BALLISTIC TRAINING FOR PITCHERS
A GET STARTED GUIDE FOR SMART WEIGHTED BALL PROGRAMMING
Book Information and Disclaimers

This eBook is distributed freely! If you paid a single dollar for this, please get a refund – and tell us (support@drivelinebaseball.com) where you purchased it.

The book should be undertaken only by physically mature athletes who are medically cleared to throw.

Consult a physician before starting any new workout regimen. This information is presented as a template only and not a specific recommendation for any individual athlete.

Driveline Baseball will not be held responsible for injuries that happen as a result of following this or any other workout program. By voluntarily following this program, you agree to hold both Driveline Baseball, it’s owners and employees harmless.

All athletes should seek medical advice before beginning this workout program. If you are under the age of 18, seek parental or guardian consent before starting this program.
Who Should Do This Program? Who Should Not?

This program is designed for biologically mature high school aged pitchers and up. As a general rule of thumb, we recommend the program in this book for 14 year olds who have a solid base of throwing and sound mechanics.

It is also recommended to put athletes through a detailed Functional Movement Screen to detect any functional deficiencies and asymmetries the athlete may have.

Do Not Do This Program If...

- You are younger than biologically 14 or prepubescent (use the Dynamic Pitcher instead)
- You are not medically cleared to pitch (use your PT program or give them our return to throwing program)

Importance of Screening

If you have an athlete with extreme deficiencies, we recommend addressing these with mobility and stability exercises and then re-testing weekly. If you do not know whether or not you or your athletes possess mobility deficits, investing in a comprehensive screen from a physical therapist is an inexpensive way to learn. Consider it an investment in the length of your career.

Arm Injuries

Any athlete that has recently undergone a significant throwing arm injury needs to first finish any prescribed physical therapy and complete a physical therapist’s throwing program all before starting this program.

You must be medically cleared to pitch.

We have a free 31 day Return to Throwing Program to address any underlying arm fitness issues post-PT which you can bring to your PT or consulting physician for guidance and clearance.

**DO NOT SKIP A PROGRAM CREATED BY YOUR DOCTOR OR PHYSICAL THERAPIST IN FAVOR OF STARTING EITHER OUR RETURN TO THROWING PROGRAM OR THIS ON-RAMPING PROGRAM.**
How to Train Ballistically….Badly

If a little is great, and a lot is better, then way too much is just about right!

-Mae West

The overwhelming mistake we see when coaches and athletes encounter velocity programs is the tendency to do too much too fast.

Driveline’s programming works because it is a blend of work AND recovery. You don’t get one without the other.

Common Mistakes with Velocity Training and This Program

Doing this on-ramp program in addition to other velocity programs.

This is too much work. We wrote our program to be done by itself. Other coaches programs are to be done by themselves.

Mixing them doesn’t give you the best of both worlds. It gives you the worst.

You will be overtired and unrecovered. You are massively increasing your risk of both seeing a decline in velocity and injury.

Doing this on-ramp program in addition to playing games.

If you are playing games, stop at Week 2 and repeat Weeks 1 and 2 until the season is over.

There are three states for a pitcher: competing, training and resting. Mixing any of the three together likely lessens your results.

If you are regularly throwing in games and want to train for velocity, you are risking that your in-game performance suffers, your injury risk increases, or both.

Getting to the season and realizing you (or your team) needs more velocity is a mistake in planning committed six months prior.

Our best advice: play out the season and come train with us when it is over.

Or stop playing and start training.

Doing this on-ramp without warming up.

Warm Up! Recover!

The “work” is not done when you are throwing the ball. The real work is done on your rest days.
There is a specific reason warm-up and recovery drills are over 50% of the program time. They matter.

Some players and coaches will see these drills and just add them in after some stretching and light catch play, and finish up practice with no arm-specific recovery.

Again, do not do this.

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Case Study: Unnamed Team Fails at Weighted Ball Training

We know of a high-level baseball team that rolled out a weighted ball program with some of its pitchers.

After several weeks, 60% of the pitchers who participated had some form of arm injury.

Why?

A significant contributing factor was program design.

**Anonymous Team Program 3x/Week**

Warm-up: Catch Play

Throwing Focus: 20-30 weighted ball running throws

Recovery: None

Minimal warm-up, no recovery, only high-output throwing. Again, we can’t stress enough that this is not the correct approach.

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If you want to have the most success with the program, follow these guidelines:

1. *Do the program as it is laid out.* Find 8 weeks to on-ramp yourself well (or two weeks--and stop at Week 2) if you are starting your season.

   If you find yourself panicking because you NEED VELOCITY FAST, there are hundreds of people on the internet who will let you buy something to scratch that itch.

   Your actual results may vary.

2. *Do the program exclusively.* Resist the urge to mix and match. Resist the urge to “do more” simply because you feel great.

