## THE PRINCIPAL CAUSES OF DEATH.

The following table gives the main causes of deaths last year in their order of magnitude, and the actual number of deaths therefrom.

$\Gamma$	OTAL DEA	THS IN	New	ZEALAND IN	1931.	12.047.		
Causes.					,	, =	Ac	tual Deaths.
Heart-disease (all	forms)							2,817
Cancer								1,493
Violence								1,165
Chest-disease—							• •	1,100
${ m Pneumonia}$							326	
Pneumonia secondary to influenza, whooping-cough, and measles							140	
Bronchitis					•••	• •	203	
Broncho-pne	umonia						180	
-					• •	• •		849
Apoplexy or cerebral hæmorrhage							• •	634
Tuberculosis (all	forms)							617
Kidney or Brigh	t's disease					• • •		579
Senility								$\frac{313}{427}$
Disease of the ar	rteries			• •			• •	420
Diabetes								$\frac{420}{227}$
Diseases and accidents of child-birth (i.e., maternal mortality)							• •	$\frac{227}{127}$
Appendicitis					••	,,,		105
Hernia and intestinal obstruction								84
Diarrhœa and enteritis					• •			74
Tr 11							• •	55
				• •	• •	• •	• •	99
${\it Common\ Infectious\ Diseases.}$								
Influenza (all forms including pneumonic)								221
Diphtheria							• • •	55
Whooping-cough			. ,					36
Scarlet fever								11
Typhoid fever								8
Measles						• •	• • •	• •
							• •	• •
Infant Mortality.								
Infant deaths (under one year), all causes				• •				856

For several years now the principal causes of death have been thus tabulated. The year 1931, compared with 1930, gave in round numbers 150 fewer deaths in a population increased by 20,000. This reduction is accounted for mainly by a lowered infantile mortality and in respect of older persons a lower rate from chest diseases and from all forms of tuberculosis, whereas there was an increased rate from influenza, accident, and suicide.

An outstanding feature noteworthy over many years is that the death-rates from the common infectious diseases appear to show a steady and definite reduction. The greatest example is typhoid fever. A five-year average taken fifty years ago gave a mortality more than forty times that for the five years ending in 1931. We still experience epidemics of scarlet fever, diphtheria, measles, and whooping-cough, but these epidemics give an annual death-rate very much lower than that experienced in former epidemics, while in the intervening non-epidemic years the sporadic cases have assumed a milder type and give a reduced death-rate. Tuberculosis also displays this very markedly over a fifty-year period, the death-rate per 10,000 of mean population in 1881 having been 13.8 compared with 4.27 in 1931, a threefold reduction. In the last six years the death-rate from this disease per 10,000 of mean population has been reduced from 5.37 to 4.27.

As is well known, the infantile death-rate of New Zealand (made up of infant deaths from all causes) has been very greatly reduced, and during recent years infants under one month of age are sharing in this lessened mortality.

These reductions are so great and so sustained that one is forced to the conclusion that good environment (to use a comprehensive term which includes measures taken to improve diet and hygiene) is steadily removing these diseases. This same tendency in lesser degree is noticeable in the vital statistics of closely populated England and is coincident in both countries with improving nutritional and hygienic conditions, including welfare measures directed mainly to those in special need of guidance or protection. The thought then arises, despite the prophesies of certain epidemiologists who, on historical grounds, predict a recurrence of high infectious disease virulence and mortality and perhaps undervalue the influence of improved environment, and those of immunologists who regard the subject as essentially one of acquired immunity, whether or not New Zealand and even closely populated England can by the maintenance or even the improvement of a good environment retain the natural resistance of their peoples to these diseases.

The Dominion is now unfortunately experiencing a period of want and poverty, and, pending necessary adjustments, there will be some overcrowding of persons in dwellings. Doubtless this will in some measure mar our vital statistics, but such effect is not yet noticeable. It is to be hoped that restoration of the economic balance can be achieved in order that the beneficient influence over many years of steady improvement in the nutrition and the hygienic environment of the poorer people will not be greatly lessened.

Suicides.—A noteworthy sign of the times we live in is that last year the number of deaths from suicide increased to 226 from 193 in 1930.