

Medical News in Brief

Sudden Cardiac Deaths Have Decreased Among Young Athletes

The rate of sudden cardiac death (SCD) in the US among National Collegiate Athletic Association athletes declined from mid-2002 through mid-2022, a recent [study](#) involving 143 SCD cases found, while deaths related to noncardiovascular causes remained stable over the period.

The SCD incidence tended to be higher among certain groups of athletes, particularly Division I male basketball players. Overall, male or Black athletes were more likely to have experienced SCD than female or White athletes, respectively. About half of the deaths were related to exertion, and none were attributed to COVID-19 myocarditis.

"Continued efforts are needed to improve cardiovascular screening, risk stratification, emergency action plans, availability of automated external defibrillators, and training in cardiopulmonary resuscitation," the researchers wrote in *Circulation*.

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HIIT in the Water Might Be Just As Beneficial

People with chronic conditions who engaged in high-intensity interval training (HIIT) in the water experienced similar improvements in exercise capacity compared with people who followed land-based HIIT programs, according to a [meta-analysis](#) of 18 trials involving about 900 participants. HIIT is an exercise program that involves interspersing periods of activity with short periods of recovery.

Adherence to the aquatic HIIT programs in the analysis was high, ranging from 84% to 100% of participants sticking with the training schedules. Factors contributing to the overall energy capacity score included maximal oxygen consumption, known as $\dot{V}O_{2\text{max}}$, and the distance participants walked during a period of 6 to 12 minutes.

The findings in *BMJ Open Sport & Exercise Medicine* suggest that water-based HIIT programs could be "a valuable alternative for people with barriers to performing high-



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intensity exercise on land," such as those with limited mobility or weakness, the researchers noted.

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Thyroidectomy for Persistent Hashimoto Disease Symptoms

People with Hashimoto disease who experienced persistent symptoms such as fatigue as well as joint or muscle pain despite thyroxine replacement reported continued long-term improvement in their quality of life 5 years after receiving a thyroidectomy. The findings, published in the *Annals of Internal Medicine*, were based on [results](#) from a randomized clinical trial involving 65 participants with the autoimmune disorder who underwent surgery.

The study's 54 participants who did not receive a thyroidectomy did not report positive changes in their well-being over the course of 3 years.

However, the researchers reported that an "unacceptably high" number of participants—14%—who received a thyroidectomy experienced lasting adverse events related to the surgery, including recurrent laryngeal nerve paralysis and hypoparathyroidism.

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Long-Term ADHD Medications and Cardiovascular Disease Risk

When used for a prolonged time, pharmacologic treatments for attention-deficit

hyperactivity disorder (ADHD) were linked with an increased risk of cardiovascular disease—specifically hypertension and arterial disease—in a case-control study.

The [study](#) included patients in Sweden aged 6 to 64 years who had an ADHD diagnosis or medication prescription. More than 10 000 participants with cardiovascular disease were matched with more than 50 000 participants without cardiovascular disease.

Over a 14-year follow-up period, each additional year of ADHD medication use was associated with a 4% increase in cardiovascular disease risk compared with nonuse. The type of medication mattered when it came to the long-term risk: the risk was higher for stimulants methylphenidate and lisdexamfetamine than the nonstimulant atomoxetine.

"Clinicians should be vigilant in monitoring patients, particularly among those receiving higher doses, and consistently assess signs and symptoms of [cardiovascular disease] throughout the course of treatment," the authors wrote in *JAMA Psychiatry*. "Monitoring becomes even more crucial considering the increasing number of individuals engaging in long-term use of ADHD medication."

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Even Mild Lack of Sleep Might Raise Women's Diabetes Risk

Women aged 20 to 75 years whose sleep was restricted in a [study](#) to about 6 hours per night had small reductions in insulin sensitivity and increases in plasma insulin after 6 weeks compared with those who slept between 7 and 9 hours nightly. The association remained when the researchers accounted for changes in body fat.

