

**Little League  
Baseball & Softball  
Injury Prevention Clinic**



**First Aid Training For  
Managers and Coaches**

**KATIE COBURN RN BSN  
Presenter**

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## **Concussion and Head Injury**

### General Concussion Recommendations:

- Coaches check helmet fitting for each player
- NOT all signs and symptoms of head injuries are immediate
- American Academy of Pediatrics recommends calling child's doctor with anything more than a light bump on the head
- **NO ATHLETE SHOULD RETURN TO PLAY OR PRACTICE WITH ANY SIGNS OF HEAD INJURY, ESPECIALLY THE SAME DAY OF OCCURANCE!!!**
- All athletes **MUST** have a Doctors medical release to return to play or practice after sustaining any type of head injury

### Immediate signs of head injury include:

1. Loss of conscience- CALL 911 IMMEDIATELY
2. Headache or neck pain
3. Light-headed, dizziness or loss of balance
4. Nausea and or vomiting
5. Blurred vision
6. Confusion
7. Loss of memory of traumatic event

### Educate parents and assistant coaches to watch for **delayed** signs of head injury

1. Slurred speech
2. Fatigue
3. Delayed response to questions
4. Changes in mood or behavior
5. Progressive headache
6. Ringing in ears
7. Changes in school performance
8. Repeated vomiting
9. Fatigue
10. Loss of balance/unsteady walking

### **Safety Action Plan:**

1. Injury plan
2. Heat illness plan
3. Concussion plan

**\*\*\*Keep these in your coaches binders for quick reference!\*\*\***

For more information, please feel free to contact:

**Teri Proper, PTA, BS**

**Physical Therapist Assistant**

**Bachelor of Science/Exercise Science**

**Ph: 269-329-0934- Portage office**

**Ph: 269-462-6431-Mattawan office**

[www.agilitysportsmedicine.com](http://www.agilitysportsmedicine.com)

## Lower Quarter Dynamic Warm up

### Walking Lunges:

Starting position: Lunge position keeping front foot behind knee.

Movement: Walking forward bringing opposite leg forward into a lunge position. Alternating legs.

Repetitions: Continue for 25 yards



### Side Push-offs:

Starting position: Side lunge position.

Movement: Push off of stance foot out to the side of bent knee. Repeat both right and left.

Repetitions: 25 yards each way



### High Knees:

Starting position: Stand on one leg and bring other knee to chest

Movement: Alternating knee to chest move in a forward position. Move arms opposite as legs

Repetitions: 25 yards



### Dynamic Hamstring Stretch:

Starting position: Place hands on floor and bend knees.

Movement: While keeping hands on floor straighten knees and repeat with performing a squat.

Repetitions: 2 sets of 10 reps

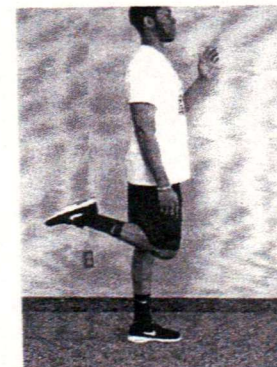


### Bottom Kickers:

Starting position: Stand on one leg and lift opposite foot up towards bottom

Movement: In a forward motion alternate feet lifting towards bottom. Moving arm opposite legs.

Repetitions: 25 yards



## Upper Quarter Dynamic Warm up

### Wipers:

Starting position: Elbow at sides of ribcage at 90 degrees.

Movement: Bring forearms across body into belly and then out away from body.

Exercise #1- Thumbs up

Exercise #2- Thumbs out

Exercise #3- Thumbs in

Repetitions: 5 times each way



### Arm Circles:

Starting position: Feet shoulder width apart

Arm extended out to the side at 90 degrees.

Movement: Move arms in circle both forward and backward directions. Small, Med, Lg circles

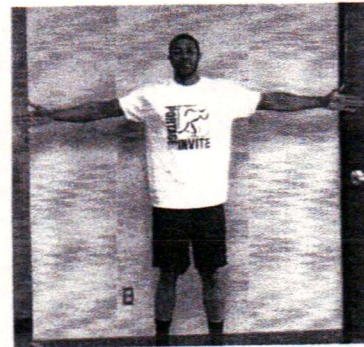
Exercise #1 Palms down

Exercise #2 Thumbs up

Exercise #3 Thumbs down

Repetitions: 5 circles in each direction

All 3 positions



### Why Me's:

Starting position: Feet shoulder width apart

Raise arms up to 90/90 position

Movement: Raise arms over head

Exercise #1- Palms in

Exercise #2- Palms out

Exercise #3- Alternating up and down

Repetition: 10 times in each position



### General Stretching Guidelines:

- Never stretch into a painful range of motion
- Muscle soreness is expected and there can be a delayed onset up to 24 hours lasting up to 72 hours
- STOP if any movement or stretch is painful

## Strength and Conditioning

The following 8 exercises are the key functional exercises for any level baseball or softball player for injury prevention and sports performance. They only require body weight and gravity, but can be progressed using home weights (e.g., dumbbells/soup can).

