

## Physical activity: are you a weekend warrior?

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Researchers from Loughborough University (UK) studied the link between different patterns of physical activity and death risk. They asked people about the frequency, duration, and intensity of their activities and concluded that even a little bit of physical activity reduces the risk of dying prematurely. Compared to inactive people, the 'weekend warriors', who meet the weekly physical activity recommendations in just one or two sessions, have about a 30% risk reduction.

A low level of [physical activity](#) is associated with an increased risk of death (mortality). To reduce the risk, and to be in good physical and mental health, the [World Health Organization \(WHO\) recommends](#) that adults should weekly perform at least:

- 150 minutes of moderate-intensity aerobic activity; or
- 75 minutes of vigorous-intensity aerobic activity; or
- an equivalent combination of both.

Aerobic activity is when the body is active, with an increased heart rate and blood circulation. This increases the oxygen supply, and ensures an efficient energy production. Some examples include brisk walking, jogging, rowing, swimming, or cycling.

The authors note that the WHO recommendation does not say how frequency, duration and intensity of physical activity can be best combined to maintain and achieve health benefits. The guidelines can be achieved by 30 minutes of moderate-intensity physical activity 5 days a week, or by 75 minutes of vigorous activity in one go.

This [observational study](#) assessed the physical activity patterns of more than 63,000 people aged 40 and over in the UK. During 18 years of the study (1994 - 2012), almost 9,000 died, of which about 1/3 from cardiovascular disease (CVD) and a bit less from cancer. To compare the mortality risks for the different activity patterns, the participants were grouped in the four categories:

- Inactive: no moderate- or vigorous intensity physical activities (62.8%);
- Insufficiently active: less than 150 minutes of moderate-, and less than 75 minutes of vigorous-intensity physical activity per week (22.4%);
- Weekend warriors: at least 150 minutes of moderate-, or 75 minutes of vigorous-intensity physical activity in one or two sessions (3.7%);
- Regularly active: at least 150 minutes of moderate-, or 75 minutes of vigorous-intensity physical activity in three or more sessions (11.1%).

The researchers found that, compared to the 'inactive' group, all three other categories had reduced risks for all-cause, CVD, and cancer mortality. The reductions in the 'insufficiently active' and 'weekend warrior' participants were similar, and somewhat smaller than in the 'regularly active' participants. In those who

met the physical activity recommendations, the frequency and duration did not affect the risk.

The authors concluded that even one or two sessions of physical activity per week decreases mortality risk, even in the 'insufficiently active' participants, and regardless of frequency and intensity. This suggests that some leisure-time physical activity is better than none.

For further information, please see:

[O'Donovan G, Lee IM, Hamer M, et al. \(2017\). Association of "Weekend Warrior" and Other Leisure Time Physical Activity Patterns With Risks for All-Cause, Cardiovascular Disease, and Cancer Mortality. JAMA Intern Med. Published online ahead of print 9 Jan 2017. Doi:10.1001/jamainternmed.2016.8014](#)