

The 1.5 Mile Run Test

The 1.5 Mile Run Test measures cardiorespiratory fitness.[1] It is a vigorous fitness assessment; therefore, individuals should successfully complete medical screening prior to test administration. Objective: cover the distance as fast as possible. A treadmill, indoor or outdoor track or another suitable flat running area measured to 1.5 miles is required. Irregular surfaces, such as loose gravel, are not acceptable. Indoor testing with or without treadmills may be ideal in certain weather conditions.[2]

Procedures

1. Individuals being tested should not eat a heavy meal or smoke for at least 2-3 hours prior to the test. Individuals should perform a dynamic warm-up prior to the test.
2. If possible, each individual being tested should have experienced some practice in pacing prior to the test. Often individuals will attempt to run too fast early in the run and become fatigued pre-maturely. A trained pacer might accompany the participants around the track during the actual test.
3. The individual runs 1.5 miles as fast as possible. If a 440-yard track is used, then 6 laps must be completed using the inside lane (lane 1). If using a 400-meter track, then an additional 15 yards must be run after the 6 laps are completed.
4. During the administration of the test, the individual can be informed of their lap times. Finish times should be called out and recorded.
5. Upon test completion, a mandatory cool-down period is enforced. The individuals should walk slowly for about 5 minutes immediately after the run to prevent venous pooling (i.e., pooling of the blood in the lower extremities which reduces the return of blood to the heart and may cause cardiac arrhythmias).

1.5 Mile Run Norms

Norms are based on Cooper Clinic patients first visit results only.

Age Group	20-29		30-39		40-49		
	M	F	M	F	M	F	
99	8:35	9:29	8:49	9:51	9:10	10:09	S
95	9:18	10:28	9:34	11:00	9:51	11:32	
90	9:40	11:10	10:02	11:33	10:28	11:58	E
85	10:00	11:33	10:24	11:58	10:48	12:51	
80	10:09	11:58	10:47	12:25	11:16	13:22	G
75	10:45	12:25	11:06	12:53	11:41	13:32	
70	10:59	12:53	11:22	13:23	11:58	13:58	F
65	11:10	12:53	11:33	13:47	12:11	14:32	
60	11:31	13:24	11:56	14:04	12:25	14:44	P
55	11:45	13:49	11:58	14:23	12:53	15:13	
50	11:58	14:07	12:25	14:34	13:11	15:24	VP
45	12:23	14:34	12:50	15:14	13:24	15:57	
40	12:38	14:50	13:04	15:38	13:49	16:21	
35	12:53	15:14	13:24	15:58	14:07	16:46	
30	13:16	15:52	13:46	16:38	14:34	17:22	
25	13:40	16:26	14:09	16:46	14:53	17:58	
20	14:06	16:46	14:34	17:38	15:22	18:38	
15	14:34	17:49	15:13	18:37	15:58	19:32	
10	15:35	18:37	15:58	19:43	16:46	20:47	
5	17:22	20:31	17:29	21:31	18:37	22:22	
1	21:25	23:58	20:58	24:57	22:20	25:49	
n	2,463	1,397	13,308	4,642	19,566	6,709	

S = superior; E= excellent; G = good; F = fair; P = poor; VP = very poor.

1.5 Mile Run Norms (continued)

Norms are based on Cooper Clinic patients first visit results only.

Age Group	50-59		60-69		70-79		
	M	F	M	F	M	F	
99	9:34	11:22	10:09	11:58	10:28	11:58	
95	10:38	12:52	11:26	14:05	12:31	14:34	S
90	11:11	13:24	12:21	14:53	13:24	16:21	
85	11:45	14:16	12:53	15:35	13:58	17:00	
80	12:07	14:34	13:23	16:21	14:34	17:38	E
75	12:36	15:11	13:53	16:46	15:13	18:14	
70	12:53	15:35	14:16	17:21	15:54	18:37	
65	13:17	15:58	14:34	17:38	16:19	18:38	
60	13:32	16:21	15:04	18:12	16:45	19:38	G
55	13:57	16:46	15:25	18:38	17:15	19:44	
50	14:16	17:13	15:56	18:52	17:47	20:11	
45	14:34	17:38	16:21	19:25	18:16	20:56	
40	15:03	18:07	16:46	20:06	18:38	21:34	F
35	15:20	18:37	17:11	20:46	19:39	22:20	
30	15:58	18:59	17:38	21:20	19:53	22:38	
25	16:21	19:44	18:32	22:14	20:51	23:10	
20	16:46	20:32	19:10	22:44	21:47	23:46	P
15	17:38	21:31	20:12	23:32	22:54	25:20	
10	18:38	22:43	21:44	24:46	24:52	26:51	
5	20:53	24:42	23:58	26:19	27:56	29:51	
1	25:01	28:39	6:18	30:13	32:46	36:12	VP
n	11,693	4,539	3,285	1,313	467	187	

Total n = 50,782 for males, n = 18,787 for females: S = superior; E = excellent; G = good; F = fair; P = poor; VP = very poor.

References

1. Despres, J.P., *Physical Activity, Sedentary Behaviours, and Cardiovascular Health: When Will Cardiorespiratory Fitness Become a Vital Sign?* Can J Cardiol, 2016. **32**(4): p. 505-13.
2. Medicine, A.C.o.S., *ACSM's Resources for the Health Fitness Specialist*. 2013: Lippincott Williams & Wilkins.