

STIMULUS CONTROL PROCEDURES

- **GO TO BED WHEN YOU ARE SLEEPY**

A 30-60 minute wind-down period is needed so as to be sleepy by bedtime. In general we suggest only going to bed when you are sleepy. When you go to bed too early, it only gives you more time to ponder events of the day, plan the next day's schedule, and worry about your inability to fall asleep. This is obviously incompatible with relaxation and sleep. Therefore, it is best to go to bed around the time you are sleepy.



As you implement this procedure, you must also adhere to the bedtime you discussed with your therapist. It is best not to go to bed earlier than this time.

Sometimes we will suggest this recommendation be modified. For example, some people are more likely to feel sleepy if they get into bed and lie in darkness. Discuss which strategy is best for you with your therapist.

- **GET OUT OF BED IF YOU ARE UNABLE TO SLEEP WITHIN 20 MINUTES**

Get out of bed when you are unable to fall asleep or return to sleep within 20 minutes; go to another room and engage in some quiet activity. You can read, listen to relaxing music, or practice any similar non stimulating activities. Do not sleep on the couch. Return to bed only when sleepy. Repeat this step as often as necessary throughout the night. It will be difficult and demanding to follow this instruction. However, your brain will begin to remember that it's *time to go to sleep* if you follow this rule!

If you have trouble sleeping, you might postpone getting out of bed. You may think: "If I leave bed, I will be awake for the rest of the night. If I just stay in bed I will eventually fall asleep." Nonetheless, trying to go to sleep only **increases performance anxiety and frustration, and disturbs your sleep even further.** If you really want to break out of this vicious cycle, you should just get up. There

is no need to watch the clock, as this alone will keep you awake. When about 20 minutes have passed and you're still awake, you should pull yourself out of this spiralling situation. At this point, leave the bed and go to another room and engage in some quiet activity in dim light. Wait until sleepiness returns before returning to bed. Do not sleep on the couch because this will create an association between sleep and the couch, not sleep and your bed.

Sometimes we will suggest this recommendation be modified. For example, some people are better to stay in bed and practice savoring or meditation (focus on the breath). We recommend this approach for people who find get caught up surfing the internet or similar if they get out of bed. Discuss which strategy is best for you with your therapist.

- ***MAINTAIN A REGULAR ARISING TIME IN THE MORNING***

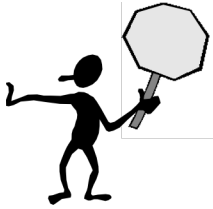


Set an alarm and get out of bed at approximately the same time every morning based on your sleep window, **weekdays and weekends, and regardless of your bedtime or the amount of sleep you had the previous night**. This will help regulate your internal clock and synchronize your sleep-wake rhythm. If you have a tendency to turn off your alarm without waking up, place the alarm somewhere else, out of reach, so you are forced to get up to turn it off.

'Catching up' on sleep the next day has negative consequences! Although it can be difficult to maintain a strict and regular rise time on weekends, there are several measures you can take to facilitate this process:

- ⇒ Always use an alarm
- ⇒ Schedule early social activities or family commitments to increase your motivation to get out of bed early.

- ***RESERVE YOUR BED AND BEDROOM FOR SLEEP ONLY***



Do not read, eat, watch television, listen to the radio, work, or worry in your bed or bedroom either during the day or at night.

These activities are incompatible with sleep. When you engage in other activities in your room, the environment

becomes associated with **wakefulness** rather than **sleepiness and sleep**.

- ***DO NOT NAP DURING THE DAY***

Routine daytime napping disrupts the natural sleep/wake rhythm and interferes with nighttime sleep. When you stay awake all day, you are sleepy at night.

There is nothing wrong with napping in itself. A short nap can have a powerful revitalizing effect. However, for people who suffer from insomnia, napping can have **harmful effects**. Napping disrupts the natural sleep-wake rhythm and interferes with nighttime sleep. The best advice is to **avoid napping**. If you stay awake all day, chances are you will be sleepier at bedtime.

- ***LEAVE AT LEAST 1 HOUR TO UNWIND BEFORE YOU GO TO BED***

Use this time for reading, listening to music or spending time with family, **but do this somewhere other than your bedroom**. As you get closer to bedtime, it is best not to rehash events of the day or plan tomorrow's schedule as this can create **mental stimulation** and make it harder to sleep. Set aside another time during the day or early evening to deal with worries and to do problem-solving. If you cannot get rid of the worries or concerns, it often helps to write them down and plan to deal with them at another time. Remember to avoid technology!

IN CONCLUSION

Strict adherence to the procedures is essential. You cannot choose only those procedures which seem easiest to apply. All of the procedures work together. You may find that sleep gets worse for the first few nights, or that you wake up in the morning feeling more exhausted than usual. Do not get discouraged, this is **normal** early on in the treatment. The benefits will become

more evident with time and repeated practice. The single most important factor in determining whether your sleep will improve is the consistency with which you follow the instructions.

