

## OpenEpi, Version of December 2003

### *Test Results for PersonTime1 Module Single Person-Time Rate*

Dataset #	Data	Compared with	Result
PT1-1a	28/10992	Altman, DG et al. Statistics with Confidence, 2 <sup>nd</sup> ed., BMJ books, 2000, p. 67	Byar approximation of Poisson agrees with confidence limits of 0.169, 0.368. Rate agrees.
PT1-1b	28/10992	Rate is 0.2547 (per 100 PT units). Abramson and Gahlinger, PEPI, Version 4 has Fisher exact 95% C.L. of 0.17, 0.37 and midP of 0.17, 0.36 compared with OpenEpi results of 0.1759, 0.3689 for "Rothman/Greenland" Rothmans "EpiSheet" gives results of .17294, .36279.	
PT1-2a	28/4000	Rosner, B. Fundamentals of Biostatistics, 5 <sup>th</sup> ed., Duxbury, 2000, p. 681-682.	Normal approximation agrees. 441, 9e-5
PT1-2b	28/4000	Rate is 0.7 (per 100 PT units). Abramson and Gahlinger, PEPI, Version 4 has Fisher exact 95% C.L. of 0.47, 1.01 and midP of 0.48, 1.0 compared with OpenEpi results of 0.4833, 1.014 for "Rothman/Greenland" Rothmans "EpiSheet" gives results of .47523, .99695.	

By Andy Dean.

Conclusions: The Normal approximation and Poisson approximations agree with those from other sources. I was unable to find an example of the Rothman, Greenland confidence limits done by exactly the same method, but they appear to agree fairly closely with the other two, and we will continue to search for examples. There appears to be a fair amount of diversity among results of different methods and software packages. It should be safe to use the Normal for large samples and the Byar for small ones, however. A warning has been included in the output page for the OpenEpi module.

R x C appears ready for use.

