Standardized Mishap Ratio Diabetics:NonDiabetics [Hansotia P, NEJM 1991 324:22-6}

Table 4

	Diabetic Cohort			Non-Diabetic Cohort				Expected # in Diabetic Cohort IF rates were same as in nondiabetics
AGE(yr)	P-Y	#accidents	rate	P-Y	#accidents	rate	rr	
<25	65.2	3	46.03	26657.9	2177	81.66	0.56	5.32
25-34	81.2	6	73.87	27145.3	1326	48.85	1.51	3.97
35-44	136.2	9	66.08	18500.9	830	44.86	1.47	6.11
45-54	306.1	14	45.73	11620.0	456	39.24	1.17	12.01
55-64	502.1	24	47.80	10515.1	336	31.95	1.50	16.04
>65	717.7	32	44.59	10625.3	340	32.00	1.39	22.97
Total	1808.5	88 **Obs**	48.66	105064.5	5465	52.02	0.94	66.42 **Exp | H0**
after indirect standardization for age			68.91			52.02		1.32 **Obs / Exp | H0**

Obs - Exp =	21.58
continuity correction	0.5
continued corrected	21.08
square of this	444.34
divided by Exp | H0	66.42
equals	6.69

Prob(X_sq(1) > 6.69)	0.0097

CI associated with SMR of 1.32:

CI for ave. # of accidents in 1808.5 diabetic PY
ave. # of accidents in 1808.5 NON-diabetic PY (same age distrn)

= { CI based on 88 } / 66.42

Gaussian Approxn. to Poisson (4, p 24)

CI based on 88 = 88 ± 1.96sqrt(88) = 88±18.4 = 69.6 to 106.4

So CI for Rate Ratio = 69.6/66.42 to 106.4/66.42 = 1.05 to 1.60

Exact method (page 22 of notes)

Chi-sq[0.025,176df]	141.16	216.84	Chi-sq[0.975,178df]
Lower = (1/2) this	**70.58**	**108.4**	(1/2) this
Divide by 66.42	**1.06**	**1.63**	