

Community Epidemiological Profile Guidance Document

Background

Step 1 of the Strategic Prevention Framework (SPF) is assessment. Assessment involves: gathering and analyzing data on substance use and related problems in your community, determining your community's resources, identifying gaps, gauging readiness, and making recommendations regarding your community's priorities. Epidemiology is the study of the distribution and determinants of health related states or events in specified populations and the application of this study to the control of health problems. Once you have gathered and analyzed data on substance use and related problems in your community, it is important to document this information. One way to document this information is by creating a Community Epidemiological Profile. The profile can then be used by community leaders and prevention specialists for planning purposes. It can also be used to share findings about substance abuse problems and trends with the entire community.

The state of Minnesota went through a similar process in order to identify the priorities for the SPF SIG. The Minnesota State Epidemiological Outcomes Workgroup (SEOW) was formed in 2006 and has remained active since its inception. The Minnesota SEOW Steering Committee is highly involved, meeting monthly and corresponding frequently via e-mail. It is composed of state agency representatives from both ADAD and the Minnesota Department of Health, and independent consultants from the MIPH, Wilder Research, and the University of Minnesota.

When the Minnesota SEOW was formed, a series of meetings were held with data experts and database managers within the state departments of human services, health, education, public safety, and corrections, as well as individuals at the community-level prevention organizations who collect data. The SEOW discussed all data indicators/topics at face-to-face meetings and determined which data indicators/topics to include in the first Minnesota State Epidemiological Profile published in 2007, based on the following criteria:

- Whether a data-use agreement needed to be established, and could be established
- Frequency of data collection, with priority given to data collected annually
- Geographic disaggregation, with priority given to data available at the sub-state level
- Subgroup disaggregation, with priority given to data available by age group, race/ ethnicity, and gender
- Validity: the indicator correctly measures what you are trying to measure.

For example, DWI conviction records from local courts would not be used to measure DWI arrests—some people are arrested, but the charges are later dropped. Another example would be use of hospital records on alcohol-related injuries for the whole community (all ages combined) used to measure alcohol-related injuries for only 18- to 25-year-olds.

- **Reliability:** consistency in the measurement process. For example, a data collection tool gets the same or similar results every time even if administered by different people. Reliable data require consistency in the wording of questions asked and in the data collection process.

Each year after the first State Epidemiological Profile was produced, the SEOW assessed data gaps and sought strategies to address them. An interactive, web-based data repository was created in 2008. A PDF of the most current Profile is available on the site's home page. Users can search data by geographic location, by topic (indicator), or by demographic group, creating tables, maps, graphs, and charts. The website and Profile can be accessed at www.sumn.org.

Deliverable

Your Community Epidemiological Profile should be completed and submitted to the Minnesota Department of Human Services Alcohol and Drug Abuse Division by November 30, 2012.

1. Review the pre-populated Community Epidemiological Profile template with your Community Epidemiological Workgroup or the Epidemiological Sub-committee of your coalition.
2. Determine which community data are available, and which you want to include in your Profile. This may be quantitative data (numbers) or qualitative data (words). Data may be presented in narrative form, bullet points, tables, graphs, charts or maps.
3. Determine which comparison data you wish to include. The template is pre-populated with state-level data in tables. Access these data using Substance Use in Minnesota, or SUMN, at www.sumn.org. After adding your community's data, you may wish to use the additional rows in the table to add county-level data (if your community is defined as a city, district, etc), or regional-level data. If your community is defined as a combination of counties, you may want to include each county in the tables, plus a row for the aggregate data. Feel free to add and delete rows as needed.
4. Include data, whenever available, by demographic characteristics such as age, grade, gender, race/ethnicity, LGBTQ, student status, veteran status etc.
5. Identify community data gaps. Strategize on how you might collect new data to address these gaps.
6. Update your Community Epidemiological Profile as you obtain new data. Update your Profile at least once per year.

