



# A Good Night's Sleep

## Leader's Guide

### **Introduction:**

Sleep problems can be a serious threat to one's health, safety, and quality of life. Sleep disturbance is a common and complex problem, particularly in older adults. Sleep disorders can range from the merely time-limited and annoying to the potentially life-threatening. This lesson about sleep is designed to meet the following objectives.

### **Learning objectives:**

After this lesson, participants will be able to:

- Define normal, age appropriate sleep patterns
- Describe common sleep disorders
- Evaluate their own sleep quality and determine level of need for medical intervention
- Apply some practical changes in sleep hygiene.

### **Why do we sleep?**

The answer to this question is still unknown, but research has provided many theories. Sleep may boost memory and learning, enable mental processing and help new memories become integrated into old memories (memory consolidation). Although it does relax muscles in the body, it appears that it is most important for brain function.

All mammals, birds, and reptiles sleep, although the number of hours per day spent in sleep varies widely. A brown bat sleeps nearly 20 hours a day, while a giraffe sleeps barely 2 hours. Sleep is crucial for humans. A recent article from Washington State University states:

“Go without sleep and the effects will be obvious and progressively dramatic. Your attention and learning abilities will dwindle quickly. Your metabolic rate will shoot up. Your body will be unable to regulate its temperature. At some point you will start hallucinating. We don't know how long a human can go without sleep, but a rat drops dead after three sleepless weeks.”

### **What happens during sleep?**

*Refer to the phases of sleep in the participant guide.*

### **How much sleep do we need?**

Each person's sleep requirement is different. Some people find that they only need 5-6 hours of sleep, while others need 10-11 hours for optimal performance. The average adult functions best with 7-9 hours of sleep a night; however, it is important to consider how much sleep you need on an individual basis. School aged children and teens need 9 to 12 hours. Infants, toddlers and preschoolers can need from 10 to 16 hours of sleep.

## **Are you sleeping, are you sleeping, brother John, brother John?**

Having trouble sleeping is one of the most common complaints among people over 50. In a survey conducted by the National Sleep Foundation in 2003, nearly 50% of older adults reported having one or more symptoms of insomnia at least a few nights a week. These symptoms include difficulty falling asleep, frequent awakenings during the night, waking up too early and being unable to return to sleep, or waking up feeling unrefreshed.

## **The “new” science of Sleep Medicine**

Sleep has been studied for centuries, going back to the discovery of opium, which was promoted as a cure for insomnia in ancient Egypt about three thousand years ago. New diagnostic tools, from x-rays and electroencephalograms (EEGs) to computerized axial tomography (CAT scan) and nuclear magnetic resonance imaging (NMR), revolutionized procedures, diagnoses, and treatments of sleep disorders in the latter half of the 20th century. Likewise, advances are occurring at an unprecedented rate into the 21st century because of the dedication of researchers and clinicians in the field of sleep medicine.

Here in Oregon, the growth of this medical specialty can be tracked by looking at the number of sleep centers accredited by the American Academy of Sleep Medicine (AASM). In 1985 there was one center, in 1990 there were 3, in 2000 there were 8, and in 2007 there are 17 centers across the state. *Refer participants to the list of accredited sleep centers in Oregon.*

## **Sleep Disorders Activity**

*Cut out the 16 Disorder Matching Cards and distribute to the group. Conduct a group discussion to match up the disorder names with their descriptions. If you want to provide more information or there are questions, you can share the following paragraphs. The participants' guide has spaces for writing notes about the sleep disorders.*

Obstructive Sleep Apnea (OSA) is a sleep-related breathing disorder that involves a decrease or complete halt in airflow despite an ongoing effort to breathe. It occurs when the muscles relax during sleep, causing soft tissue in the back of the throat to collapse and block the upper airway. This leads to complete pauses (apneas) that usually last between 10 and 30 seconds. The brain responds to the lack of oxygen by alerting the body, causing a brief arousal from sleep that restores normal breathing. This pattern can occur hundreds of times in one night and results in fragmented sleep quality that often produces excessive levels of daytime sleepiness. Most people with OSA snore loudly and frequently, with periods of silence when airflow is reduced or blocked. They then make choking, snorting or gasping sounds when their airway reopens.

About 80 to 90% of adults with OSA remain undiagnosed. Effects of OSA can include increased heart rate, chronic elevation of daytime blood pressure, increased risk of stroke, higher rate of death due to heart disease, impaired glucose tolerance and insulin resistance, and an increased risk of being involved in a deadly motor vehicle accident.

