

What has Public Health done for me? The health of Albertans 1924 to today

In 1924, the population of Alberta was 590,000; in 2023 Alberta was home to 4.8 million people. Then, Alberta was a new province and mostly rural and agricultural; today 80% of Albertans live in urban centres. How has the health of Albertans changed in a century and what contributed to the health gains we have achieved?

National governments around the world use standard measures to compare the health of their populations to others. The most important are infant mortality and life expectancy. The first is a measure of how healthy our environment and society is now. The other is a measure of how healthy those conditions have been throughout our lifetimes.

For most of our history, and unfortunately for the poor in many parts of the world today, it is not unnatural for a child to die at birth, in infancy or during childhood. In Alberta, the rate for children dying before their first birthday was 82.4 per 10,000 live births in 1924 and 4.6 per 10,000 live births in 2022. Then, children were 18 times more likely to die in their first year than they are now. The enormous decrease in infant mortality did not happen by chance or natural evolution. It changed because Alberta's civil society and its municipal, provincial and federal governments in partnerships with Public Health departments worked long and hard to make the improvements necessary to decrease infant mortality.

For a child to reach the age of 1 year healthy and safe requires immense effort, primarily by their parents and families and by the communities in which they live. Public Health campaigns have ensured measures like vitamin supplements in milk, iodine in salt, folic acid in flour and cereals, breast feeding promotion, and food inspections, resulted in the healthiest children possible. However, infants still need to survive the deadly world of communicable diseases. Lurking in wait for them are diseases like diphtheria, whooping cough (pertussis) and polio.

In 1923, Albertans experienced 24 deaths from typhoid fever (due to contaminated water), 4 from smallpox, 45 from measles, 51 from whooping cough (most under 2 years), 100 from diphtheria (60 from rural Alberta), 150 from influenza (down from 4000 who died in the 1917-influenza pandemic), 10 from polio, and 257 from tuberculosis (disproportionately Indigenous).

Today in Alberta a single case of these infections is rare, and even more rare as a cause of death, because childhood immunization is available and accessible. It should be emphasized this situation changes rapidly when the Public Health system weakens because all the bacterial and viral childhood killers (except for smallpox that has been eradicated worldwide) still exist, waiting for their chance to maim and kill children in large numbers again.

The other important standard measure is life expectancy. What do we value more highly than how much healthy time we, and the people we love, have on this earth? In 1924 the life expectancy for Albertans was 60; in 2024 it is over 80. Public Health and its allies have added 20 years to our lives, and Albertans now are much healthier for those 20 years than any previous generation.

Alberta's Public Health professionals have been, and are, involved in continually researching, designing, implementing, and evaluating programs that have increased our life expectancy by reducing mortality at all stages of our lives. Some of these programs include maternal and infant health promotion, and legislation for workplace safety, bicycle helmets, and home smoke alarms. The reduction of tobacco usage and second-hand smoke bylaws have prevented lung disease and fires. Motor vehicle safety, seat belt and child safety seat laws have prevented injury and death. Fall prevention programs and early stroke recognition campaigns have helped seniors stay healthy.

Public Health measures that benefit all of us include environmental health programs such as drinking water testing, wastewater treatment, and safe disposal of household waste. Occupational health and safety regulations, policies for personal protective equipment at work, and hazardous material disposal systems keep workers protected. Chronic and infectious diseases, cancer, heart disease, and stroke have been averted by food nutrition labelling, healthy eating and activity campaigns, and adult immunization.

The decrease in infant mortality and increase in life expectancy happened because of the partnership of Public Health and the citizens of Alberta. We face old threats reappearing (measles, syphilis) and new infections. Addiction, social anxiety and health effects of climate change are new challenges. Albertans will be able to maintain and continue the progress made over the last century only if the alliance between Public Health and Albertans remains strong.

For the last 100 years, Public Health has made it clear it will do whatever is necessary to prevent disease and injury, promote health and prolong our fellow Albertans' lives. Public Health is there for you! The question for our future health is, "Are you going to be there for Public Health?"

Written by Dr. James Talbot in collaboration with the Alberta Public Health Association.