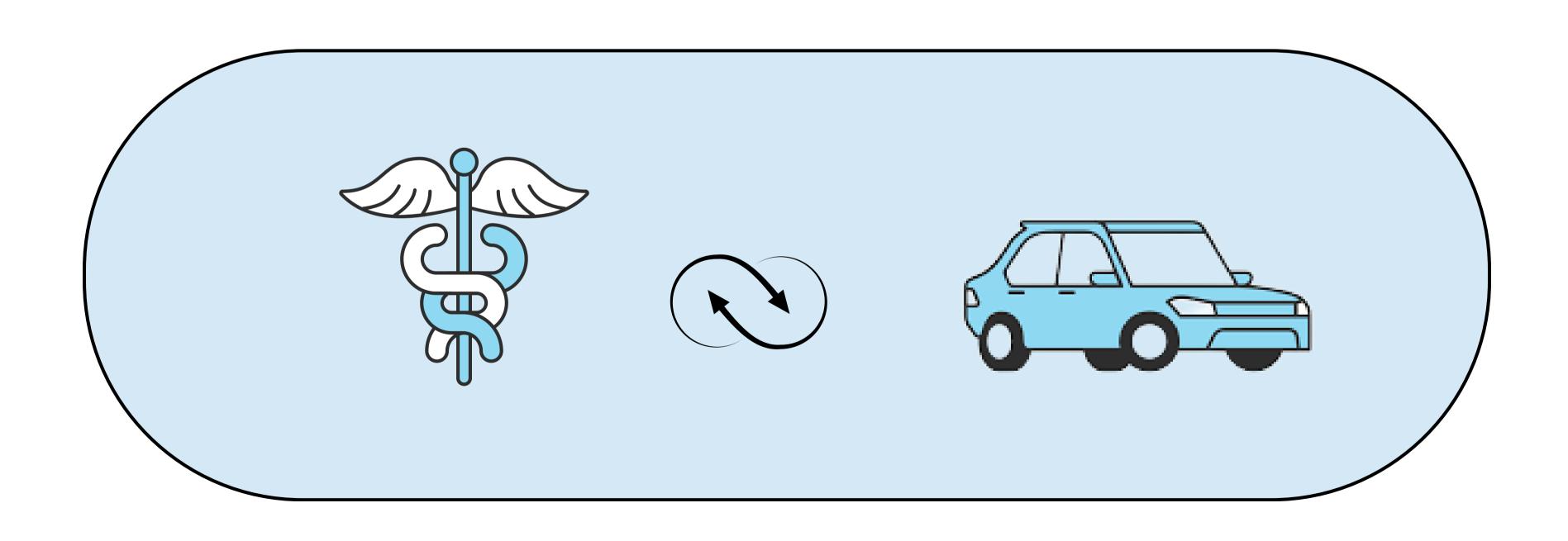
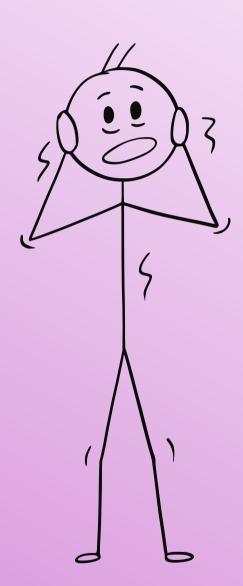
# Relationship between health & wellness and driving



#### Health factor: Stress

- According to the National Institutes of Health, "an estimated 31.1% of U.S. adults experience any anxiety disorder at some time in their lives." Source
- According to the Mental Health Foundation, "in the past year, 74% of people have felt so stressed they have been overwhelmed or unable to cope." Source



### Health factor: Stress symptoms

If you are stressed, you might **feel**:

- Irritable, angry, impatient or tense
- Over-burdened or overwhelmed
- Anxious, nervous or afraid
- Depressed
- Existing mental health problems getting worse

#### Source



#### Physical effects of stress:

- Difficulty breathing
- Panic attacks
- Blurred eyesight or sore eyes
- Sleep problems
- Fatigue
- Muscle aches and headaches
- Chest pains and high blood pressure
- Existing physical health problems getting worse

