



Progressive Aerobic Cardiovascular Endurance Run (PACER) Look-Up and Goal Setting Table

Beginning with 2013-14, the PACER, which is one of the three Aerobic Capacity test options available in the FITNESSGRAM¹, is based on student gender, age, and laps only. This table provides the minimum number of 20-meter (20m) laps that males and females need to achieve the Healthy Fitness Zone (HFZ) for the PACER, which is still reported in terms of VO_{2max} ². Although students can set goals based on the minimum number of PACER laps, teachers are encouraged to discuss the importance of aerobic capacity and to ensure that students understand how VO_{2max} is influenced by gender and age.

Age	Females Minimum Number of 20m PACER Laps	Females Aerobic Capacity HFZ VO_{2max}	Males Minimum Number of 20m PACER Laps	Males Aerobic Capacity HFZ VO_{2max}
10	17	≥ 40.2	17	≥ 40.2
11	20	≥ 40.2	20	≥ 40.2
12	23	≥ 40.1	23	≥ 40.3
13	25	≥ 39.7	29	≥ 41.1
14	27	≥ 39.4	36	≥ 42.5
15	30	≥ 39.1	42	≥ 43.6
16	32	≥ 38.9	47	≥ 44.1
17	35	≥ 38.8	50	≥ 44.2
17+	38	≥ 38.6	54	≥ 44.3

Note: The information in this table should not be used to attempt to derive a formula for calculating VO_{2max} from PACER laps. The VO_{2max} values establish the HFZ for the gender and age and are not the exact VO_{2max} values that would be obtained from the number of laps displayed.

¹ The FITNESSGRAM and Healthy Fitness Zone (HFZ) are registered trademarks of The Cooper Institute.

² VO_{2max} refers to the maximum oxygen consumption of an individual during exercise. The acronym is derived from V = volume per time, O_2 = oxygen, and max = maximum.