## PERFORMANCE PATHWAY

Arm Development and Throwing Program


## INTRODUCTION

The primary goal of BQ Throwing Program is to put the arm and body in the best position to be healthy and well conditioned. Research has found that small increase in loading the volume, intensity and duration of any conditioning program over a period of time can be safe while increasing performance. In the initial stages (On Ramp), a slow build up of volume over time is ideal for development and focusing the attention throughout the first few weeks on this 'volume' before distance and intensity is the preferred method.

However, following the on ramp stage we will want each healthy athlete to start increasing the distance as the body starts to become conditioned to the workload. By increasing the distance, it will result in naturally increase the intensity over time.

## PHILOSOPHY/PRINCIPLES

This program follows the Jaeger Sports Throwing Development principles and Driveline constraints drills (plyo care and wrist weights). The program is in line and combines their two phases 1. Stretch out and; 2. Pull Downs throughout the entire program. For further information about Jaeger Throwing Program please click on this link: https://www.jaegersports.com/jaeger-sports-off-season-throwing-program/

## Phase 1: Stretching Out Phase

You want the arm to open up gradually and you want to slowly move back away from your partner and throw with arc. This will open up the arm gradually and optimally.

## Phase 2: Pull Down Phase

Once you have completed the Stretching Out Phase, and completely opened up our arm, you are ready to implement the Pull Down phase and move back in towards your throwing partner.


## RETURN TO THROW

After a period of no throwing (either from an injury or just from a break) it's important to progress both the volume and intensity of throwing gradually to prevent the onset of further injury. A progressive throwing program should be included as part of the rehabilitation process to condition the athlete for a 'normal' volume of work.

The purpose of the following throwing program is to progress an athlete from a state of 'no-throwing' to that of normal training. The athlete will be at a standard to participate and tolerate an appropriate work load once all seven (7) levels are completed.

## CONSIDERATIONS

- Must complete one level before progressing to the next
- No time limit per session
- Athlete must remain pain free
- Throwing days are separated with at least one (1) rest day
- Returning form injury, you must be guided by medical professional
- If an athlete experiences pain, then an extra day's recovery is highly recommended
- If an athlete does not complete a level, their next session resumes at that level
- If experiencing pain is a regular occurrence then it is highly recommend you seek medical advice


## LITTLE LEAGUE AND JUNIOR LEAGUE PLAYERS

You can safely alter this program based on ability with the following options:

- Return to Throw Program - up to Level 6
- Consider $120 f t$ as your long toss (stretching out phase) distance. E.g. replace the $120 \mathrm{ft}(2 \mathrm{~min})$ throws with $120 \mathrm{ft}+(x$ mins $)$, resulting in reducing the total for each throwing session by 2 mins.



## J-BAND™ ROUTINE

Pathway Programs follow the J-Band ${ }^{\text {™ }}$ routine prior to any throw program. Ensure that you complete a suitable warm up prior to any throwing program. Coupled with a thorough warm up The J-Band ${ }^{\top M}$ exercise routine has been found to be a successful arm preparation, development and recovery program. Refer to Baseball Queensland Athlete Development Handbook for more detail

## 1: Over-the-head

Forearm Extensions

- BE SURE to place clip so it is not in alignment with head
- Get in lunge position with front knee over front heel at right angle.
- Elbows stay stationary
- Palms extend forward

2: Side Extensions

- BE SURE to place clip so it is not in alignment with head, $\mathcal{\delta}$ that there is lag in the J-Band
- Front knee over front heel at right angle
- Lengthen (not round) the side
- Extend from back hip through fingertips


Step 1


Step 2


Step 2

4: Forward Flies

- Clip at chest height
- Slightly bent elbows at chest height
- Bring palms toward each other


## 5: Reverse Flies

- Clip at mid-back height
- Same as Forward Flies in reverse direction
- Palms move away from each other
- Bend knees; keep chin over toes and head still

Step 2


Step 1

Step 1


Step 2


3: Diagonal Extensions

- Clip at mid-back height
- Front knee over front heel at right angle
- Extend from back hip diagonally through fingertips



## BAND ROUTINE cont.

6: Internal Rotation

- Clip at hip height
- Elbow on hip
- Arm at right angle
- Place o-hand under armpit
- Maintain level shoulders
- Rotate arm towards opposite hip


