

# SleepCaptions

## Diagnosis

Diagnosis begins with a careful medical history to determine whether the arousals are secondary to another health condition, or a side effect of certain medications. Providing a two week sleep log of your sleep habits (or your child's) and possibly video tapes will demonstrate the episodes to your doctor or sleep specialist. An overnight sleep study will be key to conclusively identifying this sleep disorder, which can look similar to sleepwalking and sleep terrors.

The sleep study involves an overnight polysomnogram, which records brainwaves, muscular activity and breathing during sleep. The sleep study may also record your sleep on videotape.

## Treatment

Behavioral Modification is an important part of treating Confusional Arousals in both adults and children. Incorporating Healthy Sleep Habits will eliminate unnecessary interruptions during sleep. Limiting or avoiding the use of alcohol, especially during the evening hours may also help. Parents can take specific measures to ensure their child's safety during an episode. Keep in mind that your child will not remember the episode.

- > Respond in a calm, reassuring manner to avoid frightening her.
  - > Try not to awaken your child.
  - > Watch over your child until she returns to sleep.
- Medication may be helpful for severe or persistent episodes. Antidepressants or sleeping pills may be prescribed.



## Confusional Arousals

**Confusional Arousal:** confusion during and following partial arousals from sleep, most typically from the deep (NREM) stages of sleep. It is a parasomnia in which a person behaves in a confused way because they are not fully awake or asleep. It is very common in children, although some adults experience them.

## Features

This parasomnia occurs during periods of transition from sleep, either while waking up, or just after waking. For this reason, Confusional Arousals has been labeled as one of three "classical" arousal disorders, along with Sleepwalking and Sleep Terrors.

Episodes evolve gradually after a cycle of deep sleep, usually in the first third of the night. Sometimes they arise later in the night, or after a nap. Confusion results from a brain that is divided between wakefulness and sleep. You are still in the process of waking up! Behavior may include: confused thinking, slowed speech, poor memory, or incomplete responses to questions.

Parents may find episodes in their children to be bizarre or frightening, if they do not know what to expect. The child may be agitated or appear dazed. Episodes last an average of 5 to 15 minutes, but can last for one half hour or more.

A variation of confusional arousals called Severe Morning Sleep Inertia affects teens and adults. Behavior is similar to confusional arousals except that episodes occur in the morning. Also known as sleep drunkenness, this variation tends to affect people consistently every morning, for years. Because the episodes last for longer than just a few minutes, consequences such as traffic accidents and poor job or school performance are common.

## Do I Have Confusional Arousals?

I have been told that I behave in a way that is confused or strange when I awaken on my own.

I have been told that I behave in a way that is confused or strange when abruptly awakened by others.

My behavior upon awakening has been described as aggressive or hostile.

My behavior upon awakening has been described as inappropriate or not making sense.

This pattern of behavior occurs on a regular basis.

## Confusional Arousal Mechanics

Sleep specialists define sleep according to stages, or degrees of sleep. The brain behaves differently during each sleep stage. Confusional arousals occur during stages 3-4 of NREM sleep, the deepest sleep. NREM sleep is not associated with much dreaming, so the arousals are not nightmares or vivid dreams.

Part of the brain remains asleep while areas involved with movement, thinking, and emotion become “awakened” or activated. They are not activated enough to render the person fully conscious of their words and actions, nor is the episode likely to be remembered.



## Need more information?

Visit the SleepMedicine Education web site at: [sleepmedicineeducation.com](http://sleepmedicineeducation.com) for additional publications. See also:

**SleepIssues:** “Things That Go Bump”  
“Children and Sleep”

**SleepGuides:** “Treating Sleep Disorders”

To schedule an appointment at any Sleep Medicine Centers location, visit [www.sleepmedicinecenters.com](http://www.sleepmedicinecenters.com)

or call:

(716)92-DREAM

(877)53-SNORE

## Did You Know?

The American Academy of Sleep Medicine reports that as many as 17% of children experience Confusional Arousals.

Agitated arousals of all types are common in children, affecting 17.3% of children between 3 and 13 years of age, according to a large Canadian study published in Pediatrics 2000.

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## Risks for Confusional Arousals

- ✓ Age (children and adults under 35 years of age)
- ✓ Rotating shift work
- ✓ Sleep deprivation
- ✓ Stress
- ✓ Bi-polar and depressive disorders
- ✓ Other sleep disorders
- ✓ The use of psychotropic medications
- ✓ Renal (kidney) failure
- ✓ Drug abuse
- ✓ Being forced into wakefulness

## Effects of Confusional Arousals

- ✓ Injury to oneself
- ✓ Injury to bed partner or others
- ✓ Destruction of nearby property
- ✓ Increasingly worse episodes



There is a family history of partial arousals in up to 60% of cases, according to studies cited in the Principles and Practices of Sleep Medicine.

In 2004, the European Journal of Pediatrics reported a prevalence of sleep apnea in 13% of individuals with confusional arousals vs. 2% without confusional arousals.