# Physical Training

## Hockey

***Always find the link to Hockey.***

How can improving aerobic endurance help in Hockey?

- Keeping up with play.
- Marking players.

### Components of fitness

Agility – the ability to change direction at speed

Speed – how quickly an individual can move (distance ÷ time) (to beat an opponent to the ball/move into space)

Power – also known as explosive strength or anaerobic power. It is speed and strength combined (speed x strength = power) (to be able to shoot and pass the ball)

### Types of training

Weight training – involves the use of free weights, resistance machines or any object which can be safely lifted. Allows performers to target specific muscles/muscle groups to suit their individual needs.

Advantages:

- Relevant to all sports
- Can be easily adapted for different fitness aims e.g. muscular strength or muscular endurance

Disadvantages:

- Heavy weights can increase blood pressure
- Injury can occur

Interval training - periods of high-intensity effort with periods of low-intensity effort.

Advantages:

- Can mix aerobic and anaerobic exercise which replicates Hockey

Disadvantages:

- Can become boring

### Principles of training

**Progressive Overload** - gradually increase the amount of exercise and keep overloading the body. Use **F.I.T.T** (**F**requency, **I**ntensity, **T**ime, **T**ype) to overload the body


**Principles of overload:**

**Frequency** – how often you train

**Intensity** - how hard you train

**Time** - how long to train for

**Type** – the kind of training

### Fitness Testing

**30m Sprint Test (Speed)**

Cone a 30m stretch on a flat non-slip surface. Assistant will say on your "marks, set, go". On "go" the assistant starts the stopwatch and times how long it takes the athlete to cross the finish line.

The stopwatch is stopped when the athletes' torso crosses the finish line.

**Standing Broad Jump Test (Power)** –

Stand behind the line with feet shoulder width apart. Take-off on two feet, jump as far as possible landing on two feet and measure the distance jumped.

### CALCULATIONS

Maximum Heart Rate (Max HR) = 220 – age

**Aerobic** (with oxygen) training zone – 60-80% of Max HR

**Anaerobic** (without oxygen) training zone – 80-90% of Max HR