

## IN-FLIGHT SLEEP TACTICS:

Transcontinental eastward flights are generally scheduled for evening departure, allowing for in-flight sleep during minimal alertness.

Transcontinental westward flights are generally scheduled for morning departure when it may be difficult to fall asleep, but long-duration flights afford the opportunity for afternoon sleep. The following tactics support in-flight sleep:

- ➔ Stop caffeine 6 hours prior to take-off. No caffeine until approximately 30 minute before landing.
- ➔ Forego in-flight meal service. Eat a meal prior to boarding or immediately after take-off. Forego any later in-flight meal service that will interfere with your sleep.
- ➔ Do not consume alcohol before or during the flight. Alcohol will make you feel drowsy, but it actually impairs sleep.
- ➔ Use foam ear plugs (or noise-cancelling ear buds/headphones), sleep mask, and blanket to control cabin noise, light, and temperature. Select a window seat so that passenger/flight attendant movements do not disrupt your sleep.
- ➔ Only use prescription sleep-inducing agents under a physician's supervision and approval.



TA-222-0614  
Approved for public release, distribution unlimited



## IMPORTANT PHONE NUMBERS:

**Tricare North:** 1-877-874-2273

**Tricare South:** 1-800-444-5445

**Tricare West:** 1-877-988-9378

**Overseas:** visit [www.tricare-overseas.com](http://www.tricare-overseas.com)

*When Military facilities are not available always call Tricare to ensure you utilize a Network Provider and Pharmacy.*



Learn more about the Performance TRIAD at  
[HTTP://ARMYMEDICINE.MIL](http://ARMYMEDICINE.MIL)

# Sleep Tactics for Time Zone Travel



Professional  
**SOLDIER  
ATHLETE**  
HERE IT'S NOT A GAME



## SLEEP

When traveling to different time zones, being alert and mentally sharp is critical to guarantee mission success. The brain cannot rapidly adjust to time zone changes. This results in jet lag, which is characterized by impaired sleep during new local night (resulting in a sleep debt) and difficulty staying awake during new local day.

Eastward travel involves trying to advance sleep. Westward travel involves trying to delay sleep. Delaying sleep is easier than trying to advance sleep; therefore, westward travel generally causes less sleep debt and jet lag than eastward travel.

There is no quick fix for adapting to a new local time. However, by knowing when to expect minimal and maximal alertness/mental acuity, one can partially overcome the influence of time zone travel on mental performance and the ability to sleep.

### Pre-travel sleep tactics:

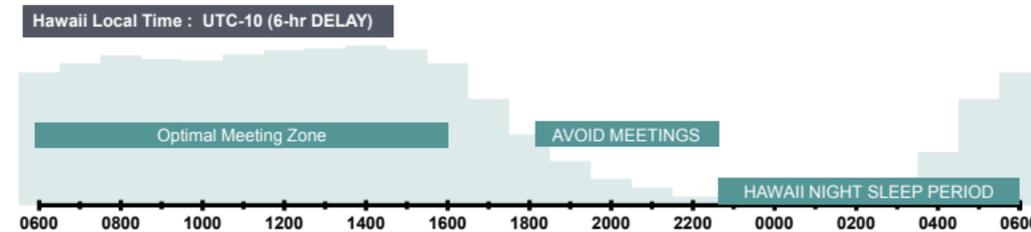
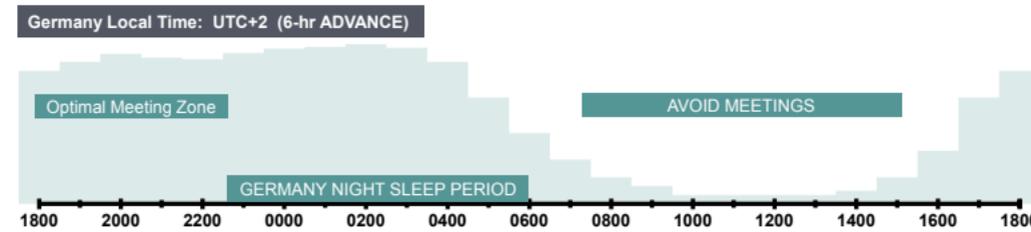
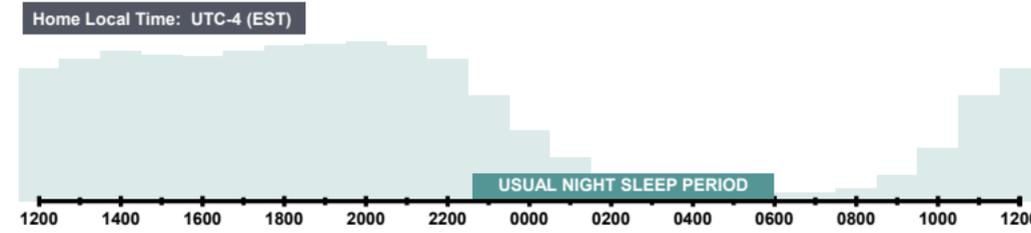
- ➔ Pay down sleep debt. Heading into time zone travel with chronic sleep loss will exacerbate sleepiness during the new local day. Pay down the sleep debt before traveling by consistently getting 7-8 hours of sleep per night.
- ➔ Do not attempt to pre-adapt to a new time zone. Attempting to pre-adapt by moving sleep/wake timing forward or backward is difficult to accomplish and will likely cause a sleep debt.

