SLEEP

Sleep and Health Among Adults in

MICHIGAN

Sufficient sleep is essential for a healthy lifestyle

How much sleep do adults need?
Adults should sleep 7 or more hours each night for optimal health. Insufficient sleep (or short sleep) is defined as less than 7 hours of sleep daily. More than a third of U.S. adults report insufficient sleep.

What are the consequences of not getting enough sleep?
Not getting enough sleep is associated with an increased risk for a number of chronic diseases and conditions:
- Diabetes
- Cardiovascular disease
- Stroke
- Obesity
- Depression
Not getting enough sleep also contributes to motor vehicle crashes and machinery-related injuries, causing substantial injury and disability each year.

What are 5 health behaviors for preventing chronic disease?
Five health behaviors have been identified as being key for preventing chronic disease:
- Not smoking
- Regular physical activity
- Moderate* or no alcohol consumption
- Maintaining a healthy weight
- Daily sufficient sleep (7 or more hours)

Why don’t adults get the sleep they need?
Causes of insufficient sleep include lifestyle (like inconsistent bedtimes and using technology late at night) and occupational factors (like shift work or long work hours). In addition, some medical conditions, medications, and sleep disorders like sleep apnea affect how long and how well you sleep.


* Up to one drink per day for women and two drinks per day for men – only by adults of legal drinking age. Individuals who do not drink alcohol should not start drinking for any reason. 2015–2020 Dietary Guidelines for Americans.
Use the information on the following pages to prioritize your education and outreach efforts to improve the health of residents in your state.

The prevalence of short sleep (<7 hours per day) varies geographically

Model-based* Estimated Age-adjusted Prevalence of Short Sleep# by County, 2014 — Michigan

In 2014, 37.6% (age-adjusted = 38.9%) of Michigan adults reported usually sleeping <7 hours in a 24-hour period.

The state map (left) presents the estimated age-adjusted county-level prevalence of short sleep among Michigan adults.

For comparison, the national map (below) shows state-by-state adult prevalence of short sleep.


# Percentage of adult population that reported usually sleeping <7 hours in a 24-hour period. Age-adjusted to the 2000 U.S. standard population.

Age-adjusted Prevalence of Short Sleep* by State, 2014

Short sleep is more common in the southeastern United States and the Appalachian Mountains and less common in the Great Plains states.

* Percentage of adult population that reported usually sleeping <7 hours in a 24-hour period. Age-adjusted to the 2000 U.S. standard population.

Data source: Behavioral Risk Factor Surveillance Survey (BRFSS) for 2014. As part of the phone survey, respondents were asked, “On average, how many hours of sleep do you get in a 24-hour period?” For information about BRFSS methodology, go to http://www.cdc.gov/BRFSS.
The prevalence of short sleep duration may vary by sex, age, and race/ethnicity.

### Short sleep duration (<7 hours) by sex, age, and race/ethnicity — Michigan, 2014 (N=8,275)

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Adults*</td>
<td>38.9</td>
<td>(37.5–40.4)</td>
</tr>
<tr>
<td>Sex*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>40.9</td>
<td>(38.7–43.1)</td>
</tr>
<tr>
<td>Women</td>
<td>36.9</td>
<td>(34.9–39.0)</td>
</tr>
<tr>
<td>Age (Years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–24</td>
<td>33.6</td>
<td>(29.3–38.2)</td>
</tr>
<tr>
<td>25–34</td>
<td>44.9</td>
<td>(40.8–49.2)</td>
</tr>
<tr>
<td>35–44</td>
<td>46.8</td>
<td>(42.8–50.8)</td>
</tr>
<tr>
<td>45–54</td>
<td>42.8</td>
<td>(39.8–45.9)</td>
</tr>
<tr>
<td>55–64</td>
<td>34.6</td>
<td>(32.1–37.2)</td>
</tr>
<tr>
<td>≥65</td>
<td>25.3</td>
<td>(23.4–27.3)</td>
</tr>
<tr>
<td>Race/Ethnicity*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>36.5</td>
<td>(34.9–38.2)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>45.3</td>
<td>(36.8–54.2)</td>
</tr>
<tr>
<td>Black</td>
<td>50.2</td>
<td>(45.6–54.8)</td>
</tr>
<tr>
<td>Asian</td>
<td>36.1</td>
<td>(26.9–46.3)</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>38.6</td>
<td>(28.2–50.1)</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander **</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other/Multiracial</td>
<td>46.3</td>
<td>(37.7–55.1)</td>
</tr>
</tbody>
</table>

* Age-adjusted to the 2000 U.S. standard population.  ** Indicates a cell size <50.

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### Prevalence of health risk factors by sleep duration

Many risk factors are more common among adults who sleep <7 hours compared to those who sleep ≥7 hours.

An asterisk (*) by a risk factor on this chart indicates that the prevalence of that risk factor is significantly higher for adults who reported short sleep compared with adults who reported sufficient sleep.

#### Sleep duration and the other health risk factors among Michigan adults

![Sleep duration and health risk factors chart](chart.png)

- **Obesity**: Body Mass Index ≥30 kg/m²
- **Physical inactivity**: No leisure time physical activity in past 30 days
- **Current smoking**: Currently smoke cigarettes every day or some days
- **Excessive alcohol†**: Underage drinker, binge drinker, or heavy drinker

Age-adjusted to the 2000 U.S. standard population.

†Underage drinker: any alcohol use among those aged 18–20 yr. Binge drinker: ≥4 drinks for women, ≥5 drinks for men during a single occasion. Heavy drinker: ≥8 drinks for women, ≥15 drinks for men per week.

Data source: Behavioral Risk Factor Surveillance Survey (BRFSS) for 2014. As part of the phone survey, respondents were asked, “On average, how many hours of sleep do you get in a 24-hour period?” For information about BRFSS methodology, go to [http://www.cdc.gov/BRFSS](http://www.cdc.gov/BRFSS).
Prevalence of chronic conditions by sleep duration

Many chronic conditions are more common among adults who sleep <7 hours compared to those who sleep ≥7 hours.

An asterisk (*) by a chronic condition on this chart indicates that the prevalence of that condition is significantly higher for adults who reported short sleep compared with adults who reported sufficient sleep.

Data source: Behavioral Risk Factor Surveillance Survey (BRFSS) for 2014. As part of the phone survey, respondents were asked, “On average, how many hours of sleep do you get in a 24-hour period?” For information about BRFSS methodology, go to http://www.cdc.gov/BRFSS.