Purpose of a warmup

As the name suggest, one purpose of a warmup is to prepare the body for the more intense activity to follow, but in practice it is much more than that. Smart coaches build mild conditioning activities into the warmup, particularly those which assist in the long term athletic development of their players. The cumulative effect of a good routine can be very substantial and should not be underestimated.

It is generally considered that a warmup should incorporate three major elements:

- 1. To raise the body temperature (our bodies function better if core temperature is a little above that at rest).
- 2. To move the joints through a gradually increasing range of motion equal to or greater than that which will be required by the following activity.
- 3. To rehearse and otherwise prepare for, in a controlled and deliberate manner, the skills which will be utilised

There several key factors which must be considered in designing a warmup routine:

- 1. **Time allocated.** This would often be dependent on the duration of the session itself: an U14 practice of 90 minutes would usually not spend 30 minutes in warmup, whereas a 4 hour session may.
- 2. The particular attributes of the athletes (skill & conditioning levels etc). Poorly conditioned athletes can not be expected to train well after a warmup that was too gruelling. Additionally, athletes with poor movement skills or body control would be unable to execute certain exercises, while those with excellent coordination are well served by a more complex warmup procedure.
- **3.** The objective of the session for which they are warming up. If they are going to throw immediately after, they need to finish the warmup on the upper body; if its sprinting etc, the lower body. If its going to be a long, hard day, keep the warmup as energy-conserving as possible. Generally, you need to include something that targets each key body segment.
- 4. **The objective of the Warmup routine itself:** is it purely to warm them up, or do you wish to incorporate some conditioning aspect as well. For example: running speed is best developed while the body is free from fatigue, so it makes sense to do sprint work early in the session. For practical reasons, it is often incorporated into the "Warmup". Likewise, many of the mobile exercises shown below, as well as warming the body up, are athletically challenging and have a gentle conditioning effect which can have significant benefits over the long term (developing joint control, balance, coordination, strength balance between related muscle groups etc).

These factors are heavily interdependent: if you have fit athletes, and you wish to incorporate some speed-work, then you will need to allocate a longer period. You might also want to leave the upper body segment of the warmup until after the sprint-work, have a drink, then come back to the upper body stuff.

Below is an example of a routine for moderately well-conditioned and well-coordinated athletes. Many of the exercises shown can be used as is, or in modified form, from the grass-roots level on. It is by no means necessary to do every one of the exercises in every session. Select a number of suitable drills to make a shorter routine, or use them all in rotation to provide more variety.

MLBAAP: Squad Warmup & Limbering Routine

Each routine is firstly outlined, and later illustrated.

1. Light warmup activity For example, jog foul-line to foul-line and return,

2. Lower Body Limbering Routine

- (Any "running" activity in this routine is designed to be 90' each way)
 - 1. Stationary leg swings
 - a. 5 forward and backward for each leg
 - b. 5 side to side for each leg
 - c. 5 butt-kicks for each leg
 - 2. Mobile exercises
 - a. Rhythmic crow-hops with arm swings (out and back)
 - b. 360s (2 rotations each way) (out and back)
 - c. Butt-kicks (out and back)
 - d. Lunges (2) and skips (3) (in repeating sequence out and back)
 - e. Ground touches (out: 2 each side) (back: 3 two-handed)
 - f. Carioca (with big hip turnout and back)
 - g. Quick-step carioca (no hip turn, out and back)
 - h. Reverse jog out, reverse butt-kicks back
 - i. High-knee carioca (out and back)
 - 2a. Supplementary exercises
 - a. Frankensteins
 - b. Knee squeeze
 - c. Lunge-drive-skip
 - d. Knee circles
 - e. Knee-to-shoulder
 - 3. Stationary exercises
 - a. Slow heel raises (5 each leg)
 - b. Lying leg extensions (5 each leg)
 - c. Resisted leg V's
 - d. Leg Circles: 3 in each direction for each leg
 - e. Jump crossover
 - f. Crucifix
 - g. Reverse Crucifix
 - h. Fire hydrants
 - i. Kneeling Butt kicks
- 3. Speed Development or Baserunning Drills Various

4. Upper Body Limbering Routine

- 1. Twisting arm swings
- 2. Wrist circles
- 3. Hand circles: front
- 4. Hand circles: side
- 5. Arm circles
- 6. Shoulder rolls
- 7. Arms swings: across chest
- 8. Arms swings: up & down
- 9. Arm swings: goalposts
- 10. Woodchoppers

- 5. Throw: 2 minutes at 45 feet
 - 3 minutes at 60 feet
 - 3 minutes at 90 feet
 - 2 minutes at 120 feet