   At the end of 8 weeks, you want your arm to feel great and to feel like you are ready for more work.
Introduction: Why Train Ballistically?

Weighted balls as a training tool are controversial but largely misunderstood. Most of the associated fear stems from bad program design or implementation and a misunderstanding of stress on a pitcher’s arm.

At Driveline, we use overweight and underweight implements to both improve an athlete’s efficiency of movement and their ability to produce and accept force.

But, if you’re new to weighted balls, we understand the associated fears about getting started.

The purpose of this Get Started guide is two-fold:

1. Create a simple, actionable path from untrained athlete to on-ramped and fit athlete, a how-to-start guide.
2. Clearly explain the logic and methodology behind the program’s creation so coaches and athletes can make an informed choice about using it.

The Role of Stress

For the properly prepared athlete, stress is a benefit. It creates positive tissue adaptations through the mechanism of supercompensation—stressed tissue (given sufficient but not too much recovery time) will add capacity, increasing its overall fitness.

For an untrained athlete (or one who is over-tired or has not recovered), stress is a negative, leading the athlete on a downward spiral to poor performance and risk of injury.
More About Stress: Progressing Loads

A pitcher’s body will adapt to the specific stressors/stimuli being applied to it – if a stressor stays exactly the same, week after week, month after month, adaptation comes to a halt. This makes intuitive sense – you wouldn’t lift the same weight for the same reps every week and expect to keep getting stronger without needing to add weight or reps.

Any thrown ball is a weighted ball. A 5-ounce baseball is not optimized to maximize throwing velocity and minimize injury risk.

Five ounces is an accident of history. We know of no weight of baseball that optimizes the performance/injury risk curve for all athletes.

Just like in the weight room, varying the weight can build arm fitness in athletes.

**Are weighted balls dangerous?**

What shines through in the research is that throwing underweight or lighter balls presents a higher injury risk.

For that reason, you will notice that the bulk of the programming here is “overload”—heavier than 5 ounces.

However, despite the increased injury risk, underload throws also have a positive impact for arm speed development.

That risk associated with underload tools needs to be evaluated in the context of the arm speed it also develops.

We use underweight balls in our programs, but introduce them later in the programming and in small doses.
Review of Available Research

Here is a list of different studies of training methods and their effects on throwing velocity. You will notice that for a population of “novice” trainees, high school and college-age, both lifting (isotonic) and overload/underload training increased throwing velocity.

<table>
<thead>
<tr>
<th>Study</th>
<th>Subjects</th>
<th>Training method</th>
<th>Strength change</th>
<th>Velocity change</th>
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* General: traditional isotonic resistance training exercises that increase overall maximum strength of the muscles.
† Special: explosive resistance training exercises for muscular power development.
‡ Specific: resistance training exercises that attempt to mimic the high-velocity ballistic throwing motion.

Dr. Coop Derene is the foremost expert in this field and has published a number of research papers that indicate that weighted baseball training creates a significant increase in velocity for those training with underweighted and overweighted baseballs.

His most popular paper is *Effects of Under and Overweighted Implement Training on Pitching Velocity*, which concludes that training with either underweighted (4 oz) or overweighted (6 oz) baseballs improved pitching velocity when compared to simply throwing normal baseballs.

More throwing research is available at our [Pitching Research](#) page.

Read more about these concepts in our blog:

[WEIGHTED BASEBALLS, SAFETY AND CONSEQUENCES](#)

[HACKING YOUR ARM ACTION: A HIDDEN POWER OF OVERLOAD TRAINING](#)
How This Ballistic Training Program Works

This 8 Week Program is for coaches and athletes new to our training methods to implement ballistic programming with weighted implements from 3 ounces to 2000 g.

The program relies on constraint training to ingrain certain movement patterns beneficial to healthy, high-velocity pitchers. And the volume of the program helps athletes learn those movements without over-intervention.

*Varying the weight of the implement thrown can improve a pitcher's mechanics by reinforcing better movements in a pitcher's mind. Training this way can also improve a pitcher's arm fitness.*

A more efficient arm action plus the fitness to sustainably produce and accept force while throwing leads to an increase in velocity and accuracy.

**Is this a throwing program or a pitching program?**

This is the start of your pitching program. The reason we begin with throwing is that it is easier to learn better movements in increasingly constrained movements (drills).

The pitching motion itself is too complex to cue and teach alone.

In the end, it transfers. But there are 4 intermediate steps.

*Step 1: Arm Strength and Mechanical Patterning*

This is you right now. Building better throwing patterns with overload implements and training the arm fitness levels to prepare for either off-season velocity work or in-season maintenance and durability program.

*Step 2: Throwing Range of Motion (ROM)*

Elite pitchers have much higher external rotation ROM in the shoulder than mediocre pitchers (source: ASMI). Overload weighted baseballs and PlyoCare balls help gently stretch the shoulder into increased range of motion while *simultaneously building force generation capacity at those ranges of motion* – this is a critical point that is often overlooked.

