Daytime Sleepiness – Epworth Sleepiness Scale

A Simple Measure for the Office

- Sleepiness during the daytime is a common problem. It generally goes unrecognized until tragedy strikes.

- Texas highways are more dangerous because of sleepiness. During 1992 it was estimated that 35,000 motor vehicle accidents occurred due to drowsy Texas drivers. Falling asleep while driving alone at night increases the risk of a fatal crash fivefold. The National Commission on Sleep Disorders Research reported in 1993 that inappropriate sleepiness during the day costs the nation over 15 billion in direct expenses and nearly 70 billion in lost productivity.

- The assessment of daytime sleepiness requires a physician to have a high index of suspicion. Patients may call it “tiredness” or “fatigue”. Others may not speak of their problems for fear of being labeled as “lazy”. If national surveys hold true, it would be estimated that 6% of patients in a typical medical practice would have moderate to severe daytime sleepiness.

- To assist physicians in their recognition of daytime sleepiness, Dr. Murray Johns of Melbourne, Australia designed and validated the Epworth Sleepiness Scale (ESS). It asks a patient to rate the chance of dozing during various daytime activities. The ESS is easy to complete and score with the cut-off points listed at the bottom of this page.

Scoring the Epworth Sleepiness Scale

*Patients with scores of 10 or above would benefit from a thorough review of their sleep pattern and possible sleep disorders.*

**Epworth Sleepiness Scale**

In contrast to just feeling tired, how likely are you to doze off or fall asleep in the following situations? (Even if you have not done some of these things recently, try to work out how they would have affected you.) Use the following scale to choose the most appropriate number for each situation:

<table>
<thead>
<tr>
<th>0 – Would never doze</th>
<th>1 – Slight chance of dozing</th>
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<tbody>
<tr>
<td>2 – Moderate chance of dozing</td>
<td>3 – High chance of dozing</td>
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<table>
<thead>
<tr>
<th>SITUATION</th>
<th>CHANCE OF DOZING</th>
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<tbody>
<tr>
<td>Sitting &amp; Reading</td>
<td></td>
</tr>
<tr>
<td>Watching TV</td>
<td></td>
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<tr>
<td>Sitting inactive in a public place (i.e. theater)</td>
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<tr>
<td>As a car passenger for an hour without a break</td>
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<tr>
<td>Lying down to rest in the afternoon</td>
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<tr>
<td>Sitting &amp; talking to someone</td>
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<tr>
<td>Sitting quietly after lunch without alcohol</td>
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<tr>
<td>In a car, while stopping for a few minutes in traffic</td>
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<tr>
<td><strong>Total Score</strong></td>
<td></td>
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A score of less than 8 indicates normal sleep function;

- 8-10 – Mild sleepiness
- 11-15 – Moderate sleepiness
- 16-20 – Severe sleepiness
- 21-24 – Excessive sleepiness
**Sleep Apnea Measurement – Berlin Sleep Scale**

Developed in 1996 at the Conference on Sleep in Primary Care in Berlin, Germany, this 10-question test has since become well-known for its accuracy in predicting the presence of sleep apnea in patients. A study conducted in 1999 by Netzer, Stooh, et. al. determined "that the Berlin Questionnaire will detect important symptom distributions and permit risk grouping in the absence of a physician-patient encounter". The authors of the study also conclude that "the sensitivity of 86% for an RDI (respiratory disturbance index) more than 5 is higher than that of strategies currently used in clinical practice." As of 1999 the study authors believed the Berlin Questionnaire was more effective than typical clinical evaluations being conducted at the time. Over the last several years the Berlin Questionnaire has become increasingly wide-spread within the medical community and is likely a common strategy in clinical practice today.

1. Complete the following:

   Height ________ Age ____________
   Weight__________ Male/Female__

2. Do you snore?
   ☐ Yes
   ☐ No
   ☐ Don’t Know

If you snore . . .

3. Your snoring is?
   ☐ Slightly louder than breather
   ☐ As loud as talking
   ☐ Louder than talking
   ☐ Very loud. Can be heard in adjacent rooms.

4. How often do you snore?
   ☐ Nearly every day
   ☐ 3-4 times a week
   ☐ 1-2 times a week
   ☐ 1 – 2 times a month
   ☐ Never or nearly never

5. Has your snoring ever bothered other people?
   ☐ Yes
   ☐ No

6. Has anyone noticed that you quit breathing during your sleep?
   ☐ Nearly every day
   ☐ 3-4 times a week
   ☐ 1-2 times a week
   ☐ 1 – 2 times a month
   ☐ Never or nearly never

7. How often do you feel tired or fatigued after you sleep?
   ☐ Nearly every day
   ☐ 3-4 times a week
   ☐ 1-2 times a week
   ☐ 1 – 2 times a month
   ☐ Never or nearly never

8. During your wake time, do you feel tired, fatigued or not up to par?
   ☐ Nearly every day
   ☐ 3-4 times a week
   ☐ 1-2 times a week
   ☐ 1 – 2 times a month
   ☐ Never or nearly never

9. Have you ever nodded off or fallen asleep while driving a vehicle?
   ☐ Yes
   ☐ No

10. Do you have high blood pressure?
    ☐ Yes
    ☐ No
    ☐ Don’t know

**Berlin Scoring Results**

Any answer followed by double asterisks (**) is a positive response.

Category 1 is positive with 2 or more positive responses to questions 2 through 6.
Category 2 is positive with 2 or more positive responses to questions 7 through 9.
Category 3 is positive with 1 or more positive responses and/or a BMI>30.
2 or more positive categories indicates a high likelihood of sleep apnea.

To Schedule a Sleep Study:
(877) 256-4904
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