The analysis involved 38 women who were metabolically healthy but had a heightened risk of cardiometabolic disease. Eleven of the women were postmenopausal, and they appeared to be particularly affected by the shorter sleep, the researchers reported in *Diabetes Care*.

If the sleep debt is maintained long-term, "it is possible that prolonged insufficient sleep among individuals with prediabetes could accelerate the progression to type 2

diabetes," study author Marie-Pierre St-Onge, PhD, said in a [statement](#). The authors noted in the study that insufficient sleep could be a modifiable risk factor that could be targeted to prevent diabetes in women.

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First At-Home Test for Chlamydia and Gonorrhea Receives FDA Approval

In 2021, the US saw an estimated 1.6 million chlamydia cases and more than 700 000 gonorrhea cases.

Citing rising numbers of sexually transmitted infections, the US Food and Drug Administration (FDA) [recently granted marketing approval](#) for the first at-home diagnostic test for chlamydia and gonorrhea.

People can obtain the direct-to-consumer Simple 2 Test over the counter without a prescription. After registering the kit online and filling out a health questionnaire, the user collects their sample—either a vaginal swab or urine specimen—and sends it to a designated laboratory. They receive their results and follow-up from a health care provider, if needed, online.

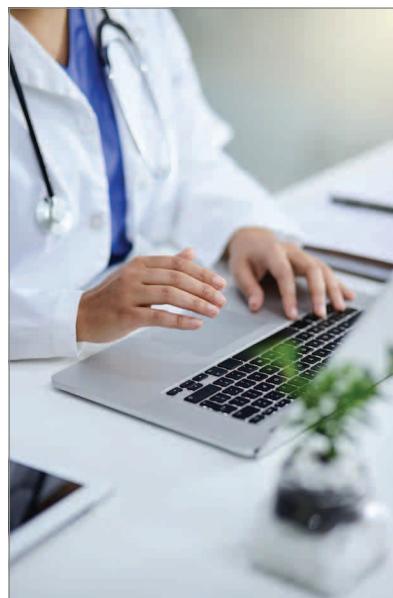
The potential risks of the test, which is intended for adults aged 18 years or older, are related to the potential for false-positive or false-negative results, and include inappropriate treatment with antibiotics or delays in care, the FDA said in its announcement.

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Approaches Decreased EHR Time for Primary Care Clinicians

Factors such as team collaboration on orders and the presence of a clinic phar-

macy technician to help with medication refills might reduce the amount of time primary care practice (PCP) clinicians spend on the electronic health record (EHR) during and after typical work hours, according to 2021 [data](#) from 307 US physicians from 31 primary care clinics at Massachusetts General Hospital and Brigham and Women's Hospital. The research appeared in *JAMA Network Open*.



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Team collaboration was measured by the use of scribes and the percentage of orders placed by a nonphysician member of the care team. Working at a community health clinic was also linked with a lower amount of EHR time.

The findings "highlight the importance of addressing EHR burden at a systems level,"

the researchers wrote, adding that "EHR time burden, and the burnout associated with this burden, represent a serious threat to the PCP workforce."

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Caregiving Tied to Mental Health Decline, Including in Younger People

The transition to unpaid caregiving was linked with increased psychological distress and worse mental health, according to [results](#) from a nationally representative survey of UK participants aged 16 years or older.

Writing in *The Lancet Public Health*, the researchers recommended that "an individual's status as a caregiver should be noted on their health record." Primary care practices in the UK now do this to foster conversations between clinicians and their caregiving patients, the authors said.

The survey found that changes in well-being were most pronounced for people who were younger than 65 years as well as for those who provided care for 20 hours or more per week and who cared for someone in their household.

Changes in physical health were not linked with the transition to a caregiver role.

Although the researchers were not able to tease apart the consequences of caregiving from the difficulty of having a loved one with an illness or care need, they said the study's results emphasize the importance of early identification and support of caregivers. — **Emily Harris**

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Note: Source references are available through embedded hyperlinks in the article text online.