glossary of Acronyms

AFRIMS — Armed Forces Research Institute of Medical Sciences
AID — Agency for International Development (U.S. Department of State)
ARI — acute respiratory infections
BCG — bacille Calmette-Guerin Vaccination
CAREC — Caribbean Epidemiology Research Center (PAHO)
CCCD — Combatting Communicable Childhood Diseases (AID)
CDC — Centers for Disease Control (PHS)
CE/LAS — California Encephalitis/LaCrosse Encephalitis
CEPIALET — Pan-American Center for Research and Training in Leprosy and Tropical Diseases (PAHO)
CFNI — Caribbean Food and Nutrition Institute (PAHO)
DOD — U.S. Department of Defense
DRG — Division of Research Grants (NIH)
EPE — eastern equine encephalitis
EPI — Expanded Program on Immunization (WHO)
FIC — Fogarty International Center (NIH)
GAO — General Accounting Office (U.S. Congress)
GMI — Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc.
GML — Gorgas Memorial Laboratory (of GMI)
GND — Great Neglected Diseases of Mankind (Rockefeller Foundation)
HHS — U.S. Department of Health and Human Services
HTLV — human T-cell leukemia virus
ICDDR — International Center for Diarrheal Disease Research/Bangladesh
ICIDR — International Collaboration in Infectious Diseases (NIAID)
IDRC — International Development Research Centre (Canadian)
ILRAD — International Laboratory of Research on Animal Diseases
INCAP — Institute of Nutrition of the Caribbean and Panama (PAHO)
IRG — Internal Review Group (NIH)
MARU — Middle American Research Unit (NIAID)
MERTU/G — Medical Entomology Research and Training Unit in Guatemala (CDC)
NAMRU — Naval Medical Research Unit
NCI — National Cancer Institute (NIH)
NIAID — National Institute of Allergy and Infectious Diseases (NIH)
NIH — National Institutes of Health (PHS)
ORT — oral dehydration therapy
OTA — Office of Technology Assessment (U.S. Congress)
PAHO — Pan American Health Organization
PHS — U.S. Public Health Service (HHSP)
SLE — St. Louis encephalitis
STD — sexually transmitted diseases
TDR — United Nations Development Program/World Bank/World Health Organization Special Programme for Research and Training in Tropical Diseases
UNDP — United Nations Development Programme
USAMRU — United States Army Medical Research Unit
VEE — Venezuelan equine encephalitis
WEE — western equine encephalitis
WHO — World Health Organization
WRAIR — Walter Reed Army Institute of Research
YARU — Yale Arboviral Research Unit (Yale University)
Glossary of Terms*

acute: Having a sudden onset, sharp rise, and short course; not chronic.
Aedes (ah-ee’dez): A genus of mosquitoes. A. aegypti, the tiger mosquito, is a common urban species that breeds near houses and transmits urban yellow fever and dengue fever.
amebiasis (am-ee-bi’ah-sis): Infection by amebae, especially, infection with Entamoeba histolytica, an intestinal parasite, characterized by diarrhea with blood and mucus and also causing abscesses in the intestine and liver (sometimes called amebic dysentery). See AMEBA.
amoeba (ah-me’bah), also, amoeba: A protozoan; a single-celled life form. One species, Entamoeba histolytica, is a parasitic pathogen producing amebiasis in man. See AMEBIASIS.
ancylostomiasis (an-k’il-os-to-mi’ah-sis): Infection with Ancylostoma duodenale, the human intestinal hookworm. Causes chronic anemia.
Anopheles gambiae (ah-nee’foh-lees gam-bee’e): A species of mosquito in Africa that transmits malaria; also, a group of closely related species of mosquitoes. See SPECIES COMPLEX.
antigen (an’ti-jen): Any substance that stimulates the production of antibodies.
Aotus (ay-oftus): A genus of monkey; the owl monkey.
arbovirus (ar’bo-vi-rus): An abbreviation for arthropod-borne virus, virus transmitted by arthropods. 
Argentinean hemorrhagic fever: An acute, sometimes fatal disease caused by a virus, transmitted through contamination by urine or feces of infected rats. Characterized by chills, fever, severe headache, hemorrhagic symptoms, shock, kidney involvement, and necrologic involvement.
arthropods (ar’thro-podz): Invertebrate animals of the phylum Arthropoda that includes insects, ticks, spiders, and crustaceans.
arthropod-borne: Transmitted by arthropods.
ascariasis (as-kah’ri-ah-sis): An infection with worms of the genus Ascaris, especially, Ascaris lumbricoides, the human intestinal round worm, characterized by intestinal pain and diarrhea.

