

# The COVID-19 Pandemic and Physical Health in Adolescents: Findings from the ABCD Study



Adolescent Brain Cognitive Development

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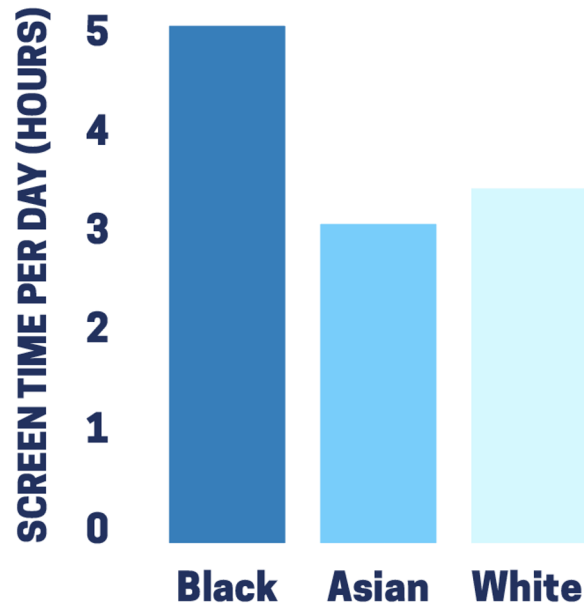
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# Overview




- Screen Time
- Physical Activity
- Sleep
- Weight
- Blood Pressure

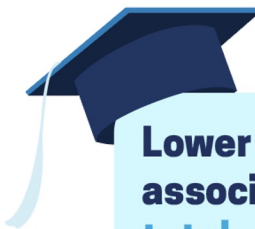
# Baseline Screen Time – Ages 9-10 Years



