MADISON NEUROLOGY · NEUROLOGY SYMPTOM GUIDE

Sudden severe headache

Structured history, interpretation & clinical review

Symptom 1 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

A sudden severe headache is an urgency problem before it is a diagnostic-label problem. Record onset, associated deficits, and the clinical context precisely.

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 Sudden severe headache

1A. Immediate safety screen

Did the headache reach maximal intensity within one minute, or is it unlike any previous headache?

☐ No ☐ Yes ☐ Not sure

If Yes: Seek emergency assessment now. Do not wait for a routine appointment or rely on pain relief as a test.

Is there new weakness, numbness, confusion, fainting, seizure, double vision, or difficulty speaking?

☐ No ☐ Yes ☐ Not sure

If Yes: Call emergency services now and record the onset or last-known-well time.

Is there fever with neck stiffness, a new rash, persistent vomiting, or marked light sensitivity?

☐ No ☐ Yes ☐ Not sure

If Yes: Seek emergency assessment now, especially if the person is drowsy, confused, or rapidly worsening.

Is there new visual loss, severe pain on eye movement, pregnancy/postpartum status, cancer, immunosuppression, or anticoagulant use with this headache?

☐ No ☐ Yes ☐ Not sure

If Yes: Arrange emergency or same-day assessment depending on severity; new visual loss or neurological symptoms require emergency care.

> **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

How quickly did the pain reach its worst point?

☐ Immediately or within one minute ☐ Over 1–5 minutes ☐ Over more than five minutes ☐ Not sure

What was happening at onset?

☐ Rest or routine activity ☐ Exercise, sex, coughing, or straining ☐ Head or neck trauma ☐ Not sure

Which description best fits the pain?

☐ All over or diffuse ☐ Back of head or neck ☐ Predominantly one side ☐ Not sure

Has this exact sudden pattern happened before?

☐ No, this is new ☐ Yes, a similar evaluated episode ☐ Yes, recurrent but not evaluated ☐ Not sure

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: Immediate thunderclap pathway

How quickly did the pain reach its worst point? Immediately or within one minute / Over 1–5 minutes

Emergency warning pattern — Now

A headache peaking within minutes requires emergency exclusion of hemorrhage and vascular causes.

Differential to review:

- Subarachnoid hemorrhage and other intracranial bleeding
- Cerebral arterial or venous vascular disorder

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

Contingency: State the exact onset time and whether exertion, sex, coughing, trauma, pregnancy, or anticoagulants were involved.

Pattern 2: Sudden headache with a contextual warning

How did the symptom begin? Suddenly, over seconds or minutes
What was happening at onset? Exercise, sex, coughing, or straining / Head or neck trauma

Emergency warning pattern — Now

Sudden onset with exertional or traumatic context remains an emergency vascular or structural pathway.

Differential to review:

- Subarachnoid hemorrhage and other intracranial bleeding
- Cerebral arterial or venous vascular disorder
- Cerebrospinal-fluid pressure or structural cause

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

Pattern 3: Recurrent abrupt headaches after prior assessment

Has this exact sudden pattern happened before? Yes, a similar evaluated episode
How quickly did the pain reach its worst point? Immediately or within one minute / Over 1–5 minutes

Urgent assessment pattern — Same day

A similar previously evaluated pattern still needs prompt clinical correlation, especially if anything differs.

Differential to review:

- Cerebral arterial or venous vascular disorder
- Primary thunderclap or another primary headache

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

Unresolved-information pathway: Sudden severe headache requires urgent medical assessment.

Emergency warning pattern — Now

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

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 Subarachnoid hemorrhage and other intracranial bleeding

Discriminating features: Thunderclap onset, meningism, vomiting, reduced consciousness, or focal deficit; absence of a deficit does not exclude bleeding.

Logical investigations: Emergency non-contrast head CT when indicated, followed by clinician-directed LP or vascular imaging depending on timing and suspicion.

3.2 Cerebral arterial or venous vascular disorder

Discriminating features: Consider dissection, reversible cerebral vasoconstriction, cerebral venous thrombosis, or pituitary apoplexy according to neck pain, triggers, visual symptoms, and risk context.

Logical investigations: Urgent brain and vascular imaging selected by the emergency team; do not rely on a single symptom to distinguish these.

3.3 Cerebrospinal-fluid pressure or structural cause

Discriminating features: Consider posterior-fossa lesions, colloid cyst, spontaneous intracranial hypotension, or raised pressure when positional, exertional, or examination clues fit.

Logical investigations: Examination for papilledema and focal signs; MRI or pressure-focused evaluation when the initial emergency pathway does not explain the presentation.

3.4 Primary thunderclap or another primary headache

Discriminating features: A diagnosis only after dangerous secondary causes are reasonably excluded; recurrent similar episodes still require clinical correlation.

Logical investigations: Document prior work-up and recurrence pattern; specialist review if episodes recur or the phenotype changes.

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. (2012, updated 2021). *Headaches in over 12s: diagnosis and management (CG150)*. https://www.nice.org.uk/guidance/cg150
2. National Institute for Health and Care Excellence. (2019, updated 2023). *Suspected neurological conditions: recognition and referral (NG127)*. https://www.nice.org.uk/guidance/ng127

Madison Neurology LLC — Neurology Symptom Guide
Sudden severe headache — including thunderclap or “worst-ever” headache
Educational reference only. Not for clinical use. Treatment is outside the scope of this workbook.