aortic meningitis (a-sept’ik men-in-ji’tis): Viral-caused inflammation of the membranes surrounding the brain and spinal cord.

bacille Calmette-Guerin, abbr. BCG: An attenuated (weakened) strain of tuberculosis bacteria used to vaccinate against virulent tuberculosis.
bacillus (ba-sil’us), pl. bacilli: Any of various rod-shaped, aerobic bacteria of the genus Bacillus.
bacteriology (bak-tir’e-ol’o-ji): The scientific study of bacteria.
bacterium (bak-tir’e-uhm), pl. bacteria: Any of numerous unicellular micro-organisms (class Schizomyces), occurring in a wide variety of forms, existing either as free-living organisms or as parasites, and having a wide range of biochemical, often pathogenic, properties.
bilharzia (bi-lahr’zi-uh): See SCHISTOSOMIASIS.
bilirubin (bi-li-roo’bin): A pigment largely derived from the breakdown in the spleen of hemoglobin from red blood cells.

Bolivian hemorrhagic fever: An acute, sometimes fatal disease caused by a virus, transmitted through contamination by urine or feces of infected rats, occurring in Bolivia. Characterized by chills, fever, severe headache, hemorrhagic symptoms, shock, kidney involvement, and necrologic involvement.

Californiaencephalitis: An acute encephalitis caused by an arbovirus, transmitted by mosquitoes.
Campylobacter (kam’pi-luh-bak’ter): A genus of bacteria, one of which, C. jejuni, causes an acute diarrheal disease.

cellulose acetate electrophoresis: A type of isozyme electrophoresis. See ISOZYME; ISOZYME ELECTROPHORESIS.
cervical cancer (ser’vi-kal): Cancer of the cervix (the neck of the uterus).

Chagas’ disease (sha’gus): Infection by Trypanosoma cruzi, transmitted by reduviid bugs. Discovered and described by Carlos Chagas of Brazil, characterized by an acute course in children with fever, encephalitis, and inflammation of the heart muscle (often life-threatening or fatal), and a chronic course in adults leading to heart disease and heart failure. Widely distributed in Central and South America. Also called American trypanosomiasis. See TRYPANOSOMIASIS.

Chagas’ fever: A febrile disease caused by an arbovirus, transmitted by phlebotomine sandflies. Also called “Panama fever.”

chemotherapy (kee-mo-ther’a-pi): The use of specific chemical agents to arrest the progress of, or eradicate, disease in the body without causing irreversible injury to healthy tissues.

chorioretinitis (kawr-i-o-ret-in’i-tis): Inflammation of the choroid and retina of the eye.