This is one of the mechanisms going on during PlyoCare work and weighted ball throwing.

*Step 3: Improving Rate of Force Development (ROFD)*

This is basically the rate at which a pitcher can produce force. This is achieved through the use of underweight baseballs, the pitcher gets the stimulus of throwing a 3 or 4 oz. baseball much faster than he would throw a regulation weight 5 oz. baseball. He not only consciously learns how to develop intent, but subconsciously improves ROFD capacity in both the underlying musculature as well as the central nervous system (CNS).

This is another of the mechanisms going on during PlyoCare work and weighted ball throwing.

*Step 4: Reorganizing Proprioception for the Mound*

Now that general arm fitness has improved, range of motion has increased, and rate of force development has gone through the roof, it’s all about transferring it to a more specific preparatory exercise chain, the mound.
Training Carry-Over: Will I lose command?

Our data shows that command DOES tend to get better after a ballistic training program that heavily features recovery modalities, but the variance is quite large.

*Following up this program with mound-specific blending work to prep for the season is the most-effective way to get tangible results from this starter program.*

The mechanism at play over the long haul is backchaining. Building a base of fitness and learning a more efficient throwing pattern backchains into your pitching motion because pitching is a more complex motion than simply throwing.

The very nature of backchaining demands that the low-skill high-output training methods are put before the high-skill low-output training concepts!

*Simply put we are learning to throw before learning to pitch. Just like you would learn to walk before learning to run.*

A misconception is that maximum intensity throwing worsens command, probably because some academies and training facilities do not care where the ball goes and insist that high intensity training alone will yield command benefits.

We do care where the ball goes.

Read more about these concepts in our blog:

[WEIGHTED BASEBALLS VS. PLYOCARE BALLS – WHAT’S THE DIFFERENCE?](#)

[CROW-HOP WEIGHTED BASEBALL THROWS FOR VELOCITY DEVELOPMENT](#)

[HOW TO TRANSFER WEIGHTED BASEBALL VELOCITY GAINS TO THE MOUND](#)
Getting Started: Assessing the Athlete

Performing a thorough movement screen is something that should be done before and during any throwing program. These screens should be done by qualified physical therapists and trainers throughout the course of an athlete’s training. However, quick assessments can be done in order to ensure no gross deficiencies exist in the throwing athlete.

Directions:
- If an athlete fails a certain category, follow the prescription for that movement.
- Re-test failed athletes every fifth day in the category that they failed.
- If severe deficiencies remain after 2-3 re-tests, consult a team doctor or physical therapist.
- If an athlete fails more than 2 categories, they are likely not ready to begin high output training and should begin a maintenance load of corrective exercises/movement patterns as prescribed by a team doctor or physical therapist.

*If an athlete fails any of these tests, have them perform the specific correctives before beginning the on-ramp program.*

**Squat Test**

**Description:** The athlete must be able to squat well below parallel pain and discomfort free. If they cannot pass it is a red flag for tightness in the ankle, calf, hips, hamstrings and/or quads.

**How to Perform:** Place feet approximately shoulder width and point the toes slightly outward, squat between the legs with neutral neck posture and a slight 45 degree angle of the back.

**Pass:** The athlete’s upper leg is well below parallel to the ground they are free of pain and discomfort and can hold this position for 5-10 seconds without problem.

**Fail:** The athlete cannot get below parallel or they can but with extreme discomfort and/or pain. Another sign of failing would be they can get below parallel but come to a hitch at or around parallel and have to push down through it.

**Movement Prescription:** Perform the following DAILY as a part of the athlete’s warm up

- Foam Roll and Lax Ball Roll as a part of warm up and recovery (calves, hamstrings, quads, IT band, hip flexors, groin) - 10 seconds per body part
- Seated 90/90 stretch - 3 sets of 15 seconds per leg
- Cradle Walks - 2 sets of 10 each leg
- Wall Quad Stretch - 2 sets of 15 seconds each leg
- Ichiro Stretch - 3 sets of 15 seconds
- Cobra Pose - 3 sets of 15 seconds
- Bodyweight Box Squats - 3 sets of 10
**Shoulder Extension**

**Description:** This test will disclose information about the upper back and upward rotation of the scapulae.

**How to Perform:** Have the athlete lay on his back with legs together and arms down by the side, raise the hands over head and try to touch thumbs to the ground.

**Pass:** The athlete can touch his thumbs to the ground without any arching of the lumbar spine and/or flexion of the elbows.

**Fail:** The athlete has to arch the lumbar spine, flexes the elbows or gets to a certain point overhead and has to “bounce” the rest of the way to get overhead.

