$H_{*}$ —31.

New Zealand has a low general death-rate—the lowest in the world—but its reduction has been far less rapid than that of the birth-rate.

Consideration of the above table indicates that there are prospects of considerable reduction in the number of deaths, provided the efforts of central and local governing authorities, including the Hospital Boards, the medical and nursing professions, and the general public, are united, and also that they are well directed.

Concentration upon further reduction of the already low infant-death rate, the still-birth rate, or the maternal deaths (134) will reduce deaths under these three headings, but the numbers are such that thereby no great reduction can be made in the general death-rate. Of the grand total of 11,811 deaths, 10,827 apply to persons over one year of age, and, of these, 10,693 were not associated with maternity.

Pregnancy and birth are events dangerous to both mother and child, and our intended efforts to reduce this danger cannot affect the general death-rate to any considerable degree.

It is obvious that we must widen our preventive effort to include persons of both sexes and all ages. It is particularly necessary to correct bad living-habits, to treat disease in its early stages, and, wherever possible, to prevent the spread of any infectious illness.

and, wherever possible, to prevent the spread of any infectious illness.

A definite alliance rather than a "cordiale entente" with the army of general medical practitioners is advisable, and it is equally important that they should be definitely engaged in the prevention of disease. The ideal to strive for is that the local authorities and their Medical Officers of Health should be aiding the medical practitioners in disease-prevention by measures intended to improve the environment of the general public.

For the past five years graduates from the Otago Medical School have received special training in preventive medicine.

It is both expensive and inadequate to send State medical officers and nurses from twenty to one hundred miles or more to introduce children from school or home to medical practitioners living in close proximity to those children.

National insurance for sickness and invalidity is one method already in operation in England, and throughout Europe and Asia, of partnership with the general medical practitioner for the purpose of disease-prevention, and I recommend advocacy of its adoption by New Zealand to your favourable consideration.

The Birth-rate.—Reference should be made to the steadily decreasing birth-rate.

## (1) Actual Reduction in the Number of Births in the past Two Years.

Year.			Births.	Reductions.
1926	 	 	28,473	
1927	 	 	27,881	592*
1928	 	 	27,200	681*

<sup>\*</sup> Despite an increased population.

## (2) Actual Reduction in Infant Deaths for the same Period.

Year.			In: (und	Reduction.		
1926				 ١.	1,132	
1927				 	1,080	52*
1928			• • .	 	984	96*

<sup>\*</sup> Contributed to by reducing birth-rate.

Quite a good way of increasing a population is the direct method. Early marriage induces large families. If by more and earlier marriages the birth-rate can be increased, the infant-death rate will tend automatically to rise, but there will be a considerable net gain in population.

## THE PRINCIPAL CAUSES OF DEATH ITEMIZED.

Heart-diseases (all forms)		 	 2,315
Apoplexy or cerebral hæmorr	 	 643	
Diseases of the arteries		 	 394
			3.352

These diseases of the heart and arteries account for 3,352, or nearly one-third, of the deaths. In the last half-century the death-rate from each of these three causes has increased very greatly—e.g., that from heart-disease (all forms) has trebled, and that from apoplexy more than doubled. Quite a proportion of these deaths apply to persons under 60 years of age. Habit, environment, and infection are important causative factors. In last year's report I discussed several causes of the various forms of heart-disease,