

Active v. Passive “IMMUNITY”

Active Immunity

- As a result of exposure to an infectious agent or one of its products (antigens)
- Antibodies are produced by the host in response to the infectious agent itself (e.g. recovery from the disease), or in response to artificial immunization (vaccination) with some **product derived from the infectious agent** (e.g. toxoid, killed cells, structural components of cells, inactivated virus, etc.).

Passive Immunity

- As a result of the **acquisition of antibodies** which have been produced in another animal (by active means) or derived from cells grown in tissue culture (monoclonal antibodies)
- Injection of immune serum from an individual previously immunized or recovered from disease, e.g. hepatitis; Injection of serum from an animal hyperimmunized with tetanus toxoid; Placental transfer of antibodies from mother to fetus; Transfer of antibodies from mother to infant in milk by nursing.

Directions

- Put an “A” in the box if it is active immunity and a “P” if it is passive immunity.

I was recently vaccinated with a small amount of the polio virus. The injections allowed me to “build-up” some immunity in case of a second exposure.

A cow recently fought off the tetanus bacterium. A serum of its antibodies was injected in me as a vaccine and allowed me to fight off the virus in my body. I stepped on a rusty nail recently.

Memory cells in my body played a large part in allowing me to fight off my second and third exposures to chicken pox

As a developing fetus my mother produced a surplus of antibodies that were successful in fighting influenza in she and I.
