

# Trends in Youth Drug Behavior in Guam

Jennifer McCutchen, Tishra Beeson, DrPH, MPH  
Department of Physical Education, School & Public Health

## BACKGROUND

Participating in drug activity (use, selling, exchanging or otherwise distributing illicit drugs) during adolescences has been linked with poor grades and dropping out of high school (Ellickson, et al., 1998; Hawkins, Catalano, Miller, 1992). It has also been linked with patterns of criminal activity, including arrest for both violent and non-violent crimes, gang activity, prostitution, and other related crimes (National Institute of Justice, 1996; Altschuler & Brounstein, 1991). Additionally, health related problems have been associated with drug activity, including traffic incidents, risk of sexually transmitted infections, self-inflicted injuries, as well as mental health issues such as depression and developmental delays (Crowe & Bilchek, 1998; Bureau of Justice Statistics, 1992). Perhaps most concerning is the high proportion of youth suicides or attempted suicides that have been linked with drug and alcohol use (Crowe & Bilchek, 1998).

As a U.S. territory, the island of Guam is home to 159,358 individuals, including adolescents and young adults. Drug activity among Guamanian youth has increased considerably over the last 20 years. The purpose of this study is to examine trends in drug-related activities and behaviors among adolescents on the island of Guam, using the Youth Risk Behavior Surveillance System (YRBSS) public data set.

## METHODOLOGY

We used the Youth Risk Behavior Surveillance System (YRBSS) through the Centers of Disease Control and Prevention (CDC) to analyze trends in drug activity among youth in Guam. This is survey that is done among high school students to collect data on their different risk behaviors and outcomes. The data I will be using comes from the YRBSS conducted in 1995, 1997, 2001, 2007, 2011, and 2013. The results that I will be using are those related to drug use (have you ever used) and the witness of drug activity on school property (were you ever offered, sold or given an illegal drug on school property?)

## KEY FINDINGS

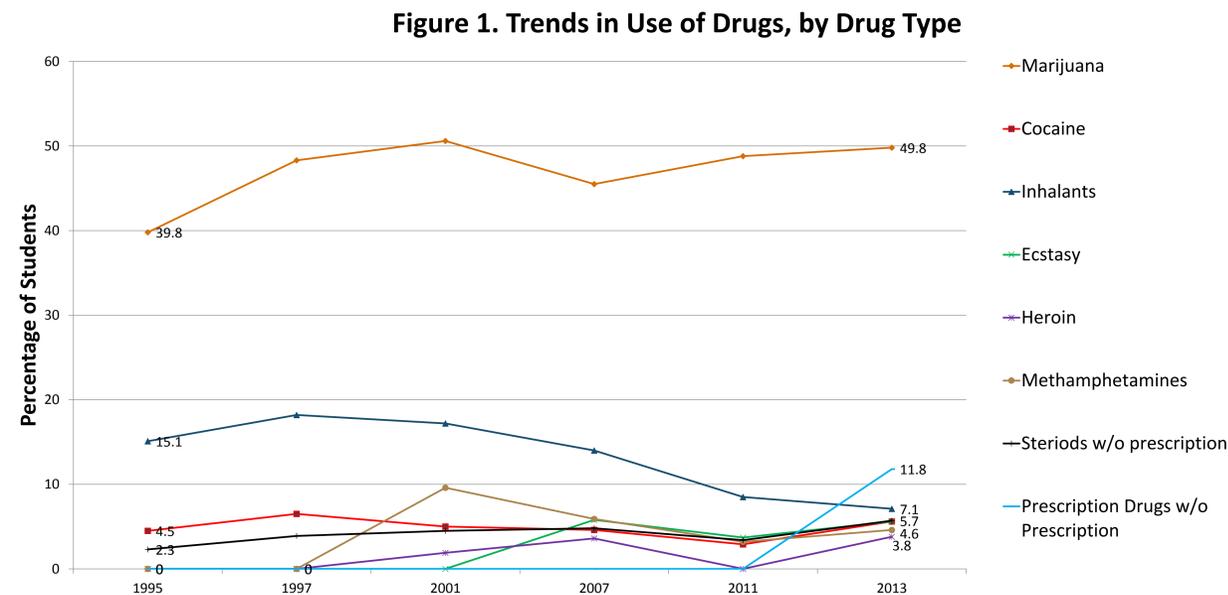


Figure 1 represents the percentage of students who have ever tried certain drugs according to the YRBSS Survey from 1995 - 2013.

