EVIDENCE & REFERENCES

Evidence & References

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1 Evidence Hierarchy

Selected guidelines, systematic reviews, OT research and landmark literature support the toolkit. Evidence certainty varies. A reference listing does not establish equal benefit or a universal protocol.

2 Core Guideline Anchors

G1 Department of Veterans Affairs & Department of Defense. (2024). VA/DoD clinical practice guideline for management of stroke rehabilitation (Version 5.0). G2 Heart and Stroke Foundation of Canada. (2025). Canadian Stroke Best Practice Recommendations: Rehabilitation, recovery and community participation following stroke (7th ed., Parts One-Three). G3 National Institute for Health and Care Excellence. (2023). Stroke rehabilitation in adults (NICE Guideline NG236). G4 Hildebrand, M. W., Geller, D., & Proffitt, R. (2023). Occupational therapy practice guidelines for adults with stroke. American Journal of Occupational Therapy, 77(5), 7705397010. doi:10.5014/ajot.2023.077501 G5 Winstein, C. J., Stein, J., Arena, R., et al. (2016). Guidelines for adult stroke rehabilitation and recovery. Stroke, 47(6), e98-e169. doi:10.1161/STR.0000000000000098

3 Current AHA/ASA Update

G6 Richards, L. G., Ifejika, N. L., Stein, J., et al. (2026). 2026 Guideline for adult stroke rehabilitation and recovery: A guideline from the American Heart Association and American Stroke Association. Stroke. Published online August 27, 2026. doi:10.1161/STR.0000000000000536. The 2026 AHA/ASA guideline replaces the 2016 guideline (G5), retained here as a historical source. Consult the 2026 publication for current guidance. The topic map retains prior source anchors; it is not a recommendation-by-recommendation reconciliation of the new guideline.



Stroke Signs



Medical Review



During activities

Activity Support

Use the evidence

Check current guidance.
Match the patient and goal.
Follow scope and policy.

Practical Tools for Confident Stroke Care

FUNCTION
PARTICIPATION
INDEPENDENCE

EVIDENCE & REFERENCES

Selected Journal Evidence

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1 Selected Journal Evidence

J1 Lee, C.-Y., & Howe, T.-H. (2024). Effectiveness of activity-based task-oriented training on upper extremity recovery for adults with stroke: A systematic review. American Journal of Occupational Therapy, 78(2), 7802180070. doi:10.5014/ajot.2024.050391

J2 Gnanaprakasam, A., Karthikbabu, S., Ravishankar, N., & Solomon, J. M. (2023). Effect of task-based bilateral arm training on upper limb recovery after stroke: A systematic review and meta-analysis. Journal of Stroke and Cerebrovascular Diseases, 32(7), 107131. doi:10.1016/j.jstrokecerebrovasdis.2023.107131

J3 Rozevink, S. G., Hijmans, J. M., Horstink, K. A., & van der Sluis, C. K. (2023). Effectiveness of task-specific training using assistive devices and task-specific usual care on upper limb performance after stroke: A systematic review and meta-analysis. Disability and Rehabilitation: Assistive Technology, 18(7), 1245-1258. doi:10.1080/17483107.2021.2001061

J4 Thieme, H., Morkisch, N., Mehrholz, J., et al. (2018). Mirror therapy for improving motor function after stroke. Cochrane Database of Systematic Reviews, 7, CD008449. doi:10.1002/14651858.CD008449.pub3

J5 Corbetta, D., Sirtori, V., Castellini, G., Moja, L., & Gatti, R. (2015). Constraint-induced movement therapy for upper extremities in people with stroke. Cochrane Database of Systematic Reviews, 10, CD004433. doi:10.1002/14651858.CD004433.pub3

J6 Arya, K. N., Pandian, S., & Puri, V. (2018). Rehabilitation methods for reducing shoulder subluxation in post-stroke hemiparesis: A systematic review. Topics in Stroke Rehabilitation, 25(1), 68-81. doi:10.1080/10749357.2017.1383712

