Incidence of Stroke among Albertans with Hypertension

By age group, Alberta, 2008 to 2013 combined

Hypertension, or high blood pressure, is one of the most prevalent chronic conditions in Alberta. It is characterized by increased pressure in an individual’s arteries, and often does not cause any symptoms initially. However, over a lifetime, hypertension can lead to an increased risk of heart disease, stroke, and kidney disease.

Today’s edition of Health Trends Alberta compares the incidence of stroke (acute ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage, or transient ischemic attack) among Albertans with Hypertension to those without.

Incidence of Stroke higher among Albertans with Hypertension

From 2008 to 2013, there were 36,399 first occurrences of stroke. Of these, 68.5 per cent had a previous diagnosis of hypertension. The rate at which Albertans had a first occurrence of a stroke was significantly higher in Albertans with Hypertension among all age groups.

Individuals with hypertension aged 40-59 were 3.7 times more likely to have a first occurrence of stroke. The rate ratio between the two groups gradually decreases as age increases. Individuals with hypertension aged 80 and above were 1.6 times more likely to have a first occurrence of stroke.

The age-adjusted 6 year incident rate of stroke from 2008 to 2013 was 2.6 times higher among individuals with hypertension compared to those without (238.1 vs. 91.1 per 100,000). The average number of years between an individual’s diagnosis of hypertension and the first occurrence of a stroke was 11.5 years.