**Prescription for failing:**

- Foam Roll and Lax Ball Roll as a part of warm up and recovery (Thoracic spine, lat, posterior shoulder, anterior shoulder, pec major, pec minor) - 10 seconds per body part
- External Rotation Bands Holds - 3 sets of 10 per arm
- Cobra Pose - 3 sets of 15 seconds
- Band Pullapart Series - 10 reps per exercise
- Cuban Press - 3 sets of 10 with 10 lb. wrist weights (warm up and recovery)

**Glenohumeral Internal Rotation Deficit (GIRD)**

**Description:** This test should be performed by either a qualified physical therapist, kinesiologist or athlete trainer. GIRD is defined as the difference in internal rotation (IR) between each shoulder. Loss of IR in the throwing shoulder is completely normal for the baseball pitcher and is typically accompanied with a gain of external rotation (ER).

*DO NOT stretch the throwing shoulder into External Rotation.*

**How to Perform:** Have the athlete lay on a table and gently stretch each arm into external rotation and then again into internal rotation. Make sure that arm is completely limp with no resistance when being stretched. Repeat on each arm.

**Pass:** The athlete’s throwing dominant and non throwing arms show exact [or similar] total degrees IR and ER with no discomfort when being stretched into those positions.

**Fail:** The athlete’s throwing dominant and non throwing arms show similar total degrees of IR and ER with discomfort or the arms’ IR and ER show vast differences compared to the non-throwing arm.

**Prescription for failing:**

- Foam Roll and Lax Ball Roll as a part of warm up and recovery (Thoracic spine, lat, posterior shoulder, anterior shoulder, pec major, pec minor) - 10 seconds per body part
- Cross-Body Stretch - 3 sets of 15 seconds each side
- Modified Sleeper Stretch - 3 sets of 15 seconds
- PlyoCare Upward Tosses - 3 sets of 10 with 2 lb ball
- PlyoCare Rebounders - 2 sets of 10 with 1 lb and 2 lb ball
Program Overview – 8 Weeks

The 8 Week On-Ramping Program is broken down into four (4) two week phases, it lasts 8 weeks overall and is designed to be done consecutively.

The program contains six different components:

**Warm-up**: We recommend taking the athlete through a full dynamic warm up as well as the Jaeger Sports J-Band routine.

**PlyoCare Program**: Up to five different constraint drills using our Driveline PlyoCare Balls.

**Throwing Program**: We encourage our athletes to follow the long toss protocols set forth by Alan Jaeger, including extension and compression phases. We highly endorse Alan’s teaching methods on long toss! Read more about the facts on long toss [here](#). His Year-Round Throwing Manual is excellent and a good way to periodize long toss.

**Weighted Ball Program**: Only done in weeks 5-8 using our Driveline Weighted Baseballs. Done in a run and gun or pulldown fashion. Be sure to record their top speed with each weight.

**Practice**: This obviously varies on the time of the year you are on-ramping the athlete, if this program is being done during a fall ball season – the athlete can go through normal practice activity (same as spring/in-season).

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*Adjusting for Bullpens*

Schedule a bullpen for the same day weighted balls are scheduled to be thrown, but do not throw weighted balls and reduce rate of perceived exertion (RPE) on PlyoCare throws for the day after he throws (down to approx. 60-70%).

If this program is being done in the offseason, the “practice” load should be substituted for weight training.

**Recovery**: The most important piece to this program, proper recovery protocols are to be executed daily and with the same emphasis the athlete and coach place in throwing PlyoCare and weighted baseballs.

You have to do the boring stuff with the same intent you have when throwing hard, or else you won’t sustain it!
Drill Overview and Video Series

Jaeger Sports J-Band Routine
We highly recommend Alan Jaeger’s J-Band routine, and use the exclusively in our facility. You can download the exercise manual here. We recommend 10 reps of each exercise.

Jaeger Sports Long Toss Routine
Jaeger Sports Year-Round Throwing manual gives great, actionable advice on how to periodize long toss between off-season, in-season and blend-to-season periods. When the program denotes “Extension” or “Extension/Compression”, we mean specific to the time of year you are beginning the program.

Reverse Throws
● This drill trains the posterior shoulder to be able to accept the force produced by higher velocities. As well as some thoracic spine mobility work.
● The athlete kneels onto throwing side knee and starts with torso stacked, create some momentum forward and drive shoulder and elbow back through the natural arm slot.
● Ball should hit the wall at head height, directly behind the athlete
● Video

Pivot Pickoff Throws
● This drill improves forward rotation in the delivery, medial forearm strength and pronation speed/timing.
● Start with throwing side perpendicular to target, counter rotate so torso now faces the target and hang throwing hand back in supinated position. Before throwing, fold glove arm down and then drive the wrist over the elbow.
● Ball should hit the wall at head height
● Video

Roll-In Throws
● Stand facing the target with ball in throwing hand at waist level, take a walking step with throwing side leg and drive powerfully into foot strike - be sure to minimize hip rotation and keep toes point to target as walking steps are taken.
● Drive throwing arm directly back into scapular retraction, no arm swing.
● As soon as stride foot contact is made, fold glove arm down and deliver ball to target.
● Rotate around a braced (not flexed) front leg.
● Ball should hit the wall at head height
● Video

