

Centre for  
**Active Living**



# 2019 ALBERTA SURVEY ON PHYSICAL ACTIVITY



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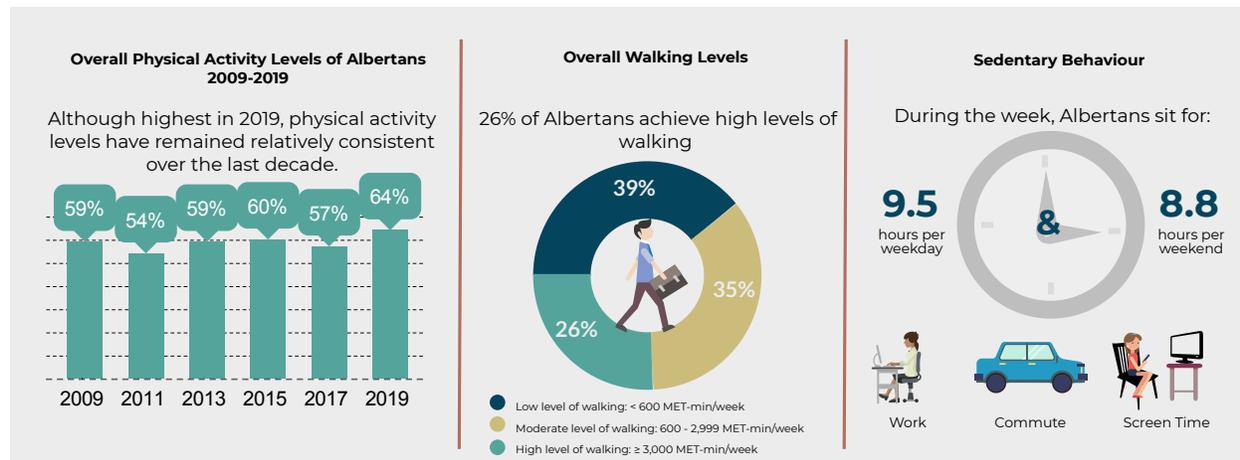


# 2019 Alberta Survey on Physical Activity, Sedentary Behaviour, and Sleep

The Alberta Survey on Physical Activity has reported on adult physical activity status and determinants of physical activity in the province since 1993. In 2019, sleep behaviour was examined. The main findings and recommendations are included in this infographic. See the full report for details.

Active living is a way of life that incorporates a combination of:

- 150 minutes of moderate-to-vigorous physical activity weekly,
- incidental physical activity every hour, and
- low levels of sedentary behaviour during waking hours.



## Sleep Behaviour

Albertans sleep an average of 7.6 hours per weekday and 8.3 hours per weekend day



### Sleep Recommendations

- Adults, **18 to 64 years**, of age should achieve **7 to 9 hours** of sleep.
- Adults **≥ 65 years** should achieve **7 to 8 hours** of sleep.

### Building Healthy Sleep Habits

- Make time for sleep.
- Maintain a regular sleep schedule.
- Limit distractions including light and sound.
- Avoid electronic devices at least 30 minutes before bed.
- Engage in regular physical activity mid-day or late afternoon to avoid sleep disruptions.
- Keep track of sleep patterns.

Full report available at [www.centre4activeliving.ca](http://www.centre4activeliving.ca)

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# EXECUTIVE SUMMARY



The Alberta Survey on Physical Activity has reported on the physical activity status and trends of adult Albertans biennially since 1993. This survey series is part of the Centre for Active Living's (CAL) strategy to provide credible and user-friendly physical activity information to researchers, practitioners, communities and decision-makers. This is the first year that the Alberta Survey on Physical Activity reports on sleep behaviour of Albertans.

Physical inactivity and sedentary behaviour are risk factors for many chronic physical and mental health conditions, such as premature mortality, cardiovascular disease, stroke, hypertension, colon cancer, breast cancer, type 2 diabetes, depression, and anxiety.<sup>1-4</sup> The Canadian Physical Activity Guidelines recommend that adults engage in a minimum of 150 minutes of moderate-to-vigorous physical activity per week and should minimize the amount of sitting time to achieve health benefits.<sup>5</sup> Sedentary behaviour includes sitting or lounging activities during waking hours and requires very little energy expenditure.<sup>6</sup> Common sedentary behaviours include working on a computer, watching television, and driving or riding in a car.