Training and technical assistance are available, should you need help in completing this deliverable or would like drafts of your Profile reviewed. For assistance, contact:

- SPF SIG Master Trainers—ten Master Trainers are available to assist with general questions about the template, and can help connect you with additional technical assistance providers as needed. Contact Mikki Hoium (651.431.2178 or Michele.Hoium@state.mn.us) or Molly Patil

(651.431.5457 or Molly.Malone@state.mn.us) if you do not have contact information for your community's Master Trainer.

- Minnesota State Epidemiological Outcomes Workgroup Chair—Melissa Boeke, mboeke@miph.org or 763.427.5310 ext. 133
- SPF SIG Evaluation Team—Kristin Dillon, kristin.dillon@wilder.org or 651.280.2656

Using Your Local Epidemiological Profile

Your Profile should be used by community leaders and prevention specialists for planning purposes. It can also be used to share findings about substance abuse problems and trends with your entire community. **View it as a living document, keeping it up-to-date with the most current data available.**

Consider using your Profile to:

- Document and track trends in Minnesota's SPF SIG priorities: youth past month drinking, youth binge drinking, and binge drinking among 18- to 25-year-olds.
- Document and track trends for a number of alcohol, tobacco and other drug use, consequence, and intervening variable data. **After reviewing your completed Profile, your community may select one additional priority indicator to address.** For example, in addition to targeting the three state priority indicators you may wish to target youth marijuana use or adult abuse of prescription drugs. If you select an additional indicator to target with the SPF SIG funds, you must be able to provide local data showing high need for that issue (such as an increasing trend, or a community rate higher than the state's rate.)
- Create fact sheets on specific topics, or for specific audiences. For example, you may wish to create a fact sheet on youth alcohol use in your community for parents or a fact sheet on overall substance abuse trends for your County Board. To view fact sheets created by the Minnesota State Epidemiological Outcomes Workgroup, go to www.sumn.org and click on Tools in the upper right corner. Select the Reading Room, and scroll down for document titles that include "SUMN Fact Sheet."
- Provide documentation of community need for future planning and funding opportunities. Maintain your Profile beyond the life of the SPF SIG and use the data to drive decision making, to target resources and/or justify use of resources, for reporting, to raise awareness, and to secure additional funds. Many State and Federal grants require up to date data on need and many awards, like the SPF, are based on need.

Step-by-Step Guide to Completing the Community Epidemiological Profile

For each section in the Community Epidemiological Profile, you will find a corresponding section below which provides additional information on the pre-populated data as well as guidance on adding community-level data. In the Profile template, **blue italicized font serves as a prompt where information should be added**. In addition to this guidance document and the Profile template, an Excel spreadsheet is available which provides an example of how to create trend and bar graphs for your Profile.

While you may choose to include qualitative data from focus groups, key informant interviews, and open-ended survey questions, you should refrain from adding anecdotal information.

The table shells in the Profile template are pre-populated with state-level data. These data can serve as a comparison to your community's data, especially in relation to the state SPF SIG priorities. The table shells in the Profile template can be filled with county- and region-level data from Substance Use in MN (www.sumn.org). Substance Use in Minnesota (SUMN) has three search options for finding quantitative data:

Data by Topic allows users to run a customized search. After choosing a topic, you may refine your search by selecting one or more counties or regions. After selecting location(s), you can further refine your search using the tool bar at the top. Depending on the topic, you may choose one or more years and choose demographic options. Data by Topic also allows you to view data as a map, bar graph or trend graph.

Data by Location allows users to view multiple indicators (or topics) for one specific county or region. Once you choose a location, you will be presented with population statistics from the U.S. Census. Use the tool bar at the top of the page to select one or more indicators. Data by Demographic functions like Data by Location. Once you choose a demographic group, you will be presented with all of the indicators available for the chosen group.

Data by Topic is by far the most versatile. Let's walk through an example. Using Data by Topic, select 'Alcohol' and then select 'Consumption.' Click on the first indicator listed: 'Youth Alcohol Use.' You will see two options:

- 'By Grade and Gender' allows you to search for county-, regional- and state-level past-month alcohol use
- 'By Grade, Race and Gender' allows you to search for regional- and state-level past-month alcohol use (data by race/ethnicity are not available at the county level).

