

Appendix A: Classroom Fact-Finding Worksheet Answer Key

Answers are not provided for questions that ask specifically about “the county where you live,” as there are 87 correct answers!

Which county(s) in Minnesota had the highest percent of alcohol related car crashes in 2008?

Answer: Pipestone County and Red Lake County (both 17%)

Where do most youth who live in the Metro Region obtain alcohol (hint: look under Risk and Protective Factors)? How does this compare with non-metro youth?

Answer: Youth who live in the Metro Region were most likely to report getting alcohol from someone or somewhere (from friends, parents, other family members, getting someone else to buy it for them, or getting it at parties)—social access. Eighty-nine percent of metro youth reported ‘getting’ alcohol from someone or somewhere, while 28% reported ‘taking’ alcohol from someone or somewhere and 12% reported buying alcohol from someone or somewhere. Mode of access is similar for non-metro students: 89% ‘got’ alcohol, 26% ‘took’ alcohol, and 10% ‘bought’ alcohol.

In 2007, which county reported the highest cost per capita of alcohol-related motor vehicle crashes,

injuries and fatalities? Now go to Data by Location and select that county. Use the population size to determine the cost for the entire county (for 2007 estimates, scroll to the bottom of the page and click on ‘Complete Population Data (2000-2007)’).

Answer: Red Lake County at \$604.00 per capita. The 2007 population estimate for Red Lake County was 4,118 people. Multiplying \$604.00 by 4,118 brings the total county cost of alcohol-related motor vehicle crashes, injuries and fatalities to \$2,487,272.00.

In the county where you live, what percent of students did not report any use of alcohol in the past month for 2007?—complete the table below.

Answers will vary by county.

| | Males | Females |
|--------------|-------|---------|
| 6th Graders | | |
| 9th Graders | | |
| 12th Graders | | |

In the county where you live, are male students or females students more likely to report binge drinking (having 5 or more drinks in a row on one occasion in the past 2 weeks)?

Answers will vary by county.

Which region of MN has the lowest rates of lung, bronchus and trachea cancer deaths? Approximately what percent of lung cancer deaths are smoking-related (hint: read the footnotes)?

Answer: From 1997 to 2007, the East Central Alcohol, Tobacco and Drug Abuse Prevention Region averaged the lowest lung, bronchus and trachea cancer death rates. However, in the year 2007 the Metro Region had a lower rate than the East Central Region: 4.0 deaths per 10,000 population vs. 4.4 deaths per 10,000 population.

Among adults in Minnesota, how do smoking rates differ by age group?

Answer: In 2004/2005, Minnesota adults aged 21-24 were most likely to report past-month smoking—43%. Past-month smoking was reported by 36% of 18-24 year-olds, 25% of 25-44 year-olds, 20% of 45-64 year-olds, and 7% of adults aged 65 and older.

How have youth smoking rates changed over time for your county? For your region?

Answers will vary by county and by region.

For the county where you live, are students more likely or less likely than the state average to report first having smoked all or part of a cigarette by the age of 13 or younger?

Answers will vary by county.

Is past month marijuana use increasing or decreasing over time among 12th graders in the Metro Region? How does this compare with non-metro 12th graders?

Answer: Reported past-month marijuana use decreased among 12th graders in the Metro Region from 13% in 1998 to 10% in 2004—then held at 10% into 2007. Comparatively, the percent of 12th graders outside the metro area reporting past-month marijuana use fell from 11% in 1998 to 8% in 2007.

In the county where you live, which drug (other than marijuana) is reported by the highest percentage of students?

Answers will vary by county.

Which age group is most likely to be admitted for substance abuse treatment in MN (hint: look under 'All Substances')? Has this changed over time? Are there differences by primary substance of abuse?

Answer: Since 1995, persons aged 25-44 are most likely to be admitted to a Minnesota treatment facility.

However, the percent of persons admitted who fall into this age group has decreased over time. The percent of persons admitted who fall into the 18-24 year-old group and the 45-64 year-old group has increased over time. Persons under the age of 18 are most likely to be admitted to Minnesota treatment facilities for marijuana as their primary substance of abuse. Among Minnesotans admitted for methamphetamines as their primary substance of abuse, the highest percent are aged 18-24.

Discussion Questions

If you were asked to name the counties that should be most concerned about drug use problems, other than alcohol or tobacco, what information in SUMN will be most useful?

