

Pneumococcus is the most important pathogen of bacterial pneumonia, bacteremia, meningitis, otitis media and sinusitis in human. According to some estimate in the States, pneumococcus infection is responsible for 50,000 cases of bacteremia, 500,000 cases of pneumonia, 3,000 cases of meningitis, 7,000,000 cases of otitis media and 40,000 cases of fatal infection each year. There has been at least 90 serotypes of pneumococcus being identified to date. Currently licensed pneumococcus vaccine contains 23 serotypes that may cover 85-90% of pneumococcus strains in invasive diseases. Advisory committee for immunization in the States recommended that the 23-valent pneumococcus vaccine should be given to people older than 65 years and those between 2 and 65 years with some chronic illnesses. After the disastrous earthquake in 1999 in Taiwan, 1,000 doses of pneumococcus vaccine were donated by the pharmaceutical company to those living in areas suffering most from the earthquake. This is the first large-scale pneumococcus vaccination program in Taiwan, and this study is aimed to evaluate the safety and efficacy of pneumococcus vaccine.