

## **OrthoKansas, P.A.**

*William A. Bailey, M.D.*  
*Kenneth L. Wertzberger, M.D.*  
*Richard G. Wendt, M.D.*  
*Jeffrey C. Randall, M.D.*

1112 West Sixth Street, Suite 124  
Lawrence, Kansas 66044  
Phone: 785-843-9125 Fax: 785-843-6973  
www.orthokansaspa.com

*Neal D. Lintecum, M.D.*  
*Sean A. Cupp, M.D.\**  
*Douglass E. Stull, M.D.*

# **Interval-Throwing Program Baseball Players**

The interval-throwing program is designed so that the athlete can achieve each individual level of throwing without pain or complication. The ITP should be supplemented with a weight training program and a flexibility program to maintain the athlete in a top physical condition. Weight training should be done on a throwing day and should emphasize high repetition with low weight as a maintenance program for the athlete. The athlete should be throwing every other day and using the day between for flexibility and rest. This program has been set up to minimize the risk for re-injury and emphasize pre-throwing warm-up, stretching, proper body and throwing mechanics, and the importance of weight training with the throwing athlete.

Baseline requirements of throwing include:

1. Clearance by the athlete's physician
2. Pain-free range of motion
3. Adequate muscle power
4. Adequate muscle resistance to fatigue

The athlete should warm-up by jogging, biking, or jumping rope to increase blood flow and increase the muscular flexibility. Following warm-up, stretching should be performed. Emphasis should be placed on proper throwing and body mechanics. The crow-hop method should be used to avoid stress to the throwing arm. The distance of the throw determines the velocity of the throw and the ball should only have enough speed to travel the appropriate distance. The athlete should begin with warm-up throws. The goal is to be able to throw the specified distance 75 times without pain.

During the recovery process the athlete may experience soreness and possibly a dull, aching sensation in the muscles and tendons. If the athlete experiences sharp pain, particularly in the joint, stop all throwing activity until the pain ceases and call the athlete's physician if pain continues.

This program is based on an individual thrower, and because all throwers will vary, there is no time for completion of the program. It is essential that the thrower complete each individual phase with the proper throwing and body mechanics and without an increase in pain. Once the phase has been completed, the athlete then progresses to the next phase. This sets up a progression that an individual goal is achieved prior to advancement instead of advancing at a specified time. This will greatly decrease the chance for re-injury and greatly increase the most adequate and safest route to return to competition.



Physicians are certified by: The American Board of Orthopaedic Surgery and Fellows of: The American Academy of Orthopaedic Surgeons

# OrthoKansas, P.A.

William A. Bailey, M.D.  
Kenneth L. Wertzberger, M.D.  
Richard G. Wendt, M.D.  
Jeffrey C. Randall, M.D.

1112 West Sixth Street, Suite 124  
Lawrence, Kansas 66044  
Phone: 785-843-9125 Fax: 785-843-6973  
www.orthokansaspa.com

Neal D. Lintecum, M.D.  
Sean A. Cupp, M.D.\*  
Douglass E. Stull, M.D.

## 45° Phase

### Step #1

Warm-up throwing  
45° – 25 throws  
Rest for 15 minutes  
Warm-up throwing  
45° – 25 throws

### Step #2

Warm-up throwing  
45° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
45° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
45° – 25 throws

## 60° Phase

### Step #3

Warm-up throwing  
60° – 25 throws  
Rest for 15 minutes  
Warm-up throwing  
60° – 25 throws

### Step #4

Warm-up throwing  
60° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
60° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
60° – 25 throws

## 90° Phase

### Step #5

Warm-up throwing  
90° – 25 throws



Rest for 15 minutes  
Warm-up throwing  
90° – 25 throws

### Step #6

Warm-up throwing  
90° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
90° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
90° – 25 throws

## 120° Phase

### Step #7

Warm-up throwing  
120° – 25 throws  
Rest for 15 minutes  
Warm-up throwing  
120° – 25 throws

### Step #8

Warm-up throwing  
120° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
120° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
120° – 25 throws

## 150° Phase

### Step #9

Warm-up throwing  
150° – 25 throws  
Rest for 15 minutes  
Warm-up throwing  
150° – 25 throws

### Step #10

Physicians are certified by: The American Board of Orthopaedic Surgery and Fellows of: The American Academy of Orthopaedic Surgeons

## OrthoKansas, P.A.

William A. Bailey, M.D.  
Kenneth L. Wertzberger, M.D.  
Richard G. Wendt, M.D.  
Jeffrey C. Randall, M.D.

1112 West Sixth Street, Suite 124  
Lawrence, Kansas 66044  
Phone: 785-843-9125 Fax: 785-843-6973  
www.orthokansaspa.com

Neal D. Lintecum, M.D.  
Sean A. Cupp, M.D.\*  
Douglass E. Stull, M.D.

Warm-up throwing  
150° – 25 throws  
Rest  
for 10 minutes  
Warm-up throwing  
150° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
150° – 25 throws

### 180° Phase

#### Step #11

Warm-up throwing  
180° – 25 throws  
Rest for 15 minutes  
Warm-up throwing  
180° – 25 throws

#### Step #12

Warm-up throwing  
180° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
180° – 25 throws  
Rest for 10 minutes  
Warm-up throwing  
180° – 25 throws

#### Step #13

Warm-up throwing  
180° – 25 throws  
Rest for 15 minutes  
Warm-up throwing  
180° – 25 throws

#### Step #14

Begin throwing off the mound or return to respective position.

Throwing program should be performed every other day, unless otherwise specified by your physician or rehabilitation specialist.



Physicians are certified by: The American Board of Orthopaedic Surgery and Fellows of: The American Academy of Orthopaedic Surgeons