Boys reported  
**0.75  
more hours**  
of overall screen  
time than girls

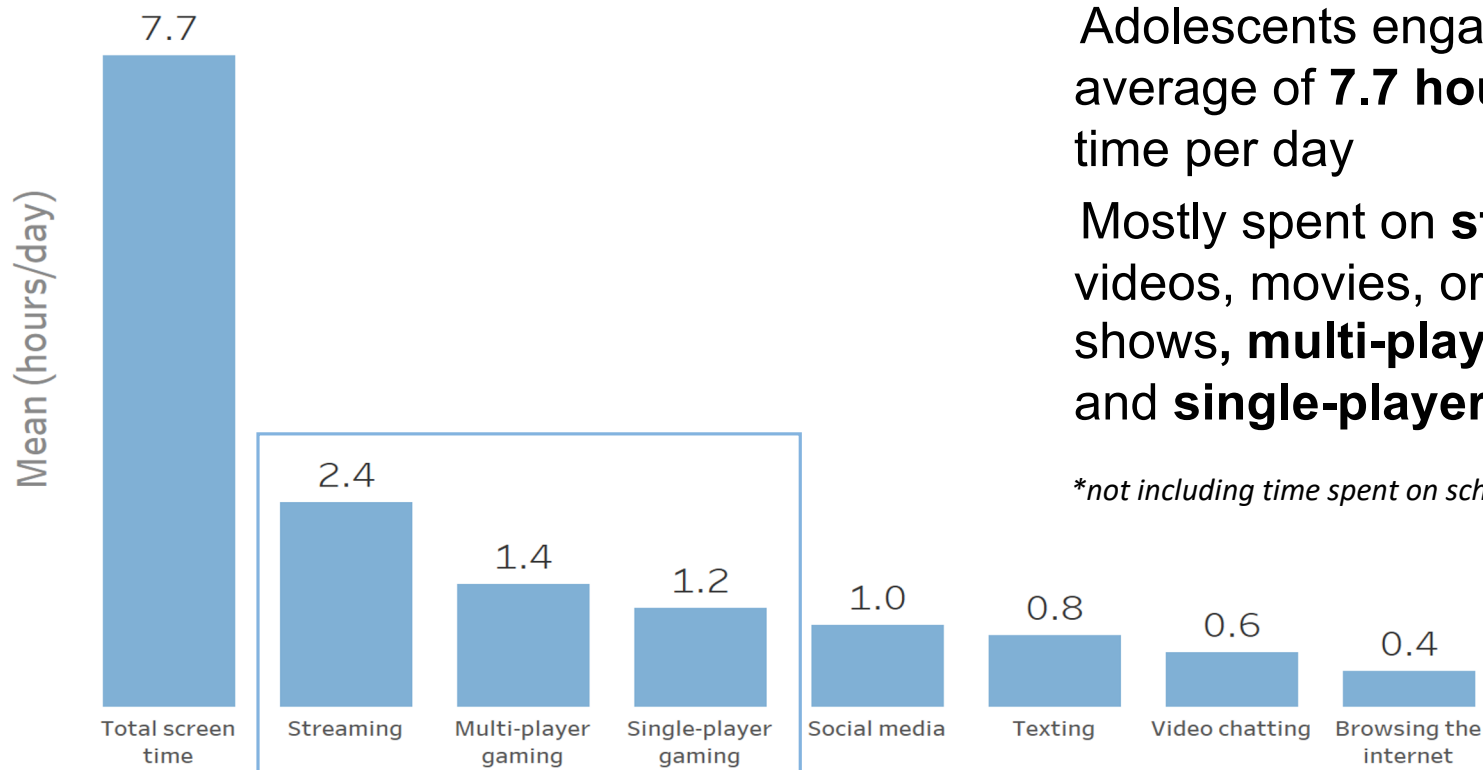


Lower income  
associated with  
**higher total  
screen time** (except  
with video chat)



Lower parental education  
associated with **higher  
total screen time**

