

HS, NCAA, AND PRO: 90 DAY OFFSEASON VELOCITY AND PITCH-ING ENHANCEMENT PROGRAM

The following 90DAY VeloPRO pitch-ING and velocity program is designed specifically for usage with the VL Harness, and is intended for the high school to pro levels. USAGE WITHOUT THE VL HARNESS IS NOT RECOMMEND, AS (1) SENSORY FEEDBACK, (2) MOVEMENT DEVELOPMENT, AND (3) UNSUPPORT OF THE THROWING SHOULDER AND ARM WOULD NOT BE ASCERTAINED TO THE WORK LOAD, TRAINING GOALS, AND/OR OVERSIGHT REQUIREMENTS SET FORTH BY THIS PROGRAM.

*THIS PROGRAM IS NOT INTENDED FOR USAGE WITH WEIGHTED IMPLEMENTS, SUCH AS WEIGHTED BASEBALLS. WORK LOAD REQUIREMENTS OF THIS PROGRAM (**IF USED WITH WEIGHTED BASEBALLS**) WOULD PLACE TOO GREAT A STRESS LOAD UPON (1) RECOVERY RATES, (2) JOINT SUPPORT, (3) LIGAMENT AND TENDONS, AND (4) MUSCULAR RESPONSE. WEIGHTED BASEBALL TRAINING SHOULD BE UTILIZED SEPARATE AND OUTSIDE THIS PROGRAM'S APPLICATIONS.*

Develops HEALTHY velocity that is both supported and competes for the win - **rather than just a velocity or throwing program**. Over 5 years of analytical pitching data and research (from the University, lab, and on field perspectives) supports this program usage. Data is **INDEPENDANT** of VeloPRO Baseball, which is highly important to the accountability and integrity of this program. **USAGE DURING GAME COMPETITION OR SEASON IS NOT ADVISED BECAUSE PROGRAM DOES NOT TAKE INTO ACCOUNT PERFORMANCE STRESS OR WORK LOADS.**

RECOMMENDED FOR:

1. **HS aged pitchers** whom have a full 3 months to commit towards velocity and pitch-ING development. Not a velocity program only, but develops from the **GROUND** up - ensuring health and support of throwing shoulder/arm are ascertained. Does not train arm speed alone, but lower half drive that supports arm speed increases. Work loads plateau to high levels. Ensure recovery rates and ratios. **MUST BE IN OPTIMAL STRENGTH AND CARDIO SHAPE BEFORE STARTING THIS PROGRAM.** Not recommended for post surgery or "recovery from injury" arms.

2. **NCAA pitchers** whom did NOT play summer baseball OR have a full 3 months to develop supported velocity and pitch-ING tools. Develops from ground up to ensure lower half drive is creating arm speed increases. Work loads plateau to high levels. Ensure recovery rates and ratios. **MUST BE IN OPTIMAL STRENGTH AND CARDIO SHAPE BEFORE STARTING THIS PROGRAM.** Not recommended for post surgery or "recovering from injury" arms.

3. **MiLB and MLB pitchers** whom are NOT playing winter ball, free agents seeking to re-sign, and/or pitchers whom will report trying to "win" a job. Ensure you have 30 full days of no throwing (after your season) before starting this program. Start 90days prior to reporting. Develops from ground up to ensure lower half drive is creating arm speed increases. Work

loads plateau to high levels. Ensure recovery rates and ratios. MUST BE IN OPTIMAL STRENGTH AND CARDIO SHAPE BEFORE STARTING THIS PROGRAM. Not recommended for post surgery or "recovering from injury" arms.

The different aspects of the program are described below - with the actual daily throwing, lifting, running, and recovery routines listed under "Week 1" to "Week 12". Read over all the information **BEFORE** you start.

Use your VL Harness (as directed by the program) with all aspects of throwing. It provides the necessary sensory feedback and peaked athletic movement required to develop a (1) proper delivery, (2) increased velocity, (3) improved pitch plane, and (5) enhanced fastball movement and off speed break, and velocity. **To better understand how to use your VL Harness, refer to our [Tutorials page](#).**

If you wish to have oversight or additional training, find a certified VeloPRO Baseball instructor near you or email Info@veloprobaseballnj.com.

RECOVERY AND WORK LOAD RATIOS:

The relationship between your work load and recovery rates should dictate how you utilize this program. Too much soreness/tightness the day after means your arm is not ready for the work load requirement. Do **NOT** push your arm to the point it is not recovering in time for your next throwing session. Follow these steps (IN ORDER) to procure recovery/work load ratio(s):

1. If you are experiencing too much "day after" soreness/tightness, back off on rep amounts - not frequency.
2. If you still are not recovering (after completing Step 1), back off one drill per training section of each day's throwing regimen. Repeat until proper recovery levels are attained and work from there.
3. No matter how your arm recovers, if you feel pain - stop and re-evaluate frequency, fitness levels, and recovery times.
4. When evaluating, know the differences between (1) fatigue, (2) soreness, (3) tightness, (4) achiness, and (5) pain. Some soreness and fatigue is good, but too much will lead into post throwing achiness that does not subside (tendonitis). It can also lead into "day after" tightness that does not work itself out quick enough. Any type of pain is not good and you should stop immediately.
5. **"PAIN"** is a sharp painful sensation when you perform a certain movement. **"FATIGUE"** is your arm or body feels tired. **"SORENESS"** is similiar to **"TIGHTNESS"**, but the later does not loosen itself out or subside quickly. **"ACHINESS"** is a throbbing sensation - indicator the presence of tendonitis or start of such. Remember that your arm is a muscle and needs to be used, but **NOT** overused.
6. Proper monitoring of recovery rates will require you to stop throwing once you feel like your arm is used. Stop after you feel this "sensation" - as it is the start of fatigue. Do **NOT** push past this, or your next day's throwing regimen will suffer.

7. Build and plateau your throwing frequency and reps to maximize recovery rates. It will take about a month to fully understand how your arm and body are responding to the below.

8. Adhere to all rest requirement(s) between drills, exercises, or sets - even if you feel you are recovered.

This is an off season pitching and velocity building program, and does not take into account performance work loads. If you are currently in a season, do NOT use this program - as recovery rates will not be ascertained.

USAGE AND PROGRAM KEY:

Always use your Velocity LOAD Harness with every aspect of the program (except strength and running). There are two ways to use your VL Harness (denoted in the program key). Back hip (**BH**) contours your back hip to train linear drive, ground reaction force (GRF), and sync of front foot strike. Front hip (**FH**) contours your front hip to train rotational torque and sync of lower-to-upper half kinetic reaction force. Refer to our [Tutorials videos](#) for more detailed usage.

There are 3 different training components PER DAY to the program - (1) Throwing, (2) Running/recovery, and (3) Strength. Ensure you have the right VL Harness placement PER DRILL (as denoted per drill below).

For drills within each training component:

1. Each drill in the program has a number #1 - #6 that corresponds with the number of a drill in the videos shown at the top of this website page. For example, if drill #1 is listed in your day's throwing routine, you are to do the Leg kick posture drill, which is described in video #1 at the top of this website page.

Training components of the throwing program and what they mean:

1. **Delivery training** - develops pitching delivery efficiency, mechanics, movements, and tempos.
2. **Velocity/long toss training** - increases arm speed, whip, endurance, velocity, plane, and lower half drive.
3. **Pitching training** - designed to increase execution ratios, pitchability, and command.
4. **Pre-throwing training** - Gets body and arm ready for the day's work requirements.
4. **Running and recovery training** - increases cardio fitness, endurance, and recovery.
6. **Strength training** - develops pitching specific strength in a kinetic chain reaction.

Program key:

1. **BH** - VL Harness is placed on back hip (application described above).
2. **FH** - VL Harness is placed on front hip (application described above).
3. **PEL** - Perceived effort level of throwing or running.
100% is max intensity throwing (on a line) or max intensity sprinting.
90% is controlled high intensity throwing or sprinting.

80% is slight arc or medium intensity sprinting.
50% is active warm up or medium rate jogging.

90-DAY PITCHING AND VELOCITY PROGRAM*

The following program includes every required aspect of pitching development. It is a general guideline that gives your pitching career a fully comprehensive approach to winning on the mound. This is an off season workout plan that does not take into account performance requirements and/or work loads. Constantly monitoring recovery is the key to ensuring success. If you have questions, email Info@veloprobaseballnj.com.