In thinking about this question, you'll want to consider the big picture: use (both youth and adults), consequences, and risk and protective factors. It is also important to think about magnitude, severity and time trends. What percentage of the population is reporting use? How does that compare to regional and state averages? Is use going up, going down, or staying the same? One county may report rates of drug use that are higher than the state average—but perhaps those rates are

dropping over time, and perception of harm and friends' disapproval are high among youth. A second county may have low rates, but those rates are increasing over time and perception of harm and friends' disapproval are low among youth.

Why might reported alcohol use be higher than average in a certain county, but the DWI arrest rate lower than average for that same county?

There could be a number of factors involved in such a scenario. It could be that persons in that county are less likely to drink and drive—either they drink at home, or designate a sober driver. Perhaps that county has many options for transportation, such as buses and taxis. It could be that they are drinking and driving in a different county—perhaps at a cabin up north (this is why it's important to look at DWI by county of arrest as well as DWI by county of residence). Another factor is law enforcement. That county may have fewer officers to enforce drinking and driving laws.

Appendix B: Sunshine County Activity Answer Key and Discussion Guide

1. Impressions of Sunshine County:

Compared to the US, Sunshine County is relatively homogeneous: 89.8% white vs. 74.7% in the US. Also, the county has a higher than average rate of home-ownership, a higher than median income, and a higher than average high school graduation rate. Sunshine County residents are more likely than others in the US to have a Bachelor's degree or higher: 40.1% vs. 27.2%. In addition, the percent of Sunshine County families and individuals living below the poverty level is less than half that of the US.

- **What problems seem to be the most urgent?**

According to the crime statistics, the highest percentage of crimes involved larceny/theft, followed by burglary.

The Sunshine Times gives the impression that use of methamphetamines is the most urgent problem facing the county. Articles on methamphetamines take up half of the front page, and the entire third page. According to reported survey findings, and letters to the editor, the county's residents are split over the proposed tobacco regulations. While an incident involving underage drinking also made the front page, two of the

events described on page four include alcoholic beverages.

Though the Sunshine Times notes that a post office is closing in a "dwindling town," the census data show county residents to be more educated, more affluent, and more likely to be in the workforce than the national average.

- **What sorts of norms and attitudes do the residents have concerning substance use?**

Use of methamphetamines is clearly not acceptable in Sunshine County. In addition to the ample newspaper space allotted to the subject, community attitudes are reflected in the fact that a pizza delivery person tipped off the police to a meth lab and by the quote from the neighbor.

Norms and attitudes surrounding tobacco use are split. The county is divided over the proposed smoking ban in public places—this division is echoed in the 'Letters to the Editor' section.

Norms and attitudes surrounding alcohol use are also split, though the community appears to be more permissive than not. The star athlete was charged with underage consumption and contributing to the delinquency

of a minor, and one letter to the editor commended the judge's ruling. However, two other letters to the editor were critical of the ruling. In addition, two of the three events listed in the 'Calendar of Events' section promote "children's activities, and 40 different types of Midwest beers" and "Wine and Beer runs all night."

2. Time trends:

- **Are they rising, falling, or stable?**

Reported past-month alcohol use among female students appears to be falling. Binge drinking among female students has remained relatively stable over time. Reported past-month cigarette smoking has fallen among female students, while past-month marijuana use has risen. Though reported past-year use of methamphetamines rose among female students from 1998 to 2004, it fell sharply from 2004 to 2007.

Reported past-month alcohol use among male students fell from 1998 to 2004, then held steady into 2007. Binge drinking among male students fell gradually over time. Reported past-month cigarette smoking has fallen among male students, while past-month marijuana use has risen. Though reported past-year use of methamphetamines rose sharply

among male students from 1998 to 2001, it fell from 2001 to 2007.

- **Do you have any thoughts as to probable causes of the rise and fall of the indicator rates?**

The Sunshine Times describes methamphetamine lab busts. This may imply increased enforcement, and/or decreased availability. It is also apparent from the newspaper that methamphetamine use is not condoned among county residents; these norms may have also led to decreased use among youth. The proposed tobacco regulations mentioned in the newspaper suggest decreasing acceptance of cigarette smoking in the county, which may have influenced youth smoking trends.

Reported past-month marijuana use increased among both male and female students. While marijuana use was mentioned in the newspaper article on David Jones, the focus seemed to be on underage alcohol consumption.

