

VITAL STATISTICS 1962

Canada's birth rate (1,000 population) dropped from 26.1 in 1961 to 25.3 in 1962, the lowest recorded since 1945; all areas had lower rates than in 1961. Among the provinces, Newfoundland still had the highest rate (32.1), followed by Alberta (28.3), New Brunswick (27.1) and Prince Edward Island (26.5), while British Columbia (23.0), Manitoba (24.5), Ontario (24.6) and Saskatchewan (25.1) had the lowest in that order; Quebec's rate (25.2) was close to the national average of 25.3.

About a third of the Canadian births in 1962 were to residents of Ontario (156,053), almost 29 per cent to Quebec residents (135,000) and over 8 per cent to British Columbia residents. Ontario has had more births than Quebec each year since 1953, although Quebec has consistently had a higher birth rate.

MARRIAGES

The number of marriages during 1962 rose to 129,381, compared to 128,475 in 1961. Increases in Prince Edward Island, Quebec, Ontario and British Columbia accounted for the rise. The national marriage rate, however, remained stationary at 7.0 (1,000 population) having dropped steadily from the record 10.9 set in 1946 and is now levelling off at about 7 in 1,000 of the population.

DIVORCES

While 129,381 couples were married in 1962, 6,709 couples were granted divorces compared to 6,563 the previous year. Ontario and the four Western provinces accounted for all the increase. No bills of divorce were passed by the House of Commons during the 1962 sessions of Parliament on behalf of Newfoundland or Quebec residents. Some 3,081 of the 1962 total were granted in Ontario, 1,490 in British Columbia and 1,084 in Alberta.

DEATHS

Of the 143,699 deaths recorded in 1962, 12,941 were those of infants under one year of age, of whom 8,783 died within four weeks of birth. The infant death rate dropped from 100 out of every 1,000 infants born alive in the early 1920's to a record low of 27 in 1960-61, and rose slightly to 28 in 1962. Had the 1020 infant mortality-rate prevailed in 1962, about 47,000 infants would have died instead of the actual 12,941, a theoretical saving of about 34,000 lives.

Canada's death rate (1,000 population) of 7.7 (unchanged from 1961) is one of the lowest in the world, and compared favourably with a rate of 9.5 for the U.S.A. and 11.9 for England and Wales, owing mainly to Canada's younger population. Owing largely to the differing age compositions of provincial populations, death rates ranged from 6.8 in Alberta and Newfoundland to 10.0 in Prince Edward Island.

NRC AND UNIVERSITY RESEARCH

In 1962-63, the expenditures of the National Research Council in support of science and engineering in Canadian universities reached a high of \$10.4 million — up 20 per cent from the 1961-62 total. Allocation of this aid was as follows: \$2.1 million for 575 graduate scholarships and 160 postdoctorate fellowships; \$6.6 million for 1200 grants to university staff members; \$1.2 million for major equipment required by the grantees; and \$500,000 for items such as publication of the *Canadian Journals of Research* and contributions to scientific organizations and activities at both national and international levels.

The 20 per cent increase represents the latest attempt by the Council to keep pace with the growth of science in the universities. In his report to Parliament last year, the then NRC President, late Dr. Steacie, outlined the impressive build-up of science and engineering that Canada's universities had achieved. He also described how, in response to this growth, the Council's support budget had increased fourfold in the past five years. He warned, however, that, to avoid stifling the development of science in the universities far more support was needed.

At present, undergraduate enrolments in Canadian universities are rising by 15 per cent a year. The number of full-time graduate students in science and engineering, and of staff members directing them, is increasing by 20 per cent a year. But the problem is not simply that there are more people doing research. It is that each of these people, because of the complexity of modern research, becomes more and more expensive to support.

WHERE AID MOST NEEDED

The provision of research equipment and supplies is the largest and most important part of NRC's aid to the universities. It is here that a major increase in the level of NRC support is most urgently required. This aid is supplied in two forms — operating and major equipment grants. Operating grants are used for purchasing small equipment and supplies, and for hiring assistants, who are usually graduate students. Major equipment grants are for large apparatus costing \$5,000 or more.

At its present level of spending, the Council is only able to provide about 30 per cent of the major equipment grants requested. In addition, there is a growing need in the universities for the major installations, such as particle accelerators, that front-line research now demands. In this area the Council is able to make only one or two grants annually, with payments spread over a period of years.

The universities bear the costs of buildings, salaries of professors, general laboratory facilities, and services such as libraries and workshops. NRC funds assist the research activities of staff members and graduate students, and provide the special and increasingly expensive equipment needed for their work.