Rocker Throws
● Start this drill with feet near stride length and front foot slightly closed off from target. Create momentum by rocking forward and then back, and then throw ball toward target - finish by bring back leg through.
● Be sure to rotate around a braced (not flexed) front leg.
● Ball should hit the wall at head height
● Video
Walking Windups
- Facing your target with ball in your throwing hand, take a step forward and rotate your foot as if to use the rubber to throw off a mound. Bring your leg up, stride out and throw the ball.
- Generate momentum toward the target, try not to pause at balance point
- Ball should hit the wall at head height
- Video

Upward Tosses
- Holding the ball in your throwing hand with arm out to the side, throw the ball up and catch it as it begins to fall.
- Let it drop before catching it
- Video

Side Lying ER Tosses
- Laying on the ground on your glove side and holding the ball in your throwing hand with your throwing elbow resting on your ribcage, throw the ball up and catch it as it begins to fall.
- Let it drop before catching it
- Video

Band Pullaparts
- Using a J-Band, either both strands or one depending on the athlete’s strength levels or desired resistance, the band apart with straight arms. Exercises are behind the head (elbows can flex for this), two diagonals and straight across the chest.
- Video

No Money Drill
- Using a J-Band, either both strands or one depending on the athlete’s strength levels or desired resistance, tuck elbows to rib cage forming two 90 degree angles - and with hands supinated, pull the bands across the midsection.
- Video

Weighted Ball Compression Throws
- Simple “Run and Gun” throw into a net from 20-40 feet away as hard as possible – intent, intent, intent to throw hard!
- Throwing should be one-way only and not to a partner. Nobody wants to catch a max-effort 7-ounce ball in the palm.
- Video
Equipment List

To complete the 8 Week On-Ramping Program, you will need the following equipment.

A weighted baseball set that has these weights in them:

- 3 oz. baseball
- 4 oz. baseball
- 6 oz. baseball
- 7 oz. baseball
- 9 oz. baseball
- 11 oz. baseball

A set of mini-med balls with the following weights:

- 2 kg mini-med ball
- 1 kg mini-med ball
- 450g mini-med ball
- 225g mini-med ball
- 150g mini-med ball
- 100g mini-med ball

Plus a bucket of baseballs to complete the long toss / high-intensity throwing portion of this program with regulation weight (5 oz) baseballs.

Ideally you’d have three dozen (36) baseballs, but you can make do with as few as six (6) if you don’t mind running around and picking them up repeatedly!

For long toss, we like and use the year-round protocols Alan Jaeger outlined in his Year-Round Throwing manual.

Last, but not least, some resistance bands / surgical tubing to do a series of arm exercises.

Believe it or not, we sell all of this equipment!
The Driveline Velocity and Arm Care Starter Kit is the ideal package to complete this program. It comes with a full set of PlyoCare Balls, Elite Weighted Baseballs, and a Jaeger Sports J-Band PLUS Alan’s Year Round Throwing Manual. If you already have some of the equipment and don’t need the full package, you can get the equipment piecemeal by going to the Driveline Baseball Online Shop:

- Driveline PlyoCare Balls
- Driveline Elite Weighted Baseballs
- Jaeger Sports J-Bands
- Alan Jaeger Year Round Throwing

What are the Differences Between the Balls?

PlyoCare balls are our throw-every-day balls, meant for submaximal throwing and for constraint training, as well as general arm care.

Weighted baseballs are almost exclusively meant for maximal intent throwing to build velocity or to affect changes at near 100% intensity for other aspects, like command or ball spin axis alignment.
**Importance of Recovery**

Adding more work doesn't make a good program better. Many athletes starting out think “If throwing weighted balls once a week is good, doing them every day will be 7x better!”

This is a flawed approach and neglects how important recovery is.

You might make yourself over trained or put yourself at increased risk of an injury.

Rest days are rest days. Don't throw.

Below is a basic breakdown of training activities by time spent per week during the off-season for an on-boarded athlete in our MaxVelo program:

*Warm-Up: 25-35%*

*Throwing Drills: 15-25%*

*Weighted Ball Pulldowns: 2.5-7.5%*

*Recovery: 30-50%*

**55-85% of time is spent on warm-up and recovery.**

If you want to see benefits from high-output training of any kind (lifting, throwing, etc.) you have to be willing to put in time doing the boring prep work.