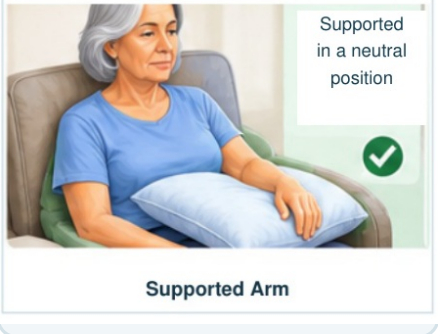
J7 de Sire, A., Moggio, L., Demeco, A., et al. (2022). Efficacy of rehabilitative techniques in reducing hemiplegic shoulder pain in stroke: Systematic review and meta-analysis. Annals of Physical and Rehabilitation Medicine, 65(5), 101602. doi:10.1016/j.rehab.2021.101602

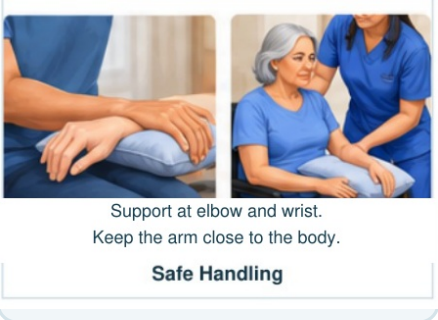
J8 Lee, H.-J., et al. (2025). Comparative effectiveness of treatments for shoulder subluxation after stroke: A systematic review and network meta-analysis. Journal of Clinical Medicine, 14(19), 6913. doi:10.3390/jcm14196913

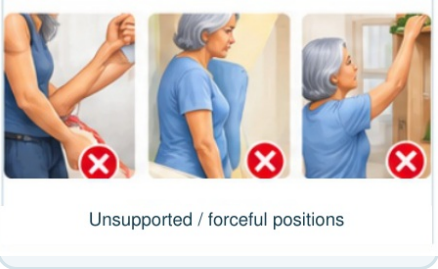
J9 Van Criekinge, T., Truijen, S., Schröder, J., et al. (2019). The effectiveness of trunk training on trunk control, sitting and standing balance and mobility post-stroke: A systematic review and meta-analysis. Clinical Rehabilitation, 33(6), 992-1002. doi:10.1177/0269215519830159

J10 Simmons-Mackie, N., Raymer, A., & Cherney, L. R. (2016). Communication partner training in aphasia: An updated systematic review. Archives of Physical Medicine and Rehabilitation, 97(12), 2202-2221.e8. doi:10.1016/j.apmr.2016.03.023

J11 Poulin, V., Korner-Bitensky, N., Dawson, D. R., & Bherer, L. (2012). Efficacy of executive function interventions after stroke: A systematic review. Topics in Stroke Rehabilitation, 19(2), 158-171. doi:10.1310/tsr1902-158







Function · Participation · Independence

Use the evidence

Check current guidance.
Match the patient and goal.
Follow scope and policy.

EVIDENCE & REFERENCES

Selected Journal Evidence

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1 Selected Journal Evidence

J12 Turville, M. L., Cahill, L. S., Matyas, T. A., Blennerhassett, J. M., & Carey, L. M. (2019). The effectiveness of somatosensory retraining for improving sensory function in the arm following stroke: A systematic review. Clinical Rehabilitation, 33(5), 834-846. doi:10.1177/0269215519829795. PMID:30798643.

J13 Mack, A., & Hildebrand, M. (2023). Interventions for caregivers of people who have had a stroke: A systematic review. American Journal of Occupational Therapy, 77(1), 7701205180. doi:10.5014/ajot.2023.050012

J14 Orange, C., Lanhers, C., Coll, G., et al. (2024). Determinants of return to work after a stroke: A systematic review and meta-analysis. Archives of Physical Medicine and Rehabilitation, 105(2), 359-368. doi:10.1016/j.apmr.2023.08.027

J15 Pearce, G., et al. (2023). Interventions to facilitate return to work after stroke: A systematic review. International Journal of Environmental Research and Public Health, 20(15), 6469. doi:10.3390/ijerph20156469