## 7: External Rotation

- Clip at hip height
- Arm at right angle
- Same as Internal Rotation in opposite direction
- Opposite hand on outside of elbow to stabilize
- Maintain level shoulders


## 8: Elevated Internal

Rotation

- Clip at shoulder height
- Arm at right angle
- Throwing elbow stabilized perpendicular to shoulder at shoulder height and in line with silver clip


## 8: Elevated Internal

Rotation (Alternative)

- Clip at shoulder height
- Have chest facing away from fence
- Have throwing elbow in alignment with clip at shoulder height \& maintain right angle (wrist over elbow)
- Keep elbow as stable as possible

Step 1


Step 1


Step 1


Step 1


Step 2


Step 2


Step 2


Step 2


## 9: Elevated External

 Rotation- Clip at shoulder height
- Same as Internal Rotation in opposite direction


## 10: Reverse Throwing

- Clip at waist height
- Front shoulder facing clip
- Take arm in reverse direction maintaining the same arm action and arm slot of forward throwing motion
- Make a complete arm circle

Step 1


Step 1


## 11: Forward Throwing

 MotionStep 1



Step 2


Step 2

- Clip at waist height
- Place throwing fingers through wrist cuff $\&$ in alignment with clip
- Keep clip and tubing in line with arm slot
- Maintain normal throwing mechanics

Step 2


- Extend out in front \& make a complete arm circle with loose \& relaxed arm action


## Return to Throw Program (2-3 weeks)

| LEVEL | ROUTINE | NO. OF THROWS |
| :---: | :---: | :---: |
| 1 | - 20 throws at 45 feet ( ( 15 meters) <br> - 10 throws at 60 feet ( $<20$ meters) or pitching distance | 30 Throws |
| 2 | - 20 throws at 45 feet ( $<15$ meters) <br> - 20 throws at 60 feet ( $<20$ meters) or pitching distance | 40 Throws |
| 3 | - 20 throws at 45 feet ( $<15$ meters) <br> - 20 throws at 60 feet ( $<20$ meters) or pitching distance <br> - 10 throws at 90 feet ( $<30$ meters) or base distance | 50 Throws |
| 4 | - 20 throws at 45 feet ( $<15$ meters) <br> - 20 throws at 60 feet ( $<20$ meters) or pitching distance <br> - 20 throws at 90 feet ( $<30$ meters) or base distance | 60 Throws |
| 5 | - 20 throws at 45 feet ( $<15$ meters) <br> - 20 throws at 60 feet ( $<20$ meters) or pitching distance <br> - 20 throws at 90 feet ( $<30$ meters) or base distance <br> - 10 throws at 120 feet ( $<40$ meters) or back of cut-out <br> - 10 throws at 60 feet ( $<20$ meters) or pitching distance | 80 Throws |
| 6 | - 20 throws at 45 feet ( $<15$ meters) <br> - 20 throws at 60 feet ( $<20$ meters) or pitching distance <br> - 20 throws at 90 feet (< 30 meters) or base distance <br> - 20 throws at 120 feet ( 40 meters) or back of cut-out <br> - 10 throws at 60 feet ( $<20$ meters) or pitching distance | 100 Throws |
| 7 | - 20 throws at 45 feet ( $<15$ meters) <br> - 20 throws at 60 feet ( $<20$ meters) or pitching distance <br> - 20 throws at 90 feet (< 30 meters) or base distance <br> - 20 throws at 120 feet (< 40 meters) or back of cut-out <br> - 10 throws at 150 feet ( $>45$ meters) or long toss <br> - 10 throws at 60 feet ( $<20$ meters) or pitching distance | 110 Throws |

Throwing Program (minutes/ distance)

| 4 WEEK ON RAMP |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 3 | Distance | M | TU | W | TH | F | SA | SU |
|  | 30ft (10m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 45 ft (15m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 90ft (30m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 120 ft (40m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 120ft+ (40m + ) |  |  |  | 3 |  |  | 2 |
|  | 120 ft ( 40 m ) |  |  |  |  |  |  | 1 |
|  | $90 \mathrm{ft}(30 \mathrm{~m})$ |  |  |  |  |  |  | 1 |
|  | 60ft (20m) |  |  |  |  |  |  | 1 |
|  | Total | 10 | 0 | 10 | 13 | 0 | 0 | 15 |