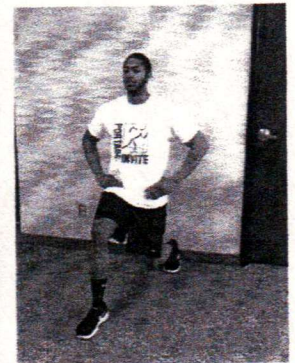
### Single Leg Partial Deadlift:

**Starting position:** Stand on one leg, knees Unlocked and lift the other leg out behind you  
**Movement:** Hinge at hips reaching towards the floor  
 Hands should extend just below the knees  
 Squeeze glutes on return  
**Repetitions:** 10-15 reps per leg/2-3 sets



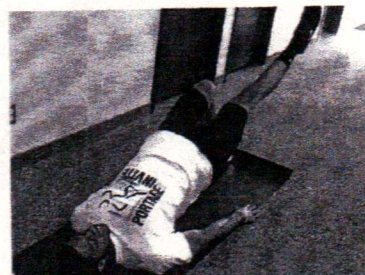
### Lunge Matrix (3 way):

**Starting position:** Feet shoulder width apart  
**Movement:** Lunge forward, then side, then backwards  
 Be certain to keep knees behind toes.  
**Repetitions:** 15 times each position/ 1-2 sets



### Bridge with Knee Kick-out:

**Starting position:** Lying on back, Knees bent, feet planted.  
**Movement:** Tighten abdominals, Lift bottom off floor, squeeze glutes.  
 Kick one leg out straight in line with opposite knee.  
 Keep hips level  
**Repetitions:** 15 times and hold 5 seconds/1-2 sets



### Planks Forward and Side:

#### Exercise #1: Forward Plank

**Starting position:** Lying on stomach with elbows Under shoulder and toes on floor  
**Movement:** Lift body up onto elbows and toes, Keeping core muscles tight and back straight.  
**Repetitions:** Hold 30 sec 5-10 reps each position



#### Exercise #2: Side Plank

**Starting position:** Lying on side with elbow under Shoulder on bottom arm. Stack legs  
**Movement:** Lift body up onto elbow and feet, squeeze shoulder blades. Keep hips forward and feet on top of each other.  
**Repetitions:** Hold 30 sec 5-10 reps each position



Modified Version

\*See modified version for younger kids\*

## Strength and Conditioning

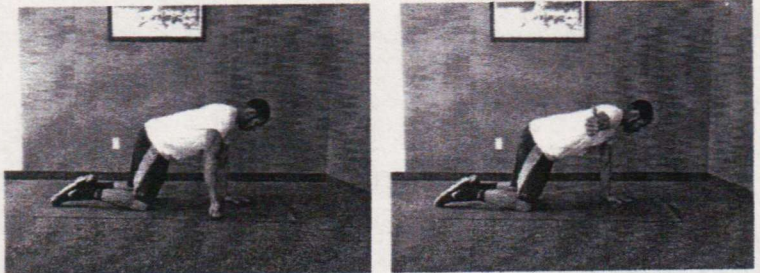
### Rotator Cuff & Scapular Stabilization:

Starting Position: Hand and knees

#### Exercise #1: "T's"

Movement: On hands and knees, squeeze shoulder blade inward. Next, lift arm out to the side with thumb up.

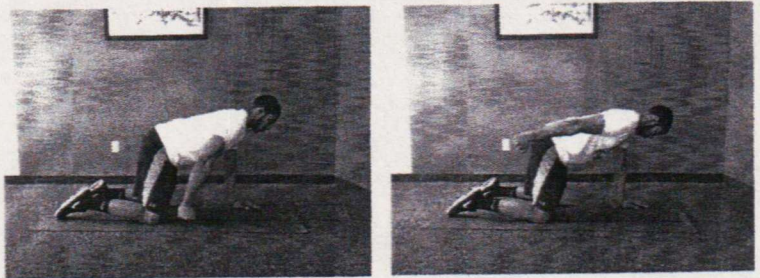
Repetitions: 2 sets of 10 reps each arm



#### Exercise #2: "I's"

Movement: On hands and knees, squeeze shoulder blade inward. Next, lift arm back towards hip leading with pinky.

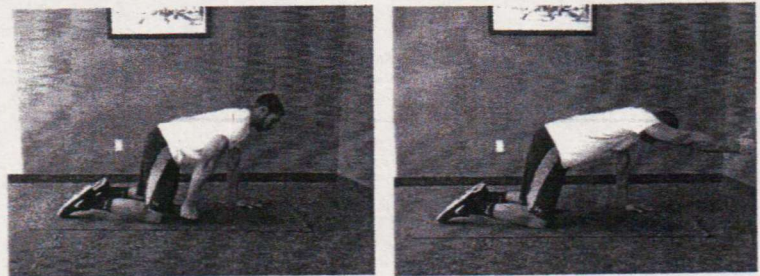
Repetitions: 2 sets of 10 reps each arm



#### Exercise #3: "Y's"

Movement: On hands and knees, squeeze shoulder blade inward. Next, lift arm on a 45 degree angle forward, with thumb up.