## SLEEP TACTICS AT NEW TIME ZONE:

Below are tactics that can be applied in any new time zone.

- ➔ **Critical meeting timing:** When possible, schedule meetings during your routine alertness cycle and avoid meetings during your routine sleep cycle (See chart on following page).
- ➔ **Caffeine:** Use caffeine (equivalent to two cups of coffee) approximately 1 hour prior to critical meetings to support alertness and mental acuity. Stop caffeine at least 6 hours prior to scheduled sleep period.
- ➔ For **fast turn-around travel** (1-2 days at each time zone), maintain your home time schedule as much as possible. Schedule critical meetings during your peak of alertness – for eastward travel, this means scheduling meetings to occur in the late afternoon or evening of new local time. Sleep or nap during the new local day.
- ➔ Be aware that alcohol will exacerbate sleepiness and mental acuity deficits, and it will impair sleep.
- ➔ **Prescription sleep-inducing agents:** Only use sleep-inducing agents under a physician's supervision and approval.
- ➔ **Do not use over-the-counter sleep aids.** These compounds do not improve sleep and can impair post-awakening alertness and mental acuity.
- ➔ **Melatonin is not recommended.** It does not increase actual sleep time.

## Critical meeting timing:



## ACTIVITY

Staying physically active during time zone travel can help with energy, sleep, and overall health.

- ➔ Before your trip, research the hotel or nearby fitness facilities and pack accordingly.
- ➔ Fitness items like a jump rope and elastic bands pack easily.
- ➔ Generalized activity like targeting 10,000 steps a day is still valuable for your health.
- ➔ Training twice a week with good intensity will help maintain your fitness despite a tight schedule.

## NUTRITION

Eating well while traveling can be a challenge unless you plan ahead.

- ➔ Take a collapsible water bottle so you can fill up anywhere and always stay hydrated.
- ➔ Pack shelf-stable foods that travel easily, such as nuts, whole grain crackers, snack bars, and dried fruit.
- ➔ Enjoy the local foods by ordering and sharing appetizers.
- ➔ If limited to fast food, choose kids meals or salads to keep calories in check.
- ➔ Don't limit yourself to restaurants. Check out local grocery stores for easy to make options, fruits, and vegetables.

## TAKING MEDICATIONS

- ➔ A number of medications require appropriate timing with meals or must be taken at a certain time of day. Schedule a telephone consult or send a Relay Health message to your provider prior to your departure to ask about any unique circumstances for your particular medication and condition.
- ➔ There are many methods for adjusting your medication timing. Discuss any medication timing changes with your provider or pharmacist.
- ➔ Most importantly remember to take your medicines! Whatever routine you have at home, you should take with you when you travel.

## REFERENCES

- » National Heart, Lung and Blood Institute: <http://www.nhlbi.nih.gov/health/public/sleep/>
- » Sack RL, Auckley D, Auger RR, et al.; American Academy of Sleep Medicine. Circadian rhythm sleep disorders: part I, basic principles, shift work and jet lag disorders. An American Academy of Sleep Medicine review. Sleep. 2007 Nov;30(11):1460-83.
- » Wesensten NJ, Comperatore CC, Balkin TJ, Belenky G . Jet lag and sleep deprivation. In: Kelley PW, ed. Military Preventive Medicine: Mobilization and Deployment. Volume 1, Textbooks of Military Medicine. Washington, DC: Office of the Surgeon General at TMM Publications 2003;287-300.