## CALCULATING THE JAIL SUICIDE RATE

Prepared by Mr. Terry Jessee, Yellowstone County Detention Center mental health staff

If one or more suicides occurs in a jail over the course of a calendar year, divide the number of suicides by the average daily population for that facility. Then multiply the quotient of that calculation by 100,000. The product of that calculation will be the suicide rate for that facility.

## **EXAMPLE:**

A facility with an average daily population (ADP) of 50 inmates experiences one jail suicide during a year.

1/50 = 0.2 X 100,000 = 2000 per 100,000

A facility with an ADP of 175 inmates experiences one jail suicide during a year.

1/175 = .00571 X 100,000 = 571 per 100,000

Note that the rate for the larger jail is only about one-fourth that of the smaller jail, even though both experienced one suicide. That is part of the issue when making comparisons. To determine a jail's suicide rate, it's necessary to compare the rate of this jail with only jails of similar size. So the smaller jail would be compared only with jails with ADPs of 50 or less, and the larger jail with jails with a population of 100-250 (according to the formulas applied by the US Bureau of Justice Statistics).

When reports to the legislature appeared in 2007, Montana's jail suicide rate was reported as five times the national rate. That figure was incorrect. It appears that it was based on an average annual daily population for the state total of 1521 (a number developed by Policy .....). However, that figure was divided into 14—the total number of suicides for the period from 2003 to 2007. That was *five years* of suicide incidents divided by one year's population.

14/1521 = .00920 X 100,000 = 920/100,000

In fact, by dividing that figure of 14 by five (years), one derives the quotient of 2.8.

2.8/1521 = .00184 X 100,000 = 184/100,000

BJS figures Montana's suicide rate based on an average daily population of <50 because that is the population of most Montana jails. Only a handful have a population greater than 50. The national rate for jails with populations <50 is 167/100,000. Historically, Montana's jail suicide rate has been only slightly higher than the national rate.

In 2011, that has changed. Currently, Montana jails have experienced seven suicides since January 1, 2011. Given a rough average daily population of 1600 for the state, the jail suicide rate currently is 438/100,000.