# Screen Time Early in the COVID-19 Pandemic May 2020



Adolescents engaged in an average of **7.7 hours** of screen time per day

Mostly spent on **streaming** videos, movies, or television shows, **multi-player gaming**, and **single-player gaming**

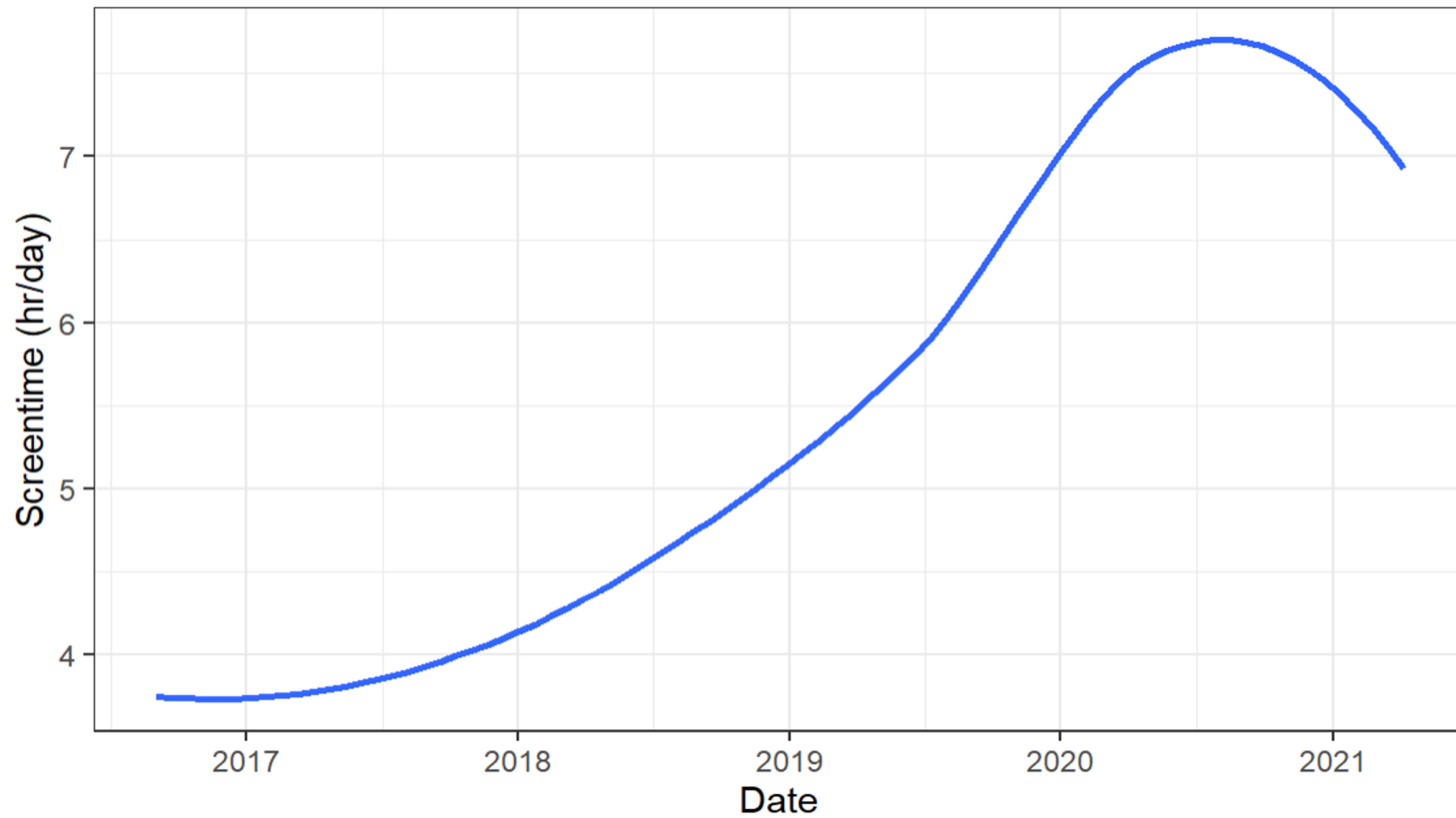
*\*not including time spent on schoolwork*

