

# VACCINES

## Live attenuated

### Bacterial

- BCG
- Oral typhoid

### Viral

- MMR
- Vaccinia
- Varicella
- Yellow fever
- Intranasal influenza
- Oral polio

\*\*injected polio or influenza vaccines are *inactivated*

## Whole cell

### Viral

- Polio
- Rabies
- influenza (IM)
- Salk polio

### Bacterial

- Pertussis
- typhoid

## Protein Based

### Toxoid

- Diphtheria
- Tetanus

### Subunit

- HBVsAg
- HPV
- Influenza
- Acellular pertussis

## Inactivated

## Fractional

## Polysaccharide

### Pure

### Conjugate

(encapsulated bac)

- H influenzae type b (Hib)
- Pneumococcal
- meningococcal

Live vaccines: Smallpox variola  
Recombinant vaccines: HBV  
\*in red=mohadret dr hatem slide 33 in red

\*\*DTP-> whole  
DTaP->Acellular p Ag  
Both inactivated, not toxoid  
DT are toxoids