Alcohol & Sleep
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Alcohol disrupts the body’s ability to respond to light cues, an effect that continues to be in place for more than 24 hours. Activity levels are also impacted by alcohol consumption, potentially causing someone to be more active later at night, further disrupting sleep. (1)

MELATONIN

Evidence supports that alcohol interferes with the release of melatonin, a hormone produced by the body to signal the onset of sleep. Consuming alcohol an hour before bed can reduce melatonin production by nearly 20%. While this might not impact the onset of sleep, it definitely affects your ability to stay asleep. (2)

(2) https://www.sleepfoundation.org/sleep-topics/melatonin-and-sleep
Alcohol decreases the time it takes to fall asleep.

Alcohol also suppresses REM in the first part of the night.

REM Rebound: Alcohol increases wakefulness and lengthens REM in the second part of the night.

Alcohol increases Stage 4 (slow wave) sleep in the first part of the night.

Ref: Roehrs & Roth, 2001
The Importance of REM

Rapid Eye Movement (REM) sleep is impacts learning and memory. During REM your brain sharpens your declarative memory—i.e your knowledge of complex, fact-based information. Alcohol reduces the amount of REM sleep you get in a night.(3)

A lack of REM sleep has been associated with many of health risks including increased anxiety and depression.(1)

REM Sleep has been shown to boost people’s accuracy in reading emotions and processing external stimuli. Those who achieve REM sleep are more successful at handling stressors the next day.(2)

(2) http://time.com/4970767/rem-sleep-dreams-health/
(3) https://www.sleep.org/articles/sleep-affects-memory-learning/
72 Hour Sleep Recovery
How heavy drinking can impact more than just the morning after

SATURDAY NIGHT
You go to bed intoxicated. Although you sleep for 10 hrs, your brain doesn’t enter REM sleep (or enters it during the final few hours of sleep).
You wake up feeling tired and sluggish.

SUNDAY NIGHT
You plan to catch up on quality sleep. However, your sleep-deprived brain enters REM REBOUND, staying too long in the REM cycle of sleep.
You wake up tired and struggle to focus on studying for your Monday mid term and/or be productive on other homework.

MONDAY NIGHT
Your brain returns to a normal sleep cycle.
You wake up on Tuesday feeling rested, but you may worry how your mid term went.
(*If you stayed up late Monday to catch up on homework, you might still not feel rested)

Adapted from Boston University—www.spreadthehealthbu.com
Recommendations

Limit alcohol beverages to 3 or less.
(Studies have shown that as little as one drink can impair sleep quality. In one study, moderate alcohol consumption lowered restorative sleep quality by 24%, and high alcohol intake by as much as 39.2%) (2)

Stop drinking sooner before sleeping.
Experts recommend stopping drinking at least 4 hours before bed to prevent sleep disruption. (1)

(1) https://www.piedmont.org/living-better/how-does-alcohol-affect-your-sleep
(2) https://www.medicalnewstoday.com/articles/321731.php