-PRE-THROWING TRAINING COMPONENT DESCRIPTION-

Before every throw day, you will conduct Steps 1 - 3 (below) **BEFORE** you start the day's throwing regimen. Do not skip, as this is a portion of your daily routine that gets your body and arm kinetically synced with muscular response.

1. **Active body warm up** - Conduct an active body warm up. 5min of agility and flex warm up, 5min of static stretching of both upper and lower half, and 5min of band work for your shoulder and scap load. Agility and flex warm up exercises can include high knees, bounders, jogging, side shuffling, etc. Band work needs to include rotator cuff protraction, retraction, and scap load drills. Ensure you activate internal and external ROMs for all cuff muscles - IN ALL BODY POSITIONS. For band work, find a program that works for you. There are many readily available on the internet that will suffice.
2. **Interval KCR warm up** - It is important to get your entire body working as one unit to sync your kinetic chain reactors (KCR) - once it is stretched and you have blood flow. To do this, do about 5-10 sprints at 90' length. Conduct them at 50%, 75%, and 100% PEL.
3. **Active arm warm up** - Throw at around 60 - 80 feet at 50% PEL to warm your arm up **BEFORE** you start with any daily throwing routines that will include Delivery, Velocity, and/or Pitching training component(s). See below for specific routines.

-RUNNING AND RECOVERY TRAINING COMPONENT DESCRIPTION-

Immediately after you finish your throwing, do your cardio cool down. Each day will provide a few cardio conditioning options (choose one only). If you are pitching in a game - **THE DAY BEFORE**, you should do ten 150' long sprints at 100% PEL after your throwing routine. Disregard any required daily program running. Then start on Day 1 (the day after you pitch in a game).

There will be some adaptations to this running program - based upon game frequency. Just make sure you are recovering enough to be "fresh" for your game appearances or throwing regimens. Conduct all running **AFTER** your day's throwing. Do NOT do it beforehand. Additionally, all below running routines are to be conducted on the warning track of a 60/90 regulation sized baseball field. If you do not have access to a field, use the last option within each day's running routine.

For cuff band work, there are many popular programs available. Jaeger Sports has a great sequence and we highly recommend its usage. Most implement the same exercises and application components. Find one that suits your needs.

POST COOL DOWN AFTER A GAME APPEARANCE:

15min on a treadmill or general running at 50% PEL.

1. Treadmill should be at a 7 speed with incline of about 3.
2. General running is a jog at 50% PEL to flush your system.
3. Finish out with cuff band work.

DISTANCE FLUSH:

25min of constant running at 50% PEL.

1. Constant running provides no rest and is a flush with limited cardio intensity.

SPRINT INTERVALS:

10x bow and arrows OR 10 JSWs.

1. Bow and arrows are sprints at 100% PEL to centerfield. Jog at 80% PEL to opposite foul line. 60sec rest between.
2. JSWs (jog/sprint/walk) is jog at 80% PEL to 1st gap, sprint at 100% PEL to opposite gap. Walk to foul line. No rest.
3. 10x 30/30/30s. Sprint for 30sec at 100% PEL. Jog for 30sec at 80% PEL. Walk for 30sec. No rest between.

LIGHT INTERVALS:

10x Poles OR Center and Gaps at 75% PEL.

1. Poles are a medium jog from foul line to foul line on the warning track. Rest 30sec between reps.
2. Center and Gaps are a medium sprint to centerfield wall, jog to gap, walk to foul line. No rest between reps.
3. 10x 45sec medium jogs with 30sec rest between reps.

MEDIUM DISTANCE FLUSH:

15min flush or jog at 50% PEL AND 10min of jump rope.

1. Jog for 15min anywhere to get a flush.
2. In addition to jog, do 10min of jump rope with a 90sec active / 30sec recovery ratio.

AGILITY LADDERS:

20min of any type of speed ladder training OR Sprint work at 75% PEL.

1. Speed ladder training can utilize any popularized agility exercise. 90sec at 75% PEL with 30sec rest. 20min regimen includes exercises and rest.
2. Sprint work is 75yd sprints at 75% PEL. Rest for 30sec in between sprints.

-STRENGTH TRAINING COMPONENT DESCRIPTION-

Ensure you have oversight for this portion of the program. **FORM IS EVERYTHING.** Improper form can lead to injury and a lack of proper strength development. If you lack experience in strength training, working with a certified trainer is highly recommended.

Always conduct this portion of the program **AFTER** you finish throwing. If you must lift before throwing, allow for 60min recovery time before commencing any type of throwing. If you have a game, do NOT strength train that day. If you feel too much soreness or tightness, cut back on your day's strength training to ensure proper recovery. You can upload any of the following regimens with more reps, higher intensity, more weight, incline or decline, and/or weighted vests, medicine balls, or physioballs. Younger athletes should not utilize any weighted apparel or weights.

There is NO rest in between reps. Take ONLY 15sec between reps or sets to get set up and ready for your next exercise. This type of high intensity training increases endurance, recovery rates, and cardio fitness levels. This is a push/pull routine developed by top baseball strength trainers whom have decades of expertise at the MLB levels. A push/pull strength routine trains the accelerator (while indirectly training decelerators) - and vice versa. This builds your body as one moving unit that connects your entire KCR. Such routines are NOT readily available to the general public and require proper form, recovery levels, and intensity levels to ascertain.

CIRCUIT #1: LOWER HALF FUNCTIONAL STRENGTH CIRCUIT

Use body as weight ONLY. Upload with medicine ball if desired. 35sec per exercise. No rest. Repeat Steps 1-9 three times. After you finish this circuit, do cuff strengthening.

1. **Squats.** 20rep minimum.
2. **Lower ab exercise of choice.** 20rep minimum.
3. **Forward alternating lunge.** 20rep minimum.
4. **Regular ab exercise of choice.** 20rep minimum.
5. **Backward alternating lunge.** 20rep minimum.
6. **Twisting ab exercise of choice.** 20rep minimum.
7. **Alternating box step ups.** 20rep minimum.
8. **Side lunges.** 20rep minimum.
9. **Lower ab leg lifting exercise of choice.** 20rep minimum.

CIRCUIT #2: LOWER HALF EXPLOSIVE STRENGTH CIRCUIT

8reps per exercise. One set equals 8 total exercises. After you finish this circuit, do cuff strengthening.

1. **Front chops:** Above head to between legs. As you chop move into a body squatting position.
2. **Diagonal left chops:** Above head to left hip. As you chop, move into a body squatting position.
3. **Diagonal right chops:** Above head to right hip. As you chop, move into a body squatting position.
4. **Left lunge chops:** Start in leg kick position w/ med ball overhead. Stride out with left leg and chop med ball diagonally. Spring back up and repeat.
5. **Right lunge chops:** Start in leg kick position w/ med ball overhead. Stride out with right leg and chop med ball diagonally. Spring back up and repeat.
6. **Right side diagonal wall throws:** Start in squat position about 3' from wall with med ball at right hip. Throw ball into wall. Catch bounce and absorb energy with a twisting action of hips. Repeat.
7. **Left side diagonal wall throws:** Start in squat position about 3' from wall with med ball at left hip. Throw ball into wall.
8. **Med ball slams:** Start with med ball overhead. Slam ball into ground. Catch the bounce up and repeat.

CIRCUIT #3: UPPER HALF STABILIZING LOAD CIRCUIT

30sec per exercise. One set equals 5 total exercises. After you finish this circuit, do cuff strengthening.

1. **Wall bounces:** Stand 3' from wall w/ med ball overhead. Feet are shoulder width apart. Bounce ball against wall on fingertips. Limit forearm absorption rate. Works finger and wrist strength.
2. **Chest passes:** Stand 3' from wall w/ med ball at chest in a squat position. Bounce ball against wall and absorb with forearms. Elbows should stay stationary. Works finger and tricep strength.
3. **Overhead throws:** Stand 3' from wall w/ med ball overhead in stride position. Bounce ball against wall and absorb with entire arm - moving shoulders and scapula with a slight bend in elbows. Works shoulder and scapula load.
4. **Left side strider throws:** Stand 5' from wall w/ med ball overhead in leg kick position. Stride out like you would pitching and throw ball against wall. No bounce absorption. Pick ball up and repeat.
5. **Right side strider throws:** Stand 5' from wall w/ med ball overhead in leg kick position. Stride out like you would pitching and throw ball against wall. No bounce absorption. Pick ball up and repeat.