*SOURCES:
chronic: Lingering, lasting, as opposed to acute.
Colorado tick fever: A febrile disease without rash caused by an arbovirus, transmitted by a tick, occurring in the Rocky Mountain region of the United States.
cytogenetics (si'to-je-net'iks): Laboratory examination, usually microscopic, of chromosomes.
dengue fever (deng'gee): An acute febrile disease caused by an arbovirus, transmitted by mosquitoes of the genus Aedes, characterized by fever, severe pains in the head, eyes, muscles, and joints, and a skin eruption. Occurring in Japan, Southeast Asia, the South Pacific, India, the Caribbean, Middle and South America. Sometimes called “breakbone fever.”
dengue hemorrhagic fever: Life-threatening complications of dengue infection; syn. DENGUE SHOCK SYNDROME. See DENGUE FEVER.
dengue shock syndrome: Life-threatening complications of dengue infection; syn. DENGUE HEMORRHAGIC FEVER. See DENGUE FEVER.
diarrhea (dy-a-ree'a): Pathologically excessive frequency and fluidity of fecal discharges. Adj., diarrheal.
diphtheria (dif-theer'ee-a): An acute infectious disease caused by the bacterium Corynebacterium diphtheria. Characterized by grey, adherent, false membrane growing on mucous surface of the upper respiratory tract. Locally there is pain, swelling, and may be suffocation. Systemically the toxins attack the heart muscle and nerves.
DNA hybridization: Laboratory method for species and strain identification based on matching of DNA from an unknown organism with DNA from known organisms.
eastern equine encephalitis, abbr. EEE: An arbovirus disease of horses and mules, possibly other vertebrates, with a reservoir of infection in birds, transmitted by mosquitoes. Can be transmitted to humans and cause death. Occurring in the United States in a region extending from New Hampshire to Texas to Wisconsin, in Canada, Mexico, the Caribbean, and parts of Central and South America. Characterized by encephalomyelitis.
elephantiasis (el-ef-an-ti-a-sis): The swelling of a limb, usually a leg, as a result of lymphatic obstruction, followed by thickening of the skin and subcutaneous tissues. A complication of filariasis in tropical countries. See FILARIASIS.
encephalitis (en-sef-a-lit'is): Inflammation of the brain.
encephalomyelitis (en-sef-al-o-mi-e-li'tis): Inflammation of the brain and spinal cord.
enemic (en-dem'ik): The constant presence or persistence of a human disease or infectious agent within a given geographic area. Cf. EPIDEMIC; ENZOOTIC.
enteric (en-ter'ik): Pertaining to the intestine.
entomology (en-to-mol'o-ji): The science dealing with insects.
enzootic (en-zo'-tik): The constant presence or persistence of an animal disease or infectious agent within a given geographic area. Cf. ENDEMIC; EPIZOOTIC.
epidemic (ep-i-dem'ik): The occurrence of a human illness in excess of usual frequency in a particular area. Cf. ENDEMIC; EPIZOOTIC.
epidemiology (ep-i-de-mi-o-l'o-ji): The scientific study of the distribution and occurrence of diseases and health conditions.
epizootic (ep-i-zo-o-tik): The occurrence of an animal disease in excess of usual frequency in a particular area. Cf. EPIDEMIC; ENZOOTIC.
Escherichia coli (esh'er-i-ka ko'ii): A species of bacteria; motile, rod-shaped bacterium which is ubiquitous in the intestinal tract of vertebrates. Some strains are pathogenic to humans, causing intestinal disease and diarrhea.
etiology (ee-ti-o-l'o-ji): The scientific study of disease causation; the causation of a disease.
filariasis (fil-a-ri’a-sis): Infection with Filaria, parasitic thread-like worms, found mainly in the tropics and subtropics, transmitted by mosquitoes. Adults of Wuchereria bancrofti and Brugia malayi live in the lymphatic system and connective tissues, where they may cause obstruction, but the embryos (microfilariae) migrate to the blood stream. Completion of the lifecycle is dependent on passage through a mosquito. See ELEPHANTIASIS.
genus (jen’us): The taxonomic category next greater than species.
granulomatous (gran-u-lom’ah-tus): Composed of tumor-like mass or nodule of tissue, due to inflammatory process associated with an infectious disease, such as tuberculosis.
hemorrhagic fever: Severe complication of some viral diseases involving internal or external bleeding.
host: Human or other living animal, including birds and arthropods, that affords subsistence or lodgment to an infectious agent under natural conditions.
human T-cell leukemia virus, abbr. HTLV: A recently identified virus that induces a specific type of cancer of the blood-forming organs.
immunity (i-my oo’ne-ti): Nonsusceptibility, or relative resistance, to a specific infection, due to antibodies produced against that specific antigen.
immunology (im’yo-nol’o-ji): The scientific study of immunity. Adj., immunologic, immunological.
