Utah Strategic Prevention Framework
State Incentive Grant

Wasatch LSAA Profile:

Prescription Narcotic Related Morbidity & Mortality

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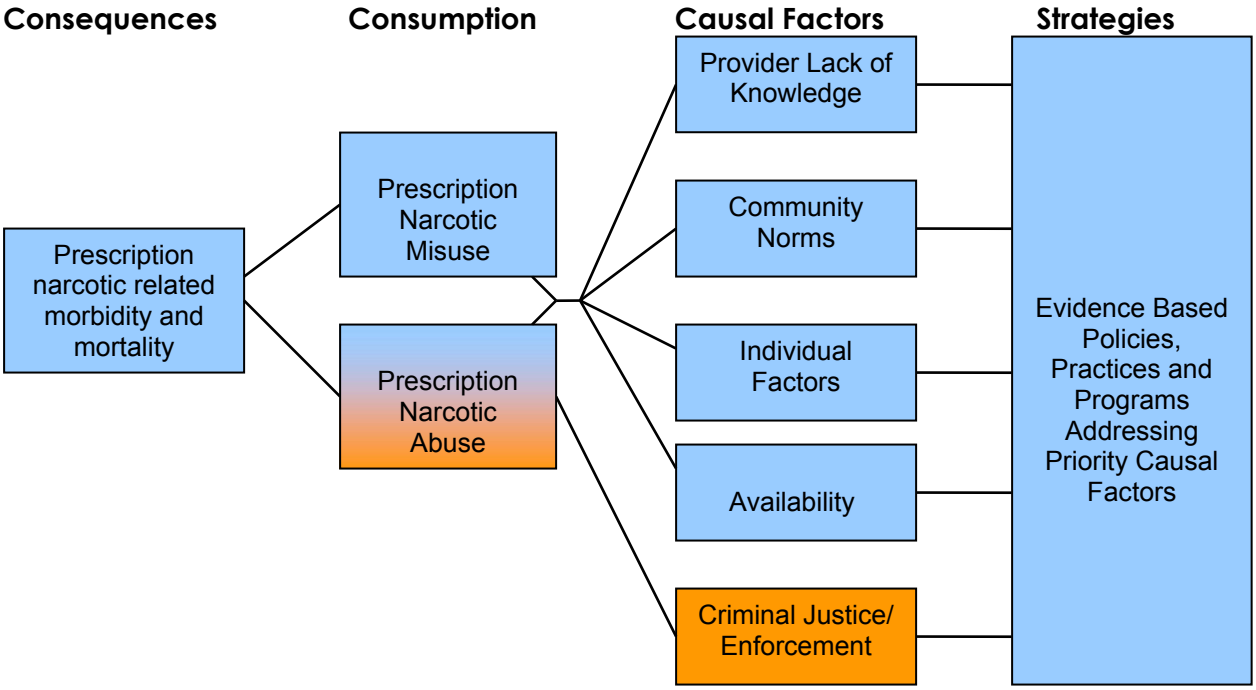
INTRODUCTION

Utah has adopted the Strategic Prevention Framework (SPF) for state and LSAA planning in order to impact population behavior for two statewide identified priorities: 1) alcohol-related motor vehicle crashes and 2) prescription narcotic related morbidity and mortality (PNMM). Your LSAA is receiving this Profile because prescription narcotic related morbidity and mortality has been identified as a priority or a potential priority for your LSAA.

The primary purpose of this Profile is to provide community planners with LSAA-level data as an objective way to look at the full complement of community environmental, social, and underlying factor data to understand prescription narcotic drug abuse within their community. These data provide the opportunity for a comprehensive needs assessment for (1) understanding the nature and extent of prescription narcotic drug abuse in your community, and (2) identifying the underlying factors that contribute to the problem. The Utah SPF Logic Model presented below presents the priority Prescription Narcotic Related Morbidity and Mortality consequences and consumption patterns identified by the State Epidemiological Outcomes Workgroup (SEOW) to be addressed by the SPF State Incentive Grant (SIG) Project, as well as potentially important causal variables that contribute to these problems. This logic model provides the blueprint for understanding the data contained within this profile and the organization of the data that is presented. Utah's Division of Substance Abuse and Mental Health has relied on the SEOW to identify consequence and consumption measures as well as causal factors related to these measures. Through formal and informal agreements, the SEOW has established a data infrastructure for ongoing collection and reporting of health data. You will receive updated Profile reports as data are available.

