

Immunity

A. Species immunity: certain species are naturally immune to specific microorganisms (e.g., humans are immune to distemper, dogs are immune to measles)

B. Active immunity: antibodies formed in the body

1. Natural active immunity: antibodies formed by the individual during the course of the disease; in some instances the antibodies provide lifelong immunity (e.g., measles, chickenpox, yellow fever, smallpox)

PROPERTY OF www.aaroncyuntalan.com

2. Artificial active immunity: use of a vaccine or toxoid to stimulate formation of homologous antibodies; revaccination (booster shot) is often needed to sustain antibody titer (anamnestic effect)

a. Killed vaccines: antigenic preparations containing microbes grown in the laboratory separated from growth medium and killed by heat or a chemical agent; usually injected subcutaneously; less often given by intramuscular or oral routes (e.g., pertussis vaccine, typhoid vaccine)

b. Live vaccines: antigenic preparations containing microbes weakened (attenuated) by drying, continued and prolonged passage through culture media or animals (to induce mutations), or by other means; typically such vaccines are more antigenic than killed preparations; (e.g., oral [Sabin] poliomyelitis vaccine, measles vaccine)

c. Toxoids: antigenic preparations composed of inactivated bacterial toxins (generally an exotoxin treated with formaldehyde) (e.g., tetanus toxoids, diphtheria toxoids)

C. Passive immunity: antibodies acquired from an outside source

1. Natural passive immunity: passage of preformed antibodies from the mother through the placenta or colostrum to the baby; therefore during the first few weeks of life the newborn is immune to certain diseases to which the mother has active immunity

PROPERTY OF www.aaroncyuntalan.com

2. Artificial passive immunity: injection of antisera derived from immunized

animals or humans; antisera (antiserums) provide immediate and often complete protection in susceptible exposed persons and also are of value in treatment (e.g., diphtheria antitoxin, tetanus antitoxin); individuals may be hypersensitive to certain sera such as horse serum, and pretesting for hypersensitivity must be carried out before administration

Expanded Program on Immunization

Launched in July 1976 by the DOH in cooperation with the WHO and UNICEF. The original objective was to reduce the morbidity and mortality among infants and children caused by the six childhood immunizable diseases. (Primary complex, Diphtheria, Pertussis, Polio, Measles, and Tetanus)

Principles

- The program is based on the epidemiological situation; the immunization schedules are based on the occurrence and characteristics of the epidemiological features of the diseases.
- The whole community is the target of EPI, not a single person therefore immunization is based on the mass approach.
- Immunization is a basic health service and such it is ingrained in the first line health unit.

Selected Elements of EPI

- Target setting
- Cold chain Management
- Education and Information Dissemination
- The use of the healthcare process to evaluate the programs over-all performance.
- Surveillance and other epidemiological approach.

PROPERTY OF www.aaroncyuntalan.com

Existing and Legal Policies with regards to EPI

PD No. 996 (September 16, 1976)

- Compulsory immunization for children below the age of eight.

PP No. 6 (April 3, 1986)

- UN's goal to disseminate Universal Child Immunization by 1990

PP No. 46 (September 16, 1992)

- Reaffirming the commitment of the Philippines to the universal Child and Mother Immunization goal of the World Health Assembly.

PP No. 147 (March 3, 1993)

- Declaring April 21 and May 19, 1993 and every third Wednesday of January and February thereafter, for two years, as National Immunization Days.

RA 7846 (December 30, 1994)

- Compulsory hepatitis B for Children below eight years old.

PP No. 773 (March 28, 1996)

- Declaring April 17 and May 15, 1996 and every third Wednesday of April and May from 1996 to 2000 as “Knock Out Polio days”.

PP No. 1066 (August 26, 1997)

- National Tetanus Elimination starting 1997

PP No. 1064 (August 27, 1997)

- All sectors are invited to join the eradication of polio in the Philippines.

PROPERTY OF www.aaroncyuntalan.com