in vivo (vi’vo): In living tissue.
in vitro (vi’tro): In glass, as in a test-tube.
isozyme (i’so-zime): Two or more forms of the same enzyme having, identical chemical function but differing physical structure, which can be separated and identified.
isozyme electrophoresis (i’so-zime el-ek-tro-ee’ sis): Laboratory method of separating isozymes (cf.) based on their migration distance in an electric field applied across a standardized inert material (polyacrylamide gel, agarose gel, or cellulose acetate).
jaundice (jawn’dis): A condition characterized by yellow appearance due to raised bilirubin level in the blood resulting from: 1) obstruction in the biliary tract, 2) excessive rupture of red blood cells, 3) toxic or infective damage of liver cells.
kwashiorkor (kwash-ee-or’kor): A nutritional disease produced by persistent deficiency in essential dietary protein. Characteristic features are anemia, wasting, edema, potbelly, depigmentation of the skin, loss of hair or change of hair color. Untreated, it progresses to death.
LaCrosse encephalitis: An acute encephalitis caused by an arbovirus, transmitted by mosquitoes. Closely related to California encephalitis.
Leishmania (leesh-may’ni-a): A genus of flagellated parasitic protozoans causing several clinical diseases. See LEISHMANIASIS.
leishmaniasis (leesh-man-i’a-sis): Infection by Leishmania, transmitted by sandflies. Cutaneous leishmaniasis is a skin ulcer caused by L. mexicana (New World) or L. tropica (Old World). Mucocutaneous leishmaniasis is an ulceration of the nose and throat caused by L. braziliensis, occurring in tropical America. Visceral leishmaniasis, also called kala-azar, is a generalized and internal disease caused by L. donovani (New and Old World).
leprosy (lep’ra-si): A chronic, infectious, granulomatous disease occurring almost exclusively in tropical and subtropical regions, caused by the bacillus Mycobacterium lepra, and ranging in severity from noncontagious and spontaneously remitting forms to contagious, malignant forms with progressive anemia, paralysis, ulceration, nutritive disturb-
ances, gangrene, and mutilation. Also called "Hansen’s disease."
leptospirosis (lep-to-spi’ro’ sis): Disease caused by spirochete (finely coiled bacterium), commonly transmitted in water contaminated by urine of infected animals. Characterized by inflammation of the spinal cord, the nervous system, and liver.
lifecycle: The progressive stages of development of an organism.
lymphatic system (lim-fa’tik): The system of vessels in the body that carry lymph fluid.
lymph glands (limf-glanz): The organs at various points of the lymphatic system that filter the lymph fluid.
malaria: A disease caused by protozoan parasites that infect red blood cells, transmitted by mosquitoes of the genus Anopheles. Four species of the parasite cause disease in humans: Plasmodium falciparum, P. vivax, P. malariae, and P. ovale. P. vivax and P. ovale have a persistent stage in the liver that causes relapses. Many other species infect monkeys, rodents, birds, and reptiles. Characterized by fever, chills, and sweating that occur at intervals depending on the time required for development of a new generation of parasites in the body. See PLASMODIUM FALCIPARUM.
marasmus (ma-raz’mus): Wasting away of the body due to gross lack of calories in the diet.
measles (meez’lz): An acute infectious disease caused by a virus, Characterized by fever, a blotchy rash, and inflammation of mucous membranes.
metabolic: Pertaining to metabolism, the series of chemical changes in the living body by which life is maintained.
metastasize (me-tas’ta-syz): Transfer of a disease from one part of the body to another, usually by blood or lymph, leading to secondary growth or lesions.
molluscicide (mol-lusk’i-side): Any chemical agent used to kill molluscs, especially snails.
morbidity: Disease or illness.
mortality: Death.
onchocerciasis (on-ko-ser-k’i-a-sis): An infection of humans with Onchocerca worms, transmitted by the bite of blood-sucking blackflies (Simuliiidae). Adult worms become encapsulated in subcutaneous nodules. Immature worms (microfilariae) migrate in the tissues and can cause “river blindness” if reaching the eye. Occurring in western Africa and discrete foci in tropical America.
oral dehydration therapy: The treatment of fluid-loss due to diarrhea by a specific water solution of electrolytes and glucose taken by mouth.
Oropouche fever (or-o-poosh): An arbovirus disease transmitted by biting midges (Culicoides spp.).
Characterized by fever, headache, aches and pains, and occasionally encephalitis. Found in Trinidad and Brazil, but recognized range in tropical America is expanding. Occurrence is primarily rural or forest, but explosive urban and suburban outbreaks occur.

