MADISON NEUROLOGY · NEUROLOGY SYMPTOM GUIDE

Abnormal movements or behaviors during sleep

Structured history, interpretation & clinical review

Symptom 89 of 94
Clinical educational workbook
Version 1.0 · October 2026

Not for clinical use. This guide cannot diagnose, triage, or exclude an emergency. Seek emergency care for severe, sudden, or worsening symptoms.

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> **Document purpose**
> A structured educational history and diagnostic-reasoning workbook. Treatment is outside its scope.

Scope and safe use

Abnormal movements or behaviors during sleep require witness/video timing, sleep stage, awareness, recall, stereotypy, injury, triggers, and separation from seizures and sleep apnea.

Not for clinical use.
This educational workbook does not diagnose, triage, estimate probability, replace examination, or exclude an emergency. If a safety-screen answer is Yes or uncertain, follow the stated action rather than continuing routine interpretation.

How to complete the workbook

- Record the current episode and the person’s usual baseline; use a witness account for events with impaired awareness.
- Check one option per question unless a clinician documents a different combination. “Not sure” is unresolved information, not a negative answer.
- Complete the safety screen before all other sections. Record exact onset or last-known-well time for sudden deficits.
- Use Section 2 only after the form is complete. More than one pattern may be relevant; urgency takes precedence.
- Use Section 3 to plan focused examination and clinician-selected investigations. No test is automatic or universally required.

Specific escalation rule

New severe headache, new focal weakness or numbness, new speech/language difficulty, reduced consciousness, a prolonged seizure, severe breathing or swallowing difficulty, sudden visual loss, or rapidly progressive weakness requires emergency assessment. Call 911 in the United States.

Section 1: Input form

Checkbox history for Abnormal movements or behaviors during sleep

1A. Immediate safety screen

Is there current severe breathlessness, blue lips, chest pain, or inability to awaken?

☐ No ☐ Yes ☐ Not sure

If Yes: Call emergency services now.

Is the person falling asleep while driving, operating machinery, or doing another safety-critical activity?

☐ No ☐ Yes ☐ Not sure

If Yes: Stop the activity now and arrange prompt assessment; do not drive until the safety issue has been evaluated.

Is there new focal weakness, sudden severe headache, confusion, or a prolonged seizure?

☐ No ☐ Yes ☐ Not sure

If Yes: Call emergency services now.

Has a sleep behavior caused serious injury, or is there a new prolonged unresponsive episode?

☐ No ☐ Yes ☐ Not sure

If Yes: Seek emergency or same-day assessment depending on current responsiveness and injury severity.

> **Stop rule:** Any Yes answer triggers the action printed under that question. Any Not sure answer requires prompt in-person clarification; do not treat it as No.

1B. Timeline

How did the symptom begin?

☐ Suddenly, over seconds or minutes ☐ Over hours to days ☐ Gradually over weeks or months ☐ Longstanding or since childhood ☐ Not sure

Use the first occurrence for recurrent episodes; use the current episode for a changing symptom.

What is the overall course?

☐ One persistent episode ☐ Separate recurrent episodes ☐ Steadily worsening ☐ Fluctuating or variable ☐ Currently resolved

Has this exact pattern been assessed before?

☐ Definitely new ☐ The same pattern occurred before ☐ Present and stable for a long time ☐ Not sure

1C. Discriminating features

When in the night does it usually happen?

☐ In the first third of the night ☐ Toward morning or during dream-rich sleep ☐ At any time, often many brief events ☐ Not sure

Which behavior is most characteristic?

☐ Confused wandering, talking, or incomplete awakening ☐ Complex or violent dream-like behavior ☐ Brief stereotyped repetitive movements or arousals ☐ Gasping or choking with behavior

Can the person be awakened, and what is remembered?

☐ Difficult to awaken; little or no recall ☐ Awakens alert with dream recall ☐ Aware but unable to control events ☐ Not known

Is there injury, sleep deprivation, a new medicine, alcohol, or a childhood/family pattern?

☐ Actual or near injury ☐ Sleep deprivation, medicine, or alcohol ☐ Childhood or family pattern ☐ None

1D. Associated findings

Are there other neurological symptoms—weakness, numbness, speech change, double vision, swallowing difficulty, or severe imbalance?

☐ Yes ☐ No ☐ Not sure

Are there systemic clues—fever, weight loss, cancer, infection risk, pregnancy/postpartum status, or a new medication?

☐ Yes ☐ No ☐ Not sure

How much does this affect daily activity?

☐ Noticeable but activities continue ☐ Some activities are limited ☐ Cannot perform usual activities ☐ Not sure

1E. Clinical context

Who is being assessed?

☐ Adult or adolescent ☐ Child under 12 ☐ Adult aged 65 or older

Could a medicine, substance, withdrawal, or recent dose change be relevant?

☐ No plausible contributor ☐ Yes or possibly ☐ Not reviewed

Include sedatives, dopamine-blocking drugs, stimulants, decongestants, anticholinergics, alcohol, and non-prescribed substances when relevant.

Is there a relevant neurological, muscular, metabolic, cardiovascular, autoimmune, or sleep disorder?

☐ No known relevant condition ☐ Yes ☐ Not sure

What prior information is available?