| Week 4 | Distance | M | TU | w | TH | F | SA | SU |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30 ft (10m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 45 ft ( 15 m ) | 2 |  | 2 | 2 |  |  | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 90ft (30m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 120ft (40m) | 2 |  | 2 | 2 |  |  | 2 |
|  | $120 \mathrm{ft}+(40 \mathrm{~m}+)$ | 2 |  | 3 | 4 |  |  | 3 |
|  | 120ft (40m) |  |  |  |  |  |  | 1 |
|  | 90 ft (30m) |  |  |  |  |  |  | 1 |
|  | 60 ft (20m) |  |  |  |  |  |  | 1 |
|  | Total | 12 | 0 | 13 | 14 | 0 | 0 | 16 |

Throwing Program (minutes/ distance)

| 4 WEEK ON RAMP cont. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 5 | Distance | M | TU | w | TH | F | SA | SU |
|  | 30ft (10m) | 2 |  | 1 | 1 |  |  | 1 |
|  | 45 ft (15m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 60ft (20m) | 2 |  | 2 | 2 |  |  | 2 |
|  | $90 \mathrm{ft}(30 \mathrm{~m})$ | 2 |  | 2 | 2 |  |  | 2 |
|  | 120ft (40m) | 2 |  | 2 | 2 |  |  | 2 |
|  | $120 \mathrm{ft}+(40 \mathrm{~m}+)$ | 2 |  | 3 | 4 |  |  | 4 |
|  | 120ft (40m) |  |  |  | 1 |  |  | 1 |
|  | 90ft ( 30 m ) |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 12 | 0 | 12 | 16 | 0 | 0 | 16 |

Throwing Program (minutes/ distance)

| 10 WEEK ARM DEVELOPMENT |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 7 | Distance | M | TU | w | TH | F | SA | SU |
|  | 30ft (10m) | 2 |  | 2 | 1 |  |  | 1 |
|  | 45 ft (15m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 90ft (30m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 120 ft (40m) | 2 |  | 2 | 2 |  |  | 2 |
|  | 120ft+ (40m + ) | 2 |  |  | 2 |  |  | 3 |
|  | 120ft (40m) |  |  |  | 1 |  |  | 1 |
|  | 90ft (30m) |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 12 | 0 | 10 | 14 | 0 | 0 | 15 |


| Week 8 | Distance | M | TU | w | TH | F | SA | SU |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30ft (10m) | 2 |  | 2 | 1 |  | 2 | 1 |
|  | 45 ft (15m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 90 ft (30m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120 ft (40m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120ft+ (40m + ) | 4 |  |  | 4 |  |  | 5 |
|  | $120 \mathrm{ft}(40 \mathrm{~m})$ |  |  |  | 1 |  |  | 1 |
|  | 90ft (30m) |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 14 | 0 | 10 | 16 | 0 | 10 | 17 |

Throwing Program (minutes/ distance)

| 10 WEEK ARM DEVELOPMENT cont. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 9 | Distance | M | TU | w | TH | F | SA | SU |
|  | 30ft (10m) | 2 |  | 1 | 1 |  | 2 | 1 |
|  | 45 ft (15m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 90ft (30m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120 ft ( 40 m ) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | $120 \mathrm{ft}+(40 \mathrm{~m}+)$ |  |  | 3 | 4 |  |  | 5 |
|  | 120ft (40m) |  |  |  | 1 |  |  | 1 |
|  | $90 \mathrm{ft}(30 \mathrm{~m})$ |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 10 | 0 | 12 | 16 | 0 | 10 | 17 |


| Week 10 | Distance | M | TU | w | TH | F | SA | SU |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30 ft (10m) | 2 |  | 1 | 1 |  | 2 | 1 |
|  | 45ft (15m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | $90 \mathrm{ft}(30 \mathrm{~m})$ | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120 ft ( 40 m ) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120ft+ (40m + ) |  |  | 3 | 5 |  |  | 5 |
|  | 120 ft ( 40 m ) |  |  |  | 1 |  |  | 1 |
|  | $90 \mathrm{ft}(30 \mathrm{~m})$ |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 10 | 0 | 12 | 17 | 0 | 10 | 17 |