CIRCUIT #4: UPPER HALF ACCEL/DECCEL PERFORMANCE STRENGTH CIRCUIT

10reps per exercise. Do Sets 1-4 one time only. After you finish this circuit, do cuff strengthening.

In between each exercise, do an ab exercise of choice. Train all quadrants of your ab muscle group by using twisting, lower, middle, and upper ab strengthening exercises. Concentrate mainly upon twisting and lower ab quadrants. Can upload with any load application (weights, bands, plates, etc). Younger athletes should not utilize any upload application(s) except for plane change, medicine ball, resistance band(s), or body weight.

SET 1:

1. **Flat chest exercise of choice.** Push up or dumbbell presses only. No machine.
2. **Overhead back pulldown exercise of choice.** Machine only.
3. **Dumbbell curl bicep exercise of choice.** Dumbbell only.
4. **Flat pulldown bar tricep exercise of choice.** Machine only.
5. **Side lift shoulder exercise of choice.** Do not lift above shoulder level. Dumbbells or medicine ball only.
6. **60sec of skaters or slide board.** Rest 90sec for recovery before starting Set #2.

SET 2:

1. **Incline chest exercise of choice.** Push up or dumbbell presses only. No machine.
2. **Sitting pull/row back exercise of choice.** Machine only.
3. **Hammer curl exercise of choice.** Dumbbell only.
4. **Rope pulldown tricep exercise of choice.** Machine only.
5. **Front lift shoulder exercise of choice.** Do not lift above shoulder level. Dumbbells or medicine ball only.
6. **90sec of jump rope.** Rest 90sec for recovery before starting Set #3.

SET 3:

1. **Fly chest exercise of choice.** Machine only.
2. **One handed bench rowing back exercise of choice.** Do not go deep on your fly ROM. On flat bench only.
3. **Preacher curl exercise of choice.** Barbell only.
4. **Overhead tricep press exercise of choice.** Machine only.
5. **Trap exercise of choice.** Do not lift above shoulder level. Machine only.
6. **60sec of high knees, wall climbers, or burpies (choose one).** Rest 90sec before starting Set #4.

SET 4:

1. **Retraction wrist exercise of choice.** Resistance bands only.
2. **Static plank exercise of choice.** Plank exercises require you to maintain a static planking position.
3. **Protraction wrist exercise of choice.** Rice bucket or rope twist only.
4. **Plank with scap load/unload exercise of choice.**

5. **Twisting wrist exercise of choice.** Resistance bands only.
6. **90sec of jump rope.**

CIRCUIT #5: LOWER HALF ACCEL/DECEL PERFORMANCE STRENGTH CIRCUIT

10reps per exercise. Repeat Sets 1-4 two times. After you finish this circuit, do your cuff strengthening.

In between each exercise, do an ab exercise of choice. Train all quadrants of your ab muscle group by using twisting, lower, middle, and upper ab strengthening exercises. Concentrate mainly upon twisting and lower ab quadrants. Can upload below exercises with any load application (weights, bands, resistance, etc). Younger athletes should not utilize any upload application(s) except body weight, medicine balls, resistance band(s), plane change, or plyoboxes.

SET #1:

1. **Body width foot placement squat exercise of choice (regular).** No machine.
2. **Forward lunge with overhead medicine ball chop.** Arch back at bottom of lunge. Alternate feet.
3. **Jump squat with body weight only.**
4. **Backward lunge with reverse overhead medicine ball chop.** Arch back at bottom of lunge. Alternate feet.
5. **Scissors jumping lunges with medicine ball overhead.** No chopping action (static position). Rest 2min before starting Set #2.

SET #2:

1. **Hack squat** on machine.
2. **Forward lunge with a twist.** Arch back at bottom of lunge. Alternate feet.
3. **Split squat.** No machine. Change foot positioning after 5 reps.
4. **Backward lunge with a twist.** Arch back at bottom of lunge. Alternate feet.
5. **Skaters for 60sec.** Rest 2min before starting Set #3.

SET #3:

1. **Body squats for 30sec.** Do them as fast as you can. 15sec recovery.
2. **Jump squats for 30sec.** Do them as fast as you can. 15sec recovery.
3. **Burpees with a jump and high knees at top of jump for 30sec.** Do them as fast as you can. 15sec recovery.
4. **Rock climbers for 30sec.** Do them as fast as you can. 15sec recovery.
5. **Forward to backward lunge on right leg.** 20sec. Do them as fast as you can. 15sec recovery.
6. **Forward to backward lunge on left leg.** 20sec. Do them as fast as you can. 15sec recovery.
7. **One legged step ups for 20sec (left leg only).** Do them as fast as you can. 15sec recovery.
8. **One legged step ups for 20sec (right leg only).** Do them as fast as you can. 15sec recovery.

-DAILY THROWING, RUNNING, AND STRENGTH ROUTINE-

There are three types of throwing components (**Delivery, Velocity, and Pitching** - described above) you will utilize PER DAY that develop (1) pitching abilities which compete for the win AND (2) velocity that enhances your ability to win. Each type of throwing component is denoted within the program's daily throwing regimens (see below).

Additionally, each day's routine includes your daily running plan and strength circuit.

Ensure your recovery is peaked. If you cannot finish out the day's throwing requirements, cut back and re-evaluate to ensure proper recovery. "Recovery" is defined as your arm feeling fresh the next day. Some days, you will feel a bit tired or sore. Cut back on that day's throwing to ensure your following day's throwing is not effected. Additionally, to aid in recovery - ice or do therapy only **AFTER** you have finished out your running and lifting for that day. Monitoring your recovery rates is how you will discover at what levels your arm can be utilized.

Again, understand that *this is an **off** season throwing plan that does **not** into account performance workloads.* Additionally, this is **NOT** a post-surgery throwing program. For such, email Info@veloprobbaseballnj.com and we can get you a program to use.

1. IF YOU ARE INDOORS AND DO NOT HAVE ACCESS TO THE DISTANCE RATINGS (FOR THROWS), SIMULATE BY THROWING HIGHER INTO NET AT A SPECIFIC TARGET. DO NOT JUST THROW BASEBALL INTO NET, BUT PICK OUT A SPECIFIC SPOT. ADDITIONALLY, RUN-AND-GUNS, PULLDOWNS, OR BALLISTIC STYLE THROWING IS NOT A TYPE OF THROWING THIS PROGRAM OR VELOPRO BASEBALL SUPPORTS WITH OUR HARNESS. ALL SUCH TYPES OF THROWING HAVE BEEN PROVEN (THROUGH OUR DATA AND INDEPENDANT RESEARCH STUDIES WE HAVE CONDUCTED) TO HAVE A NEGATIVE EFFECT UPON COMMAND AND PLANE FOR YOUNGER OR DEVELOPING ARMS. MiLB AND MLB ARMS WERE NOT RESEARCHED.

*2. WHETHER INDOORS OR OUTDOORS, DO NOT ALLOW YOUR THROWS TO REACH ABOVE 15'. IF YOU CANNOT MAKE THE DISTANCES (IN THE AIR), LET THE BASEBALL BOUNCE TO YOUR TARGET. ONCE YOUR LOWER HALF INCREASES ITS LINEAR DRIVE FORCE, GRF, AND LINEAR-TO-ROTATIONAL SYNC (THROUGH THE VL HARNESS), YOUR ARM SPEED WILL INCREASE - EFFECTIVELY CARRYING THE BASEBALL FURTHER AND ON TARGET. **THIS IS THE ESSENCE OF HEALTHY VELOCITY THAT WINS.***

3. THE RECOVERY TIMES ARE IMPORTANT, AS THEY ARE DESIGNED TO GET YOUR ARM IN SHAPE QUICKER AND ALIGN WITH QUALITY INNINGS WORK LOADS. ALTHOUGH YOU MAY FEEL READY TO PROCEED ONTO THE NEXT EXERCISE, DRILL, OR SET, ADHERE TO THE ENTIRE RECOVERY LENGTH BEFORE MOVING ON.

Time limits denoted for throwing durations.

(BH) or (FH) denotes back hip or front hip placement of VL Harness. Unhooked means to unhook bungees.

(x) denotes amount of throws or pitches.

"ROM" is range of motion.

