



SOCIETY OF ACTUARIES

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**RECENT SOCIAL SECURITY DISABILITY EXPERIENCE**

by Bruce D. Schobel

Social Security Disability Insurance (DI) experience in 1980 is continuing most recent trends, but changing somewhat in a few others. The table herewith displays statistics for calendar years, 1970, 1975, 1979 and 1980, this last projected from data available at the end of September. (Ed. Note: Figures for 1971-74 and 1976-78 are in the October 1979 issue of this newsletter).

**Social Security Disabled Worker Experience**

	1970	1975	1979	Projected 1980
Number Recorded in Year (thousands):				
Applications	868	1,285	1,188	1,250
Awards	350	592	409	390
Recoveries	41	39 <sup>e</sup>	72	65
Beneficiaries at Year-End (thousands)	1,493	2,489	2,870	2,860
Gross Annual Rates per thousand:				
Incidence/Insured	4.84	7.11	4.51	4.24
Recovery/Exposed	27.9	16.3 <sup>e</sup>	25.0	22.6

Benefit applications appear to be slightly reversing their five-year decline in numbers, but the approval rate continues downward, the net effect being continuing decrease in awards. The gross disability incidence rate is expected to be the lowest since 1964. The 1980 recovery rate is significantly higher than was experienced in the mid-1970's, even though not matching the 1979 result.

Since 1978, the combined monthly number of benefit terminations, from recovery, death and transfer to the old-age rolls at age 65, has exceeded the number of awards in all but three instances; the resulting general decline in number of beneficiaries is expected to be about 10,000 this year.

**FIT PERSONS' DISCOUNTS**

by Robert L. Whitney

In his *Second Book of Running*, James Fixx, with whom I'm acquainted, presents studies that show a cause-and-effect relation between exercise and cardiovascular health. For at least 25 years correlation between exercise and good health has been demonstrated, but always the possibility lurked that favorable results merely reflect healthy people exercising more than the unhealthy. Now, as Mr. Fixx reports, Dr. Ralph S. Paffenbarger, Jr., a respected epidemiologist (and a prominent marathoner) has completed studies of Harvard and Pennsylvania graduates which eliminates this possibility. These studies deal with a homogeneous group whose history, as a consequence of the fund-raising zeal of these universities, is readily traceable.

At first it seemed that the issue might remain in doubt since the data showed that college athletes enjoyed a continuing advantage. But as the evidence accumulated, Dr. Paffenbarger noticed a

striking trend. As the years went by, this advantage kept shrinking, until, 25 years or so after graduation, a man who had been totally unathletic in college but who kept exercising, was highly likely to be healthier than a former campus sports hero.

Using a multiple logistic risk analysis technique, Dr. Paffenbarger plotted combinations of heart attack risk to observe not only their cumulative effect but also to see what activities might have reduced that risk, resulting in the table below.

Actuaries who agree that a reduction in risk of a heart attack (which this study measures) implies a more favor-

able mortality, should find this chart useful in pricing fit persons' discounts.

James Fixx mentions in his book that such discounts exist. This led me to remark to him that although non-smoker discounts, sometimes with a requirement of a favorable family history and perhaps also a satisfactory build, have become common, I thought the number of companies offering a fit persons' discount is small. Please send news of such discounts to my Year Book address. There might be a *Third Book of Running* reporting such practices. I would gladly share this information with readers.

**REDUCING YOUR HEART ATTACK RISK**

Sedentary Life Style	Cigarette Smoking	High Blood Pressure	Heart Attack Rate*	Potential Risk Reduction†
Yes	Yes	Yes	201	88%
Yes	Yes	No	66	60%
Yes	No	Yes	102	76%
No	Yes	Yes	80	68%
Yes	No	No	35	28%
No	Yes	No	50	48%
No	No	Yes	42	41%
No	No	No	26	—

\*Per 10,000 person-years.

†If Yes's are changed to No's.