



The Progressive Aerobic Cardiovascular Endurance Run (PACER) is one of the three Aerobic Capacity test options available in the FITNESSGRAM®.

The PACER is reported in terms on VO_2 Max, however beginning in 2013–14, Healthy Fitness Zones (HFZ) are based on student gender, age, and laps only.

This table provides the minimum number of 20-meter (20m) laps that students need to achieve the HFZ for the PACER, and the corresponding VO_2 Max.

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 Max is influenced by gender and age.

FEMALES

| Age | Minimum Number of 20m PACER Laps | Aerobic Capacity HFZ VO_2 max |
|-----|----------------------------------|---------------------------------|
| 10 | 17 | ≥ 40.2 |
| 11 | 20 | ≥ 40.2 |
| 12 | 23 | ≥ 40.1 |
| 13 | 25 | ≥ 39.7 |
| 14 | 27 | ≥ 39.4 |
| 15 | 30 | ≥ 39.1 |
| 16 | 32 | ≥ 38.9 |
| 17 | 35 | ≥ 38.8 |
| 17+ | 38 | ≥ 38.6 |

MALES

| Age | Minimum Number of 20m PACER Laps | Aerobic Capacity HFZ VO_2 max |
|-----|----------------------------------|---------------------------------|
| 10 | 17 | ≥ 40.2 |
| 11 | 20 | ≥ 40.2 |
| 12 | 23 | ≥ 40.3 |
| 13 | 29 | ≥ 41.1 |
| 14 | 36 | ≥ 42.5 |
| 15 | 42 | ≥ 43.6 |
| 16 | 47 | ≥ 44.1 |
| 17 | 50 | ≥ 44.2 |
| 17+ | 54 | ≥ 44.3 |

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VO_2 Max refers to the maximum oxygen consumption of an individual during exercise. The acronym is derived from V = volume per time; O = oxygen; and max = maximum.