Read more about these concepts in our blog:

[DEMONIZING WEIGHTED BALLS – A REVIEW OF CRITICISMS](#)
**Bonus: Getting the most out of the Program**

Beyond what we've outlined here, executing a few extra-curricular activities can help you maximize your 8-week experience:

1. Track your workouts. High compliance has shown itself to be the #1 separator for great results in our facility across a lot of different variables.
2. Sleep. It is anabolic. 9 hours a day would be ideal for most athletes--if you are under 17, try for 10.
3. Eat. We have yet to encounter a novice athlete who was eating enough. Use MyFitnessPal to track your calories. A rule of thumb is 20-25 cal/lb of bodyweight. Consult a nutrition expert for a breakdown of macros or more tailored advice.
4. Lift weights. For novice lifters (this is most anyone who hasn't been lifting heavy for two years), a simple program like Starting Strength will work. When lifting, avoid lifting right before throwing work.
Weeks 9 and Beyond: What Do I Do When I’m Done?

This program is designed as an on-ramp, gearing the athlete up and getting them ready for either more aggressive ballistic weighted ball training and/or an in-season maintenance program.

Coaches
Both of these programs and many others come standard with the online content available when you purchase our Hacking the Kinetic Chain training system. Hacking the Kinetic Chain contains a huge video library and is written so that you can teach yourself how to get more out of your current pitchers. Think of it as another tool in the toolbelt.

Athletes
Completing this program means you are fully on-ramped and ready for more advanced training. You can train at Driveline through our MaxVelo program or you can start training remotely. We have options to fit most any athlete, so get in touch.
Conclusion

Thank you for downloading and reading this program.

This program can be started in the fall, winter, spring or summer – assuming your athletes are also getting what they need in terms of rest or time off.

For instance, if one of your pitchers throws a total of 100 plus innings in spring and summer combined – we do recommend they rest for 2-4 weeks before beginning this program in the fall.

Coaches, share this program with your colleagues or other coaches in your league, we just ask that you send them the link to our Free Coaches Starter Kit so that can also check out the rest of our site and the 100+ free articles on our blog.

Athletes, come train with us!

Feel free to email support@drivelinebaseball.com with questions and one of our team members will be in touch with you as fast as possible!

Thank you for reading,

Kyle and the Driveline Team
Appendix:
8 Week On-Ramping Program Explanations
Purpose of Program
The On-Ramp program is designed for an athlete and coach new to ballistic training with weighted balls. Its goal is to prepare the athlete for more extensive work.
Consult our eBook for additional information

All exercises are meant to be done in LISTED ORDER for pre and post-throwing purposes, except alternating where listed.
If performing this program during the season, repeat Weeks 1 and 2.

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Assess Athlete</td>
<td>Week 1/2</td>
<td>N/A</td>
<td>Week 1/2</td>
<td>N/A</td>
<td>Week 1/2</td>
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<tr>
<td>Week 2</td>
<td>N/A</td>
<td>Week 1/2</td>
<td>N/A</td>
<td>Week 1/2</td>
<td>N/A</td>
<td>Week 1/2</td>
<td>N/A</td>
</tr>
<tr>
<td>Week 3</td>
<td>Week 3/4 Regular</td>
<td>Assess Athlete</td>
<td>Week 3/4 Regular</td>
<td>N/A</td>
<td>Week 3/4 Regular</td>
<td>N/A</td>
<td>Week 3/4 Velocity</td>
</tr>
<tr>
<td>Week 4</td>
<td>Week 3/4 Regular</td>
<td>N/A</td>
<td>Week 3/4 Regular</td>
<td>N/A</td>
<td>Week 3/4 Regular</td>
<td>N/A</td>
<td>Week 3/4 Velocity</td>
</tr>
<tr>
<td>Week 5</td>
<td>Week 5/6 Regular</td>
<td>Assess Athlete</td>
<td>Week 5/6 Regular</td>
<td>N/A</td>
<td>Week 5/6 Regular</td>
<td>N/A</td>
<td>Week 5/6 Velocity</td>
</tr>
<tr>
<td>Week 6</td>
<td>Week 5/6 Regular</td>
<td>N/A</td>
<td>Week 5/6 Regular</td>
<td>N/A</td>
<td>Week 5/6 Regular</td>
<td>N/A</td>
<td>Week 5/6 Velocity</td>
</tr>
<tr>
<td>Week 7</td>
<td>Week 7/8 Regular</td>
<td>Assess Athlete</td>
<td>Week 7/8 Regular</td>
<td>N/A</td>
<td>Week 7/8 Regular</td>
<td>N/A</td>
<td>Week 7/8 Velocity</td>
</tr>
<tr>
<td>Week 8</td>
<td>Week 7/8 Regular</td>
<td>N/A</td>
<td>Week 7/8 Regular</td>
<td>N/A</td>
<td>Week 7/8 Regular</td>
<td>N/A</td>
<td>Week 7/8 Velocity</td>
</tr>
</tbody>
</table>
Weeks 1 and 2 (Basic On-Ramp)

Warm Up
- Full Dynamic Warm-up
- J-Band Routine 1 set of 10 reps
- Foam Roll 2-3 Passes per Body Part

PlyoCare Program
Perform the following drills, in order
- Reverse Throws 2 sets of 10 (1kg Green)
- Pivot Pickoffs 2 sets of 10 (1kg Green)

Throwing Program
Extension throwing. Play catch at below 80% exertion putting lots of loft under the ball. Use the 9oz and 11oz balls out to 90ft.