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RECOMMENDED FOR:

- 1. **HS aged pitchers** whom have a full 3 months to commit towards velocity and pitch-ING development. Not a velocity program only, but develops from the **GROUND** up - ensuring health and support of throwing shoulder/arm are ascertained. Does not train arm speed alone, but lower half drive that supports arm speed increases. Work loads plateau to high levels. Ensure recovery rates and ratios. **MUST BE IN OPTIMAL STRENGTH AND CARDIO SHAPE BEFORE STARTING THIS PROGRAM.** Not recommended for post surgery or "recovery from injury" arms.*
- 2. **NCAA pitchers** whom did NOT play summer baseball OR have a full 3 months to develop supported velocity and pitch-ING tools. Develops from ground up to ensure lower half drive is creating arm speed increases. Work loads plateau to high levels. Ensure recovery rates and ratios. **MUST BE IN OPTIMAL STRENGTH AND CARDIO SHAPE BEFORE STARTING THIS PROGRAM.** Not recommended for post surgery or "recovering from injury" arms.*
- 3. **MiLB and MLB pitchers** whom are NOT playing winter ball, free agents seeking to re-sign, and/or pitchers whom will report trying to "win" a job. Ensure you have 30 full days of no throwing (after your season) before starting this program. Start 90days prior to reporting. Develops from ground up to ensure lower half drive is creating arm speed increases. Work loads plateau to high levels. Ensure recovery rates and ratios. **MUST BE IN OPTIMAL STRENGTH AND***

CARDIO SHAPE BEFORE STARTING THIS PROGRAM. Not recommended for post surgery or "recovering from injury" arms.

The different aspects of the program are described below - with the actual daily throwing, lifting, running, and recovery routines listed under "Week 1" to "Week 12". Read over all the information **BEFORE** you start.

Use your VL Harness (as directed by the program) with all aspects of throwing. It provides the necessary sensory feedback and peaked athletic movement required to develop a (1) proper delivery, (2) increased velocity, (3) improved pitch plane, and (5) enhanced fastball movement and off speed break, and velocity. **To better understand how to use your VL Harness, refer to our [Tutorials page](#).**

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RECOVERY AND WORK LOAD RATIOS:

The relationship between your work load and recovery rates should dictate how you utilize this program. Too much soreness/tightness the day after means your arm is not ready for the work load requirement. Do **NOT** push your arm to the point it is not recovering in time for your next throwing session. Follow these steps (IN ORDER) to procure recovery/work load ratio(s):

1. If you are experiencing too much "day after" soreness/tightness, back off on rep amounts - not frequency.
2. If you still are not recovering (after completing Step 1), back off one drill per training section of each day's throwing regimen. Repeat until proper recovery levels are attained and work from there.
3. No matter how your arm recovers, if you feel pain - stop and re-evaluate frequency, fitness levels, and recovery times.
4. When evaluating, know the differences between (1) fatigue, (2) soreness, (3) tightness, (4) achiness, and (5) pain. Some soreness and fatigue is good, but too much will lead into post throwing achiness that does not subside (tendonitis). It can also lead into "day after" tightness that does not work itself out quick enough. Any type of pain is not good and you should stop immediately.
5. **"PAIN"** is a sharp painful sensation when you perform a certain movement. **"FATIGUE"** is your arm or body feels tired. **"SORENESS"** is similiar to **"TIGHTNESS"**, but the later does not loosen itself out or subside quickly. **"ACHINESS"** is a throbbing sensation - indicator the presence of tendonitis or start of such. Remember that your arm is a muscle and needs to be used, but **NOT** overused.
6. Proper monitoring of recovery rates will require you to stop throwing once you feel like your arm is used. Stop after you feel this "sensation" - as it is the start of fatigue. Do **NOT** push past this, or your next day's throwing regimen will suffer.
7. Build and plateau your throwing frequency and reps to maximize recovery rates. It will take about a month to fully understand how your arm and body are responding to the below.

8. Adhere to all rest requirement(s) between drills, exercises, or sets - even if you feel you are recovered.

This is an off season pitching and velocity building program, and does not take into account performance work loads. If you are currently in a season, do NOT use this program - as recovery rates will not be ascertained.

USAGE AND PROGRAM KEY:

Always use your Velocity LOAD Harness with every aspect of the program (except strength and running). There are two ways to use your VL Harness (denoted in the program key). Back hip (**BH**) contours your back hip to train linear drive, ground reaction force (GRF), and sync of front foot strike. Front hip (**FH**) contours your front hip to train rotational torque and sync of lower-to-upper half kinetic reaction force. Refer to our [Tutorials videos](#) for more detailed usage.

There are 3 different training components PER DAY to the program - (1) Throwing, (2) Running/recovery, and (3) Strength. Ensure you have the right VL Harness placement PER DRILL (as denoted per drill below).

For drills within each training component:

1. Each drill in the program has a number #1 - #6 that corresponds with the number of a drill in the videos shown at the top of this website page. For example, if drill #1 is listed in your day's throwing routine, you are to do the Leg kick posture drill, which is described in video #1 at the top of this website page.

Training components of the throwing program and what they mean:

1. **Delivery training** - develops pitching delivery efficiency, mechanics, movements, and tempos.
2. **Velocity/long toss training** - increases arm speed, whip, endurance, velocity, plane, and lower half drive.
3. **Pitching training** - designed to increase execution ratios, pitchability, and command.
4. **Pre-throwing training** - Gets body and arm ready for the day's work requirements.
4. **Running and recovery training** - increases cardio fitness, endurance, and recovery.
6. **Strength training** - develops pitching specific strength in a kinetic chain reaction.

Program key:

1. **BH** - VL Harness is placed on back hip (application described above).
2. **FH** - VL Harness is placed on front hip (application described above).
3. **PEL** - Perceived effort level of throwing or running.
100% is max intensity throwing (on a line) or max intensity sprinting.
90% is controlled high intensity throwing or sprinting.
80% is slight arc or medium intensity sprinting.
50% is active warm up or medium rate jogging.

90-DAY PITCHING AND VELOCITY PROGRAM*

The following program includes every required aspect of pitching development. It is a general guideline that gives your pitching career a fully comprehensive approach to winning on the mound. This is an off season workout plan that does not take into account performance requirements and/or work loads. Constantly monitoring recovery is the key to ensuring success. If you have questions, email Info@veloprobaseballnj.com.

-PRE-THROWING TRAINING COMPONENT DESCRIPTION-

Before every throw day, you will conduct Steps 1 - 3 (below) **BEFORE** you start the day's throwing regimen. Do not skip, as this is a portion of your daily routine that gets your body and arm kinetically synced with muscular response.

1. **Active body warm up** - Conduct an active body warm up. 5min of agility and flex warm up, 5min of static stretching of both upper and lower half, and 5min of band work for your shoulder and scap load. Agility and flex warm up exercises can include high knees, bounders, jogging, side shuffling, etc. Band work needs to include rotator cuff protraction, retraction, and scap load drills. Ensure you activate internal and external ROMs for all cuff muscles - IN ALL BODY POSITIONS. For band work, find a program that works for you. There are many readily available on the internet that will suffice.
2. **Interval KCR warm up** - It is important to get your entire body working as one unit to sync your kinetic chain reactors (KCR) - once it is stretched and you have blood flow. To do this, do about 5-10 sprints at 90' length. Conduct them at 50%, 75%, and 100% PEL.
3. **Active arm warm up** - Throw at around 60 - 80 feet at 50% PEL to warm your arm up **BEFORE** you start with any daily throwing routines that will include Delivery, Velocity, and/or Pitching training component(s). See below for specific routines.

-RUNNING AND RECOVERY TRAINING COMPONENT DESCRIPTION-

Immediately after you finish your throwing, do your cardio cool down. Each day will provide a few cardio conditioning options (choose one only). If you are pitching in a game - **THE DAY BEFORE**, you should do ten 150' long sprints at 100% PEL after your throwing routine. Disregard any required daily program running. Then start on Day 1 (the day after you pitch in a game).

There will be some adaptations to this running program - based upon game frequency. Just make sure you are recovering enough to be "fresh" for your game appearances or throwing regimens. Conduct all running **AFTER** your day's throwing. Do NOT do it beforehand. Additionally, all below running routines are to be conducted on the warning track of a 60/90 regulation sized baseball field. If you do not have access to a field, use the last option within each day's running routine.

For cuff band work, there are many popular programs available. Jaeger Sports has a great sequence and we highly recommend its usage. Most implement the same exercises and application components. Find one that suits your needs.

POST COOL DOWN AFTER A GAME APPEARANCE:

15min on a treadmill or general running at 50% PEL.

