

NORMS

1. Agility

1.1 Illinois agility test

Ratings	Score
Excellent	<17.1 seconds
Good	17.1-18.0 seconds
Average	18.1-21.8 seconds
Fair	21.9-23.1 seconds
Poor	>23.2 seconds

1.2 Agility T-test

Ratings	Score
Excellent	<10/50 seconds
Good	10.50-11.51
Average	11.51-12.50
Poor	>12.50

2. Speed

2.1 35m Sprint test

Ratings	Score
Excellent	<5.30
Good	5.30-5.59
Average	5.60-5.89
Fair	5.90-6.20
Poor	>6.20

2.2 50m Sprint test

Ratings	Score
Excellent	<8.0 seconds
Good	8.0-8.4 seconds
Average	8.5-8.9 seconds
Fair	9.0-9.3 seconds
Poor	>9.4 seconds

3. Muscular Strength

3.1 1RM leg press test

Ratings	Score
Very Poor	<1.22
Poor	1.22-1.36
Fair	1.37-1.49
Good	1.50-1.67
Excellent	>1.67

3.2 1RM Bench press test

Ratings	Score (per body weight)
Very Poor	< 0.90
Poor	0.91 - 0.99
Below average	1.00 - 1.14
Average	1.15 - 1.29
Good	1.30 - 1.60
Excellent	> 1.60

3.3 Hand dynamometer

Ratings	Non- Dominant hand	Dominant Hand
Excellent	>36	>40
Good	31-36	35-40
Average	25-30	29-34
Fair	19-24	23-27
Poor	<19	<23

4. Muscular Endurance

4.1 Pull up test

Ratings	Score
Excellent	3 or more
Good	2-3
Average	1
Fair	0
Poor	0

4.2 Squats test

Age	18-25	26-35	36-45	46-55	56-65
Excellent	>43	>39	>33	>27	>24
Good	37-43	33-39	27-33	22-27	18-24
Above average	33-36	29-32	23-26	18-21	13-17
Average	29-32	25-28	19-22	14-17	10-12
Below Average	25-28	21-24	15-18	10-13	7-9
Poor	18-24	13-20	7-14	5-9	3-6
Very Poor	<18	<20	<7	<5	<3

4.3 Sit up test

Age	18-25	26-35	36-45	46-55	56-65
Excellent	>43	>39	>33	>27	>24
Good	37-43	33-39	27-33	22-27	18-24
Above average	33-36	29-32	23-26	18-21	13-17
Average	29-32	25-28	19-22	14-17	10-12
Below Average	25-28	21-24	15-18	10-13	7-9
Poor	18-24	13-20	7-14	5-9	3-6
Very Poor	<18	<13	<7	<5	<3

4.4 1min Push up test

Age	17-19	20-29	30-39	40-49	50-59
Excellent	36+	37+	38+	32+	26+
Good	27-35	30-36	30-37	25-31	21-25
Above Average	21-27	23-29	22-30	18-24	15-20
Average	11-20	12-22	10-21	8-17	7-14
Below average	6-10	7-11	5-9	4-7	3-6
Poor	2-5	2-6	1-4	1-3	1-2
Very Poor	0-1	0-1	0	0	0

5. Aerobic Capacity tests

5.1 Queen step test

Ratings	Score
Excellent	<129
Good	129-158
Average	159-166
Fair	167-170
Poor	>170

5.2 Beep Test

Ratings	Score
Excellent	>12
Good	10-12
Average	8-10
Fair	6-8
Poor	<4

5.3 COOPERS fitness test

Age	Excellent	Above Average	Average	Below Average	Poor
13-14	>2000m	1900-2000m	1600-1899m	1500-1599m	<1500m
15-16	>2100m	2000-2100m	1700-1999m	1600-1699m	<1600m
17-20	>2300m	2100-2300m	1800-2099m	1700-1799m	<1700m
20-29	>2700m	2200-2700m	1800-2199m	1500-1799m	<1500m
30-39	>2500m	2000-2500m	1700-1999m	1400-1699m	<1400m
40-49	>2300m	1900-2300m	1500-1899m	1200-1499m	<1200m
>50	>2200m	1700-2200m	1400-1699m	1100-1399m	<1100m

