Fast Bowling Technique

Recent studies have identified young fast bowlers as the players most prone to injury.
Three of the main reasons for this are;

- Lack of proper stretching exercise during warm-up and cool-down periods.
- Overuse stress, especially during growth spurts.
- Incorrect technique.

This page deals with providing the basic fundamentals of the two bowling techniques, side-on and front-on. Players, parents and coaches should ensure that fast bowlers use either the side-on technique or the front-on technique [if sufficient shoulder flexibility exists], and NOT a combination of these techniques. The following mechanics and diagrams assume a right hand bowler - opposite for left handers.

-- Side On - Front On - Impact Stress --

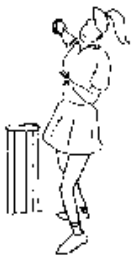
The Side-On Technique

Run-up

- The approach should be at an optimal speed for the individual, however, this velocity must allow the bowler to adopt a side-on position at delivery.
- The run-up should be a gradual progression in speed culminating in optimal speed about 3 or 4 strides prior to delivery.

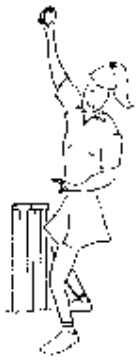
Back Foot

- Rear foot is placed parallel to the bowling crease



Impact

- Chest and hips face the bowler's stumps.
- Shoulder and hip alignment are pointed towards the batsman until just prior to release of the ball.
- Non-bowling arm is thrust high into the air.
- Bowler looks behind the front arm without arching the back.



Delivery Stride

- Elbow of the non-bowling arm is accelerated into the side of the body.
- Lateral flexion and extension of the spine with little or no arching or twisting of the spine.
- Front leg should land pointing straight down the wicket or slightly to the on-side for a right handed batter and in alignment with the back foot.

Release

- Knee of the front leg should be slightly bent to help absorb some of the impact forces.

Follow-Through

- Bowling arm follows through downwards and backwards past the outside of the left leg for a right handed bowler.
- Bowler should continue for at least six steps after delivery of the ball to gradually reduce forward momentum.

The Front-On Technique

Run-up

- The approach should be at an optimal speed for the individual.

Back Foot

- Rear foot is placed facing straight down the wicket or slightly towards the on-side ie. the fine leg position for a right handed batter.

Impact

- Chest and hips face the batsman.
- Non-bowling arm is thrust high into the air.
- The bowler looks straight down the wicket, on the inside of the non-bowling arm.

Delivery Stride

- Front leg should land pointing straight down the wicket.
- Shoulders should be relatively parallel to the crease.
- The elbow of the non-bowling arm is accelerated downwards.
- The bowler's arm leads the forward movement of the body.

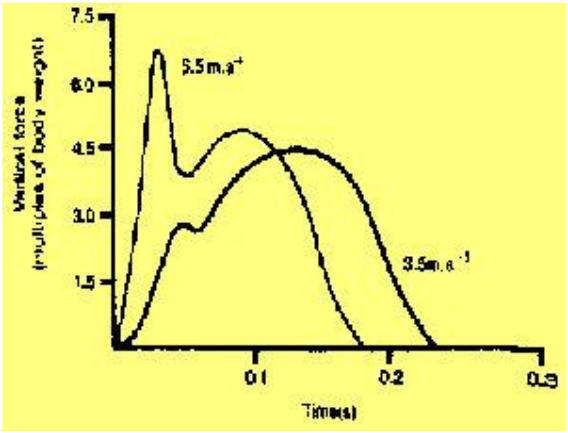
Release

- Knee of the front leg should be slightly bent to help absorb some of the impact forces.

Follow-Through

- Bowling arm follows down the side of the body.
- Bowler should continue for at least six steps after delivery of the ball to gradually reduce forward momentum.

Impact Stress



The table opposite shows the relationship between velocity and the stress it can place on a bowler, particularly the knees.

A. At 6.5m.s-1 the front foot has less time in contact with the ground but the body must absorb a force of approximately 7 times the bowler's body weight thus the potential for injury to ankles & knees is high.

B. At 3.5m.s-1, while ground contact is increased the force on the body is reduced to 4.5 times the bowler's body weight.

Conversely, these forces also apply to the back foot on push-off.

It is very popular, especially for young fast bowlers, to have long run-ups at maximum velocity. However, in fact, it adds little to the actual pace of the delivery when compared to the potential for serious injury. As a guideline, run-ups should be be limited to providing the bowler with rhythm and enough momentum to be able to complete their follow-through in approximately six paces. In the end, pace means nothing if the accuracy of the delivery cannot be effectively controlled.