

TEACHING GIRLS TO HURDLE

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A step by step teaching sequence covering a series of exercises and drills for the lead and trail legs in the development of hurdling technique. The article is based on a slightly condensed translation from Legkaya Atletika, Moscow. Re-printed with permission from Modern Athlete and Coach.

BASIC EXERCISES

It is important that newcomers learn to run fast and develop the strength of leg, abdominal and back muscles before they attempt to learn the hurdling technique. In learning the hurdling technique female athletes require exceptional flexibility, particularly in the hips. To achieve specific flexibility, it is advisable to include stretching exercises in every warm-up routine. Such exercises include frequently movement patterns and basic positions involved in hurdling. The following exercises can be used:

- Backward leg swings, supported by a hurdle. Bending from the hips should be avoided (Fig. 1).
- Standing on one leg with the other supported on the hurdle top. Bending the lead leg from the knee joint with a forward drive of the hips (Fig. 2).
- Regular splits, changing the front leg. Sitting in the hurdles position, performing forward and backward bends and upper body circles (Fig. 3).
- Standing with the trail leg positioned on a hurdle. Bending forwards to the leg on the ground and sideways towards the trail leg (Fig. 4).
- Large upper body circles in standing position with the legs shoulder width apart.
- Forward and backward trunk bends in standing position.
- Standing with one leg forward. Bending on the upper body towards the front leg so that shoulders reach a position below the knees.
- Upper body turns to both sides in a near-split position.
- Sitting in the hurdles position. Changing of the lead leg, assisted by supporting the body weight on hands.
- Sitting in the hurdles position with the lead leg elevated on a low bench. Bending of the upper body forward and towards the trail leg.

- Sitting in the hurdles position. The trail leg is brought back as far as possible and forward again with a bent knee. The same is repeated using hurdling-like arm action (Fig. 5).
- Forward bending in sitting position, holding the ankles with both hands for 15 to 20 seconds.
- Sitting in the hurdles position. Forward bending to hold the lead leg ankle for 15 to 20 seconds.
- Sitting on the floor with the soles of the feet placed together. Spreading of the knees sideways.



FIG. 1

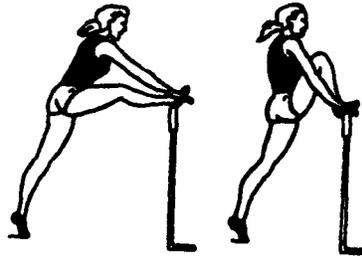


FIG. 2



FIG. 3



FIG. 4



FIG. 5

SPECIFIC FLEXIBILITY

FIG. 1 to 5 represent exercises incorporating frequent movements and basic positions in hurdling.

INITIAL DRILLS

Learning of the hurdles technique begins by creating a visual picture of the action by viewing films and observing experienced hurdlers in action. The following exercises and drills are recommended in the early learning phase:

- Acceleration runs over 60 to 100m with
 - running high on the balls of feet,
 - running with a high knee lift action,
 - running with a high knee lift in every fourth stride.
- Sprint arm action on the spot with changing speed and movement amplitude.
- Sprinting on a marked track following stride length markers, placed 1.5 to 2.0m apart.
- Running over 3 to 5 marked zones in a three-stride rhythm. The distance between the zones is gradually increased from 5.0 to 8.5m (Fig. 6).
- Running over hurdles zones with the hurdles placed $\frac{2}{3}$ distance from the take-off line (height 30 - 40 - 50cm) in three stride rhythm (Fig. 7).

Guidelines: The athletes must avoid leaning backwards in all these drills. The running action must not be allowed to develop into bounding when markers are used. The distance between the zones and hurdles must be increased gradually. Speed between the zones or hurdles must be maintained.

FIG. 6



FIG. 7



INITIAL DRILLS WITH STRIDE LENGTH MARKERS

LEAD LEG DRILLS

Hurdling can be divided into different phases in which the hurdle clearance is made up of the following elements:

- the placement of the take-off foot and the movement of the lead leg, body and the opposite arm towards the hurdle,
- the position in crossing the hurdles, including the movement sequence of the lead and trail leg to clear it,
- the landing after the hurdle clearance and the beginning of the first stride after the clearance.

