

Volleyball Outside Attacker Interval Hitting Program

Program	Step	Criteria for Progression
Outside attacker	Step 1	20 warm-up hits (40%-50%) 8 attack hits (50%), 2 sets * 10 easy full- court hits
	Step 2	20 warm up hits (40%-50%) 10 attack hits (50%), 2 sets * 4 serves (50%) ** 10 easy full-court hits
	Step 3	20 warm up hits (50%) 8 attacks hits (50%), 3 sets * 4 serves (50%), 2 sets ** 10 easy full-court hits
	Step 4	20 warm-up hits (50%) 10 attack hits (50%), 3 sets * 4 serves (50%), 3 sets ** 10 easy full-court hits
	Step 5	20 warm-up hits (50%-75%) 8 attack hits (75%), 3 sets * 3 serves (75%), 3 sets ** 15 easy full-court hits
	Step 6	30 warm-up hits (50%-75%) 9 attack hits (75%), 3 sets * 3 serves (75%), 3 sets ** 15 easy full-court hits

	Step 7	30 warm- up hits (50%-75%) 10 attack hits (75%), 4 sets * 4 serves (75%), 3 sets ** 15 easy full-court hits
	Step 8	30 warm-up hits (50%-75%) 4 sets of 8 attack hits (75%-100%) * 4 sets of 5 serves (75%) ** 20 easy full-court hits
	Step 9	30 warm-up hits (50%-75%) 4 sets of 10 attack hits (75%-100%) * 4 sets of 5 game placement serves ** 20 easy full-court hits
	Step 10	30 warm-up hits (50%-75%) 4 sets of 12 attack hits (75%-100%) * 4 sets of 5 game placement serves ** 20 easy full-court hits

***Rest 45-60 seconds between hits, 6-8 minutes between sets**

****Rest 30 seconds between serves, 6 minutes between sets**

Injury Classification

Non-hitting-arm injury:	After medical clearance, begin step 1 and advance 1 step daily, following soreness rules
Hitting arm: bruise or bone involvement:	After medical clearance, begin step 1 and advance every other day, following soreness rules
Hitting arm: tendon, ligament, nerve injury (mild):	After medical clearance, begin with step 1. For the first week, hit every third day, following soreness rules. After the first 2 weeks, advance program as soreness rules allow, hitting every other day

<p>Throwing arm: tendon, ligament, nerve injury (moderate, severe, postop) :</p>	<p>After medical clearance, begin step 1.</p> <p>First two weeks (days 1-14), hit every 3-4 days and not advance beyond step 1</p> <p>On days 15-28, begin hitting with step 2 every 2-3 days but do not advance beyond step 2</p> <p>On days 29-42, use soreness rules to advance program, hitting every third day.</p> <p>If no soreness, hit the warm-up and easy full-court hits of the previous days workouts on off days</p>
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Soreness Rules

<p>If sore more than 1 hour after hitting or the next day, take 1 day off and repeat the most recent hitting program workout</p>
<p>If sore during warm-up but soreness is gone within the first 5 hits, repeat the previous workout. If shoulder becomes sore during the workout, stop and take 2 days off. Upon return to hitting, drop down 1 step</p>
<p>If sore during warm-up and soreness continues during the first 15 hits, stop hitting and take 2 days off. Upon return to hitting, drop down 1 step</p>
<p>If no soreness, advance 1 step every hitting day</p>

Hurd, W., Hunter-Giordano, A., Axe, M., & Snyder-Mackler, L. Data-Based Interval Hitting Program for Female College Volleyball Players. *Sports Health*. 2009; 1(6), 522-530.