

Number of Children Identified with Autism Rises

Approximately 1 in 68 (1.47%) American children have been identified with autism spectrum disorder (ASD), according to a study by the US Centers for Disease Control and Prevention (CDC).¹ The estimates were based on a review of health and special education records in 11 communities across the United States during 2010. Researchers reviewed the rates of ASD in children 8 years old because, according to the CDC, most children with ASD are identified by that age.

The CDC found that, in the 11 communities measured, boys were 5 times more likely to be identified with ASD than girls: Approximately 1 in 42 (2.38%) boys and 1 in 189 (0.53%) girls were identified with ASD ($P < .01$). The

report found that white children (1 in 63 [1.59%]) were identified with ASD at a higher rate than black (1 in 81 [1.24%]) or Hispanic (1 in 93 [1.08%]) children.

The study also measured the IQ scores of children identified with ASD. "Among the 7 sites with sufficient data on intellectual ability, 31% of children with ASD were classified as having IQ scores in the range of intellectual disability ($IQ \leq 70$), 23% in the borderline range ($IQ = 71$ to 85), and 46% in the average or above average range of intellectual ability ($IQ > 85$)," the study authors wrote.

1. Jon Baio; Centers for Disease Control and Prevention. Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2010. http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6302a1.htm?cid=ss6302a1_w. Published March 28, 2014. Accessed March 28, 2014.

Childhood Obesity Rates Rose During 14-Year Period

Childhood obesity rates rose between 1999 and 2012, and the most severe forms of childhood obesity are on the rise, according to a study published in *JAMA Pediatrics*.¹ The results seem to conflict with a report published in *JAMA* in February that said obesity rates for children were on the decline.²

The study, an analysis of data from the National Health and Nutrition Examination Survey gathered between 1999 and 2012, found that 17.3% of children ages 2 to 19 were obese (95% CI, 15.3–19.3). The study also tracked rates of class 2 obesity (body mass index [BMI] $\geq 120\%$ of the 95th percentile for age and sex) and class 3 obesity (BMI $\geq 140\%$ of the 95th percentile or BMI ≥ 40). The authors determined that 5.9% (95% CI, 4.4–7.4) of children were categorized as having class 2 obesity and 2.1% (95% CI, 1.6–2.7) of children were categorized as having class 3 obesity.

The study authors explained that the results of their paper differed from the earlier report because their study covered a longer time span. The paper published in *JAMA* analyzed data that covered a decade; the paper published in *JAMA Pediatrics* analyzed data that covered a 14-year period.

The study authors noted that, although rates of obesity for children were not significantly different from 2009 to 2010, classes of obesity have increased over the 14-year period covered by the study.

1. Skinner AC, Skelton JA. Prevalence and trends in obesity and severe obesity among children in the United States, 1999–2012 [published online ahead of print April 7, 2014]. *JAMA Pediatr*. doi:10.1001/jamapediatrics.2014.21.
2. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011–2012. *JAMA*. 2014;311(8):806–814.

White Preschool Males Shown to Have Highest Rates of Color Vision Deficiency

Among children aged 37 to 72 months, white males had the highest rate of color vision deficiency (CVD; 5.6%), followed by Asian males (3.1%) Hispanic males (2.6%), and black males (1.4%), according to a population-based, cross-sectional study.¹ In boys of all ethnicities, 41% of CVD cases were severe.

Females in the same age group had CVD rates of 0.0% to 0.5% for all ethnicities. The lower rate of CVD in females is likely due to the fact that the X chromosome contains the genes necessary for color vision.

Testability varied for participants. Those 30 to 36 months of age had the lowest rate of testability (17%), but testability increased linearly with age, with 98% of patients aged 61 to 72 months testable.

The researchers said that their findings were consistent with other findings about CVD in older populations. This study, they noted, was the first study to measure prevalence of CVD in preschool-age children in the 4 major ethnicities.

1. Xie JZ, Tarczy-Hornoch K, Lin J, Cotter SA, Morres M, Varma R. Color vision deficiency in preschool children: The multi-ethnic pediatric eye disease study [published online ahead of print April 3, 2014]. *Ophthalmology*. doi:10.1016/j.ophtha.2014.01.018.

Measles Outbreak in Canada Tied to Cases in the United States

An outbreak of measles in British Columbia, Canada, has been linked with 4 measles cases in the United States,

according to a report from the Canadian Broadcasting Corporation (CBC).¹ Dr. Greg Stern, a health officer in Whatcom County, Washington state, said that 4 people in the United States have contracted the disease and are now in isolation.

“The outbreak was first declared March 8 in parts of the region where immunization rates were low within some religious communities and schools,” the CBC reported.

Canadian authorities estimated that 320 cases of measles were reported in British Columbia. Members of a religious congregation in Fraser Valley, British Columbia, reported most of those cases. The local health authority has set up immunization clinics in the area to immunize residents who are not vaccinated against the disease.

1. Measles outbreak in B.C. reaches 300-plus, tied to 4 U.S. cases. CBC News. March 31, 2014. <http://www.cbc.ca>. Accessed April 7, 2014.

Advisory Panel Suggests DNA Test to Replace Pap Test for Detection of Cervical Cancer

A US Food and Drug Administration (FDA) advisory committee, in series of 13-0 votes, recommended that a DNA test which screens for human papilloma virus (HPV) replace the Pap test for first-line cervical cancer detection. The advisory panel said that the DNA test is an effective tool for detecting cervical cancer, is safe, and that the benefits of the test outweigh the risks.

Currently, the DNA test is approved as a follow-up test for patients 21 years and older whose Pap test results are abnormal or inconclusive. It also has approval as a co-test alongside Pap tests for women 30 to 65 who are at high risk for the HPV16 and HPV18 strains of the virus. Those 2 strains account for approximately 70% of cervical cancer cases.

Under a proposal, women would use the DNA test for initial screening. Patients who test positive for HPV16 or HPV18 would use a Pap test as follow-up, which would determine the need for colposcopy.

The FDA does not have to follow the recommendations of advisory panels. However, the FDA generally considers the advice of such panels and, in most cases, follows their recommendations. Also, even if the FDA approves the use of the DNA test as a first-line exam for detecting cervical cancer, physicians could still use a Pap test to detect trichomonas and abnormal endometrial cells. ■

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