



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

Beginning with 2015–16, the PACER, which is one of the three Aerobic Capacity test options available in the *FITNESSGRAM*<sup>1</sup>, 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  $VO_2\text{max}$ <sup>2</sup>. 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  $VO_2\text{max}$  is influenced by gender and age.

Age	Females Minimum Number of 20m PACER Laps	Females Aerobic Capacity HFZ $VO_2\text{max}$	Males Minimum Number of 20m PACER Laps	Males Aerobic Capacity HFZ $VO_2\text{max}$
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  $VO_2\text{max}$  from PACER laps. The  $VO_2\text{max}$  values establish the HFZ for the gender and age and are not the exact  $VO_2\text{max}$  values that would be obtained from the number of laps displayed.

<sup>1</sup> The *FITNESSGRAM* and Healthy Fitness Zone (HFZ) are registered trademarks of The Cooper Institute.

<sup>2</sup>  $VO_2\text{max}$  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.