1. Treadmill should be at a 7 speed with incline of about 3.
2. General running is a jog at 50% PEL to flush your system.
3. Finish out with cuff band work.

DISTANCE FLUSH:

25min of constant running at 50% PEL.

1. Constant running provides no rest and is a flush with limited cardio intensity.

SPRINT INTERVALS:

10x bow and arrows OR 10 JSWs.

1. Bow and arrows are sprints at 100% PEL to centerfield. Jog at 80% PEL to opposite foul line. 60sec rest between.
2. JSWs (jog/sprint/walk) is jog at 80% PEL to 1st gap, sprint at 100% PEL to opposite gap. Walk to foul line. No rest.
3. 10x 30/30/30s. Sprint for 30sec at 100% PEL. Jog for 30sec at 80% PEL. Walk for 30sec. No rest between.

LIGHT INTERVALS:

10x Poles OR Center and Gaps at 75% PEL.

1. Poles are a medium jog from foul line to foul line on the warning track. Rest 30sec between reps.
2. Center and Gaps are a medium sprint to centerfield wall, jog to gap, walk to foul line. No rest between reps.
3. 10x 45sec medium jogs with 30sec rest between reps.

MEDIUM DISTANCE FLUSH:

15min flush or jog at 50% PEL AND 10min of jump rope.

1. Jog for 15min anywhere to get a flush.
2. In addition to jog, do 10min of jump rope with a 90sec active / 30sec recovery ratio.

AGILITY LADDERS:

20min of any type of speed ladder training OR Sprint work at 75% PEL.

1. Speed ladder training can utilize any popularized agility exercise. 90sec at 75% PEL with 30sec rest. 20min regimen includes exercises and rest.
2. Sprint work is 75yd sprints at 75% PEL. Rest for 30sec in between sprints.

-STRENGTH TRAINING COMPONENT DESCRIPTION-

Ensure you have oversight for this portion of the program. **FORM IS EVERYTHING.** Improper form can lead to injury and a lack of proper strength development. If you lack experience in strength training, working with a certified trainer is highly recommended.

Always conduct this portion of the program **AFTER** you finish throwing. If you must lift before throwing, allow for 60min recovery time before commencing any type of throwing. If you have a game, do NOT strength train that day. If you feel too much soreness or tightness, cut back on your day's strength training to ensure proper recovery. You can upload any of the following regimens with more reps, higher intensity, more weight, incline or decline, and/or weighted vests, medicine balls, or physioballs. Younger athletes should not utilize any weighted apparel or weights.

There is NO rest in between reps. Take ONLY 15sec between reps or sets to get set up and ready for your next exercise. This type of high intensity training increases endurance, recovery rates, and cardio fitness levels. This is a push/pull routine developed by top baseball strength trainers whom have decades of expertise at the MLB levels. A push/pull strength routine trains the accelerator (while indirectly training decelerators) - and vice versa. This builds your body as one moving unit that connects your entire KCR. Such routines are NOT readily available to the general public and require proper form, recovery levels, and intensity levels to ascertain.

CIRCUIT #1: LOWER HALF FUNCTIONAL STRENGTH CIRCUIT

Use body as weight ONLY. Upload with medicine ball if desired. 35sec per exercise. No rest. Repeat Steps 1-9 three times. After you finish this circuit, do cuff strengthening.

1. **Squats.** 20rep minimum.
2. **Lower ab exercise of choice.** 20rep minimum.
3. **Forward alternating lunge.** 20rep minimum.
4. **Regular ab exercise of choice.** 20rep minimum.
5. **Backward alternating lunge.** 20rep minimum.
6. **Twisting ab exercise of choice.** 20rep minimum.
7. **Alternating box step ups.** 20rep minimum.
8. **Side lunges.** 20rep minimum.
9. **Lower ab leg lifting exercise of choice.** 20rep minimum.

CIRCUIT #2: LOWER HALF EXPLOSIVE STRENGTH CIRCUIT

8reps per exercise. One set equals 8 total exercises. After you finish this circuit, do cuff strengthening.

1. **Front chops:** Above head to between legs. As you chop move into a body squatting position.
2. **Diagonal left chops:** Above head to left hip. As you chop, move into a body squatting position.
3. **Diagonal right chops:** Above head to right hip. As you chop, move into a body squatting position.
4. **Left lunge chops:** Start in leg kick position w/ med ball overhead. Stride out with left leg and chop med ball diagonally. Spring back up and repeat.
5. **Right lunge chops:** Start in leg kick position w/ med ball overhead. Stride out with right leg and chop med ball diagonally. Spring back up and repeat.
6. **Right side diagonal wall throws:** Start in squat position about 3' from wall with med ball at right hip. Throw ball into wall. Catch bounce and absorb energy with a twisting action of hips. Repeat.
7. **Left side diagonal wall throws:** Start in squat position about 3' from wall with med ball at left hip. Throw ball into wall.
8. **Med ball slams:** Start with med ball overhead. Slam ball into ground. Catch the bounce up and repeat.

CIRCUIT #3: UPPER HALF STABILIZING LOAD CIRCUIT

30sec per exercise. One set equals 5 total exercises. After you finish this circuit, do cuff strengthening.

1. **Wall bounces:** Stand 3' from wall w/ med ball overhead. Feet are shoulder width apart. Bounce ball against wall on fingertips. Limit forearm absorption rate. Works finger and wrist strength.
2. **Chest passes:** Stand 3' from wall w/ med ball at chest in a squat position. Bounce ball against wall and absorb with forearms. Elbows should stay stationary. Works finger and tricep strength.
3. **Overhead throws:** Stand 3' from wall w/ med ball overhead in stride position. Bounce ball against wall and absorb with entire arm - moving shoulders and scapula with a slight bend in elbows. Works shoulder and scapula load.
4. **Left side strider throws:** Stand 5' from wall w/ med ball overhead in leg kick position. Stride out like you would pitching and throw ball against wall. No bounce absorption. Pick ball up and repeat.
5. **Right side strider throws:** Stand 5' from wall w/ med ball overhead in leg kick position. Stride out like you would pitching and throw ball against wall. No bounce absorption. Pick ball up and repeat.

CIRCUIT #4: UPPER HALF ACCEL/DECEL PERFORMANCE STRENGTH CIRCUIT

10reps per exercise. Do Sets 1-4 one time only. After you finish this circuit, do cuff strengthening.

In between each exercise, do an ab exercise of choice. Train all quadrants of your ab muscle group by using twisting, lower, middle, and upper ab strengthening exercises. Concentrate mainly upon twisting and lower ab quadrants. Can upload with any load application (weights, bands, plates, etc). Younger athletes should not utilize any upload application(s) except for plane change, medicine ball, resistance band(s), or body weight.

SET 1:

1. **Flat chest exercise of choice.** Push up or dumbbell presses only. No machine.
2. **Overhead back pulldown exercise of choice.** Machine only.
3. **Dumbbell curl bicep exercise of choice.** Dumbbell only.
4. **Flat pulldown bar tricep exercise of choice.** Machine only.
5. **Side lift shoulder exercise of choice.** Do not lift above shoulder level. Dumbbells or medicine ball only.
6. **60sec of skaters or slide board.** Rest 90sec for recovery before starting Set #2.

SET 2:

1. **Incline chest exercise of choice.** Push up or dumbbell presses only. No machine.
2. **Sitting pull/row back exercise of choice.** Machine only.
3. **Hammer curl exercise of choice.** Dumbbell only.
4. **Rope pulldown tricep exercise of choice.** Machine only.
5. **Front lift shoulder exercise of choice.** Do not lift above shoulder level. Dumbbells or medicine ball only.
6. **90sec of jump rope.** Rest 90sec for recovery before starting Set #3.

SET 3:

1. **Fly chest exercise of choice.** Machine only.
2. **One handed bench rowing back exercise of choice.** Do not go deep on your fly ROM. On flat bench only.
3. **Preacher curl exercise of choice.** Barbell only.
4. **Overhead tricep press exercise of choice.** Machine only.
5. **Trap exercise of choice.** Do not lift above shoulder level. Machine only.
6. **60sec of high knees, wall climbers, or burpies (choose one).** Rest 90sec before starting Set #4.

