

This paper deals with statistical tests in stratified fourfold tables. Several tests of conditional independence are derived in it. A test of homogeneous association is also described. At first, contingency tables with arbitrary dimensions and multinomial distribution are defined. Then we continue with a description of fourfold tables and their binomial representation. In the next section we deal with an odds ratio and its asymptotic distribution. Formal definition of stratification and relevant terms follows afterwards. In the next chapter a derivation of test statistics for conditional independence tests including the well-known Cochran-Mantel-Haenszel test based on a hypergeometric distribution can be found. This chapter also includes a description of Breslow-Day test of homogeneous association. A numerical simulation of chosen tests is performed eventually.