## SPEED <br> 

## Sample Speed Training Workouls

The following are four sample speed workouts for the complete training year: early off-season, late off-season, preseason, and in-season. Each workout contains a warm-up, technique drills, training exercises, and injury prevention exercises. Please refer to the demonstrations of each exercise in the DVD to ensure proper technique and safety.
Special note: Speed training should not be conducted when athletes are fatigued as it may inadvertently train them to run at slower speeds with improper technique. Consequently it is recommended that training is best performed during brief, highly intense workouts. It is also important to allow complete recovery between reps or sets. Please follow the recommended rest suggestions in the sample workouts. At the end of each training session, exercises are provided that help prevent injuries and serve as cooldown activities for proper recovery after a training session.

## Early Off-Season

## Goals

- Develop fundamental movement skills.
- Develop first-step explosiveness.
- Develop acceleration ability.
- Learn to run at maximum velocity.

| Day one |  | Day two |
| :---: | :---: | :---: |
| Emphasis | Acceleration | Maximum velocity |
| Warm-up | Dynamic flexibility exercises, 10-15 minutes | Dynamic flexibility exercises, 10-15 minutes |
| Technique drills | Arm swing drill, $3 \times 10$ seconds <br> Ankling, $2 \times 10$ yards <br> Heel-to-hip walk, $2 \times 10$ yards <br> High-knee walk, $2 \times 10$ yards | Arm swing drills, $2 \times 10$ seconds Ankling, $2 \times 10$ yards <br> Heel-to-hip walk, $2 \times 10$ yards Heel-to-hip skip, $1 \times 10$ yards High-knee walk, $1 \times 10$ yards High-knee skip, 2x10 yards |
| Workout | Falling start, $3 \times 10$ yards Tennis ball drill, $3 \times 5$ yards (2-3 minutes rest between each sprint) | Falling start, $5 \times 40$ yards (2-3 minutes rest between each sprint) |
| Injury prevention | Foot and ankle strengthening exercise (5 minutes) | One-leg balance exercise (5 minutes) |

## Late Off-Season

## Goals

- Refine fundamental movement skills.
- Develop first-step explosiveness.
- Improve acceleration ability.
- Develop maximum velocity.
- Build speed endurance.

| Day one |  | Day two | Day three |
| :---: | :---: | :---: | :---: |
| Emphasis | Acceleration | Maximum velocity | Speed endurance |
| Warm-up | Dynamic flexibility exercises, 10-15 minutes | Dynamic flexibility exercises, 10-15 minutes | Dynamic flexibility exercises, 10-15 minutes |
| Technique drills | Ankling, $2 \times 10$ yards <br> Heel-to-hip skip, <br> $2 \times 10$ yards <br> High-knee skip, <br> $2 \times 10$ yards <br> A-walk, $2 \times 10$ yards | Ankling, $1 \times 10$ yards <br> Straight-leg bound, <br> 2x10 yards <br> Heel-to-hip skip, <br> $3 \times 10$ yards <br> High-knee skip, <br> $3 \times 10$ yards <br> A-walk, $1 \times 10$ yards <br> A-skip, $2 \times 10$ yards | Ankling, $1 \times 10$ yards <br> Straight-leg bound, <br> 2x10 yards <br> Heel-to-hip skip, <br> $3 \times 10$ yards <br> High-knee skip, <br> $3 \times 10$ yards <br> A-walk, $1 \times 10$ yards <br> A-skip, $2 \times 10$ yards |
| Workout | Falling start, $3 \times 5$ yards Standing start, $5 \times 10$ yards Standing long jump, $3 \times 10$, maximum effort | Standing start, $3 \times 5$ yards Crouching start, $5 \times 50$ yards Hurdle hops, $3 \times 10$ yards | Stride length drills, $3 x$ (start drill after 20-yard acceleration, sticks begin $70 \%$ of stride length and increase by $5 \%$ for each stick, 8 sticks total) 10x100 yards (2-3 minutes rest between) |
| Injury prevention | Foot and ankle strengthening exercise (5 minutes) | One-leg balance exercise (5 minutes) | Ankle hop (5 minutes) |

## Preseason

## Goals

- Improve first-step explosiveness.
- Improve acceleration.
- Improve maximum velocity.
- Maintain speed endurance.