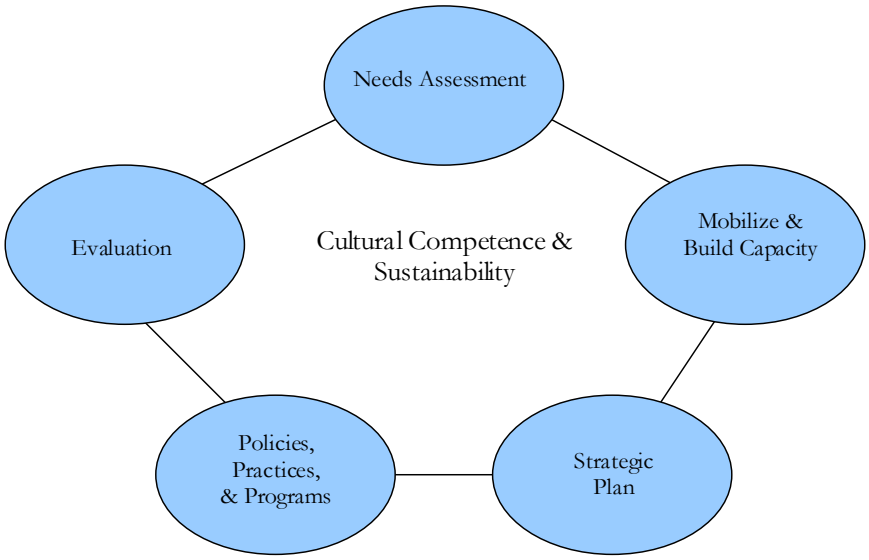
Prescription Narcotic Related Morbidity & Mortality Priority Logic Model



This profile, which comprises Section 4 of the SPF SIG Training Manual, is to be used in conjunction with Sections 5, 6 and 7 of the SPF SIG Training Manual. These documents will aid you in completing your needs assessment and planning process. If you have not already read Sections 1 through 3 of the Training Manual, we highly encourage you do so first as they provide a context for understanding the logic model and the SPF process you are engaging in.

The SEOW's data infrastructure from which this report is compiled supports the first step, Needs Assessment, in the SPF Process (this process is graphically summarized below and described in detail in the SPF SIG Training Manual). The data displayed in this profile are intended to assist community planners in identifying needs, building community capacity to address these needs, developing a comprehensive strategic plan to impact these needs, and then implementing evidence-based policies, practices and programs in sufficient scope to impact targeted needs.

The Strategic Prevention Framework Process



LSAA Demographic Data

Below, Table 1 provides a look at the basic demographic makeup of your LSAA. These data may provide you with useful contextual information for understanding your LSAA and the data within this report.