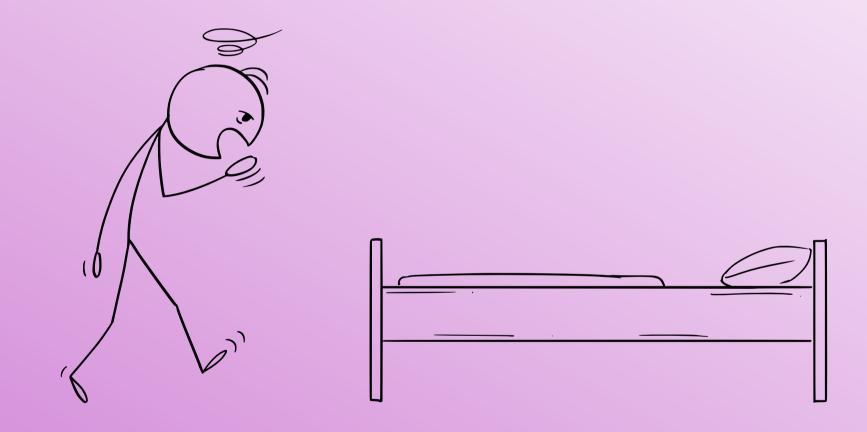
### Health factor: Stress & driving

- "When we feel different emotions, it can affect our driving abilities. For example, studies have shown that drivers who are angry or stressed are more likely to get into accidents." <u>Source</u>
- "Not only does stress affect our attention span while driving, it also shortens our fuse.
   The more stressed you are while driving, the less tolerance and patience you have for others that share the road with you." <u>Source</u>



#### Health factor: Stress & sleep

- "Several animal and human studies have demonstrated that stress-inducing factors may significantly impact the wake-sleep cycle in a variety of ways..." (Koolhaas et al., 1997; Meerlo et al., 2002; Sanford et al., 2015; Kim and Dimsdale, 2007; Germain et al., 2003).
   Source
- A study by Sadeh, Keinan, and Daon (2004)
  revealed that "Increase in stress level was
  associated with significant decrease in
  perceived sleep quality." <u>Source</u>



### Health factor: Stress & Depression

"The effects of chronic, or long-term, stress
can be harmful on their own, but they also
can contribute to depression, a mood
disorder that makes you feel sad and
disinterested in things you usually enjoy."

Source





#### Health factor: Depression

- According to the World Health Organization,
   "an estimated 3.8% of the population experience depression, including 5% of adults ... Approximately 280 million people in the world have depression."
- "A depressive episode is different from regular mood fluctuations. They last most of the day, nearly every day, for at least two weeks."

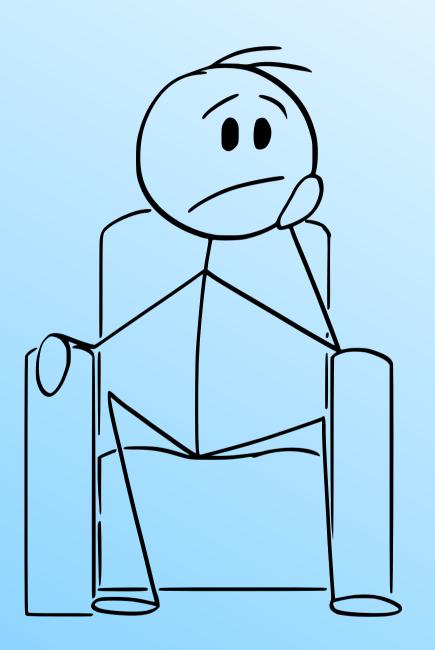
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## Health factor: Depression symptoms