| Day one |  | Day two | Day three | Day four |
| :---: | :---: | :---: | :---: | :---: |
| Emphasis | Acceleration | Maximum velocity | Acceleration | Speed endurance |
| Warm-up | Dynamic flexibility exercise, 10-15 minutes | Dynamic flexibility exercise, 10-15 minutes | Dynamic flexibility exercise, 10-15 minutes | Dynamic flexibility exercise, 10-15 minutes |
| Technique drills | Ankling, <br> $2 \times 10$ yards Heel-to-hip skip, 2×10 yards High-knee skip, 2x10 yards A-walk, 2x10 yards A-skip, $3 \times 10$ yards | Ankling, <br> $1 \times 10$ yards Straight-leg bound, <br> $3 \times 10$ yards Heel-to-hip skip, $3 \times 10$ yards High-knee skip, $3 \times 10$ yards A-skip, $3 \times 10$ yards B-walk, $2 \times 10$ yards | Ankling, <br> $2 \times 10$ yards Heel-to-hip skip, $2 \times 10$ yards High-knee skip, $2 \times 10$ yards A-walk, 2x10 yards A-skip, $3 \times 10$ yards | Ankling, <br> $1 \times 10$ yards Straight-leg bound, <br> $3 \times 10$ yards Heel-to-hip skip, $3 \times 10$ yards High-knee skip, $3 \times 10$ yards A-skip, $3 \times 10$ yards B-walk, $2 \times 10$ yards |
| Workout | Resisted standing start, $5 \times 5$ yards Standing long jump and start, $5 \times 1+10$ yards Standing start, $5 \times 20$ yards Standing long jump, 3×10, maximum effort | Crouching start, $3 \times 5$ yards Resisted sprint, $5 \times 40$ yards Bounding, $3 \times 20$ yards | Crouching start, $5 \times 5$ yards Stick drill, 5 x (sticks 18", 24", $30^{\prime \prime}, 36^{\prime \prime}, 42^{\prime \prime}$, $48^{\prime \prime}, 54^{\prime \prime}$, and $60^{\prime \prime}$ apart) <br> In front medicine ball throw and start, <br> $5 \times 1+5$ yards Staggered start, $5 \times 20$ yards Standing long jump, one leg, $3 \times 5$ yards | Stride length drill, $3 x$ (start drill after 20-yard acceleration, sticks begin 70\% of stride length and increase by 5\% for each stick, 8 sticks total) 10x150 yards (2-3 minutes rest between) |
| Injury prevention | Foot and ankle strengthening exercise (5 minutes) | One-leg balance exercise (5 minutes) | Ankle hop (5 minutes) | Foot and ankle strengthening exercise (5 minutes) |

## In-Season

## Goals

- Achieve peak first-step explosiveness.
- Achieve peak acceleration.
- Maintain maximum velocity.
- Maintain speed endurance.

|  | Day one |  | Day two |  |
| :--- | :--- | :--- | :--- | :--- | Day three

## Speed Assessment Data

The following tables list average speed assessment test results, which are demonstrated on the Speed for Sports Performance DVD, for different types, ages, and levels of athletes. You can compare your test results with these averages. The results can be used to make direct comparisons for commonly used sprint tests (10-meter, 30-yard, 40-yard, 60-yard) in baseball, basketball, rugby, and football.

Standing long jump results are shown in centimeters and in inches, broken down by age ranges. These should be viewed as standing long jump results that are predictive of potential sprinting talent. Athletes that want to be good sprinters should be aiming for these results in the standing long jump.

The 30-meter sprint crouch start, 60-meter sprint crouch start, and the projected 100-meter and 200-meter results show athletes what they need to work on for speed development. The results for these four tests should line up. If they don't, it indicates that the athlete is deficient in one or more areas. For example, if an athlete performs the 30-meter in 4.55 seconds and the 60-meter in 8.1 seconds, then they should be able to perform the 100-meter in 12.51 to 12.84 seconds. If they are slower than this (e.g., perform it in 13 seconds), that indicates acceleration and speed are good, but speed endurance may be lacking. Or, if an athlete performs the 30-meter in 4.7 seconds and the 60-meter in 8.1 seconds, it indicates that their ability to accelerate is lacking.

