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GLOSSARY OF TERMS

- Active immunity:** Protection against a disease resulting from the production of antibodies in a host (i.e., person or animal) that has been inoculated with an antigen.
- Ambulatory medical care:** Medical goods and services rendered outside of a hospital or other inpatient health care facility, including such items as physician office visits, outpatient laboratory diagnostic services, and outpatient prescription drugs.
- Anaphylaxis:** An unusual or exaggerated allergic reaction that often involves breathing difficulties and irregular heart beats, and sometimes causes death.
- Antibiotic:** A specific type of chemical substance that can be administered to fight infections in humans or animals. Most antibiotics are produced from micro-organisms; some can be produced synthetically. Examples of commonly used antibiotics are penicillin and tetracycline.
- Antibody:** A specific type of protein produced in humans or animals that combines with—and thereby diminishes or prevents harmful effects caused by—a specific antigen.
- Antibody titer:** The quantity, usually measured in the blood, of a specific type of antibody present in a host (i. e., person or animal). A certain antibody titer is needed to protect the host against a specific antigen.
- Antigen:** A specific type of substance, usually a protein or carbohydrate, that when introduced into the body of a human or animal stimulates the production of specific types of antibodies. Some antigens are made from particular micro-organisms and are used to produce active immunity against the disease(s) that these micro-organisms produce (e.g., an antigen made from measles virus is used to produce active immunity against measles).
- Antigenicity:** Potency as an antigen.
- Antiserum:** Blood serum containing antibodies from animals that have been inoculated with bacteria or their toxins. When administered to other animals or humans, antiserum produces passive immunity.
- Antitoxin:** A specific type of protein that neutralizes a specific toxin; a serum containing antitoxins.
- Asplenia:** Absence of the spleen, usually because of surgical removal.
- Attenuated:** Rendered less virulent; a term used to describe micro-organisms that have been altered so that they can be used to stimulate antibody production without producing disease.
- Attributable risk:** The arithmetic or absolute difference in incidence rates (e.g., of a disease) between two groups of subjects, usually an experimental (or exposed) group and a control (or unexposed) group.
- Bacteremia:** The presence of bacteria (e.g., pneumococci) in the circulating blood stream, an indication of severe bacterial infection.
- Biologics (biological products):** Medicinal preparations made from living organisms and their products. Examples include serums, vaccines, toxoids, and antitoxins.
- Controlled clinical trial:** An experimental method often used to evaluate the safety and efficacy of an experimental medical intervention. In a controlled clinical trial, human or animal subjects are assigned in accordance with predetermined rules either 1) to an experimental group (in which subjects receive the experimental intervention), or 2) to a control group (in which subjects do not receive the experimental intervention, but usually receive a placebo or a standard intervention instead). If the predetermined rules specify that the subjects are assigned to groups randomly, the result is a randomized controlled clinical trial.
- Cost-effectiveness ratio:** A ratio that expresses the cost (usually in dollars) associated with obtaining one unit of a measurable effect (e. g., a year of healthy life).
- Discount rate:** A factor used in economic analysis to reduce to present value costs and effects that occur in future years. Discounting is based on two premises: 1) individuals prefer to receive benefits today rather than in the future, and 2) resources invested today in alternative programs could earn a rate of return over time.
- Duty to warn:** A legal duty, based on theories of strict liability (see below), that requires a manufacturer to provide appropriate warning to the users of its “unavoidably dangerous” products (e. g., dynamite, Pasteur rabies vaccine) about the inherent, foreseeable risks associated with use of these products. In recent court cases involving injury produced by nondefective and properly administered vaccines, courts have held the vaccine manufacturer liable for failure to discharge its duty to warn the plaintiff (an injured vaccinee) about the inherent, though statistically remote, risks of vaccination.
- Effectiveness:** Same as efficacy (see below) except that it refers to “. . . average conditions of use.”
- Efficacy:** The probability of benefit to individuals in a defined population from a medical technology