There are a variety of treatments, including oral appliances, surgery, and behavioral change, but the most common treatment is use of a CPAP machine. “CPAP” stands for “continuous positive airway pressure” and was first introduced in 1981. A CPAP provides a steady stream of pressurized air to patients through a mask they wear during sleep. This airflow keeps the airway open, preventing pauses in breathing and restoring normal oxygen levels.

Restless Leg Syndrome (RLS) is a sleep-related movement disorder that involves an almost irresistible urge to move the legs at night. This urge tends to be accompanied by unusual feelings or sensations that occur deep in the legs. These sensations are often described as a burning, tingling, prickling or jittery feeling, and for some people can be painful.

RLS affects 5 to 10 percent of adults, but can also occur in children, where it is often mis-diagnosed as growing pains. Women are nearly two times more likely than men to have RLS. Iron deficiency, certain medications, and a family history of the disorder are some of the risk factors. RLS symptoms can cause severe sleep disturbances and can disturb the sleep of the bed partner. It causes a reduction in daytime energy, and increases the rates of depression and anxiety.

A regular daytime exercise program, hot baths, leg massages and heating pads may improve symptoms for mild cases. Patients with low iron levels may benefit from iron treatments. Treatment can include a number of medications.

Periodic Limb Movement Disorder (PLMD) is a related disorder that causes people to jerk and kick their legs every 20 to 40 seconds during sleep. Medication, warm baths, exercise, and learning to relax can help.

Insomnia is a common sleep complaint that occurs when a person has a hard time falling asleep, struggles to maintain sleep- waking up frequently, tends to wake up too early and is unable to go back to sleep, and/or experiences nonrestorative or poor quality sleep. About 30% of adults have symptoms of insomnia, and for about 10% of adults it is severe enough to cause daytime consequences. There are seven documented types of insomnia.

A high rate of insomnia is seen in middle-aged and older adults, and women are more likely to develop it than men. People who have a medical or psychiatric illness, including depression, are at risk and people who use medications may experience insomnia as a side effect.

Effects include fatigue, moodiness, anxiety about sleep, poor memory, lack of motivation or energy, headaches, upset stomach, and lack of concentration. People with insomnia often underestimate the amount of sleep they get each night.

Treatments include cognitive behavioral therapy for insomnia (CBT-I), over the counter products, and prescription sleeping pills. CBT-I can involve a combination of relaxation training, sleep hygiene training, cognitive therapy, sleep restriction and stimulus control.

Narcolepsy is a neurological sleep disorder that causes potentially disabling levels of daytime sleepiness. A person can suddenly fall asleep and experience muscle paralysis in unusual situations, such as while eating, walking, being angry, laughing or driving. This disorder affects about 1 in 2000 persons and typically appears in teens and young adults, persisting for a lifetime. Sleepiness in narcolepsy is not the result of inadequate sleep. The cause of most cases is the brain's loss of neurons that contain a protein that helps the brain stay alert.

When left untreated, narcolepsy can be socially disabling and isolating. It often leads to the onset of depression, and type 2 diabetes may occur more often in people with narcolepsy. Treatment includes making lifestyle changes and taking a combination of medications.

Circadian Rhythm Sleep Disorders involve a problem in the timing of when a person sleeps and is awake. The human body has an internal circadian clock in the brain which regulates the timing of such body rhythms as temperature and hormone levels. The primary rhythm that the circadian clock controls is the sleep-wake cycle, functioning in a cycle of a 24 hour day. Visual clues of light and darkness, and meal and exercise schedules can affect it. Circadian rhythms and their sensitivity to time cues may change as a person ages.

Persons with delayed sleep phase disorder regularly go to sleep and wake up more than two hours later than is considered normal. These “night owls” will have a very stable sleep pattern if they are able to go to bed at the preferred late time on a regular basis. Likewise, a person with advanced sleep phase disorder goes to sleep and wakes up several hours earlier than the norm, waking between 2 and 5 AM and going to sleep between 6 and 9 PM. This person can also have a very stable sleep pattern if they can go to bed at the preferred early time on a regular basis. This pattern is more common as people age.

Other types of Circadian Rhythm Sleep Disorders include jet lag disorder and shift work disorder. Treatment options depend upon the unique nature of the disorder and may include lifestyle changes, sleep hygiene improvements (see participant guide), bright light therapy, medications and melatonin supplements.