# Screen Time Associations

Greater total screen time during the early pandemic associated with:

- Worse mental health
- Greater perceived stress
- Less social support
- Fewer coping behaviors

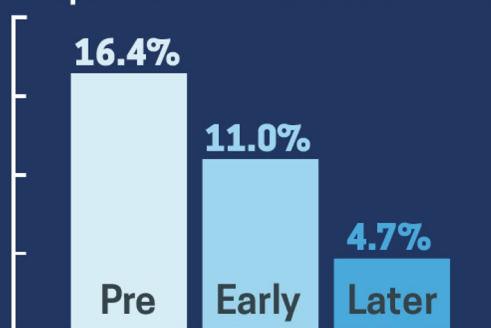
# Screen Time Trends 2016-2021



## Moderate-to-vigorous intensity physical activity among U.S. adolescents before and during the COVID-19 pandemic: Findings from the Adolescent Brain Cognitive Development study

- 1 Pre-pandemic  
(Sep 2016 - Oct 2018)
- 2 Early pandemic  
(May 2020 - Aug 2020)
- 3 Later pandemic  
(Oct 2020 - Mar 2021)

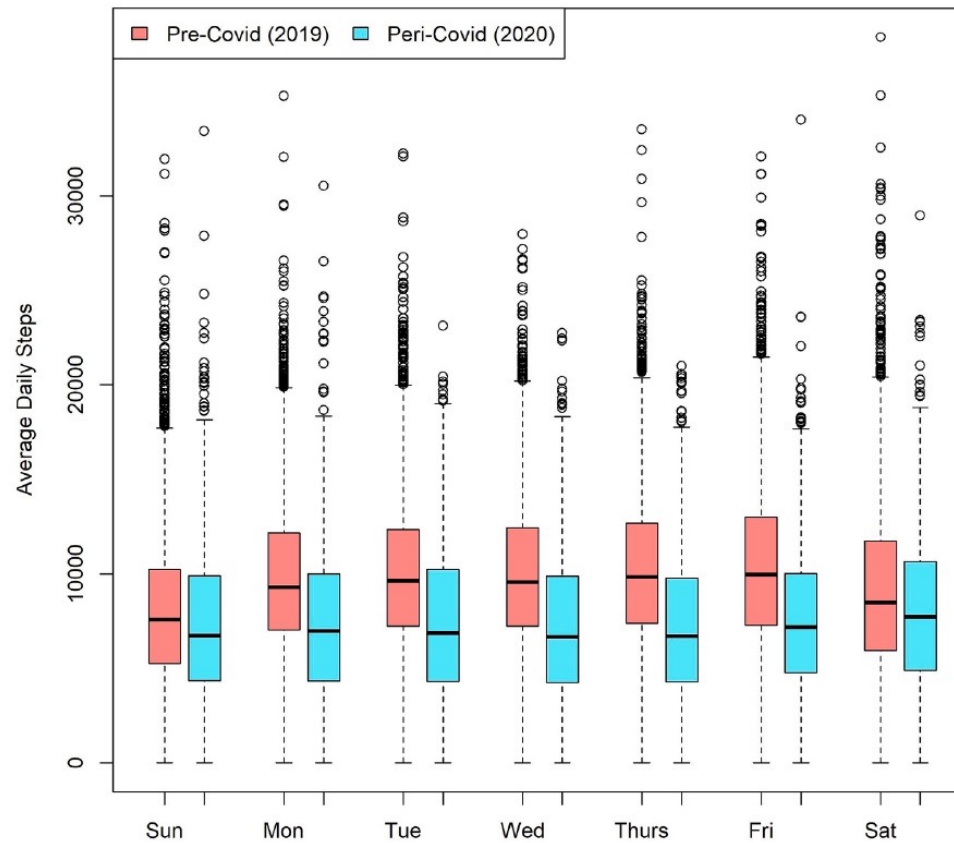
Proportion of adolescents meeting **MVPA** guidelines decreased



Department of Health and Human Services recommends **at least 60 minutes of MVPA per day**