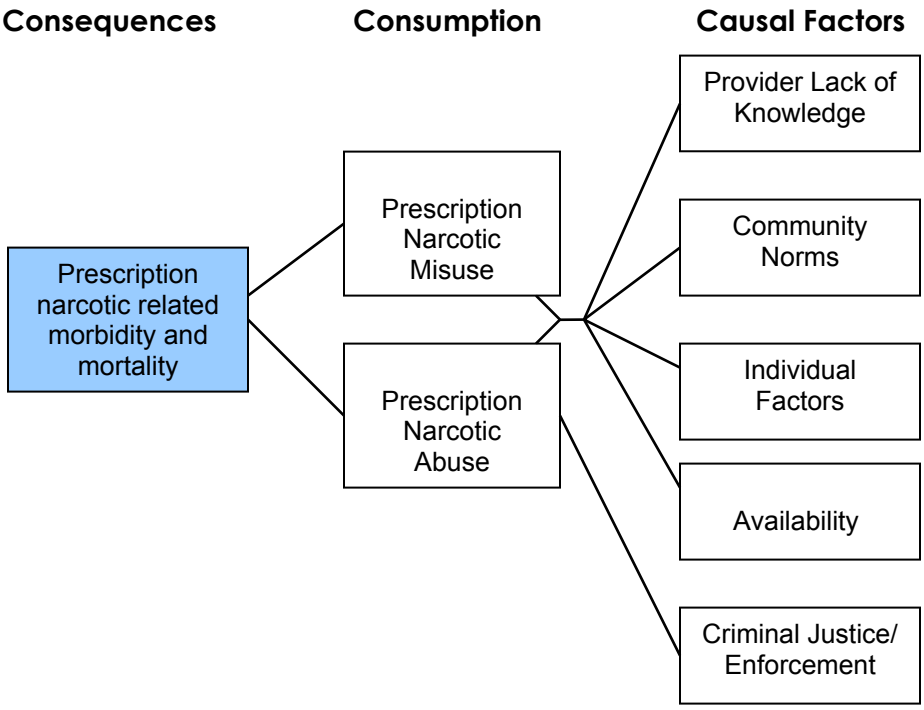
	Total Population	Male	Female	0 to 14 years	15 to 19 years
Wasatch	20,255	10,273	9,982	5,114	1,492

Age Groups:	20 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 + years
Wasatch	1,659	3,667	2,577	2,346	3,400

Race/Ethnicity:	White	Black or African American	Am. Indian & Alaska Native	Asian	Hispanic or Latino
Wasatch	19,464	56	126	154	1,484

Prescription Narcotic Related Morbidity & Mortality

CONSEQUENCE DATA



Prescription narcotics have the potential for many harmful consequences, especially when misused (used for a medical condition but not as directed) or abused (used recreationally). Narcotics can cause serious harm, addiction, and death when used at a higher dosage or more frequently than intended, when used for a longer period of time than prescribed, or when mixed with certain other drugs or alcohol. According to the *Utah State Substance Use and Abuse Epidemiological Profile*, prescription narcotics now contribute to more deaths each year in Utah than illicit drugs. Because long term outcomes of prescription narcotic use (such as health effects of chronic use or addiction) are difficult to impact within an observable timeframe, the priority consequences established during the SPF SIG state planning process by the Prevention Management Team (PMT) for the state focus on short term consequences. Short term consequences of prescription narcotics, such as overdose, have a more immediate or short term timeframe and therefore changes in their occurrence are more readily observed. The specific short term consequences identified in the State Strategic Plan as a priority for Utah, based on data compiled by the SEOW, are prescription narcotic related morbidity and mortality (PNMM).

The State Epidemiological Outcomes Workgroup (SEOW) has compiled several indicators related to PNMM from The Emergency Department Encounter Database (ED) through IBIS-PH (Utah's Indicator-Based Information System for Public Health Data Resource; http://ibis.health.utah.gov/) and from the Utah Medical Examiner Database. Available indicators of the priority consequences include emergency department encounters for methadone, emergency department encounters for other opiates (not including methadone or heroin), and unintentional opioid fatalities. These are the three indicators that the state will be examining for decreases as a result of engaging in the SPF process. This section of the LSAA Epidemiological Profile Report highlights the data available for these PNMM

consequences in the SPF logic model. Your LSAA can be compared to other LSAAs and state totals and counties within your LSAA can be compared. Trend data (data across time) for your LSAA and the state are also provided where available. Use the data in this section to better understand the nature of PNMM consequences in your community.

