

Travel and Sleep

We have all felt exhausted after a long trip. There are many reasons why we experience fatigue from our travels. Flying from San Francisco to New York or from Beijing to Dubai can wreak havoc on a person's biological clock. It can lead to various symptoms that affect sleep including jet lag and travel fatigue.



What is jet lag? What causes it?

Jet lag is a temporary sleep problem that affects people one or more days after travel while crossing at least two time zones. The body has its own internal clock, also called circadian rhythm. This tells the body when to stay awake and when to fall asleep. Modern air travel allows people to journey across time zones faster than the circadian rhythm can adjust. Jet lag occurs because the body's clock is still synced to the original time zone rather than the time zone of your destination.

What are the symptoms of jet lag?

Jet lag causes difficulty falling asleep and staying asleep, a condition called insomnia. It can also result in daytime fatigue, excessive daytime sleepiness and gastrointestinal problems. Impaired physical performance, mood swings, memory problems and general fatigue may also be seen. Severity of symptoms depends on many factors including:

- Direction of travel (eastward travel is worse than westward travel).
- The number of time zones crossed.
- Loss of sleep accumulated before and during travel.
- Lack of external cues, such as exposure of natural light or exposure to bright light at the wrong time that can readjust or confuse the body's internal clock.
- Increasing age may be associated with the inability to adjust to sudden changes with travel across time zones.

What is the difference between jet lag and travel fatigue?

Travel fatigue is often confused with jet lag but they are not the same. Travel fatigue refers to the temporary exhaustion that people feel when traveling. Travelers may also have a headache or confusion. Travel fatigue can occur with any mode of travel, and is different than jet lag because it does not have to involve air travel or crossing time zones.

What are some general strategies to reduce jet lag for eastward travel?

Before Travel:

- It's important to get enough sleep before your travel to avoid a sleep deficit.
- If you are traveling eastward to a new time zone and staying there longer than two days then try shifting your sleep schedule 1 hour earlier each day for 3 days prior to your travel.
- Exposure to bright light (sunlight) upon waking up in the morning may help you fall asleep earlier.

During Travel:

- Start by setting your watch to the time at your destination to improve perception of the new time zone.
- Try to sleep during your destination night period. Using eye shades might help.

On Arrival:

- Avoid exposure to light in the morning (destination time). Instead, try to get early afternoon bright light.
- Take melatonin 1.5-2 hours before bedtime (destination time).

What are some general strategies to reduce jet lag for westward travel?

Before Travel:

- It's important to get enough sleep before your travel to avoid a sleep deficit.
- If you are traveling westward to a new time zone for more than two days then try shifting your sleep schedule 1 hour later each day for 3 days prior to travel.
- The best time to get sunlight exposure is early evening. Avoid bright light in the first few hours after waking up.

During Travel:

- Set your watch to the destination time.
- Try to avoid bright light during the night-time of your destination.

On Arrival:

- Try to expose yourself to bright light in the late afternoon or early evening.

Can medications help with the symptoms of jet lag?

- Caffeine in the morning can help improve daytime alertness and function.
- Ask your healthcare provider if there are any prescription medications you can take to improve your sleep quality while you are traveling.
- The use of melatonin, when used at the right time after eastward travel can reduce symptoms of jet lag and improve sleep following travel across multiple time zones. Consult your healthcare provider before its use.

How do beverages affect sleep when traveling?

- *Caffeine-containing* drinks like tea, coffee or soda can have a stimulating effect right away. However the half life of caffeine is 4-6 hrs. While this may be helpful if you are feeling sleepy and are trying to fire up for a day of business meetings or sightseeing, it may also keep you up at bedtime if you have the drink later in the afternoon.
- *Alcoholic* drinks during bedtime do not improve sleep. While a glass or two of wine may allow people to fall asleep quicker, and give deeper sleep for a short time; it reduces the restorative part of sleep. You may end up waking up in the middle of the night. This can be disruptive, especially when you are traveling and struggling with jet lag.
- *Carbonated* soda that is caffeine free may appear to be harmless. But even this can disrupt sleep. The carbonation in the drinks can cause bloating and trigger acid reflux or heartburn.
- *Water* is the best fluid to consume when traveling. Humidity levels are low in planes and not drinking enough water during the flight can result in dehydration. Dehydration could also contribute to some symptoms of jet lag.

What steps can be taken to promote sleep at a hotel?

- When making your reservation, ask for a room away from the restaurant or ballroom and well off the street. Having ear plugs, eye covers and blackout curtains can also make a huge difference in promoting sleep.
- A room temperature that is between 60-67 degrees.
- Fahrenheit is ideal for falling asleep and staying asleep. A light-weight fleece or cotton blanket that covers most of your body and legs may help in regulating your temperature and promote restful sleep.

Do I need to see a healthcare provider for jet lag?

- If you had symptoms of jet lag in the past, then talk to your healthcare provider before flying. If you have already traveled and the symptoms of jet lag have persisted for more than 2 weeks, then you need to be evaluated for other medical conditions.

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Rx Action Steps

- ✓ Use the strategies before, during and after you travel either eastward or westward across time zones in order to reduce jet lag
- ✓ Partner with your healthcare provider to see if any medications might be right for you to reduce the symptoms of jet lag.
- ✓ Consider other ways to help you sleep better during travel such as such as avoiding alcohol and caffeinated beverages and asking for a quiet hotel room and sleeping in a cool and quiet environment.

Healthcare Provider's Contact Number:

Resources**American Thoracic Society**

- <http://www.thoracic.org/patients>
 - Circadian Rhythm
 - Healthy Sleep in Adults

American Academy of Sleep Medicine

- www.sleepeducation.com

American Sleep Association

- <https://www.sleepassociation.org/>

National Sleep Foundation

- <https://sleepfoundation.org/>

American Academy of Sleep Medicine

- <http://www.aasmnet.org/>

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