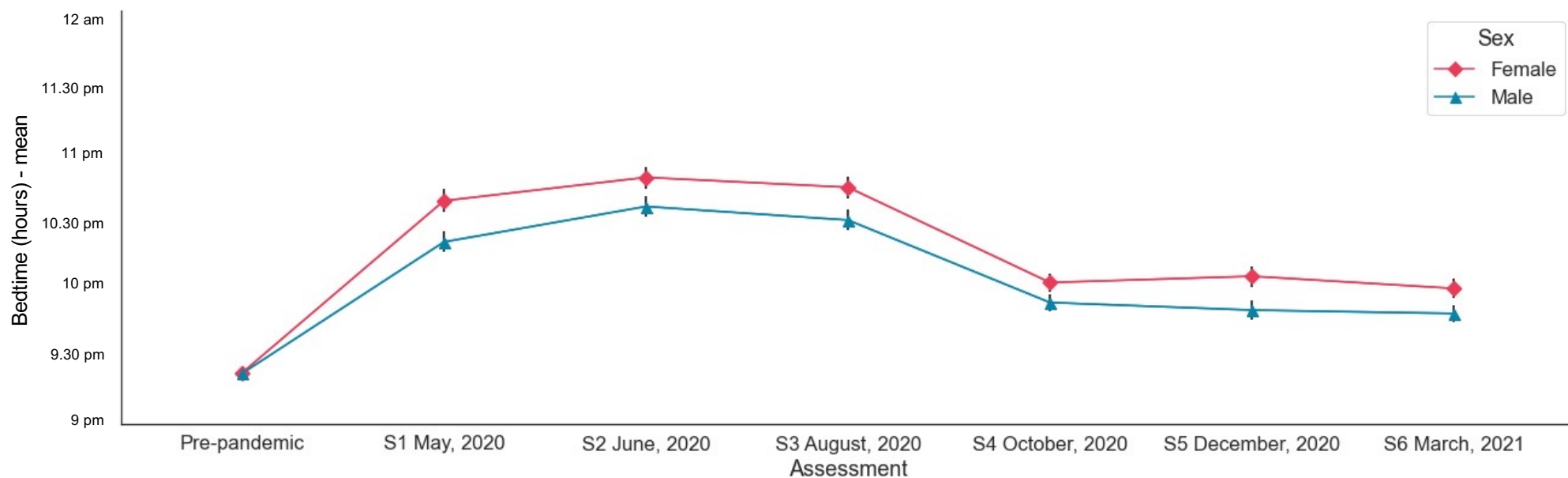


# Lower Daily Steps During COVID-19 Pandemic

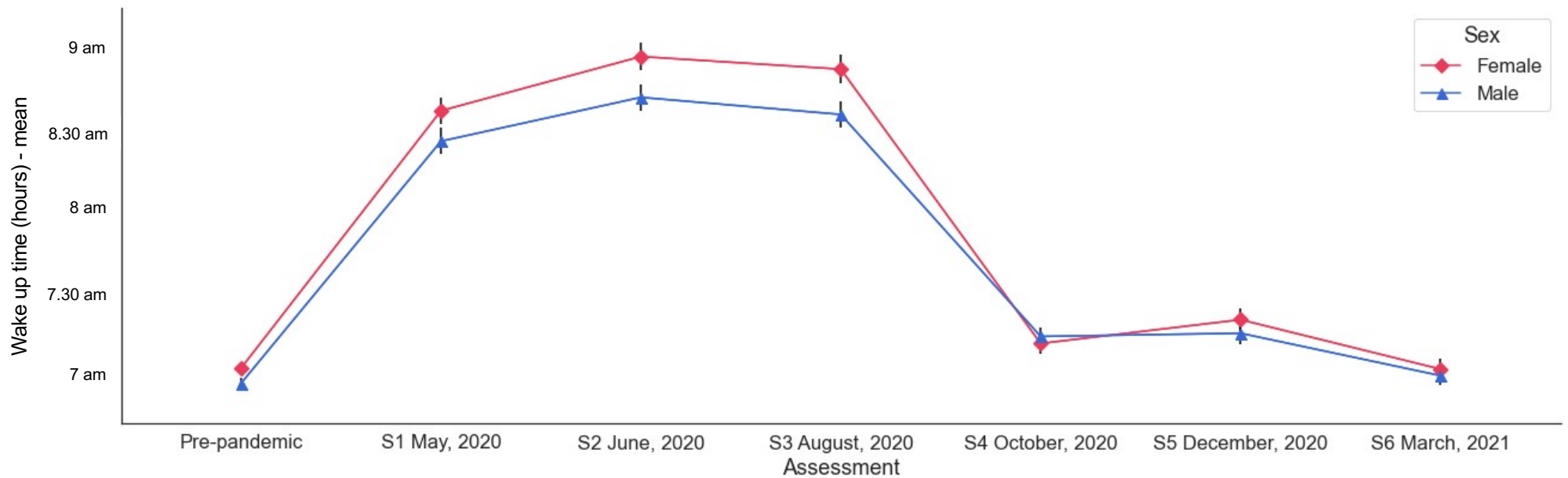




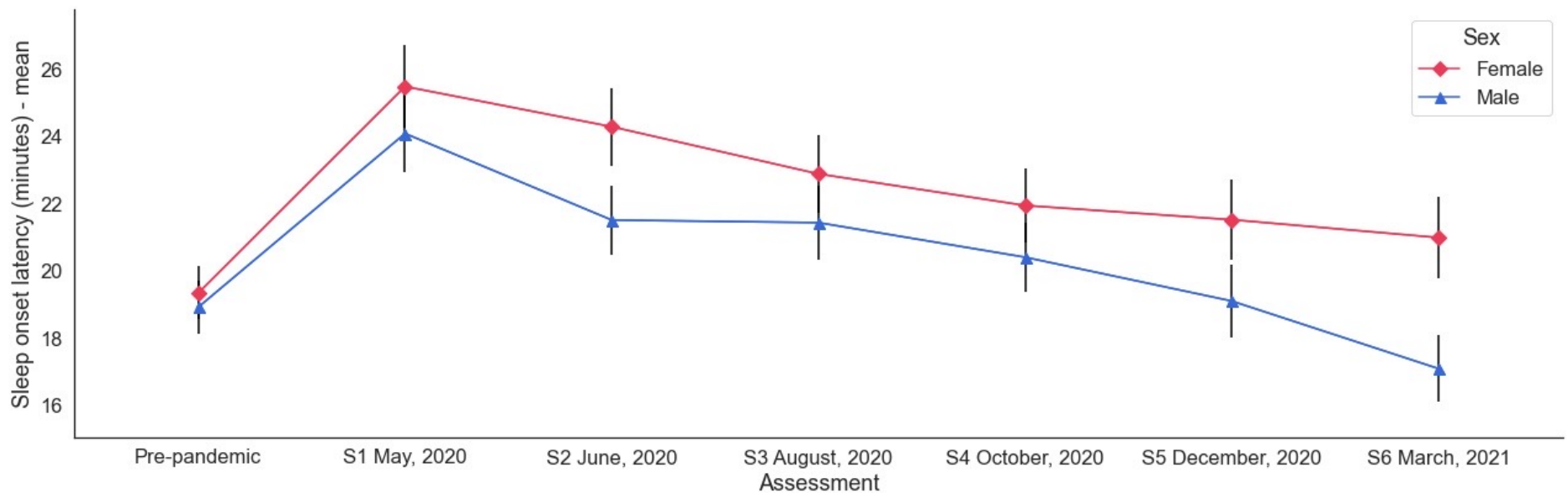