A sedentary lifestyle has physiological effects that are independent and distinct from being physically inactive.<sup>7</sup>

In recent years, sleep behaviour has been examined in relation to physical activity and sedentary behaviour. Sleep behaviour is recognized as an important determinant of overall health and well-being,<sup>8,9</sup> and is important for neural development, learning, memory, emotional regulation, metabolic health, and cardiovascular health.<sup>10</sup> There is evidence to suggest that being physically active can support improvements in sleep. In fact, both regular and small bouts of physical activity can have benefits on overall sleep, sleep efficiency, sleep onset latency, sleep quality, and rapid eye movement sleep. In fact, increasing minutes of moderate-to-vigorous physical activity per session has shown to improve sleep onset latency — in other words, reduce the time it takes to fall asleep.

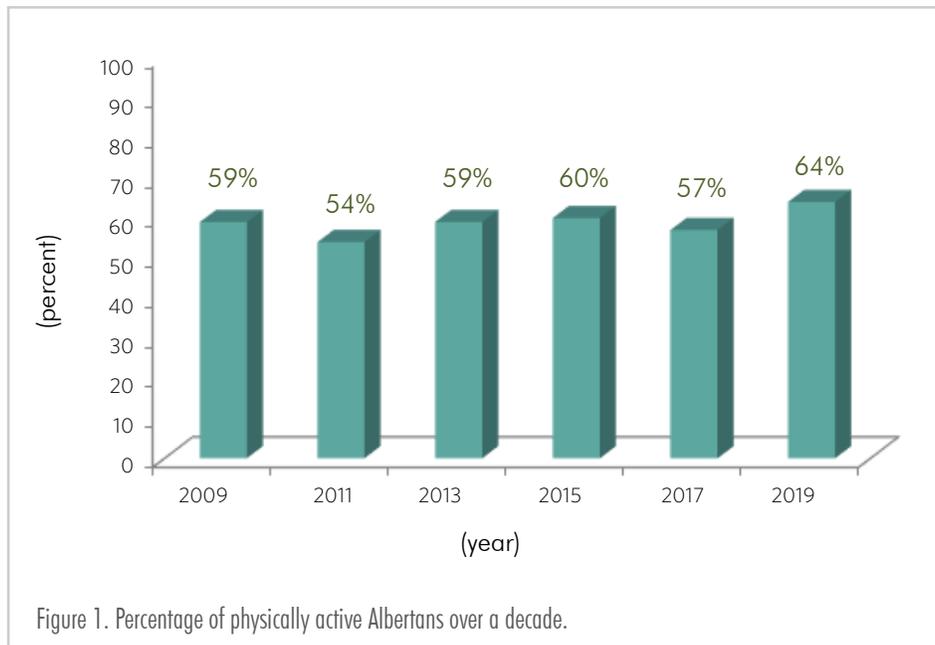
## Sleep Terms<sup>11</sup>

- **Sleep (onset) Latency:** length of time between going to bed and falling asleep.
- **Total Sleep:** total time of actual sleep, which is the sum of all time spent in each of the stages of sleep.
- **Sleep Efficiency:** the percentage of time of actual sleep out of all the time sleeping and trying to sleep.
- **Sleep Stages:** sleep normally progresses through a series of four stages in repeated cycles of about 90 minutes.
- **Non-rapid Eye Movement Light Sleep:** progressively deepening sleep as determined by the brain wave activity and arousal thresholds.
- **Non-rapid Eye Movement Slow Wave Sleep:** deep sleep, characterized by slow brain wave activity and is associated with memory consolidation. Slow wave sleep declines with age.
- **Rapid Eye Movement Sleep:** episodes of rapid eye movements, brain wave activation, lack of tone in skeletal muscles, and dreaming.

# Report Highlights

## Physical Activity in Alberta

**64% of Albertans get enough physical activity to achieve health benefits**



Although this number is slightly higher than the 2017 survey report, physical activity levels have remained relatively consistent over the last decade.



## Walking in Alberta

Walking is the most popular physical activity among Albertans,<sup>12</sup> with 26% of Albertans achieving high levels of walking (which is equivalent to approximately 12,500 steps per day) and 35% of Albertans achieving moderate levels of walking (approximately 2,500 to < 12,500 steps).

