Safety, tolerance and immunogenicity of the purified Vi polysaccharide vaccine (Typhim Vi) against typhoid fever was evaluated in primary school children aged 5-15 years. A total of 435 children were vaccinated, each with a single intramuscular injection in the left deltoid muscle. One hundred and ten children were randomly selected for blood samples on day 0 (pre vaccination) and day 30 (post vaccination). Vi antibodies studied by Radio immuno assay (RIA) on 97(88%) paired sera showed a seroconversion rate of 76.2% and seroprotection rate after vaccination was 74.2%, while 6.2% of children already had protective immunity before vaccination. The vaccine was well tolerated. Most commonly reported reactions were mild pain at site of injection (83%), and a few complained of mild swelling (4.6%), induration (1.1%), itching (1.1%) and headaches (1.4%). All reactions were of mild severity and disappeared within 24 to 48 hours.