



American Stroke Association®
A division of the American Heart Association.

Together to End Stroke®

ADULT STROKE REHABILITATION & RECOVERY GUIDELINES

PREVENTION AND MEDICAL MANAGEMENT OF COMORBIDITIES

Residual deficits from a stroke include reduced mobility, cognitive impairment and emotional instability. These in turn lead to a variety of comorbidities. Among the most common are skin breakdown, contractures, venous thrombosis, excretory incontinence, falls, pain syndromes and depression.



Here are key recommendations from AHA/ASA's Adult Stroke Rehabilitation & Recovery Guidelines that provide the best clinical practices for adults recovering from stroke. For more information about these guidelines please refer to the full guidelines at [Heart.org/StrokeRehabGuidelines](https://www.heart.org/stroke-rehab-guidelines).

The information covered here addresses one of five major recommendation topics within the guidelines:

- The Rehabilitation Program
- Prevention and Medical Management of Comorbidities
- Assessment
- Sensorimotor Impairments and Activities
- Transitions in Care and Community Rehabilitation

PREVENTION OF SKIN BREAKDOWN AND CONTRACTURES

- Resting hand/wrist splints along with regular stretching and spasticity management in patients lacking active hand movement may be considered.
- Resting ankle splints used at night and during assisted standing may be considered for prevention of ankle contracture in a hemiplegic limb.

PREVENTION OF DEEP VENOUS THROMBOSIS IN ISCHEMIC STROKE PATIENTS

- Prophylactic-dose subcutaneous heparin (unfractionated heparin or low-molecular-weight heparin) should be used for the duration of the acute and rehabilitation hospital stay or until the stroke survivor regains mobility.

TREATMENT OF BOWEL AND BLADDER INCONTINENCE

- Assessment of urinary retention through bladder scanning or intermittent catheterizations post voiding while recording volumes is recommended for patients with urinary incontinence or retention.
- Removal of the foley catheter (if any) within 24 hours after admission for acute stroke is recommended, based on the Centers for Disease Control and Prevention (CDC) recommendations for all hospitalized patients.

ASSESSMENT, PREVENTION AND TREATMENT OF HEMIPLEGIC SHOULDER PAIN

- Neuromuscular electrical stimulation (NMES) may be considered (surface or intramuscular) for shoulder pain.

PREVENTION OF FALLS

- It is recommended that persons with stroke discharged to the community participate in exercise programs with balance training to reduce falls.
- It is recommended that persons with stroke be provided a formal fall prevention program during hospitalization.

POST-STROKE DEPRESSION INCLUDING EMOTIONAL AND BEHAVIORAL STATE

- Administration of a structured depression inventory, such as the Patient Health Questionnaire-2, is recommended to routinely screen for post-stroke depression.
- Patients diagnosed with post-stroke depression should be treated with antidepressants in the absence of contraindications and closely monitored to verify effectiveness.

Stroke rehabilitation requires a sustained and coordinated effort from a large team with the patient and the patient's goals at the center. In addition to the patient, the team includes family and friends, other caregivers (e.g. personal care attendants), physicians, nurses, physical and occupational therapists, speech/language pathologists, recreation therapists, psychologists, nutritionists, social workers and others.

Communication and coordination among these team members is paramount in maximizing the effectiveness and efficiency of rehabilitation and underlies the entire stroke rehabilitation and recovery guidelines.