The elements of “attacking” the hurdle can be developed through the following exercises:

1. Standing on the toes, holding the lead leg with both hands under the knee joint. Drop the hands and relax the lower leg. The whole leg will easily straighten.
2. Lift the lead leg with the knee leading. Shift the body weight forward to land on the dropped lead leg.
3. Perform exercise 2 over a 40 to 50cm hurdle, first standing, later from a short run.

Guidelines: It is important to observe that the take-off foot is raised on the toes as the lead leg moves forward. Even more important is the lead leg in action. It is correct when the leg is lifted so that the knee is leading. The arm opposite to the lead leg, bent in the elbow, should move forward-upward, the other arm, also bent in the elbow, goes back in a fast and short action.

TRAIL LEG DRILLS

The following drills are recommended to develop the technique of the trail leg:

1. Standing on the side of the hurdle, about a foot length in front of it, with the trail leg a stride length back. Support is provided by holding to a wall ladder. The trail leg is pulled through sideways forming a sharp angle between the thigh and lower leg before it is directed towards the centre of the body (Fig. 8). Shorter hurdles can place the lead leg just behind the hurdle. This will require an even faster trail leg action. (Fig. 9).
2. The same movement pattern as in the above exercise but performed from a short (1 to 3 strides) approach. The lead foot is placed 1 to 2 feet length behind the hurdle (Fig. 10).

3. Running arm action, changed periodically to the correct hurdling lead arm movement. The arm is moved forward with the palm down, turned inwards. The backward movement takes place in a circular action.

Guidelines: The arm movement should receive special attention. It must be precise and fast in the direction, as well as in the amplitude, to establish a definite rhythm.

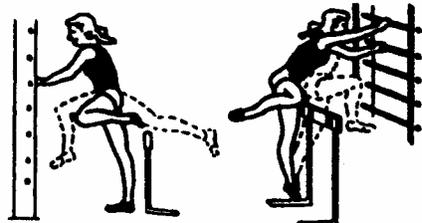


FIG. 8

FIG. 9



FIG. 10

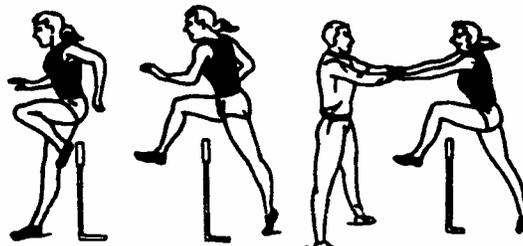


FIG. 11

FIG. 12

TRAIL LEG AND COMBINATION DRILLS

COMBINED DRILLS

After the lead and trailing leg actions have been established, the next task is to combine the two. The following drills are recommended:

1. Standing in front of a low hurdle (40 to 50cm). The front leg is lifted with the knee leading to step over the hurdle while the trail leg is brought around in the correct action. The arms follow the normal hurdling pattern. (Fig. 11).
2. As in exercise No. 1 but the emphasis is placed on bringing the trail leg through so that it reached the centre line of the body for the first stride.

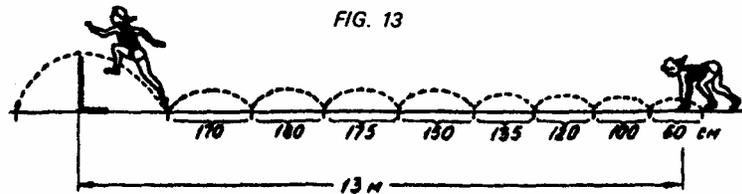
3. Performance of the above exercises first from a walk, followed by a slow running approach.

Guidelines: Athletes, who find the exercise over the hurdles difficult to perform can be assisted by the coach (Fig. 12). It is recommended to use a high knee lift running action with short strides in approaching the hurdle. Initial drills should be repeated as soon as the action deteriorates with a faster approach, or the athlete clears the hurdle with a jump. Emphasis in all these drills is placed on a fast landing of the lead leg after the hurdle clearance.

THE START

An efficient start and acceleration to the first hurdle is the key to the correct hurdling rhythm. It is therefore important that the last three strides in the approach to the first hurdle correspond with the rhythm that follows in running between the hurdles. This means that the first five strides must be extremely powerful and sufficiently long to allow for the correct rhythm and stride length in the last three strides (Fig. 13).

The development of the starting rhythm can be assisted by the coach counting "one-two-three-four-five" somewhat slower before giving signals for a rapid rhythm for the last three strides.



DEVELOPMENT OF THE STARTING RHYTHM