### 26% of Albertans achieve high levels of walking

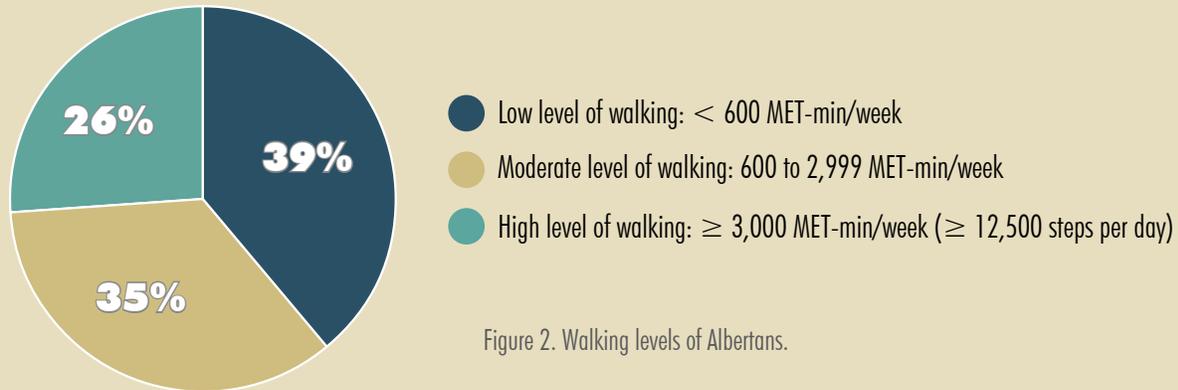


Figure 2. Walking levels of Albertans.

## Sedentary Behaviour Time in Alberta

Albertans spend an average of 9.5 hours per weekday and 8.8 hours per weekend day in sedentary activities.

These numbers are similar to those found in the previous two survey reports found on the CAL website:

[www.centre4activeliving.ca/our-work/alberta-survey-physical-activity/](http://www.centre4activeliving.ca/our-work/alberta-survey-physical-activity/)

Albertans were categorized into tertiles according to their level of sedentary behaviour time during waking hours. Thirty-seven percent of Albertans are sedentary for more than 10 hours per day.

### 37% of Albertans are sedentary > 10 hours per day



## Sleep Behaviour

Albertans sleep an average of **7.6 hours per weekday** and **8.3 hours per weekend day**.

Table 1. Average Weekly Sleep Time Among Albertans

	Sleep Time (%)		
	Below Recommendations <sup>a</sup>	Meet Recommendations <sup>b</sup>	Above Recommendations <sup>c</sup>
Adults, 18 to 64 years of age (n = 963)	14	74	12
Adults, ≥ 65 years of age (n = 164)	12	44	44
All adults (n = 1,127)	14	70	16

Notes:

<sup>a</sup> *Below recommendations* is < 7 hours per day.

<sup>b</sup> *Meeting recommendations* are ≥ 7 to ≤ 9 hours per day for adults, 18 to 64 years, and ≥ 7 to ≤ 8 hours per day for adults, 65 years or greater.

<sup>c</sup> *Above recommendations* are > 9 hours for adults, 18 to 64 years, and > 8 hours for adults, 65 years or greater.

- Of Albertans, 18 to 64 years of age, 74% meet the recommendations of 7 to 9 hours of sleep per day.
- Of Albertans, 65 years of age or older, 44% meet the recommendations of 7 to 8 hours of sleep per day.
- 75% of Albertans rate their quality of sleep as good or very good.
- 55% of Albertans use an electronic device within 30 minutes of going to sleep.

When examining physical activity levels and sleep behaviour, 71% of sufficiently active Albertans meet the sleep time recommendations.

**71% of sufficiently active Albertans  
meet the sleep time recommendations**



## Recommendations

Modifications to lifestyles, programs, services, environments, and policies can impact Albertans' time spent being physically active and sedentary. Developing various strategies to support Albertans to move more and sit less in their daily lifestyle is important in addressing the public health concern of physical inactivity and sedentary behaviour (Table 1).

At the same time, expending more energy throughout the day can also support achieving sufficient and quality sleep time. Supporting Albertans to develop healthy sleep habits and achieve sleep recommendations can reduce the potential development of physiological and mental health problems associated with too few or too many hours of sleep. Table 2 outlines strategies to support moving more, sitting less, and achieving sleep recommendations.

Table 2. Exemplar Methods of Increasing Physical Activity, Decreasing Sedentary Behaviour, and Supporting Sleep

<b>Leisure-time</b>	<b>Family and friends</b>
	<ul style="list-style-type: none"> <li>▪ Do physical activities your family enjoys or try new ones.</li> <li>▪ Walk with friends after dinner.</li> <li>▪ Stand while you talk on the phone.</li> <li>▪ Provide intergenerational physical activities that the whole family can participate in.</li> <li>▪ Set up a friendly physical activity tracker challenge with family and friends to support each other in being active, e.g., visit <a href="http://UWALK.ca">UWALK.ca</a>.</li> </ul>
	<b>Outdoors</b>
	<ul style="list-style-type: none"> <li>▪ Explore local parks, trails, recreation facilities, and school yards to be physically active.</li> <li>▪ Maintain safe outdoor spaces for physical activity all year round.</li> </ul>
	<b>Dog walking</b>
	<ul style="list-style-type: none"> <li>▪ Make a habit of walking your dog 2 to 3 times a day.</li> <li>▪ Be a volunteer dog walker at the local animal shelter.</li> </ul>
	<b>Community</b>
	<ul style="list-style-type: none"> <li>▪ Start a walking group or club in your neighbourhood.</li> <li>▪ Join a sports team or physical activity group.</li> <li>▪ Create a walking group using local trails, parks, and indoor facilities including recreation centres and malls.</li> <li>▪ Do not use the drive-through window. Instead, model active behaviour to friends, family, and others by getting out of the vehicle.</li> </ul>

## Transportation

### Walk/wheel

Walk to do errands, travel to work, and meet up with friends.