SET 4:

1. **Retraction wrist exercise of choice.** Resistance bands only.
2. **Static plank exercise of choice.** Plank exercises require you to maintain a static planking position.
3. **Protraction wrist exercise of choice.** Rice bucket or rope twist only.
4. **Plank with scap load/unload exercise of choice.**

5. **Twisting wrist exercise of choice.** Resistance bands only.
6. **90sec of jump rope.**

CIRCUIT #5: LOWER HALF ACCEL/DECEL PERFORMANCE STRENGTH CIRCUIT

10reps per exercise. Repeat Sets 1-4 two times. After you finish this circuit, do your cuff strengthening.

In between each exercise, do an ab exercise of choice. Train all quadrants of your ab muscle group by using twisting, lower, middle, and upper ab strengthening exercises. Concentrate mainly upon twisting and lower ab quadrants. Can upload below exercises with any load application (weights, bands, resistance, etc). Younger athletes should not utilize any upload application(s) except body weight, medicine balls, resistance band(s), plane change, or plyoboxes.

SET #1:

1. **Body width foot placement squat exercise of choice (regular).** No machine.
2. **Forward lunge with overhead medicine ball chop.** Arch back at bottom of lunge. Alternate feet.
3. **Jump squat with body weight only.**
4. **Backward lunge with reverse overhead medicine ball chop.** Arch back at bottom of lunge. Alternate feet.
5. **Scissors jumping lunges with medicine ball overhead.** No chopping action (static position). Rest 2min before starting Set #2.

SET #2:

1. **Hack squat** on machine.
2. **Forward lunge with a twist.** Arch back at bottom of lunge. Alternate feet.
3. **Split squat.** No machine. Change foot positioning after 5 reps.
4. **Backward lunge with a twist.** Arch back at bottom of lunge. Alternate feet.
5. **Skaters for 60sec.** Rest 2min before starting Set #3.

SET #3:

1. **Body squats for 30sec.** Do them as fast as you can. 15sec recovery.
2. **Jump squats for 30sec.** Do them as fast as you can. 15sec recovery.
3. **Burpees with a jump and high knees at top of jump for 30sec.** Do them as fast as you can. 15sec recovery.
4. **Rock climbers for 30sec.** Do them as fast as you can. 15sec recovery.
5. **Forward to backward lunge on right leg.** 20sec. Do them as fast as you can. 15sec recovery.
6. **Forward to backward lunge on left leg.** 20sec. Do them as fast as you can. 15sec recovery.
7. **One legged step ups for 20sec (left leg only).** Do them as fast as you can. 15sec recovery.
8. **One legged step ups for 20sec (right leg only).** Do them as fast as you can. 15sec recovery.

-DAILY THROWING, RUNNING, AND STRENGTH ROUTINE-

There are three types of throwing components (**Delivery, Velocity, and Pitching** - described above) you will utilize PER DAY that develop (1) pitching abilities which compete for the win AND (2) velocity that enhances your ability to win. Each type of throwing component is denoted within the program's daily throwing regimens (see below).

Additionally, each day's routine includes your daily running plan and strength circuit.

Ensure your recovery is peaked. If you cannot finish out the day's throwing requirements, cut back and re-evaluate to ensure proper recovery. "Recovery" is defined as your arm feeling fresh the next day. Some days, you will feel a bit tired or sore. Cut back on that day's throwing to ensure your following day's throwing is not effected. Additionally, to aid in recovery - ice or do therapy only **AFTER** you have finished out your running and lifting for that day. Monitoring your recovery rates is how you will discover at what levels your arm can be utilized.

Again, understand that *this is an **off** season throwing plan that does **not** into account performance workloads.* Additionally, this is **NOT** a post-surgery throwing program. For such, email Info@veloprobbaseballnj.com and we can get you a program to use.

1. IF YOU ARE INDOORS AND DO NOT HAVE ACCESS TO THE DISTANCE RATINGS (FOR THROWS), SIMULATE BY THROWING HIGHER INTO NET AT A SPECIFIC TARGET. DO NOT JUST THROW BASEBALL INTO NET, BUT PICK OUT A SPECIFIC SPOT. ADDITIONALLY, RUN-AND-GUNS, PULLDOWNS, OR BALLISTIC STYLE THROWING IS NOT A TYPE OF THROWING THIS PROGRAM OR VELOPRO BASEBALL SUPPORTS WITH OUR HARNESS. ALL SUCH TYPES OF THROWING HAVE BEEN PROVEN (THROUGH OUR DATA AND INDEPENDANT RESEARCH STUDIES WE HAVE CONDUCTED) TO HAVE A NEGATIVE EFFECT UPON COMMAND AND PLANE FOR YOUNGER OR DEVELOPING ARMS. MiLB AND MLB ARMS WERE NOT RESEARCHED.

*2. WHETHER INDOORS OR OUTDOORS, DO NOT ALLOW YOUR THROWS TO REACH ABOVE 15'. IF YOU CANNOT MAKE THE DISTANCES (IN THE AIR), LET THE BASEBALL BOUNCE TO YOUR TARGET. ONCE YOUR LOWER HALF INCREASES ITS LINEAR DRIVE FORCE, GRF, AND LINEAR-TO-ROTATIONAL SYNC (THROUGH THE VL HARNESS), YOUR ARM SPEED WILL INCREASE - EFFECTIVELY CARRYING THE BASEBALL FURTHER AND ON TARGET. **THIS IS THE ESSENCE OF HEALTHY VELOCITY THAT WINS.***

3. THE RECOVERY TIMES ARE IMPORTANT, AS THEY ARE DESIGNED TO GET YOUR ARM IN SHAPE QUICKER AND ALIGN WITH QUALITY INNINGS WORK LOADS. ALTHOUGH YOU MAY FEEL READY TO PROCEED ONTO THE NEXT EXERCISE, DRILL, OR SET, ADHERE TO THE ENTIRE RECOVERY LENGTH BEFORE MOVING ON.

Time limits denoted for throwing durations.

(BH) or (FH) denotes back hip or front hip placement of VL Harness. Unhooked means to unhook bungees.

(x) denotes amount of throws or pitches.

"ROM" is range of motion.

-WEEK 1 DAILY ROUTINE-

Delivery component (BH). Throw 2 inside / 2 outside FB sequence for all drills to catcher on flat:

MON, WED, FRI (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 1-3 @ 50' (described in videos). 15x per drill at 80% PEL.

Long toss component (BH). Throw to opposite arm side at all times.

MON, WED, FRI (60sec rest between distance ratings):

ARM SPEED ROM AND SCAP LOAD/UNLOAD TRAINING

2min at 80'. 80% PEL.

2min at 90' w/ crow hop. 80% PEL.

2min at 80'. 80% PEL.

Pitching/Velocity component:

N/A

Running/recovery component:

Running plans listed above. Do arm care/recovery after throwing.

Mon - Distance.

Wed - Medium Distance.

Fri - Agility Ladders.

Sat - Sprint Intervals.

Strength component:

Description of strength circuits listed above.

Mon - Circuit #4

Tues - Circuit #5

Wed - Circuit #2

Fri - Circuit #1

Sat - Circuit #3

-WEEK 2 DAILY ROUTINE-

Delivery component (BH). Same sequencing:

MON, WED, FRI (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 1-3 @ 60' (described in videos). 15x per drill at 80% PEL.

Long toss component (BH). Throw to opposite arm side at all times:

MON, WED, FRI (60sec rest between distance ratings):

ARM SPEED ROM AND SCAP LOAD/UNLOAD TRAINING

2min at 80'. 80% PEL.

2min at 90'. 80% PEL.

2min at 110' w/ crow hop. 80% PEL.

1min at 90' w/ crow hop. 80% PEL. Unhooked.

1min at 80'. 80% PEL. Unhooked.

Pitching/Velocity component:

N/A

Running/recovery component:

Running plans listed above. Do arm care/recovery after throwing.

Mon - Light Interval

Tues - Distance

Wed - Sprint Intervals

Thurs - Medium Distance

Fri - Light Interval

Sat - Agility Ladders

Strength component:

Description of strength circuits listed above.

Same as Week 1.

-WEEK 3 DAILY ROUTINE-

DELIVERY COMPONENT (BH). SAME SEQUENCING:

MON, TUES, THURS, FRI (60sec rest between distance ratings):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 4-6 @ 60' (described in videos). 10x per drill at 80% PEL.

LONG TOSS COMPONENT (BH). THROW TO OPPOSITE ARM SIDE AT ALL TIMES:

MON, TUES, THURS, FRI (90sec rest between distance ratings):

ARM SPEED ROM AND SCAP LOAD/UNLOAD TRAINING

2min at 90'. 80% PEL.