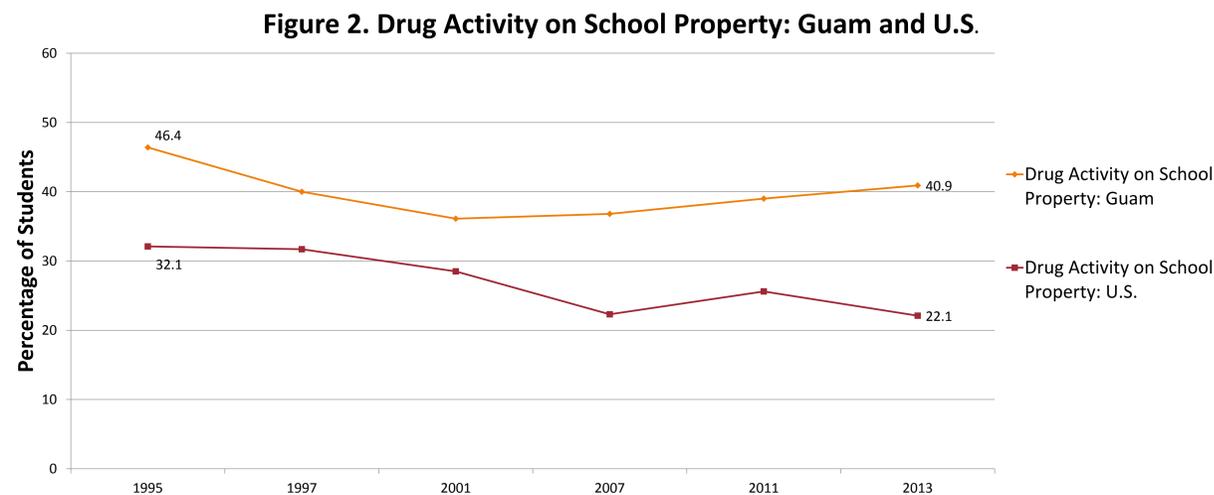


Figure 2 represents the trends in students reporting they were ever offered, sold, or given an illegal drug on school property according to the YRBSS from 1995-2013 in both Guam and in the U.S., nationally.

- References:
- Altschuler, D., and Brounstein, P. (1991). Patterns of drug use, drug trafficking, and other delinquency among inner-city adolescent males in Washington, D.C. *Criminology* 29(4):589-622.
  - CDC Youth Online: High School YRBSS Guam 2013 Results. (n.d.).
  - Crowe AH & Bilchek S. (1998). Drug identification and testing summary: consequences of youth substance abuse. Office of Juvenile Justice and Delinquency Prevention.
  - Ellickson P, Bui K, Bell R, McGuigan K. (1998). Does early drug use increase the risk of dropping out of high school? *Journal of Drug Issues*, 28(2): 357-380.
  - Hawkins, J.D., Catalano, R.F., and Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin* 112(1):64-105.
  - National Institute of Justice. 1996 (June). *Drug Use Forecasting: 1995 Annual Report on Adult and Juvenile Arrestees*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

## DISCUSSION

As you can see from Figure 1, the percentages of high school students ever trying and/or using drugs is somewhat varied over time, depending on the drug type. As we look at the different drugs we can see that the use of Marijuana is the highest among high school students (nearly 50% in 2013) with Prescription Drugs without a prescription from the doctor being next (11.8%). The rates for all drugs increased since the earliest year of data collection, with the exception of inhalants which decreased from 15.1% in 1995 to 7.1% in 2013. As seen in Figure 2, the rates of students reporting ever being offered, sold, or given an illegal drug on school property decreased slightly from 46.4% in 1995 to 40.9% in 2013, however the trend has been increasing since a low of 36.4% in 2001. This could represent a concerning trend in school-based drug activity in Guam, especially since the rates are significantly higher than the national rate in the U.S. according to the YRBSS.

Although the data on these trends in drug activity among youth in Guam are important, we still lack answers to some questions about why drug use has increased and why drug activity on school grounds is so much higher in Guam than in the U.S. Literature shows that education, socio-economic status, school policies, and cultural factors may play a role, but no study to date has ever looked at these factors specifically among Guamanian youth.

## CONCLUSION & SIGNIFICANCE

My recommendations is that we need to figure out why these drug use rates are high among high school youth in Guam. We need to figure out the cause behind the drug use and if there is something that can be done to prevent any further increase in the rates of drug use among youth.

The YRBSS data gives us very important information on trends of drug use and drug activity, as reported by high school students. But additional data is needed – especially qualitative data that can give us more context into why this public health issue exists. A team of CWU students and faculty will travel to Guam this summer, and as a part of this trip, will collect information of a qualitative nature into this very question about why drug use continues to increase in Guam. Interviews with various stakeholders including youth, teachers, school administrators and law enforcement will be conducted and the results will be presented in a case study on school-based drug activity in Guam in the coming year.