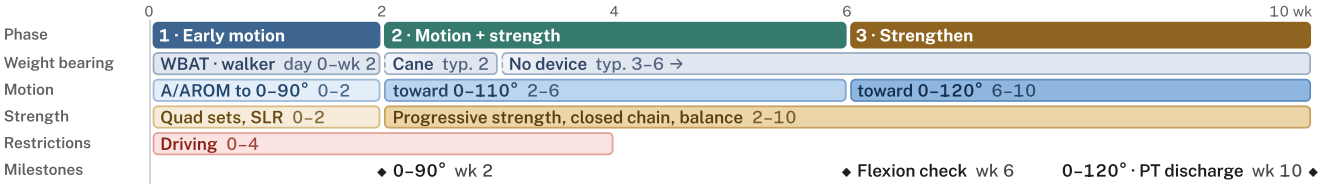
Total Knee Replacement Protocol

Primary TKA · Version 2026.10 · Reviewed Oct 2026 · HEP Drop staff · Reviewed by a licensed physical therapist

⚠ General reference for licensed clinicians, not individual patient instructions. The operating surgeon's protocol takes precedence.

At a glance: PT within 24 h · WBAT with a walker from day 0 · cane typically from wk 2 · no device typically wk 3–6 · 0–90° by wk 2 · 0–120° by wk 10 · low-impact activity from about 3 mo with surgeon clearance. Criteria-based.



First 14 days

Day 0–1	PT and up with a walker within 24 hours of surgery[1, 2, 3]
Day 0–7	Rest with the leg elevated and the knee bent 30–90°, between heel-prop bouts[1, 9, 6]
Day 0–14	Cryotherapy for early pain[1, 7]
Day 0–wk 2	Weight bearing as tolerated with a walker, unless the surgeon restricts weight bearing[2, 3, 10]
Day 1–3	Hospital discharge, typically day 1–3, once the list is met
Day 2–14	Consider NMES to the quadriceps, daily, at the highest tolerated intensity[1]
Wk 2	0–90° target

PHASE	✓ GOALS AND ALLOWED	✕ AVOID	□ ADVANCE WHEN
Phase 1 Early motion wk 0–2 if criteria met	**Walking with a walker, weight bearing as tolerated unless the surgeon restricts it[2, 3] · Knee motion toward 0–90° by wk 2[2, 4] · Quadriceps activation[5]; pain and swelling control[1] · Safe transfers and a home program before hospital discharge[2]** **Weight bearing:** WBAT with a walker, unless the surgeon restricts weight bearing • PT, including getting up, within 24 hours of surgery[1] • Gait training with the walker, then a cane once the step-down criteria are met[6] • Passive, active-assisted and active knee ROM[1] • Sustained end-range flexion and extension in short bouts, about 30 min a day in total, until 0–120° is reached[6] • Progressive walking, guided by pain and swelling (no step cap)[1, 6] • Cryotherapy for early pain; plain cold packs work as well as cold-flow devices[1, 7]	AVOID Driving, until getting in and out of the car and moving from gas to brake are comfortable, and off opioids UNTIL **wk 4**	□ 2 × 8 repetitions without fatigue[5] □ Resting pain < 5/10 (NPRS)[5] □ Active knee ROM better than 15–80°[5]
Phase 2 Motion and strength wk 2–6 if criteria met	**Knee motion toward about 0–110° by wk 6[4] · Walking without a device once gait is normal without the cane · Progressive strength, balance and gait training[1]** **Weight bearing:** WBAT with a cane (typically, once criteria are met) • Progressive resistance, 2 × 8 at an 8-repetition maximum[6] • Stationary bike for motion[1, 5] • Balance and gait training[1] • Quadriceps, hamstring and calf stretches, 3 × 1 min daily, from wk 5[6] • Walking program, building toward 30 min, 5 days a week[6] • NMES to the quadriceps, daily, if used (optional)[1]	**Still in effect:** Driving (wk 4)	□ 2 × 8 repetitions without fatigue[5] □ Resting pain < 5/10 (NPRS)[5] □ Active knee ROM better than 15–90°[5]
Phase 3 Strengthen and return wk 6–10 if criteria met	**Knee motion 0–120° by wk 10[6] · Strength, balance and stairs for daily life[1, 5] · Normal gait without a device** **Weight bearing:** full weight bearing, no device (typically, once criteria are met) • Progressive resistance, 2 × 8 at an 8-repetition maximum, including leg press and step work[6, 5] • Balance and agility work: foam stance, side steps, backward walking[5] • Walking program, then other cardio[6]		**Discharge from PT when** □ 2 × 8 repetitions without fatigue[5] □ Resting pain < 3/10 (NPRS)[5] □ Knee ROM 0–120°[6] □ Normal gait without a device □ Reciprocal stairs □ Quadriceps strength ≥ 80% of the other leg Return to low-impact activity criteria: page 2

Total Knee Replacement Protocol · exercises and sources

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Exercises by phase

* sets and reps are our default.