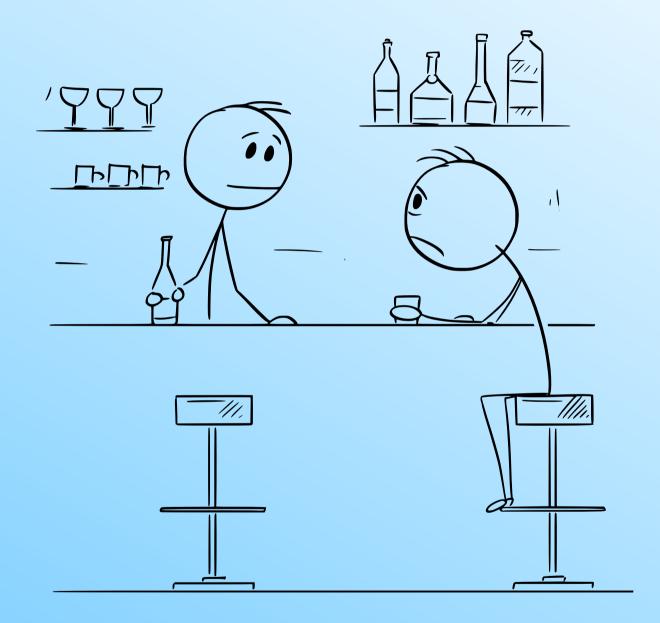
According to the World Health Organization, symptoms may include:

- poor concentration
- feelings of excessive guilt or low self-worth
- hopelessness about the future
- thoughts about dying or suicide
- disrupted sleep
- changes in appetite or weight
- feeling very tired or low in energy.



### Health factor: Depression & substance use disorder (SUD)

 "According to the National Institute of Mental Health (NIMH), about half of all people with SUD also have a mental health condition, such as depression. While depression symptoms such as low mood can cause a person to misuse drugs and alcohol, SUD may also cause depression." Source



## Health factor: Depression & driving

"Your mental health can impact road safety.
 Drivers experiencing emotional agitation or road rage are more likely to be involved in an accident, and anxiety and depression symptoms are associated with risky driving habits." <a href="Source">Source</a>



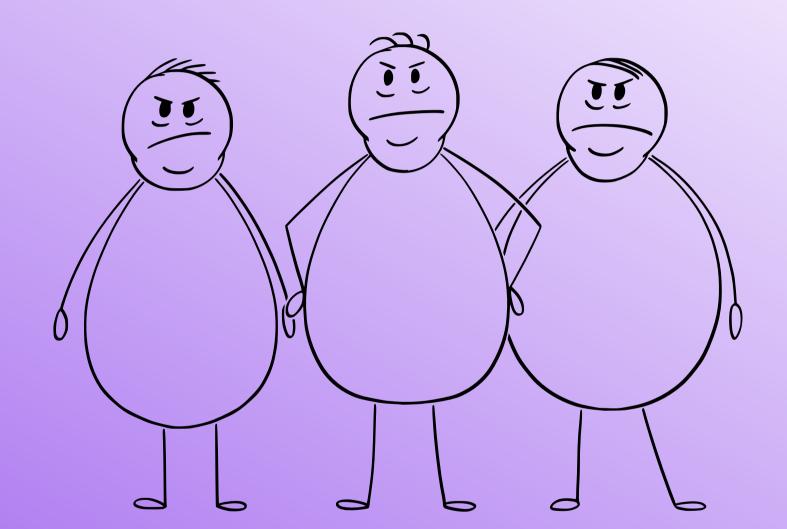
### Health factor: Depression & sleep

- "Depression can affect your appetite, your sleep habits, and your ability to concentrate."
   Source
- "Sleep issues commonly associated with depression include insomnia, hypersomnia, and obstructive sleep apnea. It is believed that about 20% of people with depression have obstructive sleep apnea." Source



### Health factor: Depression & obesity

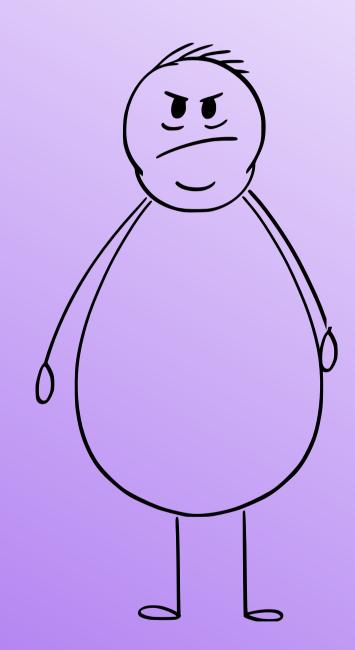
- According to the Centers for Disease Control and Prevention (CDC), "depression and anxiety can both be associated with overeating, poor food choices, and a more sedentary lifestyle.
   Over time, weight gain may eventually lead to obesity. About 43 percent of adults with depression have obesity." Source
- "Stress can enhance weight gain and fat deposition through changes in feeding behavior. Chronic stress is known to alter the pattern of food intake, dietary preference, and the rewarding properties of foods." <u>Source</u>