Specifically, state and LSAA level data is presented for the following indicators of prescription drug related morbidity and mortality:

a) Emergency Department Encounters for Methadone (2006 ED Database)
b) Trend Data for Emergency Department Encounters for Methadone per 10,000 population (2001-2006 ED Database)
c) Emergency Department Encounters for Other Opiates (2006 ED Database)
d) Rate of Emergency Department Encounters for Other Opiates per 10,000 population (2001-2006 ED Database)
e) Emergency Department Encounters for Methadone and Other Opiates (2006 ED Database)
f) Rate of Emergency Department Encounters for Methadone and Other Opiates per 10,000 population (2001-2006 ED Database)
g) Unintentional Opioid Fatalities by LSAA

Additionally, emergency department encounters and fatalities are presented by age groups at the state level. These data are not presented by LSAA because the numbers broken out by age at the LSAA level are too small to present. These data can still be used to inform decision making and planning and to provide a more comprehensive picture of PNMM.

h) Rate of Emergency Department Encounters for Methadone by Age
i) Rate of Emergency Department Encounters for Other Opiates by Age
j) Rate of Emergency Department Encounters for Methadone and Other Opiates by Age
k) Unintentional Opioid Fatalities by Age

Emergency Department Encounters for Methadone, Opium Alkaloids and Other Opiates

The Emergency Department Encounter Database (ED) distinguishes between emergency department encounters due to heroin, methadone, opium alkaloids (morphine, codeine, thebaine, papaverine, and noscapine), and other opiates. Because the SPF priority focuses on prescription drugs, the data for methadone, opium alkaloids, and other opiates are presented below. Data for each category are presented separately, and for the three categories combined. The same emergency department encounter may be included in more than one category, in the case of overdoses caused by multiple drugs. Therefore the different categories do not necessarily represent independent emergency department encounters and the numbers of emergency department encounters for methadone, opium alkaloids, and other opiates combined may be lower than the sum of the emergency department encounters for each category.

Table 2 presents the number of emergency room encounters for methadone for each LSAA across the state. Because the number of emergency room encounters will be influenced by the total population in the LSAA, the number in the population and the rate per 100,000 population are also provided. It should be noted that some LSAAs have populations less than 100,000, therefore the rate per 100,000 population is provided as a way to compare to other LSAAs and the state but does not represent actual emergency department encounters. Table 3 presents the historical figures for ED encounters due to methadone for your LSAA and counties from 2001-2006 in order for you to examine the trend in your specific LSAA.

Table 2. Emergency Department (ED) Encounters for Methadone per 100,000 population (2006 ED Database)

LSAA	Number of Emergency Encounters	Number in the Population	Rate per 100,000 Population
Bear River	6	153,779	3.9
Weber	14	224,758	6.2
Salt Lake	75	996,374	7.5
Davis	20	286,547	7.0
Utah	36	475,425	7.6
Wasatch	0	21,053	0.0
Summit	0	36,871	0.0
Tooele	2	54,375	3.7
Central Utah	5	72,236	6.9
Southwest	25	195,817	12.8
Northeastern	0	44,281	0.0
Four Corners	4	38,966	10.3
San Juan	1	14,647	6.8
State of Utah Total	*190*	*2615129*	*7.3*

Table 3. Trend Data for ED Encounters for Methadone per 100,000 population (2006 ED Database)

LSAA	2001	2002	2003	2004	2005	2006
Wasatch	0.0	5.7	0.0	0.0	10.0	0.0
State of Utah Total	*2.7*	*4.7*	*5.8*	*6.8*	*8.1*	*7.3*

Emergency Department Encounters for Opium Alkaloids

Table 4 presents the number of emergency room encounters for opium alkaloids (morphine, codeine, thebaine, papaverine, and noscapine) for each LSAA across the state. Again, the number in the population and the rate per 100,000 population are also provided. Table 5 presents ED encounters due to opium alkaloids over time for your LSAA and counties from 2001-2006 in order for you to examine the trend in your specific LSAA.

