

# ‘Weekend warrior’ exercise pattern sufficient to cut mortality

BY MARY ANN MOON

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The “weekend warrior” exercise pattern – having one or two rather than five to seven leisure-time activity sessions per week – may be sufficient to reduce all-cause, cardiovascular disease, and cancer mortality risks, according to a report published online Jan. 9 in JAMA Internal Medicine.

The World Health Organization and U.S. Department of Health & Human Services recommend that adults perform at least 150 minutes per week of moderate-intensity aerobic activity, at least 75 minutes per week of vigorous-intensity aerobic activity, or equivalent combinations, spread out over the week.

However, it is uncertain whether performing all the recommended activity on 1 or 2 days of the week – the “weekend warrior” pattern that many people find easier to incorporate into a busy lifestyle – would yield the same benefits as performing the activity in shorter (30-minute) sessions for 5-7 days a week, noted Gary O’Donovan, PhD, of the National Center for Sport and Exercise Medicine, Loughborough (England) University, and his associates (JAMA Intern Med. 2017 Jan 9. doi: 10.1001/jamainternmed.2016.8014).

They performed a pooled analysis of data in eight household surveillance studies across England and Scotland, focusing on the self-reported physical activity patterns of 63,591 adults older than 40 years from 1994 through 2012. The mean age of the survey respondents was 58.6 years. A total of 62.8% were classified as inactive, 22.4% as

insufficiently active (performing less than 150 minutes per week of moderate-intensity activity), 3.7% as weekend warriors, and 11.1% as regularly active.

There were 8,802 deaths because of all causes, including 2,780 deaths due to cardiovascular disease (CVD) and 2,526 deaths due to cancer, during 561,159 person-years of follow-up.

Compared with inactive participants, the hazard ratio (HR) for all-cause mortality was 0.69 for insufficiently active participants (a 31% reduction), 0.70 for weekend warriors (a 30% reduction), and 0.65 for regularly active participants (a 35% reduction).

Compared with inactive participants, the HR for CVD mortality was 0.63 and that for cancer mortality was 0.86 for insufficiently active participants, the HR for CVD mortality was 0.60 and that for cancer mortality was 0.82 for weekend warriors, and the HR for CVD mortality was 0.59 and that for cancer mortality was 0.79 for regularly active participants.

The findings remained consistent for men and women alike and regardless of the presence or absence of obesity. However, because 95% of the study population was white, it is not known whether the findings apply to other racial or ethnic groups.

The study results suggest that some leisure-time physical activity is better than none, and that even as few as one to two sessions per week offer considerable health benefits to both men and women, even among obese adults, Dr. O’Donovan and his associates said.

The investigators did not elaborate on the finding that an “insufficient” activity level reduced mortality risks to nearly the same degree as a “weekend warrior” activity level.

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## VIEW ON THE NEWS

### Can exercise wait for the weekend?

**IN RESPONSE TO THE QUESTION** of whether exercise can wait for the weekend, the short answer is “perhaps.”

Meeting current guidelines for physical activity in only one or two sessions per week does yield substantial mortality benefit, but exercising more frequently yields even more.

In addition to studying the timing, frequency, and intensity of physical activity, we hope researchers also examine ways to promote its popularity in the general public.

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