**Plasmodium falciparum** (plaz-mo’dé-um fal-sip’ar-um): One of the four species of protozoan parasites causing malaria in humans. Only *P. falciparum* causes life-threatening complications; only species with drug-resistant characteristics. See MALARIA.

**pneumococcal** (nyoo-mo-kok’al): Referring to the bacterium, *Diplococcus pneumonia*, that causes pneumococcal pneumonia.

**pneumonia** (nyoo-mo-ni’ya): Inflammation of the lung, usually the lower respiratory tract.

**poliomyelitis** (po’lee-o-my’a-li’tis): An infectious viral disease occurring mainly in children and in its acute, more virulent form attacking the central nervous system and producing paralysis, muscular atrophy, and often deformity. Transmitted by the oral-fecal route.

**prevalence** (prev’a-lens): The number of existing cases of a disease in a defined population at a particular time.

**protozoa** (pro-to-zo’a): Unicellular organisms, the smallest type of animal life. Adj. protozoan, protozoal.

**protozoology** (pro-to-zo-o-lé-o-ji): The scientific study of protozoa. Adj. protozoologic.

**reduviid** (re-du’vi-id): Belonging to the family Reduviidae, winged, “true” bugs (Order Hemiptera), including blood-sucking vectors of Chagas’ disease. See CHAGAS’ DISEASE.

**reservoir**: Any person, animal, arthropod, plant, soil or substance (or combination of these) in which an infectious agent normally lives and multiplies, on which it depends primarily for survival, and where it reproduces itself in such manner that it can be transmitted to a susceptible host.

**rotavirus** (ro-ta-vi-rus): Any of a group of viruses (round in shape) causing gastroenteritis in infants and children.

**St. Louis encephalitis**, abbr. SLE: An arbovirus disease transmitted by mosquitoes, with the reservoir of infection in birds. Can be transmitted to humans and cause death. First observed in Illinois in 1932. Occurring in most of the United States, Trinidad, Jamaica, Panama, and Brazil. Mild cases characterized by aseptic meningitis; severe infection usually marked by acute onset, headache, high fever, coma, convulsions, and paralysis.

**schistosomiasis** (shis’to-so-mi’a-sis): An infection of the human body by worms of the genus *Schistosoma* (“blood flukes”), from drinking or bathing in infected water. Infected humans pass eggs in urine or feces (depending on parasite species) into water source. Immature form (miricidia) hatches and infects suitable snail host. After multiplication, intermediate form ( cercariae) is shed from snail into water, where penetration of human skin occurs. Adult worm develops in human, localizing in veins of bladder or intestine. *Schistosoma mansoni* occurs in Africa, the Caribbean, and Brazil; *S. japonicum* occurs in the Far East; in both, adult worms localize in veins of intestine; deposited eggs cause tissue scarring of intestine and liver; *S. haematobium* occurs in Africa and the Middle East producing the urinary form as adult worms localize in veins of the bladder; characterized by obstruction due to scar formation, inflammation, and possibly cancer. Also called “bilharzia.”

**sequelae** (se-kwel’ee): The pathological consequences of a disease.

**seroepidemiologic**: Pertaining to a branch of epidemiology that studies antigens from humans to delineate epidemiologic patterns of a disease. See EPIDEMIOLOGY; SEROLOGY.

**serology** (se-ro’-oji): The scientific study of sera (the fluid portion of blood). Adj. serologic, serological.

**sexually transmitted diseases**: A group of infectious diseases defined by transmission through intimate contact, including gonorrhea, syphilis, chancroid, lymphogranuloma venereum, granuloma inguinale, chlamydia, herpes simplex, trichomonas, as well as hepatitis virus and intestinal parasites such as giardia, entamoeba, ascaris, and trichuris.

**species** (spe’ziès): A taxonomic subdivision of a genus. A group of individuals having common characteristics distinguishing them from other categories of individuals of the same taxonomic level. Always carries the implication of reproductive isolation, i.e., members of a species only reproduce successfully with one another.

