

## **Bright Light Therapy**

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Depression is prevalent in long-term care (LTC) populations and is typically treated with antidepressants. Insomnia is prevalent in LTC populations and is typically treated with sedating medications (eg, trazodone). Bright light therapy (BLT) is a good non-pharmacological intervention that may help some residents with depression and or insomnia. It should generally be used along with other non-pharmacological interventions (e.g., cognitive behavioral therapy, behavioral activation, individualized pleasant activity schedule, exercise, music, gratitude-based interventions, dignity therapy) and / or pharmacological interventions.

If you prefer natural sunlight, try to get it early in the morning as damaging UV light is lower in the morning. Sitting next to the window for sunlight is also fine.

Usual indoor lighting is not strong enough to provide benefits.

BLT should be considered for all residents with seasonal affective disorder (especially winter depression) and may also help residents with non-seasonal Major depression and or Insomnia disorders (eg, chronic insomnia). Research has also found it useful as an adjunct to pharmacological interventions for Bipolar depression (1).

BLT with sleep hygiene may improve sleep in individuals with dementia.

I recommend a BLT lamp (NLT bright light therapy lamp) available at the Center for Environmental Therapeutics (<https://cet.org/shop/>). It costs around \$190 (includes shipping). I have no financial relationships with the makers of this BLT box. I recommend this because it was used in research settings. Other sources of BLT lamp are also fine.

A 10,000-lux light box is recommended. Intensity needs to be individualized and is effective in the range of 2,500 – 10,000. For most cases, 10,000 lux is needed for 30 minutes daily for beneficial effects. Light boxes with larger screens are preferred over smaller screens due to less eye strain. If lower intensity is used, extend the exposure to more than 30 min.

Benefits can be seen as early as 2 days but generally take 2-4 weeks. Many patients who show improvement in the first four weeks continue to improve further over next 4 weeks (2).

The resident can begin exposure to bright light for 15 minutes initially and slowly increase (15 minutes per week) as tolerated to 60 minutes per day. The box should be above the resident's head at a 45-degree angle. One can start with exposure in the morning (6am-9am) but some residents may respond to exposure in the afternoons (noon-3pm). The resident is generally around 30-80 cm (30cm = one foot) from the screen, not looking at the screen but engaged in another activity (e.g., reading, watching TV).

Adverse effects are typically minor and transient and include eye strain, nausea and headache. Using BLT for a shorter time or lowering the intensity may be needed to reduce these problems for some individuals. Although rarely BLT could trigger a switch to a manic / hypomanic episode, in the two studies (1,2), that did not happen. Both the studies had a small N (small sample size).