1077-VE-2753   **Paul R. Coe*** (`coepaul@dom.edu`), 7900 W. Division Street, River Forest, IL 60305. *Exact Confidence Intervals for the Ratio of Two Proportions.*

Confidence intervals for a single Binomial parameter or the difference or ratio of two Binomial parameters are usually calculated using a Normal distribution approximation. However, when the sample size is small or the observed proportion is close to 0 or 1, the Normal approximation to the Binomial is inaccurate. Several methods have been developed for dealing with this inaccuracy.

    Some years ago Ajit Tamhane and I developed an algorithm for calculating exact confidence intervals for the difference, ratio, and odds ratio of two proportions. However, the algorithm is only implemented in a usable form for the difference of two proportions. Recently I have created a usable implementation of the algorithm for the ratio of two proportions. In this paper I will talk about the algorithm for calculating exact confidence intervals for the difference and ratio of two proportions, and then I will present the new implementation of the algorithm for the ratio. (Received September 22, 2011)