

Using the Diagnostic and Statistical Manual of Mental Disorders – 5th Edition (DSM-5)  
to Identify Prevalence Rates of Acute Stress Disorder in a National Sample of U.S.  
Adolescents: Findings from the National Comorbidity Survey- Adolescent Supplement  
(NCS-A)

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**Abstract**

This study examined prevalence rates of Acute Stress Disorder (ASD) in a national sample of adolescents using data from the National Comorbidity Survey – Adolescent Supplement (NCS-A). The sample consisted of 10,148 youth aged 13-17 years old since being added to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) in 1994. According to the DSM-5, Acute Stress Disorder can occur in people who experienced, witnessed, or were involved in a situation in which “actual or threatened death, serious injury, or actual or threatened physical or sexual violation” occurred (2013). To be diagnosed with ASD, someone who experienced a traumatic event must have eight of the fourteen symptoms, including, but not limited to, a sense of detachment or numbing, recurrent memories of the event, avoidance of thoughts, and

questions related to the each updated DSM-5 ASD specific symptom criteria. After the mapping process was completed, the Statistical Package for the Social Sciences (SPSS) computer program was used to conduct statistical analyses to identify estimated national prevalence rates of ASD using the NCS-A. Data were analyzed in terms of age, gender, race, birth in the United States, and urbanicity of residence.

### Results

Analyses were conducted to show the estimated number of youth in the NCS-A sample ( $N = 10,148$ ) that met criteria for Acute Stress Disorder. Descriptive analyses revealed a rather bell-curve shaped distribution of prevalence rates based on age. However, the percentage of males with ASD was smaller than the percentage of females with the disorder, 0.4% and 1.6%, respectively. Furthermore, youth not born in the United States made up a larger percentage (1.9%) of youth with ASD in comparison to those who were born in the United States (0.1%). These results are displayed in Table 1.

**Table 1**

Table 1<sup>a</sup>

	Total N = 10,148 (%)
<b>Age</b>	
13	16 (0.2%)
14	27 (0.3%)
15	40 (0.4%)
16	39 (0.4%)
17	45 (0.5%)
18	25 (0.3%)
<b>Gender</b>	
Male	36 (0.4%)
Female	156 (1.6%)
<b>Race</b>	
Hispanic	35 (0.4%)
Black	31 (0.3%)
Other	10 (0.1%)
White	116 (1.2%)
<b>Not born in the U.S.</b>	
False	185 (1.9%)
True	16 (0.2%)
<b>Urbanicity</b>	
Metropolitan	77 (0.8%)
Other Urban	29 (0.3%)
Rural	10 (0.1%)

<sup>a</sup> Table does not account for survey design or sampling weights

\* Acute stress disorder is a lifetime diagnosis

\*\* Metropolitan means a county with a population greater than 100,000

that ASD is a positive predictive factor for PTSD, meaning that a large portion of those diagnosed with ASD are eventually re-diagnosed with PTSD (Bryant 2011). This study provides data that can help pinpoint those youth most at risk for ASD and develop potential early intervention/treatment strategies to ensure ASD is treated

and does not intensify in severity and duration. The prevalence rates of ASD in adolescents gained from this study allow for further studies to be conducted to more accurately determine risk and protective factors for this mental health disorder.

## References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*, 5<sup>th</sup> Edition.

Bryant, R. A. & Harvey, A. G. (2003). Gender differences in the relationship between acute stress disorder and posttraumatic stress disorder following motor vehicle accidents. *The Australian and New Zealand Journal of Psychiatry*, 37, 226-229.

Bryant, R.A. (2011). Acute Stress Disorder as a predictor of Posttraumatic Stress Disorder: A systematic review. *The Journal of Clinical Psychology*, 72, 233-239.

Kaminer, D., Seedat, S., & Stein, D. J. (2005). Post-traumatic stress disorder in children. *World Psychiatry*, 4, 121-125.