- applied for a given medical problem under ideal conditions of use.
- Epidemiology:** The study of the frequency, distribution, and determinants of; morbidity and mortality from; and the impact of interventions on diseases and disabilities in defined populations.
- Guillain-Barre Syndrome (GBS):** A neurological disorder of unknown etiology which is characterized by paralysis that begins in the legs and later involves the trunk of the body, arms, and neck. GBS has been observed rarely to follow certain types of vaccinations, most notably, swine flu. It is a transient condition in about 90 percent of those afflicted, leaves residual paralysis in about 5 to 10 percent, and is fatal in about 5 percent.
- Herd immunity:** The resistance of a group or population, based on the immunity of a high proportion of individual members of the group, to invasion and spread of an infectious agent.
- High-risk group or population:** A group comprised of persons who are more likely than those in the general population to contract or die from a certain medical problem (e. g., pneumococcal pneumonia), either because 1) they possess certain conditions (e.g., chronic lung disease), or 2) they have been exposed to the agent that causes the medical problem (e.g., pneumococci).
- Immunity:** See *active immunity*, *passive immunity*.
- Immunization:** See *vaccination*.
- Immunogenicity:** Relative ability to produce immunity.
- Incidence rate:** The rate at which new cases of a disease occur in a defined population over a defined period of time.
- Isolate:** A population of living micro-organisms that have been isolated from a sample of body fluid or tissue, e.g., blood, sputum.
- Medical technology:** The drugs, devices, and medical and surgical procedures used in medical care, and the organizational and supportive systems within which such care is provided.
- Micro-organisms:** Microscopic plants or animals, e.g., bacteria, fungi, molds, viruses.
- Morbidity:** Illness, injury, impairment, or disability.
- Morbidity rate:** The rate at which morbidity occurs, a term often used in epidemiologic studies in which the rate of disability or impairment resulting from a certain disease or injury is calculated for a defined population.
- Mortality:** Death.
- Mortality rate:** The rate at which mortality occurs; a term often used in epidemiologic studies in which the rate of death resulting from a certain disease or injury is calculated for a defined population.
- Passive immunity:** Protection against a disease derived from the injection of antibodies produced by another host (i. e., person or animal).
- Pneumococcal pneumonia:** Pneumonia caused by pneumococci.
- Pneumococcus (*Streptococcus pneumoniae*):** A form of bacterium belonging to the streptococcal family. There are 83 known serotypes of pneumococci.
- Pneumonia:** A disease of the lungs characterized by inflammation and consolidation, which is usually caused by infection or irritation.
- Polysaccharides, capsular pneumococcal:** The complex sugars which make up the capsule that surrounds a pneumococcus bacterium. The composition, hence antigenicity, of capsular polysaccharides varies with each of the 83 serotypes of pneumococci.
- Prevalence rate:** The number of people in a defined population who have a disease at a given point in time.
- Quality-adjusted life year (QALY):** One year of life adjusted for various types and degrees of disability to yield one year of healthy life. QALYs are sometimes used to measure in common terms the effects on morbidity and mortality of health care interventions or programs.
- Risk:** The probability (among a defined population or for an individual) of occurrence of an untoward outcome (e. g., GBS) resulting from use of a particular medical technology (e. g., swine flu vaccine) when applied for a given medical problem under specified conditions of use.
- Safety:** A judgment of the acceptability of risk in a specified situation.
- Serology:** The study of antigen-antibody reactions in the test tube.
- Serotype:** A specific type, as determined by the kinds and combinations of antigenic components present in the cell, of a particular micro-organism (e. g., Type 3 pneumococcus).
- Serum:** See antiserum.
- Sickle-cell anemia:** A hereditary, genetically determined hemolytic anemia, which is characterized by joint pain, arthritis, acute attacks of abdominal pain, ulcerations of the lower extremities, and sickle-shaped red blood cells; and which occurs almost exclusively in Negroes.
- Strict liability:** A theory of legal liability that can be used to hold a manufacturer legally responsible for harm produced by one of its products that is unavoidably unsafe, no matter what precautions are taken (e.g., dynamite, the Pasteur rabies vaccine). Strict liability may attach even in the absence of wrongful intent or negligence on the part of the manufacturer. In cases involving socially useful, but dangerous products, some courts have ruled that liability for unavoidable injury does not attach if a product which produces an injury was accompanied by appropriate warnings to the user re-

garding the product's inherent risks. (See duty to warn.)