J16 Jee, S., Jeong, M., Paik, N.-J., et al. (2022). Early supported discharge and transitional care management after stroke: A systematic review and meta-analysis. Frontiers in Neurology, 13, 755316. doi:10.3389/fneur.2022.755316

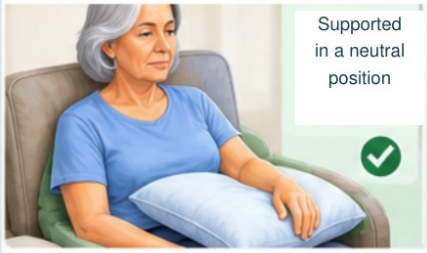
J17 Winterbottom, L., Geller, D., Goldberg, C., Nilsen, D. M., Mahoney, D., & Gillen, G. (2023). Occupational therapy and activities of daily living interventions to improve performance in activities of daily living for adults with stroke (2012-2019). American Journal of Occupational Therapy, 77(Suppl. 1), 7710393070. doi:10.5014/ajot.2023.77S10007

J18 Pelak, A., Zamir, F., Patel, R., Hickner, A., & Stilling, J. (2026). Strategies for rehabilitation of poststroke hand edema: A scoping review. Journal of Hand Therapy, 39(3), 496-509. doi:10.1016/j.jht.2025.12.005

J19 Lannin, N. A., & Herbert, R. D. (2003). Is hand splinting effective for adults following stroke? A systematic review and methodologic critique of published research. Clinical Rehabilitation, 17(8), 807-816. doi:10.1191/0269215503cr682oa. PMID:14682551.

J20 Yang, N. Y. H., et al. (2013). Rehabilitation interventions for unilateral neglect after stroke: A systematic review from 1997 through 2012. PMID:23675339.

J21 Nolan, J., Jacques, A., Godecke, E., et al. (2023). Clinical practice recommendations for management of lateropulsion after stroke determined by a Delphi expert panel. Clinical Rehabilitation, 37(11). doi:10.1177/02692155231172012. Expert consensus; not a treatment-effectiveness trial.







Function · Participation · Independence

Use the evidence

Check current guidance.
Match the patient and goal.
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EVIDENCE & REFERENCES

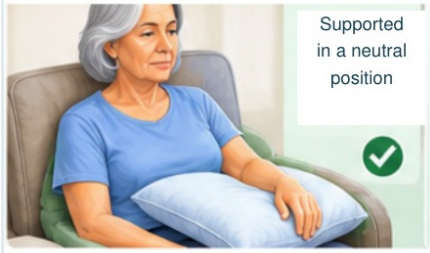
Evidence Map: 40 Clinical Topics

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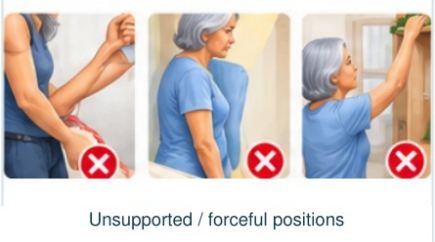
1 Topic-to-Source Map

Use the original topic anchors below alongside the current AHA/ASA update (G6). J21 is expert consensus for lateropulsion. Selected citations and safety wording were checked during this revision; the complete reference set has not been exhaustively re-audited.