Practice
Go into normal practice activity from here; batting practice, team defense, PFP, etc.

Recovery
Post-Practice recovery methods as follows:
- J-Band Routine 1 set of 10 reps
- Upward Tosses 2 sets of 15 (2kg Black OR 1kg Green)
- Band Pullaparts 2 sets of 15
- No Money Drill 2 sets of 10
- Side Lying ER Tosses 2 sets of 10 (2kg Black or 1kg Green)

If you are in-season, do not move on to further weeks of programming. Continue this basic program until the season is over and you are ready to on-ramp to an off-season throwing program.
Weeks 3 and 4 (Regular)

Warm Up

- Full Dynamic Warm-up
- J-Band Routine 1 set of 10 reps
- Foam Roll 2-3 Passes per Body Part

PlyoCare Program

*Perform the following drills, in order*

- Reverse Throws 2 sets of 10 (2kg Black and 1kg Green)
- Pivot Pickoffs 2 sets of 10 (2kg Black and 1kg Green)
- Roll-In 1 set of 10 (450g Blue)

Throwing Program

Extension throwing. Play catch at below 80% exertion putting lots of loft under the ball. Use the 9oz and 11oz balls out to 90ft.

Once maximum distance is reached, begin the compression phase, putting throws on a line and moving in 5-10 feet with each throw.

Year-Round Throwing gives more specific recommendations on how to periodize this for different times of year (in-season, off-season, summer).

Practice

Go into normal practice activity from here; batting practice, team defense, PFP, etc.

Recovery

Post-Practice recovery methods as follows:

- J-Band Routine 1 set of 10 reps
- Upward Tosses 2 sets of 15 (2kg Black OR 1kg Green)
- Band Pullaparts 2 sets of 15
- No Money Drill 2 sets of 10
- Side Lying ER Tosses 2 sets of 10 (2kg Black or 1kg Green)
Weeks 3 and 4 (Velocity)

Warm Up

- Full Dynamic Warm-up
- J-Band Routine 1 set of 10 reps
- Foam Roll 2-3 Passes per Body Part

PlyoCare Program

Perform the following drills, in order

- Reverse Throws 2 sets of 10 (2kg Black and 1kg Green)
- Pivot Pickoffs 2 sets of 10 (2kg Black and 1kg Green)
- Roll-In 1 set of 10 (450g Blue)

Throwing Program

Extension throwing. Play catch at below 80% exertion putting lots of loft under the ball. Use the 9oz and 11oz balls out to 90ft.

Weighted Ball Program

Throw the following weights into a net, in order (video):

- 5oz 4 total throws (1st throw at 80%)
- 6oz 4 total throws (1st throw at 80%)
- 4oz 4 total throws (1st throw at 80%)

Practice

Go into normal practice activity from here; batting practice, team defense, PFP, etc.

Recovery

Post-Practice recovery methods as follows:

- J-Band Routine 1 set of 10 reps
- Upward Tosses 2 sets of 15 (2kg Black OR 1kg Green)
- Band Pullaparts 2 sets of 15
- No Money Drill 2 sets of 10
- Side Lying ER Tosses 2 sets of 10 (2kg Black or 1kg Green)
Weeks 5 and 6 (Regular)

Warm Up
- Full Dynamic Warm-up
- J-Band Routine 1 set of 10 reps
- Foam Roll 2-3 Passes per Body Part

PlyoCare Program
Perform the following drills, in order
- Reverse Throws 2 sets of 10 (2kg Black and 1kg Green)
- Pivot Pickoffs 2 sets of 10 (2kg Black and 1kg Green)
- Roll-In 2 set of 10 (1kg Green and 450g Blue)
- Rocker Throws 1 set of 4 (Blue, Red, Yellow, Grey - in order)
- Walking Windup 1 set of 4 (Blue, Red, Yellow, Grey - in order)

Throwing Program
Extension throwing. Play catch at below 80% exertion putting lots of loft under the ball. Use the 9oz and 11oz balls out to 90ft.
Once maximum distance is reached, begin the compression phase, putting throws on a line and moving in 5-10 feet with each throw.
Year-Round Throwing gives more specific recommendations on how to periodize this for different times of year (in-season, off-season, summer).

Practice
Go into normal practice activity from here; batting practice, team defense, PFP, etc.