2min at 100' w/ crow hop. 90% PEL.

2min at 125' w/ crow hop. 90% PEL.

2min at 100' w/ crow hop. 90% PEL. Unhooked.

1min at 80'. 80% PEL. Unhooked.

PITCHING/VELOCITY COMPONENT:

N/A

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Mon - Light Interval

Tues - Medium Distance

Wed - Distance

Thurs - Sprint Intervals

Fri - Sprint Intervals

Sat - Distance

STRENGTH COMPONENT:

Description of strength circuits listed above.

Mon - Circuit #5

Tues - Circuit #4

Thurs - Circuit #1

Fri - Circuit #3

Sat - Circuit #2

-WEEK 4 DAILY ROUTINE-

DELIVERY COMPONENT (BH). SAME SEQUENCING:

MON, TUES, THURS, FRI (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 4-6 @ 60' (described in videos). 10x per drill at 80% PEL.

LONG TOSS COMPONENT (BH). THROW TO OPPOSITE ARM SIDE AT ALL TIMES:

MON, THURS (90sec rest between distance ratings):

ARM SPEED ROM AND SCAP LOAD/UNLOAD TRAINING

2min at 100' w/ crow hop. 80% PEL.

3min at 125' w/ crow hop. 90% PEL.

2min at 150' w/ crow hop. 90% PEL.

2min at 125' w/ crow hop. 90% PEL. Unhooked.

1min at 100' w/ crow hop. 90% PEL. Unhooked.

PITCHING/VELOCITY COMPONENT (BH). ALTERNATE INSIDE/OUTSIDE:

TUES, FRI: (2min rest between distance ratings):

VELOCITY LOAD AND COMMAND TRAINING

10 throws w/ crow hop @ 100'. 90% PEL.

10 throws w/ crow hop @ 125'. 90% PEL. Last 5 throws at 100% PEL.

10 throws w/ crow hop @ 100'. 90% PEL. Last 5 throws at 100% PEL. All throws are unhooked.

15 pitch flat ground bullpen at 90% PEL. Last 5 pitches are not hooked in.

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Mon - Sprint Interval

Tues - Medium Distance

Wed - Distance

Thurs - Light Interval

Fri - Sprint Interval

Sat - Agility Ladders

STRENGTH COMPONENT:

Description of strength circuits listed above.

Mon - Circuit #5

Tues - Circuit #4

Thurs - Circuit #5

Fri - Circuit #3

Sat - Circuit #1

-WEEK 5 DAILY ROUTINE-

DELIVERY COMPONENT (FH). SAME SEQUENCING:

MON, TUES, THURS, FRI (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 1-3 @ 60' (described in videos). 10x per drill at 80% PEL.

LONG TOSS COMPONENT (BH). THROW TO OPPOSITE ARM SIDE AT ALL TIMES:

MON, THURS (90sec rest between distance ratings):

ARM SPEED ROM AND SCAP LOAD/UNLOAD TRAINING

2min at 100' w/ crow hop. 80% PEL.

2min at 125' w/ crow hop. 100% PEL.

3min at 150' w/ crow hop. 90% PEL.

2min at 125 w/ crow hop. 90% PEL. Unhooked.

1min at 90' w/ crow hop. 80% PEL. Unhooked.

PITCHING/VELOCITY COMPONENT (BH). ALTERNATE INSIDE/OUTSIDE:

TUES, FRI (2min rest between distance ratings):

VELOCITY LOAD AND COMMAND TRAINING

10 throws w/ crow hop @ 100'. 90% PEL.

12 throws w/ crow hop @ 125'. 100% PEL.

15 throws w/ crow hop @ 150'. 100% PEL.

10 throws w/ crow hop @ 100'. 90% PEL. Unhooked.

15 pitch flat ground bullpen at 90% PEL. Last 5 pitches are not hooked in. All fastballs.

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Mon - Sprint Interval

Tues - Medium Distance

Wed - Distance

Thurs - Light Interval

Fri - Sprint Intervals

Sat - Agility Ladders

STRENGTH COMPONENT:

Description of strength circuits listed above.

Mon - Circuit #5

Tues - Circuit #4

Thurs - Circuit #2

Fri - Circuit #3

Sat - Circuit #1

-WEEK 6 DAILY ROUTINE-

DELIVERY COMPONENT (FH). SAME SEQUENCING:

MON, TUES, THURS, FRI, SUN (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 4-6 @ 60' (described in videos). 10x per drill at 80% PEL.

LONG TOSS COMPONENT. THROW OPPOSITE ARM SIDE AT ALL TIMES:

MON, THURS (90sec rest between distance ratings):

ARM SPEED ROM AND SCAP LOAD/UNLOAD TRAINING

90sec at 110' w/ crow hop. 80% PEL. (BH)

2min at 140' w/ crow hop. 90% PEL. (FH)

2min at 170' w/ crow hop. 90% PEL. (BH)

2min at 170' w/ crow hop. 90% PEL. (FH)

2min at 140' w/ crow hop. 100% PEL. Unhooked

90sec at 100' w/ crow hop. 80% - 90% PEL (depending upon arm conditioning). Unhooked

PITCHING/VELOCITY COMPONENT. ALTERNATE INSIDE/OUTSIDE ON FB ONLY:

TUES, FRI (2min rest between distance ratings):

VELOCITY LOAD AND COMMAND TRAINING

10 throws w/ crow hop @ 125'. 100% PEL. (BH)

15 throws w/ crow hop @ 150'. 100% PEL. (BH)

10 throws w/ crow hop @ 100'. 100% PEL. Unhooked

25 pitch flat ground bullpen at 90% PEL. Pitches 1-10 (BH). Pitches 11-20 (FH). Pitches 21-25 (unhooked). All fastballs.

SUN (2min rest between distance ratings):

OFF SPEED PITCH DEVELOPMENT

2min at 90' w/ crow hop. 80% PEL. (BH)

2min at 90' w/ crow hop throwing CH. (3 breaking pitches to 3 FBs). 80% PEL. (BH)

2min at 70' w/ crow hop throwing breaking pitches (3 breaking pitches to 3 FBs). 80% PEL. (BH)

1min at 60' w/ pitching delivery throwing CH (alternate CH/FB). 80% PEL. (BH)

1min at 60' w/ pitching delivery throwing breaking pitches (alternate BB/FB) 80% PEL (BH)

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Mon - Sprint Interval

Tues - Agility Ladder

Wed - Distance

Thurs - Sprint Interval

Fri - Light Interval

Sat - Medium Distance

STRENGTH COMPONENT:

Description of strength circuits listed above.

Same as Week 5.

-WEEK 7 DAILY ROUTINE-

DELIVERY COMPONENT (BH). SAME SEQUENCING:

TUES, WED, FRI, SAT, SUN (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 1-3 @ 60' (described in videos). 8x per drill at 80% PEL.

LONG TOSS COMPONENT. THROW OPPOSITE ARM SIDE AT ALL TIMES:

TUES, FRI (90sec rest between distance ratings):

ARM SPEED ROM AND SCAP LOAD/UNLOAD TRAINING

90sec at 125' w/ crow hop. 80% PEL. (BH)

90sec at 150' w/ crow hop. 90% PEL. (FH)

2min at 180' w/ crow hop (on line with one bounce to target). 90% PEL. (BH)

3min at 180' w/ crow hop (on line with one bounce to target). 90% PEL (FH)

2min at 150' w/ crow hop. 90% PEL. Unhooked

1min at 100' w/ crow hop. 80% - 90% PEL (depending upon arm conditiong). Unhooked.

PITCHING/VELOCITY COMPONENT. ALTERNATE INSIDE/OUTSIDE ON FB ONLY:

WED, SAT (2min rest between distance ratings):

VELOCITY LOAD AND COMMAND TRAINING

10 throws w/ crow hop @ 125'. 100% PEL. (BH)

15 throws w/ crow hop @ 150'. 100% PEL (FH)

10 throws w/ crow hop @ 100'. 100% PEL. Unhooked.

16 throws w/ crow hop @ 90' alternating 2CH/2FB/2BB/2FB. (BH)

15 pitch bullpen off mound at 85% PEL. Pitches 1-10 (BH). Pitches 11-15 (unhooked). All fastballs.

