



## DATA SHORTS

Behavioral Health Data and Analysis | October 2012 Vol. 1, Issue 2

### Suicide Deaths: Maryland and the U.S.

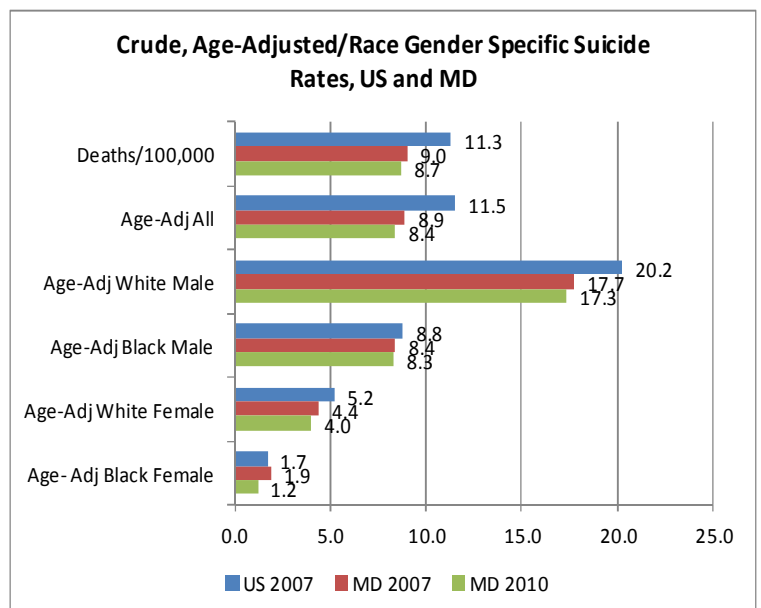
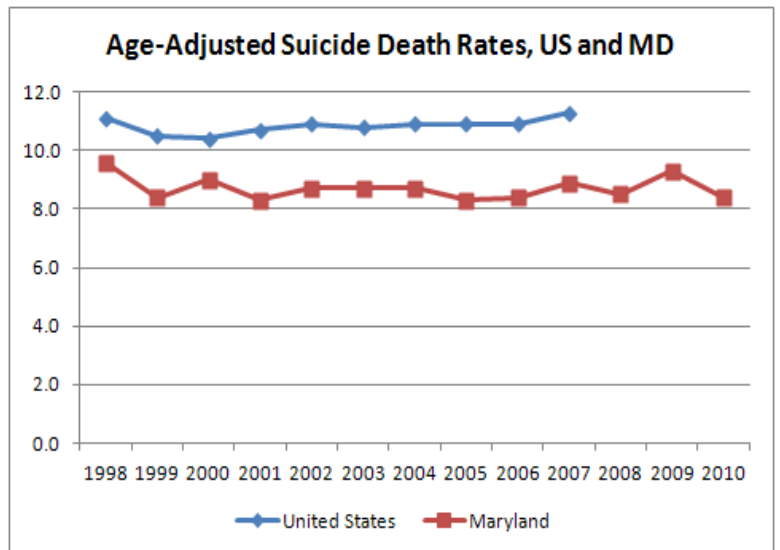
September was set aside as Suicide Awareness and Prevention month by the United States (US) military and October is Suicide Prevention month in Maryland. This Data Short will examine recent Maryland and national suicide rates and, in the process, explain some of the different ways in which death rates are presented and the ways that they are compared across geographic boundaries.

The simplest death rates are called crude death rates, obtained by dividing the number of deaths by the population under study and multiplying by 100,000. This yields a rate per 100,000 people. For the most recent year US data is available, 2007, Maryland experienced 508 deaths by suicide; in 2010, the number was 505<sup>1</sup>. The crude suicide 2007 death rate for the US was 11.3<sup>2</sup>, while for Maryland it was 9.0; in 2010, Maryland's rate decreased to 8.7.

In order to make these rates more comparable, demographers use a method called age adjustment. This takes into account differences in age distributions among populations. The method uses the number of deaths by age in a given area to calculate what the death rate would be on some standard population. While this standard changes, currently the US population in 2000 is being used. When these crude death rates are adjusted for age, the national 2007 rate increases to 11.5, while Maryland rates decrease to 8.9 in 2007 and 8.4 in 2010. (For 2010, this means that if the Maryland population contained the same percentage of people in each age group as the US 2000 population and experienced deaths in comparable numbers, the crude death rate would be 8.4 per 100,000).

The first graph shows the age-adjusted death rates for Maryland and the United States from 1998 to 2010 (though US rates are only available through 2007). During this time, the Maryland rate was consistently below the US rate. There was not a great deal of variation in either set of rates; the range for the US rates was 10.4 to 11.3, and for Maryland, the range was from 8.3 to 9.6. There is no upward or downward trend over time; rates tend to go up and down slightly, showing no real pattern over time.

In addition to adjusting for age, it is also useful to examine deaths by age, gender, and ethnicity. Age-adjusted rates in these instances are based on the age composition of the subgroup in the US 2000 population. In addition to crude death rates and age-adjusted death rates for the total population, the second graph shows age-adjusted rates for four groups: White males, White females, African American or Black males, and African American or Black females. There is only one Maryland group, African-American or Black females, whose 2007 rate was above the US rate; by 2010, that rate had reduced below the US 2007 rate. The greatest difference in rates is seen in White males, with the Maryland rate at 17.7 compared with the US at 20.2.



1. Maryland Vital Statistics, 2010 2. Census Bureau Website: [http://www.census.gov/compendia/statab/cats/births\\_deaths\\_marriages\\_divorces/deaths.html](http://www.census.gov/compendia/statab/cats/births_deaths_marriages_divorces/deaths.html)