# Adolescent Sleep Hygiene

## Position Statement

Sleep complaints are extremely common in carceral settings.[1,2] All youth detention and confinement facilities serving adolescents should develop and maintain a comprehensive, multidisciplinary, trauma-informed approach to the assessment and management of sleep difficulties and sleep disorders that includes the following considerations:

1. Health staff should be knowledgeable about the ways youths' sleep requirements differ from those of adults. Health staff should strive to provide education and consultation to facility leadership and staff regarding environmental and structural factors that may contribute to improved sleep among adolescents. The following are strategies to consider:
   a. Schedule shifts to optimize adolescents' unique sleep needs and sleep patterns (e.g., bedtime, wake-up time, school start time, limited daytime nap opportunities, timing of recreation/physical activity, timing of medication administration)
   b. Access to light, either natural outdoors or light boxes, at appropriately timed intervals
   c. Unit routines around bedtime (e.g., showers, relaxation groups, calm music, low lights)
   d. Limiting of loud music, stimulating movies on unit television, blue light, and electronic devices
   e. Limited caffeine intake, especially in the afternoons and evenings
   f. Enhanced sleep conditions overnight (e.g., minimal noise, comfortable beds, adequate room temperature, dark units, blue lights instead of bright flashlights for routine checks)

2. Facilities should follow a consistent process for conducting a comprehensive, multidisciplinary assessment of youth-reported sleep disturbance that includes a history of sleep patterns both before and since the time of incarceration; a log of current sleep patterns completed by the adolescent, the staff, or both; review for possible comorbidities, including medical (such as sleep apnea, obesity, or enuresis) or psychiatric (such as depressive or anxiety disorders, other psychiatric disorders, medications for attention-deficit/hyperactivity disorder causing insomnia, post-traumatic stress disorder, substance use disorders); and review of diet, exercise, and other health behaviors associated with sleep. An emphasis should be on objective findings from the multidisciplinary team, such as the youth's attendance and participation in educational services and other programs, functional abilities, and overall health and wellness, rather than solely relying on subjective concerns voiced by the adolescent or complaints of insomnia incongruent with objective multidisciplinary findings.

3. The initial approach to management of sleep problems should treat any underlying conditions cited above. Nonpharmacological strategies should be widely deployed, and patient education should be incorporated regarding healthy sleep hygiene and habits, introduction of relaxation strategies such as mindfulness training, guided imagery, or progressive muscle relaxation, and the evidence-based practice of cognitive behavioral therapy for insomnia (CBT-I). When possible, it may be helpful to collect information about the youth's previous sleep pattern to establish a baseline and better understand how those patterns are incongruent with the structured sleep schedule in detention. Adolescents should be reassured that unhealthy sleep patterns they developed when they were in the community may take time to stabilize within the new environment.

4. Emphasis should be placed on increasing daytime activity and exercise, along with physical participation in organized facility activities.

5. Additional approaches may include group sessions and staff training regarding adolescent sleep and sleep hygiene strategies.

6. When psychosocial interventions are not effective, psychotropic interventions may be considered but only after taking into account the lack of FDA-approved medications. Behavioral interventions are first line and strongly recommended over the routine use of sleep medications. Facility medical and psychiatric leadership should work with pharmacy staff to identify sleep medications with the strongest evidence base to support their use, lowest side effect risks, and established dosing and clinical indications, as well as the lowest risks of abuse, diversion, and trafficking, if and when clinically indicated. Youths (and, when indicated, families/legal guardians) should receive education on the lack of any specific FDA-approved sleep medications or supplements for youths and the associated risks and benefits.

7. Once a determination has been made that sleep medications may be safely used and are clinically indicated and youth assent has been obtained (as well as parental/guardian consent if needed), medications may be used with careful consideration of the following guidelines:
   a. Psychiatric consultation should be considered whenever psychotropic medication is being used.
   b. Assessing for other psychiatric comorbidity or etiologies of sleep difficulties (e.g., depression, PTSD, psychostimulant side effects of ADHD treatment) should be the primary target for any sleep medication trials.
   c. Youth assent and, if applicable in certain municipalities, informed consent from the parent and/or legal guardian must be obtained prior to initiating medication.
   d. Ongoing monitoring by health care providers and nursing staff is essential to assess for benefit and adverse effects and must focus on discontinuing medication as soon as it is no longer necessary.
   e. Special attention must be paid to the risk of abuse, diversion, extortion for medications, and related substance use disorders.

## Definitions

*Adolescents:* people under the age of 18
*Young adults*: people ages 18-25

## Discussion

A focus on rehabilitation of adolescents remains at the core of all health care and correctional programming in the juvenile legal system. Adequate sleep is critical to adolescent health and rehabilitation. Moreover, reports of sleep disturbance and requests for “sleep meds” are recurrent among many detained youth. The American Academy of Sleep Medicine recommends 8 to 10 hours of sleep per night for teenagers and 7 to 9 hours for young adults.[3,4] However, as many as 73% of adolescents in the community get fewer hours of sleep,[5] and approximately 24% suffer from insomnia.[6]

Adolescent insomnia may be related to medical comorbidities (including sleep apnea, particularly among youth with obesity and those who snore loudly) as well as the following risk factors often found in youth who are detained:

- Psychological conditions (e.g., ADHD with medication treatment [stimulants], PTSD, anxiety disorders, depressive and other mood disorders)
- Poor sleep hygiene (e.g., inconsistent sleep schedules; afternoon caffeine consumption; use of blue light electronic devices such as tablets, television, computers; and high-impact activities before "lights out")
- Acute stress/family disorganization[7]
- Substance use, especially marijuana, alcohol, and psychostimulants

In addition, many youth enter the juvenile legal system already taking psychotropic or over-the-counter medication that either specifically targets insomnia or somehow impacts sleep architecture.

Additional risk factors for poor sleep specifically associated with the detention environment may impact sleep even in youth without premorbid medical or psychiatric conditions or prior history of sleep disturbance, including the following:

- Adjustment issues (e.g., sights, sounds, smells, fears of being physically or sexually assaulted, fear of being bullied or extorted)
- Environmental factors (e.g., doors slamming, yelling, loudspeaker announcements, staff talking by handheld devices/intercoms, comfort of bed and bedding, room temperature, room lights)
- Sleep–wake cycle and forced phase shift at time of detention

Numerous sequelae of impaired sleep have been identified, including the following:

- Psychological: Patients with impaired sleep have been found to be 4 times more likely to develop new major depression over the next 3 to 5 years, 2 times more likely to develop anxiety, and 7 times more likely to develop substance use disorders.[8] Insomnia is also associated with suicide risk.[9]
- Medical: Patients with impaired sleep have higher rates of hypertension, heart disease, and diabetes mellitus, [10] and obesity.[11]
- Social: Incarcerated adults with impaired sleep have demonstrated lesser ability to partake in or benefit from prison-based programs compared to incarcerated adults without sleep impairment.[12]
- Academic: Poor sleep interferes with executive functioning tasks including attention, information processing, and self-regulatory processes such as impulse control. School performance appears worse in those with impaired sleep.[13]

Overall, although sleep management has not been well-studied in the youth detention setting, the available evidence indicates that a multifaceted approach that incorporates psychoeducation, cognitive behavioral therapy, and, when indicated, medication has been shown most effective both for adolescents both in the community and in detention.

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**Resources**

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