






+ VANGUARD OF MEDICAL INNOVATION + **TETANUS TOXOID IMMUNIZATION**



 In the 1920s, Louis Bazy and George Ramon of the Pasteur Institute developed the **tetanus toxoid**, a preparation that induces active immunization by stimulating the body to produce its own antitoxins against the disease.

 The U.S. Navy conducted the largest early experimental tetanus toxoid studies in June 1934. Led by Navy physician Lt. Cmdr. W.W. Hall aboard the hospital ship USS Relief, these trials focused on determining the correct interval and number of injections needed for successful immunization with an alum-precipitated toxoid.

 Building on these successful trials, the Bureau of Medicine and Surgery (BUMED) instituted a program in 1941 to immunize all U.S. Navy and Marine personnel against tetanus. **This massive Navy-led inoculation campaign was so effective that not one American Sailor or Marine died of tetanus in World War II.**

