

Table 17-1

Examples of the Different Types of Functional Performance Tests Used to Assess Function of the Ankle

Functional Performance Test Category	Test Examples
Agility/speed test	Shuttle-run test Agility hop test Figure 8 hop test Single-limb hopping course Square-hop test Agility T-test Up-down-hop test Side-hop test 6-meter crossover hop
Strength/power test	Single forward hop Triple forward hop Triple lateral hop Crossover hop Vertical jump

Regardless of how the test is classified, all functional performance tests require coordination of multiple joints and muscle groups as well as adequate range of motion, strength, balance, and neuromuscular control. The coordination of multiple systems to perform the task makes functional testing a critical component in return-to-play considerations. One criterion used by clinicians and researchers to determine functional readiness is by evaluating limb symmetry. To return to sport participation, the injured limb should be able to perform a test within 80% of the contralateral uninjured limb.¹ For this reason, functional tests that assess performance on only one limb at a time are most beneficial when determining functional abilities following an injury. Therefore, tests such as the shuttle-run test, the agility T-test, and the co-contraction test, which require the use of both limbs to complete the task, are not ideal.

Single-limb hopping tests have been found to be effective in identifying functional deficits following an ankle sprain. Specifically, the triple-forward-hop and the triple-lateral-hop tests are sensitive to change following a lateral ankle sprain.^{1,2} In other words, these tests can quantify deficits in performance created by an acute injury or improvements in performance created through rehabilitation