☐ A previous examination or investigation ☐ Prior records but no clear explanation ☐ No useful prior assessment ☐ Not sure

Additional history and documentation

Record exact dates/times, witness details, relevant medication doses and changes, prior investigation reports, and the person's baseline function.

Section 2: Interpreting the input form

Answer combinations generate a differential and an assessment pathway—not a diagnosis.

> **Precedence:** Emergency safety answers override every pattern below. Otherwise, the highest-urgency fully matched pattern takes precedence. If entries are incomplete, contradictory, or match no pattern, use the unresolved-information pathway.

Pattern 1: Non-REM arousal pattern

When in the night does it usually happen? In the first third of the night
Can the person be awakened, and what is remembered? Difficult to awaken; little or no recall

Prompt clinical review pattern — Promptly

Early-night incomplete arousals with amnesia follow a non-REM parasomnia assessment.

Differential to review:

- Non-REM arousal parasomnia

Action: Arrange an in-person medical or neurological review promptly, usually within days. Seek sooner care if the pattern changes.

Pattern 2: Dream-enactment pattern

When in the night does it usually happen? Toward morning or during dream-rich sleep
Can the person be awakened, and what is remembered? Awakens alert with dream recall

Prompt clinical review pattern — Promptly

Later-night behavior with alert dream recall requires REM-sleep and neurological assessment.

Differential to review:

- REM-sleep behavior or dream-enactment disorder

Action: Arrange an in-person medical or neurological review promptly, usually within days. Seek sooner care if the pattern changes.

Pattern 3: Frequent stereotyped nocturnal-event pattern

When in the night does it usually happen? At any time, often many brief events
Which behavior is most characteristic? Brief stereotyped repetitive movements or arousals

Prompt clinical review pattern — Promptly

Frequent stereotyped brief events need nocturnal seizure and movement-disorder evaluation.

Differential to review:

- Nocturnal seizure or sleep-related movement disorder

Action: Arrange an in-person medical or neurological review promptly, usually within days. Seek sooner care if the pattern changes.

Pattern 4: Breathing-related sleep behavior

Which behavior is most characteristic? Gasping or choking with behavior

Prompt clinical review pattern — Promptly

Behaviors accompanied by choking or gasping require sleep-breathing assessment.

Differential to review:

- Sleep apnea, medication, substance, or another mimic

Action: Arrange an in-person medical or neurological review promptly, usually within days. Seek sooner care if the pattern changes.

Unresolved-information pathway: The entries need structured in-person characterization.

Prompt clinical review pattern — Promptly

Do not guess missing answers or convert uncertainty into reassurance. Document what is unknown, perform an in-person examination, clarify the timeline with a witness or records when available, and reassess if any new feature appears.

Action: Arrange an in-person medical or neurological review promptly, usually within days. Seek sooner care if the pattern changes.

Section 3: Clinical review

Diagnostic modules and focused investigation logic

The examination comes before a test list. Select investigations only after localization, urgency, comorbidity, pregnancy status, renal function, anticoagulation, and prior results have been considered.

3.1 Non-REM arousal parasomnia

Discriminating features: Early-night incomplete arousal with confusion, amnesia, sleep deprivation, family history, or childhood onset.

Logical investigations: Sleep history, safety assessment, trigger review, and specialist study when atypical or injurious.

3.2 REM-sleep behavior or dream-enactment disorder

Discriminating features: Later-night dream enactment with alert awakening and dream recall, sometimes with neurodegenerative clues.

Logical investigations: Sleep-specialist assessment and polysomnography; neurological review for associated movement/cognitive signs.

3.3 Nocturnal seizure or sleep-related movement disorder

Discriminating features: Highly stereotyped, frequent brief events, dystonic posturing, or rhythmic movements can indicate seizures or motor disorders.

Logical investigations: Neurological/sleep assessment with video-polysomnography and EEG when indicated.

3.4 Sleep apnea, medication, substance, or another mimic

Discriminating features: Gasping/arousals, sedatives, antidepressants, alcohol, or another sleep fragmentation cause.

Logical investigations: Breathing and medication review with targeted polysomnography when indicated.

Reassessment and documentation

- If the symptom pattern changes, repeat the safety screen and timeline rather than carrying forward an earlier interpretation.
- If a test is unrevealing but the deficit persists or progresses, revisit localization and seek specialist review; a normal result does not automatically end assessment.
- If symptoms resolve, document duration, completeness of recovery, recurrence, and any residual deficit. Resolved sudden focal symptoms can still require urgent vascular assessment.
- If the history and examination conflict, obtain collateral information and in-person review rather than forcing a single diagnostic label.

Selected references

Sources provide background standards and do not replace local emergency pathways or current specialist guidance. Accessed October 2026.

1. National Institute for Health and Care Excellence. (2021, updated 2024). *Obstructive sleep apnoea/hypopnoea syndrome and obesity hypoventilation syndrome in over 16s (NG202)*. https://www.nice.org.uk/guidance/ng202
2. Winkelman JW, Berkowski JA, DelRosso LM, et al.. (2025). *Treatment of restless legs syndrome and periodic limb movement disorder: an American Academy of Sleep Medicine clinical practice guideline*. https://pubmed.ncbi.nlm.nih.gov/39324694/