5.4 1.6km run test

Percentile	12yrs	13yrs	14yrs	15yrs	16yrs	17+
100	6.22	5.42	5.00	5.51	5.58	6.20
96	7.35	7.21	7.20	7.25	7.26	7.22
90	8.00	7.49	7.43	7.52	7.55	7.58
85	8.23	8.13	7.59	8.08	8.23	8.15
80	8.52	8.29	8.20	8.24	8.39	8.34
75	9.15	8.49	8.36	8.40	8.50	8.52
70	9.36	9.09	8.50	8.55	9.11	9.15
65	10.05	9.30	9.09	9.09	9.25	9.33
60	10.26	9.50	9.27	9.23	9.48	9.51
55	10.44	10.07	9.51	9.37	10.09	10.08
50	11.05	10.23	10.06	9.58	10.31	10.22
45	11.23	10.57	10.25	10.18	10.58	10.48
40	11.47	11.20	10.51	10.40	11.15	11.05
35	12.01	11.40	11.10	11.00	11.44	11.20
30	12.24	12.00	11.36	11.20	12.08	12.00
25	12.46	12.29	11.52	11.48	12.42	12.11
20	13.35	13.01	12.18	12.19	13.23	12.40
15	14.12	14.10	12.56	13.33	14.16	13.03
10	14.39	14.49	14.10	14.13	16.03	14.01
5	16.00	16.10	15.44	15.17	18.00	15.14
0	24.54	20.45	20.04	24.07	21.00	28.50

5.5 Harvard step test

Ratings	Score (Long form)
Excellent	>86
Above Average	76-86
Average	61-75.9
Below average	50-64.9
Poor	<50

6. Anaerobic Capacity Testing

6.1 300m Run test

Rating	Time (seconds)
Poor	> 77
Below average	71.1 - 77
Average	65.1 - 71
Above average	59.1 - 65
Excellent	54.1 - 59

6.2 400m Run test

Rating	Time (seconds)
Excellent	<59 seconds
Very good	60-69 seconds
Average	70-74 seconds
Fair	75-79 seconds
Poor	>79 seconds

6.3 800m Run test

Rating	Time (minutes/seconds)
Poor	More than 3.45
Below average	3.31-3.30
Average	3.01-3.15
Above average	2.46-3.00
Excellent	2.45 or less

6.4 RAST test

You can determine the level of fatigue and the power of each sprint by using below formula

$$\text{-power} = 1125 * \text{mass} / \text{time}^3$$

7. Flexibility

7.1 Sit and reach test

Ratings	Score
Super	> +30cm
Excellent	+21 to +30cm
Good	+11 to +20cm
Average	+1 to +10cm
Fair	-7 to 0cm
Poor	-15 to -8cm
Very poor	< -15cm

7.2 Trunk rotation test

Ratings	Score
Poor	0 cm
Fair	5 cm
Good	10 cm
Very good	15 cm
Excellent	20 cm

7.3 Shoulder elevation test

Arm length – measurement length

Ratings	Score
Excellent	13 or less
Good	14 – 19
Average	20 – 27
Fair	28 – 30
Poor	31 or more

8. Muscle power testing

8.1 Vertical leap test

Ratings	Score
Excellent	>60
Good	46-60
Average	31-45
Fair	21-30
Poor	<20

8.2 Broad jump test

Ratings	Score
Excellent	>200
Very Good	191-200
Above average	181-190
Average	171-180
Below average	161-170
Poor	141-160
Very poor	<141

9. Coordination

9.1 Wall toss test

Ratings	Score
Poor	< 15
Fair	15 – 19
Average	20 – 29
Good	30 – 35
Excellent	> 35

10. Reaction time

Ratings	Score
Excellent	<7.5cm
Above average	7.5 – 15.9cm
Average	15.9 – 20.4cm
Below average	20.4 – 28cm
Poor	>28cm

11. Balance tests

11.1 Flamingo balance test

Age	Excellent	Very good	Good	Sufficient	Poor	Inadequate
12 year	<3	3	6-5	10-7	14-11	15
13 year	<2	2	5-3	8-6	12-9	>12
14 year	<2	2	4-3	7-5	10-8	>10
15 year	<2	2	5-3	7-6	12-8	>12
16 year	<2	2	4-3	6-5	10-7	>10

11.2 Stork stand test

Ratings	Score
Excellent	>50 seconds
Good	40-50 seconds
Average	25-39 seconds
Fair	10-24 seconds
Poor	<10 seconds

Sources:

<http://www.topendsports.com>

The presidents challenge

<http://www.brianmac.co.uk>