Disturbing Parasomnias are a group of sleep disorders that involve undesirable physical events or experiences that occur while falling asleep, sleeping, or waking from sleep. Types of parasomnias include recurrent nightmares, waking in a confused state, hallucinations, REM sleep disorder (physically acting out dreams), and sleep terrors or night terrors (loud scream or cry and a look of intense fear while unresponsive).

Many parasomnias emerge and peak during the childhood years. Because parasomnias often occur in healthy people, treatment may be unnecessary. Treatment may be necessary if the parasomnia is especially disturbing to the sleeper or to others in the household, or if it produces behaviors that are potentially dangerous. A treatment program might include avoidance of drugs, alcohol and sleep deprivation, medications, and cognitive behavioral therapy.

Sleepwalking, also known as somnambulism, is a parasomnia that most often emerges in the first third or first half of the sleep period when slow-wave sleep is more common. Sleepwalking consists of a series of complex behaviors that result in the person walking around with an altered state of consciousness and impaired judgment. It can involve strange, inappropriate, and even violent behaviors.

Sleepwalking occurs in as many as 17% of children and 4% of adults. It tends to be a fairly normal part of a child’s development, peaking by the age of 8 to 12 years. Sleepwalking is more common if one or both parents were sleepwalkers as children. Other factors such as medication side effects, head injuries, stroke, migraine headaches, other sleep disorders, stress, and travel or unfamiliar surroundings can cause sleepwalking.

Treatment for sleepwalking may become necessary if the sleepwalking persists into adulthood and involves behaviors that are potentially dangerous. Treatment can include medications and cognitive behavioral therapy.

Sleep talking is a common sleep disorder that is classified as an isolated symptom. It can arise during any stage of sleep and can occur with varying levels of comprehensibility. The sleep talker tends to be unaware of the problem, but loud and frequent talking can disturb the sleep of the bed partner. At times the content of the talking can be objectionable and offensive to others. Sleep talking is extremely common in children and is rarely severe enough to require treatment. Severe sleep talking may be a sign of a more serious sleep disorder that would need to be treated.

*This lesson gives a brief overview of the types of sleep disorders. Refer participants to the AASM Fact Sheet website listed at the end of the participants’ guide if they want more information about a particular disorder.*

### **How does sleep change as we age?**

Poor sleep is not a part of normal aging, but there are factors that may impact sleep quality and quantity:

- We still need the same amount of sleep as young adults – between 7 and 9 hours each night.
- We tend to go to sleep earlier and get up earlier than when we were younger.
- We spend less time in the deepest sleep stages, which can make us lighter sleepers.
- Our risk of developing sleep apnea rises because throat tissues can become less firm.
- Our risk of developing Restless Leg Syndrome and Periodic Limb Movement Disorder rises.
- Other health issues and medications can disrupt sleep.

### **How are we sleeping now?**

*Ask participants to complete the Rate Your Sleep assessment in the participants' guide. Conduct a discussion if participants are willing to share their results.*

*Distribute and introduce the Two Week Sleep Diary, share the explanation and example that appears on the top of the sheet, and suggest that this form would be helpful to complete and show a medical provider to help evaluate a sleep problem.*

### **What can we do to improve the quality and quantity of our sleep?**

*Refer to the Understanding Some Definitions and Sleep Hygiene Strategies in the participants' guide. Emphasize that the items listed in the Sleep Hygiene Strategies are only some possible options and may not improve sleep for everyone. You may want to ask participants to take turns reading and discussing the strategies.*

*Conduct the Progressive Muscle Relaxation activity. (Reading this over in advance and trying it yourself before teaching the group is highly recommended!) Take your time so the participants have time to feel the muscle groups.*

### **Closing**

*Ensure that the group has had the opportunity to personalize the materials by sharing any sleep problems and discussing solutions or next steps.*

Sleep: It's vitally important and we spend a third of our life doing it. I hope each of you will take some time today to think about what you can do to get the optimal quality and quantity of sleep so that you can enjoy all your waking hours.

### **Evaluation**

*Distribute the evaluation form and consent letter. Read the consent letter to the group, address any questions they may have, and say they may keep their copy of the letter for future reference. Read through the instructions for the evaluation so everyone understands it, then allow time for completion and collect the evaluations. Collected evaluations should be sent to the Extension Family and Community Development Faculty member in your county. Evaluations help us demonstrate the impact of our OSU Extension Service programs. Your cooperation is appreciated.*

## References

A Woman's Guide to Sleep Joyce A. Walsleben, Ph.D. and Rita Baron-Faust, 2000, Three Rivers Press, Random House, New York.