If you click on either option, you will then be asked to select one or more locations. You can choose to see data for all locations at once, or you can select specific locations. For example, say you want to compare your county to both your region and the state. Click on 'Choose Specific Counties' and check the box next to yours (at this point, you may also wish to select the boxes for neighboring counties).

Don't hit submit just yet! Now click on 'Choose a Region' and select the box for your region. Finally, check the 'State of Minnesota' box. Now you can hit submit.

After choosing one or more locations, you will see the relevant data presented in a table. By default, the table will show data for all years and all demographic groups available. Data will also be displayed as a percent. You can use the toolbar to refine your search, or view the data by number. For example, if you only work with 6th graders you may wish to deselect or 'uncheck' the boxes for 9th, 12th, and All Grades so the data presented only includes 6th graders. The tables will be most helpful in completing your Profile template.

You can now click on Map to view county comparisons of reported past-month alcohol use among Minnesota students. The map is shaded based on level of reported use: students in counties shaded dark orange reported the highest use while students in the counties shaded dark green reported the lowest use. The color changes represent quintiles (equal groupings of 1/5 or 20% of the state's counties). Default is set for the most current year available, and for all demographic groups combined. Again, the toolbar can be used to refine your search. Of note—if you choose to view the map by 'Number' instead of 'Percent', shading of the counties will likely coincide with population size. For example, the metro area counties will likely be shaded dark orange due to the large number of people living there.

Click on Bar to view comparisons to the overall state average. The axis in these graphs is set at the state average—this figure will appear at the top of the graph. Counties or regions with rates of use higher than the state average will have a bar pointing to the right of the axis. The length of the bar indicates how much higher that county or region is than the state. Default is set to the current year, and to all demographic groups combined. Use the toolbar to refine your search, and the axis will change accordingly. For example, if you select 12th grade males the axis will change to show the state average for 12th grade males only (not all students).

Click on Trend to view changes over time in past-month alcohol use. If you have selected more than seven locations, you will be asked to limit your selections. More than seven lines on the graph make it too difficult to read. Pay careful attention to the axis! In order to show adequate variation between lines, the axis sometimes starts at a value other than zero. For example, the axis may run from 10% to 40% instead of 0% to 100%. This can lead to confusion, as charts can sometimes make small differences appear to be large differences. Take care to note the actual percentage point differences between groups or locations depicted in the chart.

About the Strategic Prevention Framework State Incentive Grant (SPF SIG)

What's in the pre-populated template?

Included in your template are descriptions of: the SPF SIG overall, state-level SPF SIG infrastructure, and the SPF SIG priorities selected by the state of Minnesota.

What might you add to the profile?

Information on your community's planned approach for implementing the SPF, a description of your community's SPF SIG partners or coalition, and a description of your community's prevention infrastructure.

Table of Contents

What's in the pre-populated template?

The major section headings are included in the template.

What might you add to the profile?

Enter the appropriate page numbers once you're finished adding information to the profile. Be sure to update page numbers each time you add additional data. You may also wish to add sub-section headings to the Table of Contents.

Community Epidemiological Workgroup/Coalition Epidemiological Sub-committee

What's in the pre-populated template?

This section is not pre-populated with information.

What might you add to the profile?

Describe you Workgroup's/Sub-committee's mission, goals and objectives. If you haven't already done so, you may find it helpful to create Charter.

Describe the membership of your Workgroup/Sub-committee. Consider including names, titles, and organizations. You may wish to designate a Chair.

Describe you Workgroup's/Sub-committee's processes, policies and procedures for gathering existing data, collecting new data, and analyzing data. How will you assess the quality of local data? Which criteria will you used to determine which local data to include in the Profile? Describe any data-use agreements or MOUs established.

About the Community Epidemiological Profile

What's in the pre-populated template?