Twice each week, add 5 one-hop throws from 150 feet, 5 at 180, and 5 at 210. (The exact routine is of course subject to change depending on the specific activity to follow)

Stationary leg swings

1. Forward and backward



2. Side to side





3. "Butt Kicks"





1. Rhythmic crow-hops (with arm swings)



2. 360s (two in each direction running out, same coming back) Turn complete circles while jogging forward



3. Butt kicks Bring heel up close to butt each step





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4. Lunges (2) and Skips (3) repeated sequence going out, same coming back







5. Ground touches. Two touches each side (out)



Three two-handed touches (back)



Can also do touches (with one or two hands) between feet, rather than to sides

6. Carioca (including hip-turn) Aim for maximum turning of hips (but keep it smooth)







7. Quick-step Carioca (no hip-turn) Hold abs strong so that there is no hip turn







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8. Backwards jog (out)



9. Reverse Butt-Kicks (back)



While running backwards, lift foot up towards butt and reach back

10. High-knee Carioca









Drive trailing leg up & across when it comes in front

Other functional exercises

These exercises are more difficult, but greatly assist the development of the strength and form needed for good sprinting technique

1.Frankensteins Walking stiff-leg raise





• Swing bent knee

through wide circular

path while walking

Maintain upright

• Try to straighten

posture.

support leg

4. Walking knee circles



- 2. Knee squeeze
 - Use hands to pull knee to chest each step.
 - Maintain upright posture.
 - Try to straighten support leg



5. Walking side knee-to-shoulder



- Lift knee explosively toward outside of shoulder with each step
- Maintain upright posture.
- Try to straighten support leg

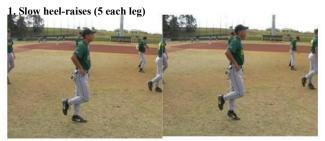
3. Lunge-drive-skip

Drive phase

• Maintain upright posture throughout • Try to straighten support leg



Stationary Exercises:



The slower the better: more challenging for balance and the muscles around the ankle

2. Lying leg extension (5 each leg)



Hold knee to chest **3. Resisted leg-V's** Extend leg

Bend foot downwards



4. Leg circles (3 in each direction with each leg)



Hold firmly with abs so that hips do not move

5. Jump crossover (5 each leg)







6. Crucifix (5 each leg)



7. Reverse Crucifix (5 each leg)







8. Fire hydrants





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9. Butt-kicks



Upper Body Pre-Workout Warmup & Conditioning Sequence

32. Cuff warmups 1: self-resisted





(rotate bent arm while resisting with other)

37. Cuff warmups 2: partner resisted





Flex and extend arm while resisting with other



Elbow remains stationary

38. Resisted throws



Against resistance from partner, pull elbow down then extend arm

Appendix 1: A warmup routine for semi-elite juniors

A. Easy run

- B. Stretching & Stationary Warmup
 - 1. Leg swings: 5 forward and backward, 5 side to side for each leg
 - 2. Slow heel raises
 - 3. Lying knee to chest
 - 4. Lying leg extensions
 - 5. Leg Circles: 3 in each direction for each leg
 - 6. Lying spinal twist
 - 7. Knee flop
 - 8. Lying resisted leg V
 - 9. Jump crossover
 - 10. Crucifix
 - 11. Reverse Crucifix
 - 12. Twisting arm swings
 - 13. Wrist circles
 - 14. Hand circles: front
 - 15. Hand circles: side
 - 16. Arm circles
 - 17. Shoulder rolls
 - 18. Arms swings: across chest
 - 19. Arms swings: up & down
 - 20. Arm swings: goalposts
 - 21. Woodchoppers

C. Running drills	(done over	60m.	distance)	I
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	Day 1	Day 2	Day 3
Series 1: drill for 30m, then run through for 30m	360s Butt-kicks Ground touches Lunge-and-twist	Lunges (2) and skips (3) 360s Butt-kicks Frankensteins	Lunges (2) and skips (3) Ground touches Frankensteins Lunge-and-twist
Series 2: out 10m, back to start, then run through 60m.	Lateral Lunge Lateral skip Carioca High-knee carioca (Back)	Carioca Carioca Quick-step High-knee carioca (Back) High-knee carioca (Front)	Lateral skip Lateral Lunge Carioca Quick-step High-knee carioca (Front)
Series 3: drill for 30m, then run through for 30m	Reverse jog Reverse butt-kicks	Knee circles Knee-to-shoulder	Reverse butt-kicks Knee-to-shoulder