“At Last! A Good Night's Sleep”, AARP Magazine, March & April 2007, p.60-64.

American Academy of Sleep Medicine [www.sleepeducation.com](http://www.sleepeducation.com)

“Health After 50”, The Johns Hopkins Medical Letter, December 2004

Mayo Clinic 10 Tips for better sleep <http://www.mayoclinic.com/health/sleep/HQ01387>

National Heart Lung and Blood Institute [www.nhlbi.nih.gov/health/public/sleep/](http://www.nhlbi.nih.gov/health/public/sleep/)

National Institute of Neurological Disorders and Stroke <http://www.ninds.nih.gov/index.htm>

National Institute on Aging <http://www.niapublications.org/agepages/sleep.asp>

National Sleep Foundation <http://www.sleepfoundation.org/>

The Promise of Sleep William C. Dement, M.D, Ph.D. and Christopher Vaughan, 1999, Dell Publishing, Random House, New York.

Rate Your Sleep AASM <http://www.sd+cmaynard.com/Rate.pdf>

Say Good Night to Insomnia Gregg D. Jacobs, Ph.D., 1998, Henry Holt and Company, New York.

Sleep Medicine Center <http://sleepmedicinecenter.upmc.com>

Sleepquest - Dr. Dement [http://www.sleepquest.com/d\\_column\\_archive6.html](http://www.sleepquest.com/d_column_archive6.html)

The Sleep Well <http://www.stanford.edu/~dement/>

Sleeping well as we age [http://www.helpguide.org/life/sleep\\_aging.htm](http://www.helpguide.org/life/sleep_aging.htm)

University of Pittsburgh Sleep Medicine Center <http://sleepmedicinecenter.upmc.com/DuringSleep.htm>

What is sleep and why do we do it? <http://faculty.washington.edu/chudler/sleep.html>

Why do we sleep? <http://www.wsu.edu/NIS/Universe/sleep.htm>

This lesson was developed by Debra Minar Driscoll, Family and Community Development Faculty, Oregon State University Extension Service. She is grateful for the helpful reviews conducted by Extension specialists Sally Bowman and Kathy Gunter.

### Disorders Matching Cards

<b>Obstructive Sleep Apnea</b>	<b>Breathing stops, or gets very shallow. Each pause in breathing typically lasts 10 to 20 seconds or more. These pauses can occur 20 to 30 times or more an hour.</b>
<b>Restless Leg Syndrome</b>	<b>Characterized by unpleasant sensations in the legs and an uncontrollable urge to move when at rest in an effort to relieve these feelings.</b>
<b>Insomnia</b>	<b>Trouble falling asleep or staying asleep, waking too early and being unable to go back to sleep, or sleep is nonrestorative or of poor quality.</b>
<b>Narcolepsy</b>	<b>Caused by the brain's inability to regulate sleep-wake cycles normally, the main symptom is excessive daytime sleepiness, with "sleep attacks" occurring while eating, walking or driving.</b>
<b>Circadian Rhythm Sleep Disorders</b>	<b>These all involve a problem in the timing of when a person sleeps and is awake. Types include jet lag disorder, shift work disorder and delayed sleep phase disorder.</b>



<b>Disturbing Parasomnias</b>	<b>These are sleep disorders that involve undesirable physical events or experiences that occur while falling asleep, sleeping or waking from sleep. They include nightmares, hallucinations, and sleep terrors.</b>
<b>Sleepwalking</b>	<b>Known as somnambulism, it consists of a series of complex behaviors that culminate in walking around with an altered state of consciousness and impaired judgment.</b>
<b>Sleep Talking</b>	<b>A common sleep disorder that is classified as an isolated symptom. The person tends to be unaware of the problem, but loud and frequent episodes can disturb the sleep of the bed partner, and at times be offensive to others.</b>



## Progressive Muscle Relaxation

Progressive muscle relaxation is a form of deep relaxation training designed to calm the body and reduce stress. It has also been shown to relieve sleep problems, and is recommended by the *American Academy of Sleep Medicine* as an effective treatment for individuals who have difficulty sleeping.

To begin, sit in a comfortable chair--reclining arm chairs are ideal. Bed is okay too. Get as comfortable as possible--no tight clothes, no shoes, don't cross your legs.