Recovery
Post-Practice recovery methods as follows:
- J-Band Routine 1 set of 10 reps
- Upward Tosses 2 sets of 15 (2kg Black OR 1kg Green)
- Band Pullaparts 2 sets of 15
- No Money Drill 2 sets of 10
- Side Lying ER Tosses 2 sets of 10 (2kg Black or 1kg Green)
Weeks 5 and 6 (Velocity)

Warm Up
- Full Dynamic Warm-up
- J-Band Routine
- Foam Roll

PlyoCare Program
Perform the following drills, in order
- Reverse Throws
- Pivot Pickoffs
- Roll-In
- Rocker Throws
- Walking Windup

2 sets of 10 (2kg Black and 1kg Green)
1 set of 10 (2kg Black and 1kg Green)
1 set of 10 (1kg Green and 450g Blue)
1 set of 4 (Blue, Red, Yellow, Grey - in order)
1 set of 4 (Blue, Red, Yellow, Grey - in order)

Throwing Program
Extension throwing. Play catch at below 80% exertion putting lots of loft under the ball. Use the 9oz and 11oz balls out to 90ft.

Weighted Ball Program
Throw the following weights into a net, in order (video):
- 5oz
- 6oz
- 7oz
- 5oz
- 4oz

4 total throws (1st throw at 80%)
4 total throws (1st throw at 80%)
4 total throws (1st throw at 80%)
4 total throws (All at 100%)
4 total throws (1st throw at 80%)

Practice
Go into normal practice activity from here; batting practice, team defense, PFP, etc.

Recovery
Post-Practice recovery methods as follows:
- J-Band Routine
- Upward Tosses
- Band Pullaparts
- No Money Drill
- Side Lying ER Tosses

1 set of 10 reps
2 sets of 15 (2kg Black OR 1kg Green)
2 sets of 15
2 sets of 10
2 sets of 10 (2kg Black or 1kg Green)
Weeks 7 and 8 (Regular)

Warm Up

- Full Dynamic Warm-up
- J-Band Routine
- Foam Roll

1 set of 10 reps
2-3 Passes per Body Part

PlyoCare Program

Perform the following drills, in order

- Reverse Throws
- Pivot Pickoffs
- Roll-In
- Rocker Throws
- Walking Windup

2 sets of 10 (2kg Black and 1kg Green)
2 sets of 10 (2kg Black and 1kg Green)
2 set of 10 (1kg Green and 450g Blue)
3 set of 4 (Blue, Red, Yellow, Grey - in order)
3 set of 4 (Blue, Red, Yellow, Grey - in order)

Throwing Program

Extension throwing. Play catch at below 80% exertion putting lots of loft under the ball. Use the 9oz and 11oz balls out to 90ft.

Once maximum distance is reached, begin the compression phase, putting throws on a line and moving in 5-10 feet with each throw.

Year-Round Throwing gives more specific recommendations on how to periodize this for different times of year (in-season, off-season, summer).

Practice

Go into normal practice activity from here; batting practice, team defense, PFP, etc.

Recovery

Post-Practice recovery methods as follows:

- J-Band Routine
- Upward Tosses
- Band Pullaparts
- No Money Drill
- Side Lying ER Tosses

1 set of 10 reps
2 sets of 15 (2kg Black OR 1kg Green)
2 sets of 15
2 sets of 10
2 sets of 10 (2kg Black or 1kg Green)
Weeks 7 and 8 (Velocity)

Warm Up

- Full Dynamic Warm-up
- **J-Band Routine** 1 set of 10 reps
- Foam Roll 2-3 Passes per Body Part

PlyoCare Program

*Perform the following drills, in order*

- **Reverse Throws** 2 sets of 10 (2kg Black and 1kg Green)
- **Pivot Pickoffs** 1 sets of 10 (2kg Black and 1kg Green)
- **Roll-In** 1 set of 10 (1kg Green and 450g Blue)
- **Rocker Throws** 1 set of 4 (Blue, Red, Yellow, Grey - in order)
- **Walking Windup** 1 set of 4 (Blue, Red, Yellow, Grey - in order)

Throwing Program

Extension throwing. Play catch at below 80% exertion putting lots of loft under the ball. Use the 9oz and 11oz balls out to 90ft.

Weighted Ball Program

*Throw the following weights into a net, in order (video):*

- 5oz 4 total throws (1st throw at 80%) 4 total throws (1st throw at 80%)
- 6oz 4 total throws (1st throw at 80%)
- 7oz 4 total throws (1st throw at 80%)
- 5oz 4 total throws (All at 100%)
- 4oz 4 total throws (1st throw at 80%)
- 3oz 4 total throws (1st throw at 80%)

Practice

Go into normal practice activity from here; batting practice, team defense, PFP, etc.

Recovery

Post-Practice recovery methods as follows:

- **J-Band Routine** 1 set of 10 reps
- **Upward Tosses** 2 sets of 15 (2kg Black OR 1kg Green)
- **Band Pullaparts** 2 sets of 15
- **No Money Drill** 2 sets of 10
- **Side Lying ER Tosses** 2 sets of 10 (2kg Black or 1kg Green)