

PHYSIOLOGICAL STANDARDS



This section provides the benchmarks for the WCL senior national team (men and women) by the number of years before the Olympic Games. The benchmarks and the way they are measured are as follows:

1. **Aerobic capacity** (i.e., endurance), measured in ml/kg/minute
2. **Power clean:** We use a calculation of the weight lifted divided by the individual's body weight, in kilograms.
3. **Back squat:** idem.
4. **Bench press:** idem.
5. **Pull-ups:** we measure the maximum number of repetitions with good technique.
6. **Squat jump:** we measure the number of watts per kilogram of body weight for the individual.
7. **Counter-movement jump:** idem.
8. **Horizontal jump:** the total distance in centimeters.

Note: with any strength exercise or Olympic lift used as test, it is imperative that the athlete maintains good form. If their technique is not good, that repetition does not count.

MEN: PHYSIOLOGICAL BENCHMARKS FOUR TO SIX (4-6) YEARS BEFORE THE OLYMPIC GAMES

TEST	MEASUREMENT	GOLD	SILVER	BRONZE
AEROBIC CAPACITY	ml/kg/min	57.1 to 62	52.1 to 57	<52
POWER CLEAN	Kilograms lifted divided by athlete's body weight in kilograms	1.2 to 1.4	1.01 to 1.19	<1
BACK SQUAT	Same as above	1.51 to 1.7	1.21 to 1.5	<1.2
BENCH PRESS	Same as above	1.11 to 1.3	0.91 to 1.1	<0.9
PULL-UP	Number of repetitions	21 to 30	11 to 20	<10
SQUAT JUMP	The amount of power measure in watts, divided by the athlete's body weight in kilograms	52.1 to 65	42.1 to 520	<42
COUNTER MOVEMENT JUMP	Same as above	62.1 to 67	52.1 to 62	<52
HORIZONTAL JUMP	Distance in centimeters	251 to 270	231 to 250	<230