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| Age | 10-12 | 12-13 |  | 13-14 | 14-15 | 16-17 | 18-19 |  | 20+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Standing long jump (cm) | 200-220 | 220-230 |  | 230-240 | 240-250 | 280-285 | 290-300 |  | 300-315 |
| Standing long jump (in) | $\begin{aligned} & 78.74- \\ & 85.8 \end{aligned}$ | $\begin{aligned} & 85.8- \\ & 89.7 \end{aligned}$ |  | $\begin{aligned} & 89.7- \\ & 93.6 \end{aligned}$ | $\begin{aligned} & 93.6- \\ & 97.5 \end{aligned}$ | $\begin{aligned} & 109.2- \\ & 111.5 \end{aligned}$ | $\begin{aligned} & 113.1- \\ & 117.0 \end{aligned}$ |  | $\begin{aligned} & 117.0- \\ & 122.85 \end{aligned}$ |
| 30-meter (32.8 yards) sprint crouch start (s) | 5.0 | 4.8 | $\begin{aligned} & 4.7- \\ & 4.6 \end{aligned}$ | $\begin{aligned} & 4.6- \\ & 4.5 \end{aligned}$ | $\begin{aligned} & 4.5- \\ & 4.4 \end{aligned}$ | $\begin{aligned} & 4.4- \\ & 4.3 \end{aligned}$ | $\begin{aligned} & 4.3- \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 4.2- \\ & 4.1 \end{aligned}$ | $\begin{aligned} & 4.1- \\ & 4.0 \end{aligned}$ |
| 60-meter (65.6 yards) sprint crouch start (s) | $\begin{aligned} & 9.0- \\ & 8.78 \end{aligned}$ | $\begin{aligned} & 8.78- \\ & 8.6 \end{aligned}$ | $\begin{aligned} & 8.58- \\ & 8.2 \end{aligned}$ | $\begin{aligned} & 8.2- \\ & 8.0 \end{aligned}$ | $\begin{aligned} & 8.0- \\ & 7.8 \end{aligned}$ | $\begin{aligned} & 7.8- \\ & 7.6 \end{aligned}$ | $\begin{aligned} & 7.6- \\ & 7.4 \end{aligned}$ | $\begin{aligned} & 7.4- \\ & 7.2 \end{aligned}$ | $\begin{aligned} & 7.2 \\ & 7.0 \end{aligned}$ |
| Projected 100-meter (109.4 yards) dash (s) | >13.81 | $\begin{aligned} & 13.81- \\ & 13.51 \end{aligned}$ | $\begin{aligned} & 13.47- \\ & 12.84 \end{aligned}$ | $\begin{aligned} & 12.84- \\ & 12.51 \end{aligned}$ | $\begin{aligned} & 12.51- \\ & 12.17 \end{aligned}$ | $\begin{aligned} & 12.17- \\ & 11.84 \end{aligned}$ | $\begin{aligned} & 11.84- \\ & 11.51 \end{aligned}$ | $\begin{aligned} & 11.51- \\ & 11.01 \end{aligned}$ | $\begin{aligned} & 11.01- \\ & 10.84 \end{aligned}$ |
| Projected 200-meter (218.7 yards) dash (s) | >28.09 | $\begin{aligned} & 28.09- \\ & 27.41 \end{aligned}$ | $\begin{aligned} & 27.41- \\ & 26.12 \end{aligned}$ | $\begin{aligned} & 26.12- \\ & 25.45 \end{aligned}$ | $\begin{aligned} & 25.45- \\ & 24.77 \end{aligned}$ | $\begin{aligned} & 24.77- \\ & 24.09 \end{aligned}$ | $\begin{aligned} & 24.09- \\ & 23.41 \end{aligned}$ | $\begin{aligned} & 23.41- \\ & 22.73 \end{aligned}$ | $\begin{aligned} & 22.73- \\ & 22.05 \end{aligned}$ |


| Baseball | MLB | AAA |  | AA |
| :--- | :--- | :--- | :--- | :--- |
| 30-yard (27.43 meters) dash (s) | 3.75 | 3.66 | 3.64 | 3.77 |
| 60-meter (65.62 yards) dash (s) | 6.96 | 6.86 | 6.79 | 7.05 |


| Basketball, college | Guards |  | Forwards |  | Centers |
| :--- | :--- | :--- | :--- | :---: | :---: |
| 30-yard (27.43 meters) dash (s) | 3.68 | 3.83 | 3.97 |  |  |
| 40-yard (36.58 meters) dash (s) | 4.68 | 4.84 | 4.97 |  |  |


| Rugby |  |
| :---: | :--- |
| 10-meter (10.94 yards) dash (s) | 1.85 |
| 20-meter (21.87 yards) dash (s) | 3.14 |
| 40-meter (43.74 yards) dash (s) | 5.6 |


| Foothall, 300-yard <br> (274.32 meters) shutite (s) | OB | DB | OL | DL | LB |
| :--- | :--- | :--- | :--- | :--- | :--- |
| D1 | 49.4 | 48.8 | 56.7 | 54.9 | 49.9 |
| D3 | 60.2 | 58.4 | 64.4 | 64.4 | 60.2 |


| Football, 40-yard (36.58 meters) dash (s) | OB | DB | OL | DL | LB | Receivers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D1 | 4.7 | 4.67 | 5.07 | 4.96 | 4.71 | 4.6 |
| D2 | 4.8 | 4.72 | 5.21 | 5.05 | 4.87 | 4.75 |
| D3 | 4.89 | 4.74 | 5.23 | 5.04 | 4.9 | 4.8 |
| CC | 4.71 | 4.53 | 5.27 | 5.01 | 4.67 | 4.58 |

