MADISON NEUROLOGY · NEUROLOGY SYMPTOM GUIDE

Head injury or concussion symptoms

Structured history, interpretation & clinical review

Symptom 93 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

Head-injury or concussion symptoms require danger-sign screening, mechanism and consciousness history, anticoagulant risk, repeated vomiting, neurological deficits, and symptom-course documentation.

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 Head injury or concussion symptoms

1A. Immediate safety screen

Is there worsening headache, repeated vomiting, seizure, weakness, slurred speech, unusual behavior, or one pupil larger than the other?

☐ No ☐ Yes ☐ Not sure

If Yes: Call emergency services now or go to an emergency department immediately.

Is the person increasingly drowsy, confused, or difficult to awaken?

☐ No ☐ Yes ☐ Not sure

If Yes: Call emergency services now and do not leave the person alone.

Is there severe neck pain, suspected spinal injury, new limb weakness, or loss of bladder or bowel control?

☐ No ☐ Yes ☐ Not sure

If Yes: Seek emergency assessment now and minimize unnecessary spinal movement.

Does the person use anticoagulants, have a bleeding disorder, or have a high-risk injury mechanism?

☐ No ☐ Yes ☐ Not sure

If Yes: Arrange emergency assessment even if early symptoms seem mild.

> **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

What was the mechanism?

☐ Low-energy bump without high-risk features ☐ Fall from height, vehicle, assault, or high-speed impact ☐ Sport or recreational impact ☐ Uncertain or unwitnessed

Was there loss of consciousness, amnesia, seizure, or confusion immediately afterward?

☐ None ☐ Brief confusion or memory gap ☐ Loss of consciousness ☐ A seizure

Which symptoms are present now?

☐ Headache, dizziness, or visual symptoms ☐ Concentration, memory, or slowed-thinking symptoms ☐ Sleep, mood, or sensitivity change ☐ Several of these

How are symptoms changing?

☐ Gradually improving ☐ Unchanged ☐ Worsening or new symptoms ☐ Improve then recur with activity

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: High-risk mechanism or immediate seizure/loss of consciousness

What was the mechanism? Fall from height, vehicle, assault, or high-speed impact / Uncertain or unwitnessed
Was there loss of consciousness, amnesia, seizure, or confusion immediately afterward? Loss of consciousness / A seizure

Emergency warning pattern — Now

High-risk or unwitnessed injury with loss of consciousness or seizure requires emergency assessment.

Differential to review:

- Intracranial bleeding or another acute traumatic emergency

Action: Call 911 or go to the nearest emergency department now. Do not drive yourself.

Pattern 2: Worsening post-injury symptom course

How are symptoms changing? Worsening or new symptoms

Emergency warning pattern — Now

Worsening or new symptoms after head injury require emergency reassessment.

Differential to review:

- Intracranial bleeding or another acute traumatic emergency

Action: Call 911 or go to the nearest emergency department now. Do not drive yourself.

Pattern 3: Improving concussion-symptom pattern

How are symptoms changing? Gradually improving
Which symptoms are present now? Headache, dizziness, or visual symptoms / Concentration, memory, or slowed-thinking symptoms / Sleep, mood, or sensitivity change / Several of these

Prompt clinical review pattern — Promptly

Improving post-impact symptoms need structured concussion review and specific follow-up if recovery stalls.

Differential to review:

- Concussion or mild traumatic brain injury
- Cervical, vestibular, visual, or headache post-traumatic syndrome

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

Pattern 4: Activity-recurrent or persistent post-injury pattern

How are symptoms changing? Improve then recur with activity / Unchanged

Prompt clinical review pattern — Promptly

Persistent or activity-recurrent symptoms need focused headache, vestibular, visual, cervical, and cognitive assessment.

Differential to review:

- Cervical, vestibular, visual, or headache post-traumatic syndrome
- Psychological, sleep, medication, or another concurrent contributor

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.

Urgent assessment pattern — Same day

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 same-day medical assessment. If symptoms are rapidly worsening or severe, call 911.

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 Intracranial bleeding or another acute traumatic emergency

Discriminating features: Worsening headache, repeated vomiting, seizure, weakness, unusual behavior, unequal pupils, reduced consciousness, or anticoagulant risk.

Logical investigations: Emergency department assessment and clinician-directed imaging; danger signs should not be observed at home.

3.2 Concussion or mild traumatic brain injury

Discriminating features: Transient neurological dysfunction after impact with headache, dizziness, cognitive, visual, sleep, or mood symptoms and no emergency finding.

Logical investigations: Structured neurological and symptom assessment with individualized activity and follow-up planning.

3.3 Cervical, vestibular, visual, or headache post-traumatic syndrome

Discriminating features: Persistent neck pain, vertigo, balance, ocular, or headache phenotype after injury.

Logical investigations: Focused cervical, vestibular, ocular, and neurological examination with targeted therapy/testing after dangerous causes are excluded.

3.4 Psychological, sleep, medication, or another concurrent contributor

Discriminating features: Sleep disruption, stress, medication, pain, or unrelated neurological illness can maintain overlapping symptoms.

Logical investigations: Full symptom, sleep, mood, medication, and functional review while monitoring for new objective deficits.

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. Centers for Disease Control and Prevention. (2025). *Symptoms of Mild TBI and Concussion*. https://www.cdc.gov/traumatic-brain-injury/signs-symptoms/index.html

2. National Institute for Health and Care Excellence. (2023). *Head injury: assessment and early management (NG232)*. https://www.nice.org.uk/guidance/ng232