SLEEP RESTRICTION

RESTRICT THE AMOUNT OF TIME SPENT IN BED TO THE ACTUAL AMOUNT OF SLEEP



Sleep restriction consists of keeping the number of hours spent in bed as close as possible to the actual number of hours you spend asleep. Bed rest is one of the most common strategies to cope with temporary insomnia, and it can bring short-term relief. In the long run, however, this strategy is not effective. Spending too much time awake in bed makes sleep more fragmented or restless and perpetuates insomnia.

People suffering from troubled sleep often associate their room with frustration and the fear of not sleeping. The proposed procedures provide the opportunity to re-establish a positive association between bedtime, the bedroom, and sleep. The main effect of sleep restriction is to produce a mild state of sleep deprivation, which facilitates sleep onset at bedtime and improves the continuity of sleep throughout the night. The duration of sleep may not be increased at first, but the efficiency and quality will be. Duration will be increased slowly over time as quality and efficiency continue to improve.

How to implement sleep restriction?

The first step is to determine your initial sleep window (i.e., the period from bedtime to arising time) for the first week of treatment. This sleep window is based on two factors, your average sleep time and average sleep efficiency of the previous week.

- 1) Using your sleep diary, calculate the average number of hours of sleep per night for the previous week. This duration should represent your initial sleep window.
- 2) Then, select the time you wish to go to bed and to arise in the morning. You must then go to bed at this time every evening and get up at same time every morning.
- 3) Keep the same sleep window for a complete week. Then, you can readjust it based on the sleep efficiency of the previous week.
- 4) Compute your sleep efficiency:

$$\text{Sleep Efficiency (SE)} = \frac{\text{Total Sleep Time}}{\text{Total Time in Bed}} \times 100$$

Example: For the previous week, Steve slept, on average, 330 minutes (5.5 hours) and he spent, on average, 360 minutes (6 hours) in bed per night. His Sleep Efficiency is computed as follows: $330\text{min} / 360\text{min} = 91 \times 100 = 91\%$. He thus slept 91% of the time that he spent in bed.

- 5) After the first week of treatment, your sleep window is readjusted for each subsequent week according to the following rules:
 - If your Sleep Efficiency was **lower than 80%**, decrease your sleep window by 15-20 minutes. You can decide whether you want to go to bed later or wake up earlier, but it is important that you reduce your time in bed.
 - If your Sleep Efficiency was higher than **85%**, increase your sleep window by 15-20 minutes. You can decide whether you want to go to bed earlier or wake up later.
 - If your Sleep Efficiency is **between 80% and 85%**, leave your sleep window as it is.

Example: Steve has a Sleep Efficiency of 91%. For the following week, he will increase his sleep window by 20 minutes. He decides to go to bed at 11:40pm and to wake up at 6:00am (sleep window = 6 hours and 20 minutes).

The sleep window is redefined every week based on these rules. In the beginning, a possible side effect of sleep restriction is sleepiness during the day. This problem is **normal** and **temporary**. After one or two weeks, you may realize that in spite of your reduced time in bed, you function just as well during the day. The duration of your sleep may not necessarily be increased but sleep efficiency and quality of sleep will be. It is very important to adhere to this procedure, both on weekdays and on weekends, in order for this program to be successful.

Warning: Never reduce your sleep window to less than 6.5 hours per night in order to avoid excessive sleepiness on the following day. Also, if your job involves driving or operating heavy equipments, or potential danger to you or others, do not do sleep restriction.

Sleep Restriction and Stimulus Control Procedures





- Restrict the amount of time you spend in bed to the actual amount of time you sleep (i.e., _____ hours).
 - Go to bed only when you are sleepy.
 - Get out of bed if unable to fall asleep or go back to sleep within 15-20 minutes; return to bed only when sleepy. Repeat this step as needed during the night.
 - Maintain a regular arising time in the morning.
 - Use the bed/bedroom for sleep and sex only, do not watch TV, listen to the radio, eat, or read in bed.
 - Do not nap during the day.
 - Allow yourself at least one hour to unwind before bedtime.
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WHAT TO DO WHEN I LEAVE THE BED/BEDROOM?

You may be hesitant to leave the comfort of your bed, concerned that you may be too cold or that you won't know what to do while waiting for sleepiness to come back. To prevent these difficulties, be prepared to rise during the night: keep a warm blanket near the bed, reserve a comfortable place in the house (other than the bedroom), and plan certain activities that can be done there.

These activities should not be so exciting that your mind becomes too active, nor should they be so boring that you have no motivation to get up; they should also not be too enjoyable, resulting in decreased motivation to return to bed. Lastly, they should not require too much preparation such that you remain awake longer than needed. Here is a list of suggested activities to fill the periods when you are awake during the night, as well as a list of activities to avoid.

Activities to do and to not do when you awake during the night

 SUGGESTED ACTIVITIES 	 DISCOURAGED ACTIVITIES 
<ul style="list-style-type: none">• Reading• Listening to music• Taking a bath• Writing• Drawing• Spending time with pets•	<ul style="list-style-type: none">• Doing housework, cleaning• Taking a walk or exercising• Working/chatting on the computer• Playing a video game• Worrying•