#### Health factor: Obesity

#### According to the CDC:

- "The US obesity prevalence was 41.9% in 2017 March 2020." (NHANES, 2021)
- "From 1999 –2000 through 2017 –March 2020,
   US obesity prevalence increased from 30.5% to
   41.9%. During the same time, the prevalence
   of severe obesity increased from 4.7% to
   9.2%. (NHANES, 2021)" <u>Source</u>

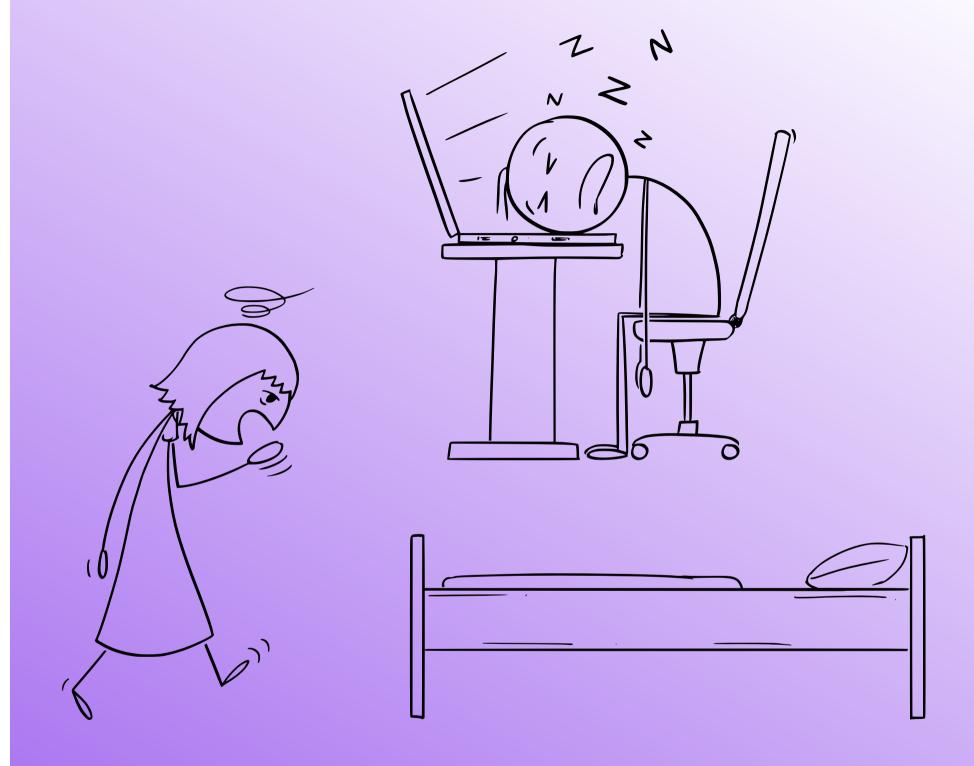


#### Health factor: Obesity & sleep

 "Greater than 50-percent of individuals diagnosed with obstructive sleep apnea (OSA) are either overweight or obese."

Source

• "There is a linear correlation between obesity and OSA. Fat deposition in the tissues surrounding the upper airway appears to result in a smaller lumen and increased collapsibility of the upper airway, predisposing to apnea." Source



## Health factor: Obesity, sleep apnea, & driving

According to the Mayo Clinic:

• "The repeated awakenings associated with sleep apnea make typical, restorative sleep impossible, in turn making severe daytime drowsiness, fatigue and irritability likely. You might have trouble concentrating and find yourself falling asleep at work, while watching TV or even when driving." Source



### Health factor: Lack of sleep & driving

- "Every year, drowsy drivers cause over 6,400 fatal car accidents." <u>Source</u>
- "Each year, drowsy driving accounts for about 100,000 crashes, 71,000 injuries and 1,550 fatalities, according to the National Safety Council (NSC)." <u>Source</u>

