

## CORRESPONDENCE

(To the Editors of the Journal of the Institute of Actuaries)

SIRS,

For office internal purposes I have recently been making an investigation into blood pressure readings, and I have pleasure in sending you the results in case you may think them of sufficient interest to publish in the *Journal*.

The investigation was based on all proposals received during the years 1923–29 inclusive, and includes proposals both completed and uncompleted and cases accepted on special terms or declined after examination. The total number of blood pressure readings was 4368 and was therefore rather more extensive than Mr Orr's enquiry which related to 1444 lives during the years 1925–29.

I may add that it has long been our practice to require a systolic blood pressure reading in all examinations, whatever the age of the proposer, but no special instructions are issued to examiners. In the case of such examinations as are conducted by the Chief Medical Officer the readings are taken on a mercury manometer by palpation, but in most other cases it is probable that an aneroid instrument is used.

Comparisons with the results of Mr Orr's enquiry and with those also of Dr Arthur Hunter are interesting. Our own figures show on the whole a very close correspondence with those of Mr Orr, though they are slightly lower at the younger ages and slightly higher at the older ages. The explanation for this feature may be that our enquiry was not limited to first-class lives, and the inclusion of sub-normal lives, especially at the older ages, may have tended to push up the average reading at these ages. The enquiry also confirms Dr Hunter's conclusion that blood pressures in this country are somewhat higher than those in the United States, and that notwithstanding the universal employment in the United States of auscultation as the method of reading—a method which I understand produces higher readings than when palpation alone is relied on.

I am, Sirs, etc.,

G. H. RECKNELL

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22nd September 1932.

Table of Systolic Blood Pressure compiled from 4368 readings

Age next birthday	Average systolic blood pressure New enquiry	Age next birthday	Average systolic blood pressure New enquiry
20	122	40	127
1	122	1	128
2	122	2	128
3	123	3	129
4	123	4	129
5	123	5	130
6	123	6	131
7	123	7	131
8	124	8	132
9	124	9	132
30	124	50	133
1	124	1	134
2	125	2	134
3	125	3	135
4	125	4	135
5	126	5	136
6	126	6	137
7	126	7	137
8	127	8	138
9	127	9	139
		60	140

## Comparison with Figures previously published

Age	Hunter (545,000 readings)	Orr (1444 readings)	New enquiry (4368 readings)
20	120	124	122
25	121	125	123
30	122	126	124
35	123	127	126
40	125	129	127
45	127	130	130
50	129	133	133
55	131	135	136
60	134	138	140