The Community Epidemiological Profile has been pre-populated with information on the state-level data sources used to pre-populate the data table shells. Also included are definitions and technical notes that may be helpful to users of the Profile.

What might you add to the profile?

Describe each local data source used to fill in the data table shells. For each source briefly note:

- Who collects the data (department or agency, program staff, etc.)
- What data are collected (clearly define the indicator, note demographic information collected, etc.)
- When it is collected (years available and frequency)
- Where it is collected (county-wide or city-wide, in schools, etc.)
- How it is collected (phone, door-to-door, web survey, administrative records, etc.)
- Note any limitations of the data (such as a low response rate on a survey)

Define additional technical terms that are relevant. Consider adding a glossary of local acronyms used in your Profile.

About the Community

What's in the pre-populated template?

The Community Epidemiological Profile has been pre-populated with demographic and socio-economic data from the US Census Bureau. These data include population counts, and percents, by gender, age group, race/ethnicity, education and income.

Census data can be accessed at: <http://www.census.gov/> Enter your community's name in the Population Finder on the right-hand side of the Census homepage, then click Go. Next, use the toolbar on the left-hand side of the page that opens to select Fact Sheet. For population size by age group, scroll down to ACS Demographic Estimates and click on 'show more.' Use these data to complete the table. If your SPF SIG community is made up of more than one city or county, you could combine the population counts or add additional columns to report the populations separately.

What might you add to the profile?

Please add information about your community in the space provided:

- Consider describing any new demographic trends in your community.
- Consider including information on schools in your community, both K-12 and post-secondary institutions. This might include number of schools, types and names of schools, enrollment and attendance data, etc.
- Consider including information on businesses in your community, such as major employers and demographics of employees.
- Consider including information on active, and previous, coalitions in your community. This might include names of coalitions, membership, purpose, and activities.
- Consider including information on populations within your community at high-risk for substance use or abuse.

Alcohol Consumption

What's in the pre-populated template?

State-level data on 6th, 9th, and 12th graders reporting any use of alcohol in the past 30 days and age at first use are presented in one table by year and by grade, in a second table by year and by gender, and in a third table by year and by race/ethnicity. State-level data on 9th and 12th graders reporting binge drinking, impaired driving, and riding with an impaired driver are presented in a similar fashion (these questions were not asked of 6th graders. Both number of students reporting use and percent of students reporting use are displayed.

State-level data on adult past 30 day drinking and binge drinking are reported using data from two national sources and one state source. For further information on each of these data sources, please see the 2010 Minnesota State Epidemiological Profile which is available on the homepage of SUMN as a PDF. These data are not available at the county- or city-level. Data are available by age group and year for the two national sources. Trend data are not yet available for the state data source—the Minnesota Survey of Adult Substance Use.

What might you add to the profile?

Complete the tables for youth alcohol consumption using Minnesota Student Survey data relevant to your community. For county- and regional-level data, follow the instructions for using SUMN on page 4 of this guidance document. For school district-level data, contact your local superintendents. Add and delete rows as needed.

Each SPF SIG sub-recipient community is required to conduct the MN Young Adult Alcohol Survey. The Community Epidemiological Profile Template does not include any table shells for these data. Your Community Epidemiological Workgroup/Coalition Epidemiological Sub-committee can select which data to present, and how to present it. Data on perceptions, attitudes and behaviors could be presented by age, gender, sexual orientation, race/ethnicity, employment, student status, and/or housing situation. Work with your SPF SIG Evaluator, the Master Trainer for your region, the State SEOW Epidemiologist to determine which data to consider including and how best to present it.

If there is a college or university in your community, they may have survey data on alcohol consumption. You may wish to contact them to inquire about data availability. For comparable data on Minnesota colleges and universities, visit the University of Minnesota Boynton Health Services website at <http://www.bhs.umn.edu/surveys/index.htm>.

