Abstract: Objective. To analyze prevalences of allergic sensitization and atopic disease in relation to vaccination coverage. Methods. A German atopy risk-enhanced birth cohort of 1314 neonates who were born in 1990 in 5 German cities was studied. A total of 943 children participated in the follow-up visit at 5 years of age. Atopic symptoms and diagnoses (derived from structured interviews), total serum immunoglobulin E, and specific immunoglobulin E against 9 common allergens (CAP Radio-Allergo-Sorbent Test Fluoro-Enzyme Immunoassay) were evaluated. Children were grouped into dose percentiles according to cumulative doses of any vaccine given up to 5 years of age (90%, 21-27 doses). Results. The cumulative vaccine dose was inversely related to atopic dermatitis prevalences at 6 months (13.8%, 5.2%, 5.1%, and 4.5%), 2 years (16.9%, 10.9%, 7.4%, and 3.7%), 3 years (27.6%, 16.4%, 13.5%, and 4.5%), and 5 years (28.3%, 16.0%, 9.3%, and 11.9%). Asthma followed a similar pattern at age 3 (22.4%, 8.6%, 6.7%, and 6.3%), age 4 (20.0%, 8.6%, 8.9%, and 8.1%), and age 5 (20.8%, 12.6%, 10.3%, and 5.5%). Allergic sensitization rates were inversely related to the cumulative vaccine dose at age 2 (37.5%, 29.1%, 23.8%, and 12.9%). Conclusion. Children with a higher vaccination coverage seemed to be transiently better protected against development of atopy in the first years of life.