

RT NEWS MEDICAL UPDATE



THE "C" WORD

CANCER NUMBERS DROPPING

Both the incidence rate and death rate for cancer went down in the 10 years from 2005 to 2014, according to researchers with the American Cancer Society (ACS).¹ The incidence rate dropped 2% annually in men during that period, although the rate for women remained constant over the same period. The death rate fell by 1.5% annually for both sexes. Further, the overall cancer death rate has decreased by 26% over the 24-year period from 1991 to 2015, according to the ACS analysis.

Based on these data, the ACS researchers projected that there will be approximately 1,735,350 new cancer cases and 609,640 deaths related to cancer in 2018. The cancer statistics were generated based on 2014 data from the National Program of Cancer Registries, the North American Association of Central Cancer Registries, and the Surveillance, Epidemiology, and End Results Program, and from 2015 data available through the National Center for Health Statistics.

1. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2018. *CA Cancer J Clin*. 2018;68(1):7-30.

EARLY DETECTION FOR EIGHT CANCERS

A blood test developed at the Johns Hopkins University can detect eight common cancers by evaluating the circulating levels of proteins and mutations.¹ Researchers administered the CancerSEEK test to 1005 patients with nonmetastatic, clinically detected cancers of the breast, colorectum, esophagus, liver, lung, ovary, pancreas, and stomach. The specificity of the test was greater than 99%. In five cancer types (esophageal, liver, ovarian, pancreatic, and stomach) for which there is no available screening test for those with average risk, the test demonstrated detection sensitivities ranging from 69% to 98%.¹

1. Cohen, Li L, Wang Y, et al. Detection and localization of surgically resectable cancers with a multi-analyte blood test [published online ahead of print January 18, 2018]. *Science*.



NEURO NEWS

A PLATEAU IN AUTISM

There was no statistically significant increase in new incidences of autism spectrum disorder in the United States between 2014 and 2016, according to a recent analysis, representing the first occurrence of a plateau in a steady growth in the disorder for 2 decades.¹ Researchers at the

University of Iowa analyzed nationally representative data from the National Health Interview Survey to estimate a prevalence of autism spectrum disorder of 2.47% among US children and adolescents in 2014 to 2016.

The researchers noted that there is a need for continued monitoring of prevalence of the disorder. A number of factors may have been responsible for the previously observed 20-year increase in prevalence, they said, including nonetiologic influences such as evolving diagnostic criteria, amplified public awareness, and a greater number of possible referrals, and etiologic elements such as genetic and environmental risks.

1. Xu G, Strathearn L, Liu B, Bao W. Prevalence of autism spectrum disorder among US children and adolescents, 2014-2016. *JAMA*. 2018;319(1):81-82.



SMOKING RISKS

E-CIGARETTES, TOO, CARRY RISKS

Substituting e-cigarettes for traditional cigarettes reduces users' exposure to carcinogens and other toxic agents, but there are still risks associated with the noncombustible products, according to a report from the National Academies of Sciences, Engineering, and Medicine.¹ The comprehensive report is the result of a review of the scientific evidence concerning e-cigarettes, including their contents, their health effects, and their potential for harm reduction in comparison with combustible tobacco.

The review was conducted by an expert committee assembled with support from the Center for Tobacco Products of the US Food and Drug Administration. The committee reviewed the available evidence, categorized it by level of evidence, and generated 47 conclusions.

According to the report, there is conclusive evidence of exposure to nicotine and other potentially toxic substances through the use of e-cigarettes, the presence of which varies by product.² The report can be viewed in its entirety on the website of the National Academies of Sciences, Engineering, and Medicine.¹ ■

1. The National Academies of Sciences, Engineering, and Medicine. Public Health Consequences of E-Cigarettes. <http://nationalacademies.org/hmd/Reports/2018/public-health-consequences-of-e-cigarettes.aspx>. Published January 23, 2018. Accessed February 22, 2018.

2. The National Academies of Sciences, Engineering, and Medicine. Public Health Consequences of E-Cigarettes: Conclusions By Level of Evidence. www.nap.edu/resource/24952/012318ecigaretteConclusionsByEvidence.pdf. Published January 23, 2018. Accessed February 22, 2018.

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