Physical activity levels of Canadian children and youth

Since 2005, the Canadian Fitness and Lifestyle Research Institute’s CANPLAY study (Canadian Physical activity Levels Among Youth study) has been used to measure the physical activity levels of children and youth, by using pedometers to measure daily steps. Trend information is provided at the national and provincial/territorial level using 2005-2007 as the baseline. This bulletin reflects data collected in year 7 and 8 (2011-2014), and also compares this data to those collected in previous years. The CANPLAY study shows that Canadian children, aged 5 to 19, took approximately 11,000 daily steps on average in 2011-2014.

Canada and regions

Generally, physical activity levels of children and youth did not differ significantly by province and territory compared to the national average, with the exception of children and youth living in the Yukon who took more daily steps on average than Canadian children overall.

Child Characteristics

In 2011-2014, boys and young children (aged 5 to 10) took more daily steps on average than girls and older children (aged 11 to 19). Average steps decreased with increasing age. This gender difference appeared for all age groups, and the age-related decrease in steps appeared for both boys and girls. Children who have participated in organized physical activity and sport took more daily steps on average than children who have not participated in these types of activities.

Parent and household characteristics

Children whose parents have a university education took more steps than those whose parents had a college education. In 2011-2014, a relationship between average steps and household income was evident. Specifically, children living in the highest income households took more steps than those living in lower income households. Children whose parents said that they were substantially more active than other parents took more daily steps than children whose parents said that they were slightly less active than other parents.
**Trends in activity level over time**

In 2011-2014 (years 7 and 8 of data collection), children and youth aged 5 to 19 took roughly approximately 11,000 steps per day on average. Using CANPLAY data collected during 2005-2007 (years 1 and 2) as a baseline, there has been a significant decrease in the overall average steps of children and youth in Canada in 2011-2014. Mean steps over the first three time periods have roughly averaged between 11,500 and 11,700 steps per day. For the first time, data from 2011-2014 shows a significant decline. This decline in average steps in the combined years of 2011-2014 appears for both boys and girls, and for various age groups compared to earlier years (except for 11 to 19 year olds who took a similar number of daily steps in 2009-2011).

Generally speaking, there have been relatively few significant changes in average steps by province and territory over the earlier three time periods. More specifically, there were no significant changes in daily steps across the four time periods in Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, the Yukon, Northwest Territories and Nunavut (which had sufficient sample for territorial specific analysis across three time periods). Compared to 2011-2014, however, average steps/day were lower in Quebec and British Columbia compared to 2007-2009; lower in Saskatchewan and Alberta compared to 2005-2007, and lower in Ontario compared to 2007-2011.

**Child Characteristics**

The various relationships between child characteristics and average daily steps have generally persisted over time, namely:
- boys take more steps than girls;
- number of steps decreased with increasing age;
- children participating in organized physical activity and sport take more steps compared to those who do not.

**Parent and Household Characteristics**

Less consistent over time are differences with respect to parent characteristics. Although an association between a child’s average daily steps and parent’s education level existed in all previous years of the CANPLAY study, this pattern varies over time. In earlier survey years children and youth who lived in the highest income households took more steps compared to those from the lower income households, and this relationship was significant in 2011-2014. The association between a child’s average daily steps and parental perceived activity level has generally persisted over time.