**species complex**: A group of two or more closely related insect species that can only be differentiated by cyto genetic analysis or cross-breeding experiments.

**strain**: A group of organisms of the same species (cf.) having a distinctive quality or characteristic (bio-
chemical, pathogenic, or other feature) that can be
differentiated, but not different enough to constitute a separate species.
subacute: Mild or moderately severe. Often the stage between the acute and chronic phases of disease.
symptomatic: Of or pertaining to the symptoms, rather than the causes of a disease.
symptomatology: The branch of medicine concerned with symptoms. The combined symptoms typical of a particular disease.
therapeutic: Dealing with the treatment of disease.
toxoplamosis (toks-o-plas-mo'sis): Infection by the protozoal parasite Toxoplasma gondii. Many mammals can harbor the parasite which encysts in tissue after ingestion (oral-fecal route), but only in cats is the lifecycle completed, with the infective form shed in feces. Characterized by lesions of the central nervous system, which may lead to chorioretinitis, blindness, brain defects, and death.
trachoma (tra-ko'mah): A chronic, infectious disease of the eye caused by the bacterium Chlamydia trachomatis, characterized by inflammation, pain, watery eye, then scarring, and finally blindness.
triatomine (tri-a-to-meen): Pertaining to the genus Triatoma, blood-sucking bugs important as vectors of Chagas’ disease See CHAGAS’ DISEASE.
trichuriasis (trik-u-ri‘ah-sis): Infection with the intestinal parasitic whipworm, Trichuris trichiura.
Trypanosoma (tri-pan-o-so’ma): A genus of parasitic protozoans. Their lifecycle alternates between blood-sucking arthropods and vertebrate hosts. See TRYPANOSOMIASIS.
trypanosomiasis (tri-pan’a-so-my’a-sis): Disease produced by infection with Trypanosoma. In man this may be with Trypanosoma cruzi, transmitted by blood-sucking reduviid bugs in the Americas (also called Chagas’ disease); or with T. rhodesiense in East Africa or T. gambiense in West Africa, both transmitted by the tsetse fly, causing “sleeping sickness.” See CHAGAS’ DISEASE.
tubercle bacillus (tu’ber-k1 ba-sil’es): A bacillus causing tuberculosis; usually refers to Mycobacterium tuberculosis, the principal cause of human tuberculosis.
tuberculosis (tu-ber-ku-lo’sis): An infectious disease caused by any of several species of mycobacteria. Usually begins with lesions in the lung, but can metastasize to other parts of the body.
vector: A carrier of disease; usage commonly refers to arthropods or rodents.
vector bionomics: The relationship between organisms and their environment.
vector-borne: Transmitted by a vector.
vector control: Intervention aimed at disease reduction by action against vectors.
Venezuelan equine encephalitis, abbr. VEE: An arbovirus disease of horses and mules, possibly other vertebrates, with a reservoir of infection in birds, transmitted by mosquitoes. Can be transmitted to humans and cause death. Endemic in northern South America, Trinidad, Middle America, Mexico, and Florida. Characterized by severe headache, chills, fever, pain in muscles and eyes, nausea and vomiting, possibly with severe central nervous system complications leading to convulsions, coma, and death.
western equine encephalitis, abbr. WEE: An arbovirus disease of horses and mules, possibly other vertebrates, with a reservoir of infection in birds, transmitted by mosquitoes. Can be transmitted to humans and cause death. Occurring in Western and Central United States and Canada and in scattered areas further east. Characterized by encephalomyelitis.
whooping cough: Pertussis; an infectious respiratory disease of children with attacks of coughing which reach a peak of violence ending in an inspiratory whoop. Caused by Bordetella pertussis, Prophylactic vaccination is responsible for a decrease in case incidence.
yellow fever, abbr. YF: An acute febrile disease caused by an arbovirus, transmitted by mosquitoes. Characteristic features are fever, jaundice, black vomit, and anuria (absence of urine excretion). Jungle/sylvan yellow fever is maintained in monkey reservoir hosts; urban yellow fever refers to transmission with human reservoir hosts.
zoonosis (zo-on-o’sis): An infection or infectious disease transmissible under natural conditions from vertebrate animals to man,