- Park 10 minutes away from work to add 20 minutes of walking to your daily routine. This can add up to an extra 100 minutes of moderate physical activity per week.
- Take public transportation (bus or train). Individuals who take public transportation walk more than vehicle commuters.
- Get off the bus early and walk the rest of the way.
- Park farther from the store.
- Wear a physical activity tracker or use a physical activity application to measure:
  - ◆ physical activity and sitting time
  - ◆ daily steps and distance travelled
- Set up step challenges with family, friends, or co-workers ([UWALK.ca](http://UWALK.ca)).

### Ride (cycle or skateboard)

Cycle to do errands, travel to work, and visit friends.

- The cities of Edmonton and Calgary are expanding their bike commuter routes. Visit their websites to map out the best paths and learn the rules of the road for safe cycling.
- Cities and towns can develop safe commuter routes and provide education to cyclists and drivers on how to share the road.
- Track the distance travelled and compare each day with a physical activity tracker.

### Communities

- Build sidewalks and pathways.
- Add effective streetlights to light the way.
- Build safe, protected bike lanes.
- Provide secure bike racks and storage by popular amenities.
- Develop bike-share programs (e.g., Calgary, [www.li.me/locations/calgary](http://www.li.me/locations/calgary); Bixi-Montréal, [bixi.com](http://bixi.com)).
- Re-purpose streets with an Open Streets Model (e.g., 8-80 Cities Open Streets, [www.healthiestpracticeopenstreets.org](http://www.healthiestpracticeopenstreets.org)).
- See Active Transportation in Canada: A Resource and Planning Guide [www.fcm.ca/Documents/tools/GMF/Transport\\_Canada/ActiveTranspoGuide\\_EN.pdf](http://www.fcm.ca/Documents/tools/GMF/Transport_Canada/ActiveTranspoGuide_EN.pdf).
- Use a “Complete Streets” approach to community planning.
- Establish an “Open Streets” policy.



## Workplace

### Stand more

Use a standing desk and/or standing tables for meetings.

- Stand when you are speaking on the phone.
- Walk down the hall to speak with a co-worker rather than use email.

### Take breaks from sitting

Take active breaks instead of coffee breaks.

- Set an activity tracker, phone application, or computer reminder hourly to remind yourself to move around.
- Schedule physical activity time into your calendar.

### Make being active easy and attractive

- Maintain attractive and safe stairwells.
- Provide showers, bike storage, fitness equipment, walking maps, and/or communal gardens at work.
- Do workplace physical activity challenges on the [UWALK.ca](http://UWALK.ca) website or with physical activity trackers.

### Develop a culture of physical activity

- Provide free or subsidized:
  - ♦ bus passes
  - ♦ commuter bike purchasing
  - ♦ access to fitness centres
  - ♦ physical activity classes
- Encourage senior management to be a positive role model for physical activity.
- Respect co-workers' physical activity breaks as non-negotiable time away from the office.
- Share monthly physical activity tips at the workplace.
- Start a [UWALK.ca](http://UWALK.ca) walking challenge, walking group, or sports team.
- Stay in hotels with fitness centres and use them.
- Find a physical activity buddy at work.
- Take the stairs instead of the elevator.



## Sleep

### Build healthy sleep habits

- Make time for sleep.
- Maintain a regular sleep schedule.
- Set the stage for a comfortable sleep environment.
- Limit distractions including light and noise.
- Avoid using electronic devices, such as a television, computer, tablet, smartphone, or video games, at least 30 minutes prior to going to bed.
- Engage in regular physical activity at mid-day or late afternoon to avoid sleep disruptions.
- Track your sleep patterns using a sleep diary ([css-scs.ca/files/resources/brochures/Sleep%20Journal.pdf](https://css-scs.ca/files/resources/brochures/Sleep%20Journal.pdf)).

### For shift workers

- Use light blocking or opaque curtains to condition your biological clock.
- Take a nap before starting the next shift.
- Avoid reliance on sleep medications to sleep during the day.