Toxin: A protein substance, produced in some cases by disease-producing micro-organisms, which is highly toxic for other living organisms. Some toxins are antigenic.

Toxoid: A toxin that has been modified to reduce or eliminate its toxicity, but to retain its antigenicity. Solutions or suspensions of toxoids are administered to produce active immunity.

Vaccine: A preparation that contains live, attenuated, or killed micro-organisms for their antigenic components. Upon being administered, a vaccine can stimulate antibody formation and produce active immunity.

Vaccination: The process of administering a vaccine; a term often used interchangeably with the word immunization, although vaccination does not always confer immunity.

GLOSSARY OF ACRONYMS

ACIP	- Advisory Committee on Immunization Practices	IBNP	- incurred-but-not-reported (claim)
AHA	- American Hospital Association	IND	- investigational new drug application
ASTHO	- Association of State and Territorial Health Officials	ISO	- Insurance Services Office
BC	- Blue Cross	LRTI	- lower respiratory tract infection
BCA	- benefit-cost analysis	MMWR	- Morbidity and Mortality Weekly Report
BOB	- Bureau of Biologics (FDA)	MSD	- Merck Sharp and Dohme
BOD	- Bureau of Drugs (FDA)	NAMCS	- National Ambulatory Medical Care Survey (NCHS)
BS	- Blue Shield	NCHCT	- National Center for Health Care Technology (HEW)
CDC	- Center for Disease Control (HEW)	NCHS	- National Center for Health Statistics (HEW)
CEA	- cost-effectiveness analysis	NCHSR	- National Center for Health Services Research (HEW)
CFR	- Code of Federal Regulations	NDA	- new drug application
CHAP	- Child Health Assessment Program	NIAID	- National Institute of Allergy and Infectious Diseases (NIH)
CMA	- California Medical Association	NIH	- National Institutes of Health (HEW)
CM	- Consumer Price Index	NNHS	- National Nursing Home Survey (NCHS)
DHEW	- Department of Health, Education, and Welfare	OASDHI	- Old-Age, Survivors, Disability and Health Insurance Program (SSA)
DOD	- Department of Defense	OMB	- Office of Management and Budget
DPT	- diphtheria, pertussis, and tetanus toxoids	ORC	- Opinion Research Corporation
DVS	- Division of Vital Statistics, (NCHS)	OTA	- Office of Technology Assessment (U.S. Congress)
EPSDT	- Early and Periodic Screening, Diagnosis, and Treatment (Program)	PHS	- Public Health Service (HEW)
FDA	- Food and Drug Administration (HEW)	PKU	- Phenylketonuria
FR	- Federal Register	PMA	- Pharmaceutical Manufacturers Association
GAO	- U.S. General Accounting Office	PMS	- postmarketing surveillance
GBS	- Guillain-Barre Syndrome	PPB	- planning, program, and budgeting
HCFA	- Health Care Financing Administration (HEW)	PP1	- patient package insert
HCIFC	- House Committee on Interstate and Foreign Commerce (U. S. Congress);	PSRO	- Professional Standards Review Organization
HDS	- Hospital Discharge Survey (NCHS)	QALY	- quality-adjusted life year
HEW	- Department of Health, Education, and Welfare	RMSF	- Rocky Mountain Spotted Fever
HIP	- Health Insurance Plan of Greater New York	SSA	- Social Security Administration
HIS	- Health Interview Survey (NCHS)	USE	- United States Code
HMO	- Health Maintenance Organization	VA	- Veterans Administration
HPRS	- Health Program Reporting System (ASTHO)	VDC	- Vaccine Development Committee (NIAID)
HSA	- Health System Agencies		