Include local-level quantitative data on alcohol use in tables, charts, graphs or maps. These data might be available from youth surveys (in addition to the Minnesota Student Survey data), and/or from college surveys. Minnesota Survey of Adult Substance Use data are available by region on SUMN, should you wish to include these data.

Include local-level qualitative data from key informant interviews, focus groups, open-ended survey questions, and other sources. You may wish to conduct key informant interviews with representatives from collaborating community sectors (such as the police or sheriff's department, hospitals, courts, schools), to add context to the data or to address data gaps.

Alcohol Consequences

What's in the pre-populated template?

State-level data on impaired driving arrests are provided in a table by number and by rate. Rate per 10,000 population is calculated by multiplying the number of arrests by 10,000 and then dividing by the population size. See the 2010 Minnesota State Epidemiological Profile for additional state-level impaired driving data which are available by age, gender and race/ethnicity.

State-level data on alcohol-related motor vehicle crashes are provided in a table by number and percent. The percent is calculated by dividing the number of alcohol-related motor vehicle crashes by the total number of crashes (alcohol-related and non-alcohol-related). State-level data on alcohol-related motor vehicle fatalities are reported by number and by rate per 10,000 population. See the 2010 Minnesota State Epidemiological Profile for additional state-level data on alcohol-related motor vehicle injuries, and alcohol-related motor vehicle fatalities by gender, age group, and blood alcohol content (BAC).

State-level data on cirrhosis deaths, suicides and homicides are provided in tables by number and by rate per 10,000 population. As noted in the narrative provided in the Profile template, an estimated

40% of liver cirrhosis deaths, 23% of suicides and 47% of homicides in the United States are alcohol-related. These fractions have not been applied to the data in the tables. For more information on alcohol-related deaths, both acute and chronic causes, see the 2010 Minnesota State Epidemiological Profile and/or the Centers for Disease Control and Prevention (CDC) Alcohol-Related Disease Impact (ARDI) at <https://apps.nccd.cdc.gov/ardi/Homepage.aspx>. The ARDI provides alcohol-attributable fractions for 49 causes of death.

State-level data on school disciplinary incidents involving alcohol from the Minnesota Department of Education's (MDE) Safe and Health Minnesota Students (SAHMS) are provided in a table by number and by percent of total disciplinary incidents. Data can be obtained at the county-, region- and state-level by using SUMN. School-district level data can be accessed using the SAHMS Portal.

What might you add to the profile?

Complete the DWI arrest table using SUMN (for county- and region-level data), and by using any local data available. Check with your local police or sheriff's department, courts, or department of motor vehicles to inquire about local data availability. Be sure to list the sources for any local data included in your Profile. Pay attention to whether local data are on DWI arrests, DWI charges, or DWI incidents on drivers' records. You might be able to find DWI arrests by month, time of day, blood-alcohol content (BAC) or driver characteristics (such as age group, gender, etc.). Consider adding any available data on citations for impaired operations of boats or ATVs. Also consider adding qualitative data. You could gather information about alcohol-related consequences via key informant interviews or focus groups with local law enforcement, attorneys or judges.

Complete the tables on alcohol-related motor vehicle crashes and fatalities using SUMN (for county- and region-level data), and by using any local data available. Check with your local police or sheriff's department, or your local health department (for vital statistics). For some less-populated communities, there may not be any motor vehicle fatalities in a given year. Note that when there are a small number of incidents or cases, percents and rates may fluctuate greatly. See the SUMN Toolkit for strategies to use when dealing with small numbers—a link to the Toolkit is available on the SUMN homepage in the upper left corner. Consider adding data on alcohol-related motor vehicle injuries and/or costs if available. Also consider adding qualitative data. You could gather information about alcohol-related consequences via key informant interviews or focus groups with local law enforcement or hospitals.

Complete the tables on cirrhosis, suicide and homicide deaths using SUMN, and by using any local data available. Check with your local health department for vital statistics. Though the Profile is not pre-populated with data on alcohol-related illnesses and injuries, consider including if they are available locally. Check with area hospitals for data on emergency department visits, injury diagnoses, etc. You may also be able to obtain data on alcohol-related birth outcomes. Also consider adding qualitative data. You could gather information about alcohol-related consequences via key informant interviews or focus groups with hospitals or first responders.