SUN (Constant throwing):

EXTRA LIGHT FLUSH DAY WITH NO STRESS

5min of light throwing at 50 - 70% PEL. No off speeds and no harness. Get flush

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Tues - Sprint Intervals

Wed - Light Intervals

Thurs - Distance

Fri - Agility Ladders

Sat - Light Intervals

Sun - Medium Distance

STRENGTH COMPONENT:

Description of strength circuits listed above.

Tues - Circuit #5

Wed - Circuit #4

Fri - Circuit #1
Sat - Circuit #3

-WEEK 8 DAILY ROUTINE-

DELIVERY COMPONENT (BH). SAME SEQUENCING:

TUES, WED, FRI, SAT, SUN (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 4-6 @ 60' (described in videos). 8x per drill at 80% PEL.

LONG TOSS COMPONENT. ALTERNATE INSIDE/OUTSIDE:

Same as Week 7.

PITCHING/VELOCITY COMPONENT. ALTERNATE INSIDE/OUTSIDE ON FB ONLY:

Same as Week 7 except:

1. Bullpen is bumped to 25 pitches with off speeds mixed in (only throw CH). Alternate 3FB / 2CH.

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Same as Week 7.

STRENGTH COMPONENT:

Description of strength circuits listed above.

Same as Week 7.

-WEEK 9 DAILY ROUTINE-

DELIVERY COMPONENT (FH). SAME SEQUENCING:

TUES, WED, FRI, SAT, SUN (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 1-3 @ 60' (described in videos). 6x per drill at 80% PEL.

LONG TOSS COMPONENT (BH). ALTERNATE INSIDE/OUTSIDE UNLESS DENOTED:

TUES, FRI (90sec rest between distance ratings):

ARM SPEED ROM, SCAP LOAD/UNLOAD, AND COMMAND TRAINING

90sec at 125' w/ crow hop. 90% PEL. (BH)

90sec at 150' w/ crow hop. 90% PEL. (BH) Last 25sec unhooked.

90sec at 125' w/ crow hop. 90% PEL. Unhooked.

90sec at 90' w/ crow hop. 90% PEL. Mix in CH. (BH)

12 pitch flat at 60'. 90% PEL. 2FB/1BB intervals. (BH) Last 4 pitches unhooked.

25 pitch bullpen @ 90% PEL. (BH) Last 10 pitches unhooked.

5FB inside / 5FB outside / 3CH / 2FB inside / 3BB / 2FB outside / 2FB alternate / 1 CH / 1BB / 1FB.

PITCHING/VELOCITY COMPONENT. ALTERNATE INSIDE/OUTSIDE:

WED, SAT (2min rest between distance ratings):

VELOCITY FLUSH AND OFF SPEED PITCH DEVELOPMENT

2min at 100' w/ crow hop. 80% PEL. (FH)

1min at 90' w/ crow hop. 80% PEL. Unhooked.

2min at 60' working on BB. (FH)

SUN (2min rest between distance ratings):

MAX INTENT VELOCITY LOAD TRAINING

90sec at 125' w/ crow hop. 100% PEL. (FH)

2min at 175' w/ crow hop. 100% PEL. On a line w/ a bounce. (BH)

2min at 150' w/ crow hop. 100% PEL. On a line. (FH)

90sec at 125' w/ crow hop. 100% PEL. Unhooked

30sec at 80' w/ delivery. 80% PEL. Unhooked. Alternate inside/outside

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Tues - Light Interval

Wed - Sprint Interval

Thurs - Distance

Fri - Agility Ladders

Sat - Light Interval

Sun - Medium Distance

STRENGTH COMPONENT:

Description of strength circuit listed above.

Tues - Circuit #5

Wed - Circuit #4

Fri - Circuit #2

Sat - Circuit #3

Sun - Circuit #1

-WEEK 10 DAILY ROUTINE-

DELIVERY COMPONENT (FH). SAME SEQUENCING:

TUES, WED, FRI, SAT, SUN (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 4-6 @ 60' (described in videos). 6x per drill at 80% PEL.

LONG TOSS COMPONENT. ALTERNATE INSIDE/OUTSIDE ON FB ONLY:

90sec rest between distance ratings. Alternate inside/outside.

Same as Week 9. Bump bullpen up to 35 pitches.

PITCHING/VELOCITY COMPONENT. ALTERNATE INSIDE/OUTSIDE ON FB ONLY:

2min rest between sets. Alternate inside/outside.

Same as Week 9.

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Same as Week 9.

STRENGTH COMPONENT:

Description of strength circuit listed above.

Same as Week 9.

-WEEK 11 DAILY ROUTINE-

DELIVERY COMPONENT (BH). SAME SEQUENCING:

TUES, WED, FRI, SAT, SUN (60sec rest between distance ratings):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Drills 1-3 @ 60' (described in videos). 6x per drill at 80% PEL.

LONG TOSS COMPONENT. THROW TO OPPOSITE ARM SIDE UNLESS DENOTED:

Same as Week 10 except:

1. No flat ground bullpen.
2. Cut out 150' distance throwing.
3. Bump bullpen up to 45 pitches.
4. Lower long toss throwing to 60sec increments w/ 60sec rest in between exercises.

PITCHING/VELOCITY COMPONENT. THROW TO OPPOSITE ARM SIDE UNLESS DENOTED:

WED, SAT (2min rest between distance ratings):

VELOCITY FLUSH AND OFF SPEED PITCH DEVELOPMENT

2min at 100' w/ crow hop. 80% PEL. (BH)

1min at 90' w/ crow hop. 80% PEL. Unhooked

2min at 60' working BB. 80% PEL. (FH)

SUN (2min rest between distance ratings):

MAX INTENT VELOCITY LOAD TRAINING

90sec at 125' w/ crow hop. 100% PEL. (BH)

2min at 175' w/ crow hop. 100% PEL on a line with a bounce. (FH)

2min at 150' w/ crow hop. 90% PEL on a line (no bounce). BH

90sec at 125' w/ crow hop. Work in CH. 100% PEL. Unhooked

30sec at 80' w/ delivery. Work BB/FB sequence (alternating 2FB / 1BB). 90% PEL. Unhooked.

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Same as Week 10.

STRENGTH COMPONENT:

Description of strength circuit listed above.

Same as Week 7.

-WEEK 12 DAILY ROUTINE-

DELIVERY COMPONENT (BH). SAME SEQUENCING:

TUES, WED, FRI, SAT, SUN (60sec rest between drills):

MOVEMENT / MECHANICAL EFFICIENCY TRAINING

Rest 30sec between drills.

Drills 4-6 @ 60' (described in videos). 8x per drill at 80% PEL.

LONG TOSS COMPONENT. THROW TO OPPOSITE ARM SIDE UNLESS DENOTED:

Same as Week 11 except:

1. No flat ground bullpen.
2. Cut out 150' distance throwing.
3. Bump bullpen up to 50 pitches.
4. Lower long toss throwing to 30sec increments w/ 30sec rest in between exercises.

PITCHING/VELOCITY COMPONENT. THROW TO OPPOSITE ARM SIDE UNLESS DENOTED:

WED, SAT (2min rest between distance ratings):

VELOCITY FLUSH AND OFF SPEED PITCH DEVELOPMENT

2min at 90' w/ crow hop. 80% PEL. (BH)

1min at 80' w/ crow hop. 80% PEL. Unhooked

2min at 60' working BB and CH. 80% PEL. Unhooked

SUN (2min rest between distance ratings):

MAX INTENT VELOCITY LOAD TRAINING

90sec at 125' w/ crow hop. 90% PEL. (BH)

2min at 150' w/ crow hop. 100% PEL on a line. (FH)

1min at 150' w/ crow hop. 100% on a line. Unhooked

1min at 100' w/ crow hop. Work in CH. 100% PEL. Unhooked

90sec at 60' w/ delivery. Work all pitches. 80% PEL. Unhooked for last 30sec

RUNNING/RECOVERY COMPONENT:

Running plans listed above. Do arm care/recovery after throwing.

Same as Week 11.

STRENGTH COMPONENT:

Description of strength circuits listed above.

Same as Week 7.

**Developed from data and on field coaching and playing expertise gathered from MLB pitchers Jim Parque and Mike Sirotko, NCAA pitching coaches Sean Taunt and BA Garner, Big League Edge Performance Baseball, and 2 university biomechanical and kinesiology departments. Over*

16 different independent studies and over 5000 pitchers (youth to MLB) were tested throughout a 5 year period.