

Long Toss

Why? How often? What's the best distance?

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Why Long Toss?

- ✓ More about timing than arm strength
 - ✓ The pitching motion from start to finish is ~1.3 seconds
- ✓ Perfecting the Kinetic Chain
 - ✓ Properly transferring energy from the legs → trunk → shoulder → throwing arm
- ✓ Being strong and accurate and 120-180 = VERY strong and accurate at 60 feet.

3 Popular Approaches

- ✓ Alan Jaeger
 - ✓ 300-ft long toss
 - ✓ Throwing 90 mph = 300-ft throw
 - ✓ Taking that 300-ft throw and narrowing the energy into a 60-ft tunnel
- ✓ National Pitching Association
 - ✓ Loss Toss = Double your pitching distance
- ✓ Dick Mills
 - ✓ "Long Toss = Wrong Toss"

What the research shows

The Harm of Improper Long Toss February 8, 2011

A study presented at the [ASMI 2011 Baseball Injuries Conference](#):

Biomechanical Comparison of Baseball Pitching and Long-Toss: Implications for Training and Rehabilitation

Looked at biomechanical differences in college pitchers between:

1. Throwing off a mound
2. Long toss at 120 feet with ball thrown on a straight line
3. Long toss at 180 feet with ball thrown on a straight line
4. Maximal distance with no restrictions on trajectory

What did they find?

- ✓ The least shoulder/elbow stress was seen at 120-foot toss on flat ground
 - ✓ Throwing off a 60-ft mound was MORE stressful than throwing 120 feet on flat ground.
- ✓ The most shoulder/elbow stress seen at the maximum distance throw (10% greater than 120-ft throw)
 - ✓ Average max distance throw = 264 feet
- ✓ Velocity decreased during the maximum distance throw compared to the other 3 groups
 - ✓ 80.5 mph vs 82.7 mph

Recommendations

- ✓ Long toss at a max of 180 feet
- ✓ Throw on a line
- ✓ Spend more time throwing at 120-180 feet than throwing off the mound between pitching starts
 - ✓ See "What do I do between pitching starts?" presentation
- ✓ 30 throws per long toss session, make sure last 10-15 throws are high intensity BUT mechanically consistent
- ✓ Step-Behind Drill / Crossover Drills done with long toss

Thank You!



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