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Preventing Sleep Problems and Treatment of Sleep-disordered Breathing in Pregnancy: Part 2

The term "Sleep-disordered Breathing" (SDB) refers to a range of breathing problems during sleep, ranging from snoring to obstructive sleep apnea (OSA). SDB occurs when the upper airway is blocked or narrowed, restricting airflow into the lungs. Frequent snoring occurs in up to half of pregnant women. If you have sleep problems including sleep-disordered breathing (SDB), these may be worse during pregnancy.



Some women develop SDB during pregnancy. Symptoms of OSA include heavy snoring, breathing pauses, gasping or choking during sleep associated with brief awakenings. There can be drops in blood oxygen level with the upper airway blockages. Daytime sleepiness is a common symptom. For more information about SDB, its causes, signs and symptoms, dangers and diagnosis, please see the ATS Patient Information Series fact sheet "Sleep-disordered Breathing in Pregnancy: Part 1."

What can I do to try to prevent sleep problems in pregnancy?

In all pregnant women, general self-help measures may prevent SDB and improve your sleep. If you have already been diagnosed with sleep apnea, the self-treatment measures listed below may not be adequate treatment and you should follow up with your healthcare provider. Actions you can take include the following:

- Achieve normal weight before pregnancy and control your weight gain as advised by your provider during pregnancy.
- Avoid caffeine, high fat dairy products, or spicy meals in the two to three hours before bedtime.
- Get regular exercise at least 30 minutes a day (after discussion with your primary care physician or obstetrician) to control your weight gain.
- Avoid tobacco smoking or use of nicotine products such as vaping or e-cigs. Avoid exposure to cigarette smoke or vapors.
- Avoid drinking alcohol.
- Plan a regular sleep—wake schedule. Make sleep a priority. If necessary, add naps earlier in the day, up to 30 minutes (naps could lead to difficulty sleeping at night, if you nap later in the day). A regular sleep schedule will help you relax and sleep better which can decrease apnea episodes.

- Relieve nasal congestion at night using nasal saline washes, nasal dilators, or breathing strips. Avoid using prescription or over the counter nasal decongestants without checking with your obstetric provider. You should discuss with your obstetric provider before using any product to be sure if it is safe to use during pregnancy.
- Avoid sleeping on your back, as gravity can make your tongue and soft tissues drop and block your airway (sleeping on the back does not always cause breathing problems for all women). Sleeping on your side (ideally with your left side down) can improve blood flow to both the fetus and to your body.
- Consider elevating the head of your bed by around five inches or elevate your body from the waist up by using a foam wedge to prevent or decrease snoring, fluid retention around your upper airway and heartburn. You can also use pregnancy or support pillows between the knees, under the abdomen, and behind the back to sleep comfortably. An elevated upper body position may improve sleep apnea.

How is sleep-disordered breathing treated?

Drug treatment

There is no medication that prevents or treats SDB. Stimulant medications may be used to treat the sleepiness (not snoring or breathing pauses) caused by OSA. If you are taking one of these medications before pregnancy, you should discuss the safety of the drug with your healthcare provider, preferably before you get pregnant to decide on a plan of action during and after pregnancy. Your healthcare provider will weigh the severity of your symptoms against the potential safety risk of the drug to you or your unborn baby. If your healthcare provider advises you to stop the drug, you may need to take appropriate safety measures (in discussion with your primary care provider or obstetrician), especially when you are driving. In addition, you should be aware that some of these medications might make

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birth control medications less effective!

Treatment of OSA

During pregnancy evaluation of OSA should be addressed as soon as it is suspected, and treatment started promptly because of the potential negative effects on the fetus and mother. Insurance issues may hinder this process but you should keep working on a plan with your healthcare provider to get help.

Continuous positive airway pressure (CPAP): CPAP is the most effective treatment for OSA. CPAP is a device that uses air pressure to keep the upper airway open during sleep by blowing air into a mask that covers the nose, or the nose and mouth. In many cases, your symptoms may be relieved right away after a single night of CPAP usage. If CPAP is used during pregnancy, an automatically adjusting device is often advised because the severity of apnea may change during pregnancy. (For more information on OSA and CPAP therapy, go to the ATS Patient Information Series at www.thoracic.org/patients.)

Oral devices: Oral appliances are worn in your mouth, much like an athletic mouth guard, during sleep to keep your airway open. Oral appliances are most likely to be effective for a person without obesity who has mild to moderate OSA. Most oral devices work by either bringing your lower jaw forward or keeping the tongue from blocking the throat. These devices are usually custom-made and fitted by a specialized dentist. Over the counter devices are also available with lower cost but are often less effective. Treatment with an oral device may not return your oxygen level to normal when you have sleep apnea. In addition, it has side effects, including soreness, saliva build-up, nausea, and permanent change in position of the jaw, teeth, and mouth. It is very important to be fitted by a dentist specialized in sleep medicine. Pregnancy-related changes in the mouth and the lengthy production and fitting sessions needed to start oral appliance therapy render this treatment difficult to use during pregnancy.

Oxygen therapy: This is not considered a replacement for CPAP treatment. CPAP is far better than just using extra oxygen for SDB. Your healthcare provider may advise using oxygen therapy if you have a low blood oxygen level due to SDB and you are unable to use CPAP device. Oxygen therapy provides you with extra oxygen. Normal oxygen levels are important for your baby to develop and your own body to function well. Usually you use a nasal cannula, two small tubes that go into both your nostrils to get extra oxygen. In some severe cases, your healthcare provider may prescribe both CPAP and oxygen therapy for treatment of OSA. This could be more helpful than using one of them alone.

After the baby is born

If you have sleep apnea, you should continue treatment after your baby is born. Untreated sleep apnea causes sleepiness, lack of energy and other symptoms that may interfere with your ability to care for your newborn. It is possible that sleep apnea may improve after delivery. However, depending on its severity, it may not resolve. Be sure to follow-up with your healthcare provider to see what is safe to use after pregnancy.

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R Action Steps

- ✓ The best time to address any sleep issues you already have is BEFORE pregnancy occurs
- Ask your partner / roommate if you snore and have breathing pauses during sleep, or make an audio recording of yourself
- ✓ Talk with your healthcare provider if you have sleep problems
- ✓ Ask your healthcare provider if you need a sleep study
- ✓ Talk with your healthcare provider what the safest treatment is for you and your baby
- ✓ Do regular exercise at least 30 minutes a day to help control your weight gain, especially if you are overweight (talk with your healthcare provider)
- ✔ Plan a regular sleep—wake schedule
- Relieve nasal congestion at night but only use prescription or over the counter nasal decongestants after talking with your healthcare provider about what is safe in pregnancy.
- ✔ Avoid sleeping on your back
- ✓ Consider elevating the head of your bed by around five inches
- Avoid caffeine, heavy or spicy meals in the two to three hours before bedtime

Healthcare Provider's Contact Number:

For More Information

American Academy of Sleep Medicine

 https://foundation.aasm.org/positional-sleep-therapypregnancy/

National Sleep Foundation

- http://www.sleepfoundation.org/article/hot-topics/ sleep-tips-pregnant-women
- https://www.sleepfoundation.org/articles/treatingsleep-disordered-breathing-pregnancy-may-improvefetal-health

Mayo Clinic

 https://www.mayoclinic.org/healthy-lifestyle/ pregnancy-week-by-week/in-depth/sleep-duringpregnancy/art-20043827

American Pregnancy Association

 http://americanpregnancy.org/pregnancyhealth/ insomnia.html

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