# Bedtime During COVID-19 Pandemic



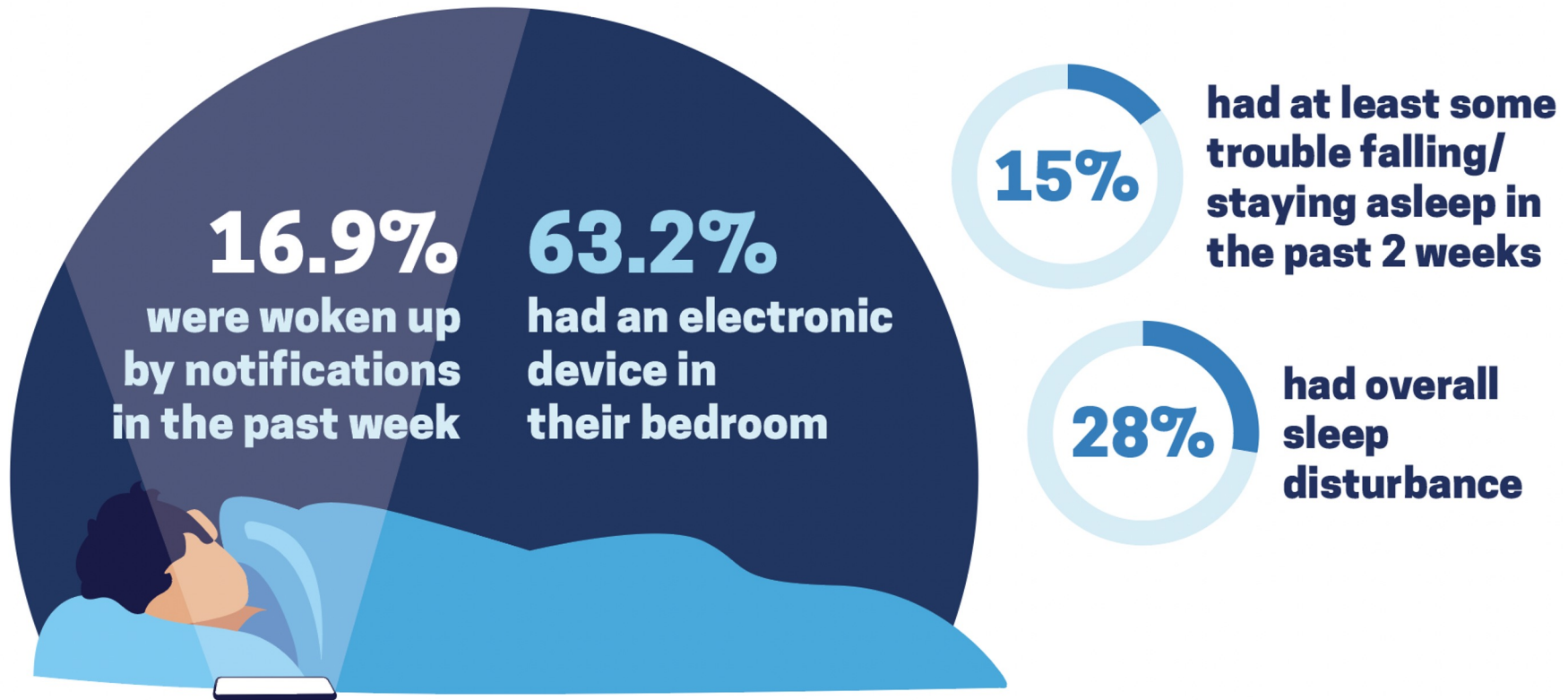
# Wake Up Time During COVID-19 Pandemic