Alcohol use and binge drinking are not on the rise among Sunshine County youth. Looking at statewide alcohol use trends among students (on www.sumn.org), rates of past-month alcohol use and binge drinking have been on the decline. Perhaps Sunshine County

rates reflect statewide prevention efforts, or county-level programs, policies and interventions.

3. Rate ratios:

- Using the county percents from 2007 provided on the graph and the state percents from www.sumn.org, calculate the ratio of Sunshine County : MN for each indicator (divide the county percent by the state percent).

| | Female Students | | | Male Students | | |
|-------------------|-----------------|-----|------------|---------------|-----|------------|
| | Sunshine | MN | Rate Ratio | Sunshine | MN | Rate Ratio |
| Any Alcohol Use | 31% | 23% | 1.35 | 45% | 23% | 1.96 |
| Binge Drinking | 24% | 18% | 1.33 | 23% | 23% | 1.00 |
| Cigarette Smoking | 11% | 12% | 0.92 | 18% | 12% | 1.50 |
| Marijuana Use | 26% | 8% | 3.25 | 28% | 11% | 2.55 |
| Meth Use | 1% | 1% | 1.00 | 3% | 2% | 1.50 |

- **How would you describe the comparability of the problem? Be sure to discuss what you feel is an acceptable ratio or meaningful difference.**

A rate ratio provides a measure of severity. There are no hard and fast rules as to what a meaningful difference is. Obviously, if the two rates are exactly the same (rate ratio = 1.00)—there is no difference between Sunshine County and the state. One rule of thumb is that a rate ratio falling in the range of 0.80 to 1.20 may be due to chance, indicating no meaningful difference. Others believe that only a rate ratio outside the range of 0.50 to 2.00 indicates a meaningful difference. It is up to you and your community to decide what is meaningful.

Rate ratios should be considered in conjunction with magnitude (number of students reporting use) and time trends. You may wish to compare your county to the region or the nation. Caution should be taken when comparing your county to other counties—pay close attention to demographic and social factors to ensure you're comparing similar populations.

4. Prioritization matrix:

| | Higher than the state | Similar to the state | Lower than the state |
|----------------------|--|-------------------------------------|----------------------|
| Increasing over time | Marijuana Use: 26% Marijuana Use: 28% | | |
| Staying flat | Binge Drinking: 24% | Cigarette Smoking: 11% | |
| Decreasing over time | Alcohol Use: 31% Alcohol Use: 45% Cigarette Smoking: 18% Meth Use: 3% | Meth use: 1% Binge Drinking: 23% | |

Key: orange = female students; blue = male students

- What seems to be the number one problem, according to this data?**
According to these data, marijuana use among both male and female students is the most severe (as compared to the state), and is increasing over time. Alcohol use is the biggest problem among students in Sunshine County in terms of magnitude—the percent of students using that substance.
- What receives the lowest prioritization?**
According to these data, methamphetamine use among female students and binge drinking among male students are both similar to the state and decreasing over time.
- How do your data-driven findings compare with the more qualitative findings from step one?**
The student survey data show that only a small percentage of youth use methamphetamines, and that use is decreasing over time. However, qualitative data from the newspaper reveals that even a small number of persons making and using methamphetamines can have a large impact on the community. One might argue that the methamphetamine problem in Sunshine County is blown out of proportion in the newspaper. On the other hand, the children, the neighbors, and the county courts and social services all pay a heavy toll.

The student survey data also show that marijuana is a large and growing problem among youth, but little mention of this substance is made in the newspaper. The high percentage of youth reporting alcohol use reflects the relative permissiveness of the community. However, alcohol use among male and female students, and binge drinking among male students, appears to be decreasing over time.

5. Community readiness:

Within your group, come up with some overall conclusions about the problems in this county, their readiness to deal with those problems, and any other interesting thoughts you'd like to share.

The Community Readiness Survey results show that Sunshine County residents are not permissive, and that they support prevention efforts targeting alcohol, tobacco and other drug use. To some extent this is at odds with the newspaper content. According to information in the Sunshine Times, the community is split over tobacco prevention efforts and seems to condone drinking at community events.

According to the Community Readiness Profile, residents perceive that alcohol and tobacco are not easy for youth to obtain. It is clear from the student survey findings that these substances are easy for youth to get their hands on: 45% of males students reported alcohol use, 31% of female students reported alcohol use, 18% of male students reported cigarette smoking, and 11% of female students reported cigarette smoking.