Throwing Program (minutes/distance)

| 10 WEEK ARM DEVELOPMENT cont. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 11 (De load week) | Distance | M | TU | w | TH | F | SA | SU |
|  | 30 ft (10m) | 2 |  |  | 2 |  | 2 | 2 |
|  | 45ft (15m) | 2 |  |  | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  |  | 2 |  | 2 | 2 |
|  | 90 ft (30m) | 2 |  |  | 2 |  | 2 | 2 |
|  | 120 ft ( 40 m ) | 2 |  |  | 2 |  | 2 | 2 |
|  | $120 \mathrm{ft}+(40 \mathrm{~m}+)$ |  |  |  | 3 |  |  | 2 |
|  | 120 ft ( 40 m ) |  |  |  |  |  |  |  |
|  | $90 \mathrm{ft}(30 \mathrm{~m})$ |  |  |  |  |  |  |  |
|  | 60ft (20m) |  |  |  |  |  |  |  |
|  | Total | 10 | 0 | 0 | 13 | 0 | 10 | 12 |


| Week 12 | Distance | M | TU | w | TH | F | SA | SU |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30ft (10m) | 2 |  | 2 | 1 |  | 1 | 1 |
|  | 45ft (15m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 90ft (30m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120ft (40m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | $120 \mathrm{ft}+(40 \mathrm{~m}+$ ) |  |  | 2 | 4 |  |  | 4 |
|  | 120ft (40m) |  |  |  | 1 |  |  | 1 |
|  | $90 \mathrm{ft}(30 \mathrm{~m})$ |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 10 | 0 | 12 | 16 | 0 | 9 | 16 |

Throwing Program (minutes/ distance)

| 10 WEEK ARM DEVELOPMENT cont. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 13 | Distance | M | TU | w | TH | F | SA | SU |
|  | 30 ft (10m) | 2 |  | 1 | 1 |  | 2 | 1 |
|  | 45 ft ( 15 m ) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 90ft (30m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120 ft ( 40 m ) | 2 |  | 4 | 2 |  | 2 | 2 |
|  | 120ft+ (40m + ) |  |  |  | 5 |  |  | 5 |
|  | 120ft (40m) |  |  |  | 1 |  |  | 1 |
|  | 90ft (30m) |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 10 | 0 | 11 | 17 | 0 | 10 | 17 |


| Week 14 | Distance | M | TU | w | TH | F | SA | SU |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30 ft (10m) | 2 |  | 1 | 1 |  | 1 | 1 |
|  | 45ft (15m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 90ft (30m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120ft (40m) | 2 |  | 4 | 2 |  | 2 | 2 |
|  | $120 \mathrm{ft}+(40 \mathrm{~m}+)$ |  |  |  | 6 |  |  | 6 |
|  | 120 ft ( 40 m ) |  |  |  | 1 |  |  | 1 |
|  | 90ft (30m) |  |  |  | 1 |  |  | 1 |
|  | 60ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 10 | 0 | 11 | 18 | 0 | 9 | 18 |

Throwing Program (minutes/ distance)

| 10 WEEK ARM DEVELOPMENT cont. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week 15 | Distance | M | TU | w | TH | F | SA | SU |
|  | 30 ft (10m) | 2 |  | 1 | 1 |  | 1 | 1 |
|  | 45 ft (15m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 90ft ( 30 m ) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120 ft ( 40 m ) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120ft+ (40m +) |  |  | 2 | 7 |  |  | 7 |
|  | 120 ft ( 40 m ) |  |  |  | 1 |  |  | 1 |
|  | 90ft ( 30 m ) |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 10 | 0 | 11 | 19 | 0 | 9 | 19 |


| Week 16 | Distance | M | TU | w | TH | F | SA | SU |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30ft (10m) | 2 |  | 1 | 1 |  | 1 | 1 |
|  | 45 ft ( 15 m ) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 60 ft (20m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 90ft (30m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120ft (40m) | 2 |  | 2 | 2 |  | 2 | 2 |
|  | 120ft+ (40m + ) |  |  | 2 | 8 |  |  | 8 |
|  | 120ft (40m) |  |  |  | 1 |  |  | 1 |
|  | $90 \mathrm{ft}(30 \mathrm{~m})$ |  |  |  | 1 |  |  | 1 |
|  | 60 ft (20m) |  |  |  | 1 |  |  | 1 |
|  | Total | 10 | 0 | 11 | 20 | 0 | 9 | 20 |