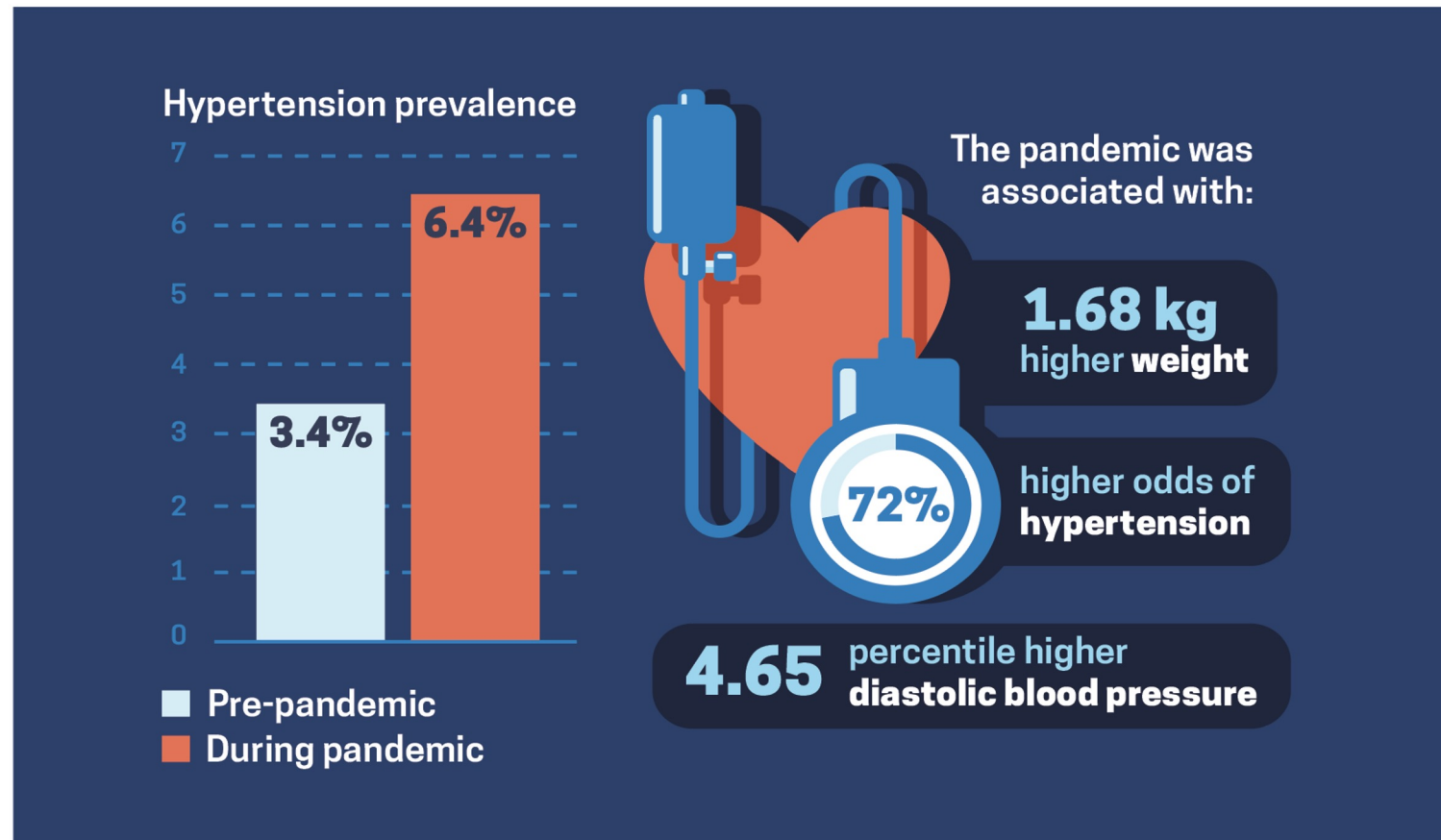
# Sleep Onset During COVID-19 Pandemic

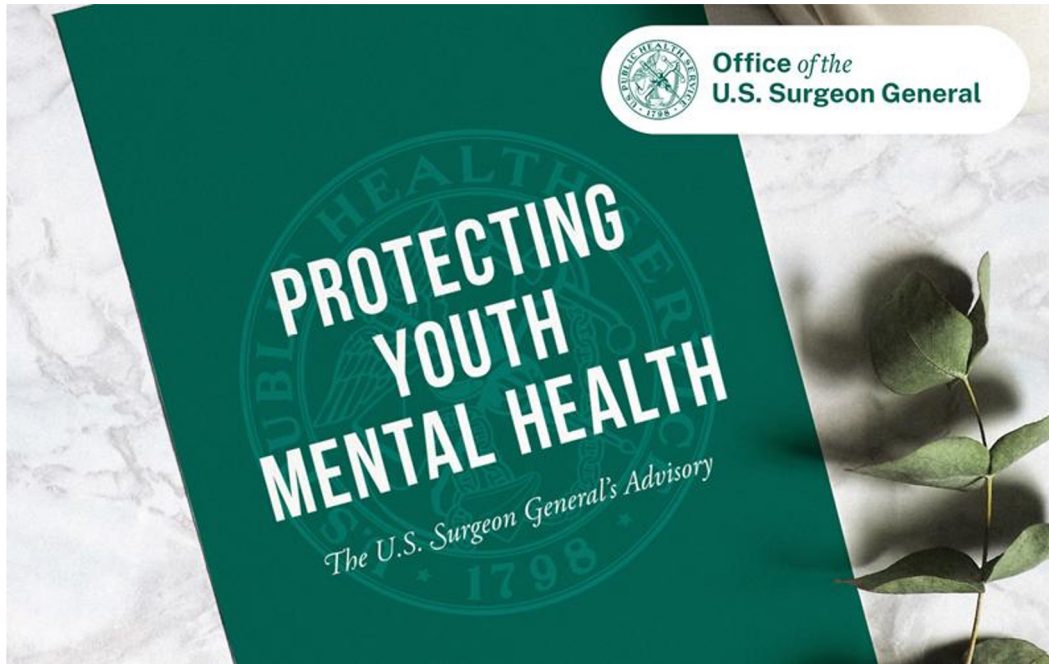


# Bedtime Screen Use and Sleep



## Higher blood pressure and weight observed among early adolescents during the COVID-19 pandemic





# References

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