1-6 | Evaluation, medical context, goals and measures | G1-G5
7-8 | Shoulder protection, subluxation and pain | G1-G5; J6-J8
9-10 | Flaccid UE and spasticity | G1-G5; J6-J8
11 | Hand hygiene, edema and contracture risk | G1-G4; J18
12 | Splinting decisions; individualize | G1-G4; J19
13 | NMES/FES | G1-G5; J6; J8
14 | Mirror therapy | G1-G5; J4
15 | CIMT / modified CIMT | G1-G5; J5
16 | Task-specific UE training | G1-G5; J1-J3
17 | Trunk control and midline | G1-G3; J9
18 | Lateropulsion | G1-G3; J21 (expert consensus)
19-27 | Positioning, mobility and ADL retraining | G1-G5; J17; J9
28-30 | Visual field loss, neglect and ocular-motor concerns | G1-G5; J20
31 | Aphasia-friendly OT / communication | G1-G5; J10
32 | Apraxia | G1-G5
33 | Cognition and executive function | G1-G5; J11
34 | Sensation and proprioception | G1-G5; J12
35 | Fatigue, endurance and pacing | G1-G5
36 | IADLs, community and roles | G1-G5; J17
37 | Home safety and fall prevention | G1-G5
38 | Driving and return to work | G1-G5; J14-J15
39 | Caregiver competency training | G1-G5; J13
40 | Discharge planning and documentation | G1-G5; J16 Follow current assessment manuals, patient-specific precautions, scope, competence and facility policy. This map is an educational aid. ASHA Adult Dysphagia supports the caregiver silent-aspiration clarification: https://www.asha.org/practice-portal/clinical-topics/adult-dysphagia/







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EVIDENCE & REFERENCES

Neurologic safety review: selected updates

Denise, MS, OTR/L · Occupational Therapist

1 Review Scope

October 6, 2026: AI-assisted review used occupational-therapy education, graphic-design, neurologic-safety, caregiver and patient perspectives. Selected emergency, swallowing, shoulder-protection and intervention-selection statements were checked against official sources. This is not independent specialist endorsement or an exhaustive audit of every study. The material remains an educational aid, not an individualized treatment protocol.

2 Emergency Recognition

American Stroke Association. Stroke Symptoms and Warning Signs. stroke.org/en/about-stroke/stroke-symptoms. Accessed October 5, 2026. Supports immediate emergency action for sudden stroke symptoms, including vision or balance changes and severe unexplained headache, even when symptoms resolve.

3 Posterior Circulation Warning Signs

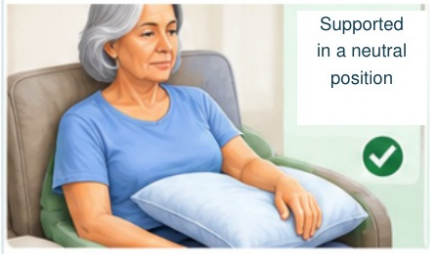
Canadian Stroke Best Practices. Triage and Initial Diagnostic Evaluation of Transient Ischemic Attack and Non-Disabling Stroke, section 1.1. strokebestpractices.ca, Secondary Prevention of Stroke. Accessed October 5, 2026. Supports urgent assessment of brainstem/cerebellar presentations, including diplopia and ataxia.

4 Before Oral Intake

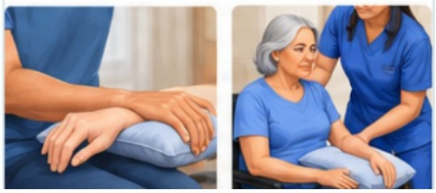
Canadian Stroke Best Practices. Swallowing (Dysphagia), Nutrition and Oral Care, section 6.1. 2025 rehabilitation recommendations. Accessed October 5, 2026. Supports trained, valid screening before oral medications, food or liquids and individualized management after a failed screen.

5 How the Guidance Was Applied

Clinician and caregiver content now separates sudden new neurologic change from stable rehabilitation symptoms, makes emergency escalation explicit and clarifies the limits of informal swallowing observation. Existing shoulder-protection, patient-specific care and scope precautions remain in force.

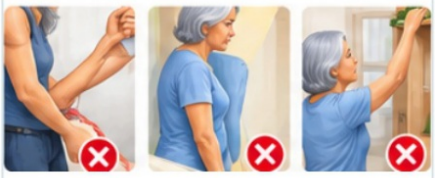


Supported Arm



Support at elbow and wrist.
Keep the arm close to the body.

Safe Handling



Unsupported / forceful positions

Function · Participation · Independence

Use the evidence

Check current guidance.
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Follow scope and policy.

Practical Tools for Confident Stroke Care

FUNCTION
PARTICIPATION
INDEPENDENCE