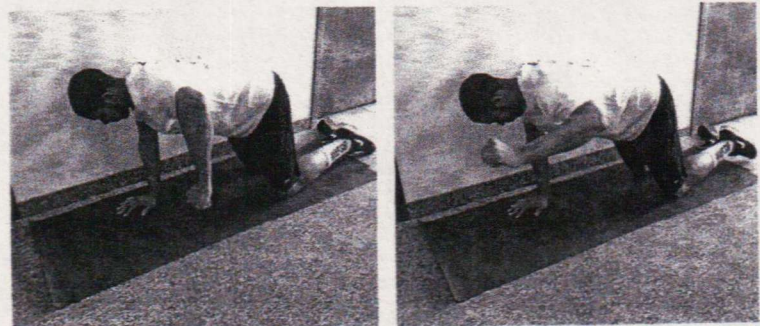
Repetitions: 2 sets of 10 reps each arm



#### Exercise #4: "W's"

Movement: On hands and knees, squeeze shoulder blade inward and bring arm & elbow out to the side (90/90). Next, rotate hand (palm down) towards the ceiling. While maintaining that 90/90 position, repeat.

Repetitions: 2 sets of 10 reps each arm



Progression for Rotator Cuff & Scapular Exercises:  
Can add a 1# dumbbell or soup can or increase from 10 to 15 reps.

### General Strengthening Guidelines:

- All exercises are provided in good faith and should NOT cause any pain
- Discontinue any exercises that cause pain
- If currently be treated by a physician or physical therapist, please consult with them that any of the exercises recommended are appropriate
- Muscle soreness is expected and there can be a delayed onset up to 24 hours lasting up to 72 hours

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## **Addendum: Heat Related Illness- How dangerous is it really?**

Combination of high heat and humidity makes for very dangerous playing conditions for athletes. This includes for games and practices. Every year we hear about High school to professional athlete dying of heat related illness. It is important to note that children's heat regulation processes are NOT fully developed therefore they more prone to heat related illnesses. When playing in high heat and humidity you MUST keep this in mind. If you are questioning to play or not to play due to heat or humidity always choose to be more cautious as it could cost a life!

The question is how do we prevent it and how do we treat it properly?

Below are guidelines on the prevention, recognition (signs and symptoms) and treatment of heat issues and when it is an emergency.

### **Prevention:**

**Key #1: Education:** Always educate assistant coaching staff and parent volunteers on how to pre-hydrate before practices and games. Teaching kids to drink 10-16 oz of water 15-30 minutes before arriving.

AVOID: Carbonated drinks, caffeine

**Key #2: When, What and How Frequently to Drink?**

During practices and games: 4-8 oz of cold fluid every 10-15 min/ every inning

Add a beverage that contains small amount of sodium and electrolytes as well ie: sports drink

### **How to recognize and treat heat illness: 3 types**

#### **1. Heat Stroke: Medical Emergency- 911**

##### **Signs & Symptoms:**

- No longer sweating
- Hot, DRY, flushed skin
- Confusion, delirious behavior
- Loss of consciousness

##### **Treatment:**

- Call for medical help -High body temps (105 deg)
- Move person into cool place
- Cool the person- cool water towels in arm pits and groin
- Fan person
- Offer water if conscious ½ glass every 15 minutes

#### **2. Heat Exhaustion: When a person loses more fluid through sweating than is taking in.**

##### **Signs & Symptoms:**

- Sweating profusely
- Weakness
- Clammy skin
- Dizziness
- Pale or flushed face
- Nausea
- Near normal body temperature

##### **Treatment:**

- Move person to shade or cool place
- Person to lie on back with feet elevated
- Give ½ glass of water every 15 min
- Get medical help

#### **3. Heat Stress:**

##### **Signs & Symptoms:**

- Heat Cramps- In the muscles that are working the hardest
- Fainting- falling down when unable to cope with heat
- Prickly heat - rash on skin when sweat can't evaporate

##### **Treatment:**

- Water every 15 min
- Move to cool place
- Sports drink if available 4-8 oz

### **Sources:**

- *What you need to know: Symptoms of Concussion.* Brainline.org in collaboration with the Mayo Clinic.
- *Tips on concussion prevention.* Dr. Clifford Wheelless, Orthopaedic Specialists of North Carolina.
- *Concussion Symptoms.* Mayo Clinical Staff.
- *Hey coach! Too much sports practice can hurt kids long-term.* Dr. Neeru Jayanthi, American Medical Society for Sports Medicine (AMSSM), Loyola and Lurie Children's Hospital.
- *Heat & Humidity: DANGER.* Lee Joyce, District Safety Officer, Virginia District 7 in collaboration with the Mayo Clinic.