1. Take a deep breath; let it out slowly. Again.
2. What you'll be doing next is alternately tensing (tightening) and relaxing specific groups of muscles. For example, while taking in a deep breath, tense (tighten) the muscles in your thighs. When you let the breath out, relax the muscles in your thighs.
3. Try to focus on one muscle group at a time, tensing for 5-10 seconds, and relaxing for 10-30 seconds before moving on to the next muscle group.
4. After tension, a muscle will be more relaxed than prior to the tensing. Concentrate on the feel of the muscles, specifically the contrast between tension and relaxation. In time, you will recognize tension in any specific muscle and be able to reduce that tension.

Don't tense muscles other than the specific group at each step. Don't hold your breath, grit your teeth, or squint! Breathe slowly and evenly and think only about the tension-relaxation contrast. Each tensing is for 10 seconds; each relaxing is for 10 or 15 seconds. Count "1,000 2,000..." until you have a feel for the time span. Note that each step is really two steps--one cycle of tension-relaxation for each set of muscles.

Do the entire sequence once a day if you can, until you feel you are able to control your muscle tensions. Be careful: If you have problems with pulled muscles, broken bones, or any medical contraindication for physical activities, consult your doctor first. All movements should be done to the point of mild discomfort. If you are feeling significant discomfort or pain, you have stretched or tensed too far!

1. **Hands.** The fists are tensed; relaxed. The fingers are extended; relaxed.
2. **Biceps and triceps.** The biceps are tensed (make a muscle--but shake your hands to make sure not tensing them into a fist); relaxed (drop your arm to the chair--really drop them). The triceps are tensed (try to bend your arms the wrong way); relaxed (drop them).
3. **Shoulders.** Pull them back (careful with this one); relax them. Push the shoulders forward (hunch); relax.
4. **Neck** (lateral). With the shoulders straight and relaxed, the head is turned slowly to the right, as far as you comfortably can; relax. Turn to the left; relax.

5. **Neck** (forward). Slowly bring your chin to your chest; relax. (Bringing the head back is not recommended).

6. **Mouth**. The mouth is opened as far as comfortably possible; relaxed. The lips are brought together or pursed as tightly as possible; relaxed.

7. **Tongue** (extended and retracted). With mouth open, extend the tongue as far as comfortably possible; relax (let it sit in the bottom of your mouth). Bring it back in your throat as far as comfortably possible; relax.

8. **Tongue** (roof and floor). Dig your tongue into the roof of your mouth; relax. Dig it into the bottom of your mouth; relax.

9. **Eyes**. Open them as wide as comfortably possible (frown your brow); relax. Close your eyes tightly (squint); relax. Make sure you completely relax the eyes, forehead, and nose after each tensing--this can be challenging.

10. **Breathing**. Take as deep a breath as possible--and then take a little more; let it out and breathe normally for 15 seconds. Let all the breath in your lungs out--and then a little more; inhale and breathe normally for 15 seconds.

11. **Back**. With shoulders resting on the back of the chair, push your body forward so that your back is arched; relax. Be very careful with this one, or don't do it at all.

12. **Butt**. Tense the butt tightly and raise pelvis slightly off chair; relax. Dig buttocks into chair; relax.

13. **Thighs**. Extend legs and tense the muscles so that your heels almost lift off the floor (but not quite), relax completely. Dig your feet (heels) into the floor or foot rest; relax.

14. **Stomach**. Pull in the stomach as far as possible; relax completely. Push out the stomach or tense it as if you were preparing for a punch in the gut; relax.

15. **Calves and feet**. Point the toes (without raising the legs); relax. Point the feet up as far as comfortably possible (beware of cramps-if you get them or feel them coming on, shake them loose); relax.

16. **Toes**. With legs relaxed, dig your toes into the floor; relax. Bend the toes up as far as comfortably possible; relax.

Source: Adapted from webpage of Professor George Boeree, Psychology Department, Shippensburg University, Pennsylvania  
<http://webspace.ship.edu/cgboer/musclerelaxation.html> ; [Sleep](#). 2006 Nov 1;29(11):1415-9

**Sleep Centers in Oregon**  
**Accredited by the American Academy of Sleep Medicine (AASM)**

**Bend**

High Desert Sleep Disorders Center  
St. Charles Medical Center  
2042 Williamson Court  
Bend OR 97701  
541-383-6905  
[gcalliso@scmc.org](mailto:gcalliso@scmc.org)

Sleep Disorders Center at Sacred Heart  
Medical Center  
1255 Hilyard Street  
Eugene OR 97401  
541-686-7224  
[cdunks@peacehealth.org](mailto:cdunks@peacehealth.org)  
[www.peacehealth.org](http://www.peacehealth.org)