Phase 1 · Early motion wk 0–2

Ankle Pumps
2 × 10, 2–3×/day*

Quad Set
2 × 10, 2–3×/day*

Glute Set
2 × 10, 2–3×/day*

Supine Heel Slide with Strap
2 × 10, 2–3×/day*

Short Arc Quad
2 × 10, 2–3×/day*

Active Straight Leg Raise with Quad Set
2 × 10, 2–3×/day*

Seated Knee Extension Stretch (Heel Prop)
short bouts, about 30 min a day in total with the flexion stretch, until 0–120°

Seated Knee Flexion Stretch
short bouts, about 30 min a day in total with the heel prop, until 0–120°

Phase 2 · Motion and strength wk 2–6

Active Straight Leg Raise with Quad Set
2 × 10, 2–3×/day*

Hip Abduction (Side-Lying)
2 × 8 at an 8-repetition maximum

Clamshell
2 × 8 at an 8-repetition maximum

Seated Long Arc Quad
2 × 8 at an 8-repetition maximum

Standing Knee Flexion AROM with Chair Support
2 × 8 at an 8-repetition maximum

Sit to Stand
2 × 8 at an 8-repetition maximum

Standing Mini Squat
2 × 8 at an 8-repetition maximum

Standing Calf Raise
2 × 8 at an 8-repetition maximum

Standing Hip Flexion (Marching)
2 × 10*

Single Leg Balance
3 × 30 s*

Seated Knee Extension Stretch (Heel Prop)
short bouts, about 30 min a day in total with the flexion stretch, until 0–120°

Seated Knee Flexion Stretch
short bouts, about 30 min a day in total with the heel prop, until 0–120°

Stationary Bike
for motion, as tolerated*

Walking Program
build to 30 min, 5 days a week

Prone Quad Stretch
3 × 1 min, daily · from wk 5

Supine Hamstring Stretch
3 × 1 min, daily · from wk 5

Standing Calf Stretch (Gastrocnemius)
3 × 1 min, daily · from wk 5

Phase 3 · Strengthen and return wk 6–10

Leg Press
2 × 8 at an 8-repetition maximum

Step Up
2 × 8 at an 8-repetition maximum

Lateral Step Up
2 × 8 at an 8-repetition maximum

Step Down (Forward)
2 × 8 at an 8-repetition maximum

Forward Lunge
2 × 8 at an 8-repetition maximum

Wall Squat (Wall Sit)
2 × 8, holding 5–10 s at the bottom

Standing Terminal Knee Extension with Resistance
2 × 8 at an 8-repetition maximum

Bridge (Bilateral)
2 × 8 at an 8-repetition maximum

Banded Side Step
2 × 10 steps each way*

Bosu / Foam Balance Stance
3 × 30 s*

Retro Walking (Backward Ambulation)
2 × 10 steps*

Stationary Bike
for motion, as tolerated*

Walking Program
build to 30 min, 5 days a week

Prone Quad Stretch
3 × 1 min, daily

Supine Hamstring Stretch
3 × 1 min, daily

Return to low-impact activity when

☐ About 3 months since surgery (mean return to low-impact sport about 13 wk)[16]

☐ Cleared by the surgeon

Key milestones vs published protocols

MILESTONE	THIS PROTOCOL	RANGE IN PUBLISHED PROTOCOLS
Off the walker or cane	**wk 3**	wk 3–8[17, 18, 19], all three compared protocols include wk 6
Driving again	**wk 4**	wk 2–8[10], most often about wk 4
Discharge from outpatient PT	**wk 10**	wk 8–15[13], typical recovery about wk 10
Low-impact activity	**from 3 mo**	wk 9 to 6 mo[16, 17, 18, 19], mean about 13 wk

Published protocols agree on walking with a walker from the first days, and differ most on when to drop the walker or cane, the final flexion goal and how to rest the knee in the first days. A side-by-side comparison with published hospital protocols is at **hepdrop.com/p/tka**.

Sources

1. Bove 2026
2. Cook 2008
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4. Mutsuzaki 2017
5. Bade 2011
6. Bade 2017
7. Liang 2024
9. Jette 2020
10. Na 2020
13. Graber 2023
16. Witjes 2016
17. Sanford Health
18. Mass General Brigham
19. South Shore Health

Full citations, licenses and what each source supports: **hepdrop.com/p/tka**.