Complete the table on alcohol-related school disciplinary incidents. County-level incident data are available on SUMN, and school-district level data are available on the SAHMS Portal. Contact local schools for additional data on alcohol-related incidents. Also consider adding qualitative data. You could gather information about alcohol-related consequences via key informant interviews or focus groups with teachers, school administrative staff, coaches, and/or students.

In addition to these consequences, you may wish to add any available local-level data on alcohol-related crimes. Some crimes are 100% attributable to alcohol, such as drunk and disorderly or minor consumption. Other crimes, such as violent and property crimes, may be partially attributable to alcohol (such a domestic abuse, assault, arson, etc.) Check with local law enforcement regarding alcohol-related arrests, and/or check with your local courts regarding charges filed. If your community has a college or university, inquire about alcohol-related crimes with campus police. Local human services agencies may have data on alcohol-attributable child abuse and neglect cases.

Alcohol-Related Intervening Variables

What's in the pre-populated template?

State-level data on 6th, 9th, and 12th graders reporting they believe people put themselves in great or moderate risk of harm by frequently binge drinking are presented in one table by year and by grade, in a second table by year and by gender, and in a third table by year and by race/ethnicity. Data are displayed by both number and percent. State-level data on youth reporting the extent to which their parents or guardians would disapprove of them binge drinking are presented in a similar fashion—this item was just added to the Minnesota Student Survey in 2010, so no trend data are available.

State-level data on 6th, 9th, and 12th graders reporting alcohol use in the past 30 days who bought the alcohol from someone or somewhere are presented in one table by year and by grade, in a second table by year and by gender, and in a third table by year and by race/ethnicity. Both number of students reporting buying alcohol, and percent of students reporting buying alcohol, are displayed. Students were asked to select all responses that applied. Responses indicating that they purchased alcohol from gas stations, convenience stores, bars or restaurants, liquor stores, or on the internet were collapsed into the indicator “youth bought alcohol.” State-level data on youth reporting taking and getting alcohol are presented in a similar fashion. Responses indicating that they got alcohol from their friends, their parents, other family members, getting someone else to buy it for them, or at parties were collapsed into the indicator “youth got alcohol.” Responses indicating that they took alcohol from their home, a friend’s home, or from stores were collapsed into the indicator “youth took alcohol.”

What might you add to the profile?

Complete the tables for youth perceptions of alcohol harm, perceptions of disapproval, and access to alcohol using Minnesota Student Survey data relevant to your community. For county- and regional-

level data, follow the instructions for using SUMN on page 4 of this guidance document. For school district-level data, contact your local superintendents. Add and delete rows as needed.

Include intervening variable data for 18- to 25-year-olds from the MN Young Adult Alcohol Survey. Your Community Epidemiological Workgroup/Coalition Epidemiological Sub-committee can select which data to present, and how to present it. Data on perceptions and attitudes could be presented by age, gender, sexual orientation, race/ethnicity, employment, student status, and/or housing situation. Work with your SPF SIG Evaluator, the Master Trainer for your region, the State SEOW Epidemiologist to determine which data to consider including and how best to present it.

For youth and young adult intervening variables, you might consider adding local data on retail access and availability, social access and availability, enforcement, pricing and promotion, community norms, and individual factors. For examples of specific intervening variable indicators, please visit www.sumn.org and search under 'Tools', 'Toolbox, and 'Intervening Variables'. There are many indicators to choose from—a link is also provided on the site to a PowerPoint presentation which provides information on how to select and prioritize intervening variables indicators. For additional help, contact a SPF SIG Master Trainer, the SPF SIG Epidemiologist, or your SPF SIG Evaluator. **Selection of intervening variables is extremely important, and these provide the basis for selection of prevention strategies.**