

COMFORTABLE WALKING SPEED: NORMS FOR ADULTS DERIVED USING META-ANALYSIS

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Background and Purpose: Walking speed is an important indicator of status and outcome. Interpreting individuals' gait speed requires the availability of norms. As information about normal gait speed is often from samples of convenience or small size, we undertook this meta-analysis to derive a better estimate of walking speed.

Methods: We identified relevant literature via PubMed and the terms "normal, comfortable, usual, preferred, and self-selected" combined with "gait speed and walking speed." As a follow-up, reference list checks and hand-searches were performed. Information on sample characteristics, procedures, and gait speed were abstracted from relevant articles. A macro was used to consolidate gait speed data by gender and decade.

Results: Forty-four studies contributed data from 18,752 subjects. Most data were homogeneous. Mean comfortable gait speed for subjects < 60 years old ranged from 137.9 to 144.8 cm/sec for men and 132.7 to 139.5 cm/sec for women. For men in their 60s, 70s, or ≥ 80 years, the mean speeds were 138.1, 133.7, and 102.5 cm/sec, respectively. For women in their 60s, 70s, or ≥ 80 years, the mean speeds were 123.9, 117.1, and 96.9 cm/sec, respectively.

Conclusions: This study provides norms for comfortable gait speed that may provide a more accurate estimate of normal speed than individual studies.