**Clackamas**

Sleepwell Partners, LLC  
9717 SE Sunnyside Road  
Clackamas OR 97015  
503-652-0067  
[amy.herrmann@sleepitest.com](mailto:amy.herrmann@sleepitest.com)  
[www.sleepwellpdx.com](http://www.sleepwellpdx.com)

**Klamath Falls**

Klamath Sleep Medicine Center  
2628 Campus Drive  
Klamath Falls OR 97601  
541-885-2201

Northwest Sleep Health  
Northwest Primary Care Group  
13518 SE 97<sup>th</sup> Avenue  
Clackamas OR 97015  
503-353-1272  
[amber.schuppert@nwpc.com](mailto:amber.schuppert@nwpc.com)  
[www.nwsleephealth.com](http://www.nwsleephealth.com)

**McMinnville**

Sleep Disorders Center  
Willamette Valley Medical Center  
2700 SE Stratus Ave.  
McMinnville OR 97128  
503-435-6566  
[thomas.lutsock@triadhospitals.com](mailto:thomas.lutsock@triadhospitals.com)  
[www.wvmcweb.com](http://www.wvmcweb.com)

**Corvallis**

Samaritan Sleep Disorder Center  
3600 NW Samaritan Drive  
Corvallis OR 97330  
541-768-5262  
[johnl@samhealth.org](mailto:johnl@samhealth.org)

**Medford**

Sleep Disorders Center  
Rogue Valley Medical Center  
2825 East Barnett Road  
Medford OR 97504  
541-789-4320  
[gzanotto@asante.org](mailto:gzanotto@asante.org)  
[www.sleepcenters.org/roguevalley](http://www.sleepcenters.org/roguevalley)

**Eugene**

Sleep Disorders and Neurology Clinic  
4725 Village Plaza Loop, Suite 101  
Eugene OR 97401  
541-683-3325  
[eugenesleep@yahoo.com](mailto:eugenesleep@yahoo.com)

## **Portland**

Providence Portland Sleep Disorders  
Center

Providence Portland Medical Center  
4805 NE Glisan Street, Suite 3M01  
Portland OR 97213  
503-215-3095  
[dianne.hurst@providence.org](mailto:dianne.hurst@providence.org)

Legacy Sleep Disorders Center  
Legacy Good Samaritan Hospital and  
Medical Center  
1015 NW 22<sup>nd</sup> Avenue, Suite 315  
Portland OR 97210  
503-413-7540  
[kmccollum@lhs.org](mailto:kmccollum@lhs.org)  
[www.legacyhealth.org](http://www.legacyhealth.org)

Providence St. Vincent Sleep Disorders  
Center  
Providence St. Vincent Medical Center  
MOB 409  
Portland OR 97225  
503-216-2010  
[lyn.miskowicz@providence.org](mailto:lyn.miskowicz@providence.org)

Pacific Sleep Program  
11790 SW Barnes Road, Suite 330  
Portland OR 97225  
503-228-4414  
[lab@snoreweb.com](mailto:lab@snoreweb.com)  
[www.snoreweb.com](http://www.snoreweb.com)

The Sleep Center at Adventist Medical  
Center  
10123 SE Market Street  
Portland OR 97216-2599  
503-251-6134  
[mike\\_mcdonald@msn.com](mailto:mike_mcdonald@msn.com)  
[www.adventisthealth.com](http://www.adventisthealth.com)

Oregon Sleep Associates  
2228 NW Pettygrove, Suite #150  
Portland OR 97210  
503-288-5201  
[admin@oregonsleepassociates.com](mailto:admin@oregonsleepassociates.com)  
[www.oregonsleepassociates.com](http://www.oregonsleepassociates.com)

## **Salem**

Sleep Disorders Center  
Salem Hospital  
875 Oat Street SE, Suite 3040  
Salem OR 97309-5014  
503-561-5170  
[lucinda.tatman@salemhospital.org](mailto:lucinda.tatman@salemhospital.org)  
[www.salemhospital.org/services/sleepdisorder.html](http://www.salemhospital.org/services/sleepdisorder.html)

## **The Dalles**

Mid-Columbia Center for Sleep  
Medicine  
Mid-Columbia Medical Center  
1700 East 19<sup>th</sup> Street  
The Dalles OR 97058  
541-296-7724  
[paulc@mcmc.net](mailto:paulc@mcmc.net)