Table 4. ED Encounters for Opium Alkaloids per 100,000 population (2006 ED Database)

LSAA	Number of Emergency Encounters	Number in the Population	Rate per 100,000 Population
Bear River	2	153,779	1.3
Weber	12	224,758	5.3
Salt Lake	60	996,374	6.0
Davis	18	286,547	6.3
Utah	39	475,425	8.2
Wasatch	0	21,053	0.0
Summit	0	36,871	0.0
Tooele	5	54,375	9.2
Central Utah	7	72,236	9.7
Southwest	24	195,817	12.3
Northeastern	4	44,281	9.0
Four Corners	4	38,966	10.3
San Juan	1	14,647	6.8
State of Utah Total	*182*	*2615129*	*7.0*

Table 5. Trend Data for ED Encounters for Opium Alkaloids per 100,000 population (2006 ED Database)

LSAA	2001	2002	2003	2004	2005	2006
Wasatch	6.1	11.4	0.0	0.0	5.0	0.0
State of Utah Total	*4.8*	*5.8*	*7.7*	*8.5*	*6.5*	*7.0*

Emergency Department Encounters for Other Opiates

Table 6 presents the number of emergency room encounters for other opiates (opiates not including heroin, methadone, or opium alkaloids) for each LSAA across the state. Again, the number in the population and the rate per 100,000 population are also provided. Table 7 presents ED encounters due to other opiates over time for your LSAA and counties from 2001-2006 in order for you to examine the trend in your specific LSAA.

Table 6. ED Encounters for 'Other Opiates' per 100,000 population (2006 ED Database)

LSAA	Number of Emergency Encounters	Number in the Population	Rate per 100,000 Population
Bear River	32	153,779	20.8
Weber	95	224,758	42.3
Salt Lake	296	996,374	29.7
Davis	60	286,547	20.9
Utah	121	475,425	25.5
Wasatch	2	21,053	9.5
Summit	6	36,871	16.3
Tooele	16	54,375	29.4
Central Utah	26	72,236	36.0
Southwest	45	195,817	23.0
Northeastern	12	44,281	27.1
Four Corners	12	38,966	30.8
San Juan	3	14,647	20.5
State of Utah Total	*747*	*2615129*	*28.6*

Table 7. Trend Data for ED Encounters for 'Other Opiates' per 100,000 population (2006 ED Database)

LSAA	2001	2002	2003	2004	2005	2006
Wasatch	24.6	0.0	10.8	10.4	30.0	9.5
State of Utah Total	*18.7*	*20.3*	*22.0*	*22.6*	*23.7*	*28.6*

Emergency Department Encounters for Methadone, Opium Alkaloids, and Other Opiates Combined

Table 8 presents the number of emergency room encounters for methadone, opium alkaloids, and other opiates (not including heroin) combined for each LSAA across the state. This table is important because the previous tables may have common records, in cases where an emergency room encounter was due to more than one drug. Again, the number in the population and the rate per 100,000 population are also provided. Table 9 presents ED encounters due to the combined opiates over time for your LSAA and counties from 2001-2006 in order for you to examine the trend in your specific LSAA.

Table 8. ED Encounters for Methadone, Opium Alkaloids and 'Other Opiates' per 100,000 population (2006 ED Database)

LSAA	Number of Emergency Encounters	Number in the Population	Rate per 100,000 Population
Bear River	39	153,779	25.4
Weber	120	224,758	53.4
Salt Lake	419	996,374	42.1
Davis	96	286,547	33.5
Utah	196	475,425	41.2
Wasatch	2	21,053	9.5
Summit	6	36,871	16.3
Tooele	23	54,375	42.3
Central Utah	38	72,236	52.6
Southwest	94	195,817	48.0
Northeastern	16	44,281	36.1
Four Corners	21	38,966	53.9
San Juan	4	14,647	27.3
State of Utah Total	*1104*	*2615129*	*42.2*

Table 9. Trend Data for ED Encounters for Combined Opiates* per 100,000 population (2006 ED Database)

LSAA	2001	2002	2003	2004	2005	2006
Wasatch	30.7	17.2	10.8	10.4	40.0	9.5
State of Utah Total	*26.2*	*30.4*	*35.4*	*37.8*	*37.7*	*42.2*

* Defined as Methadone, Opium Alkaloids and 'Other Opiates'

The combined opiates are also presented graphically below, so that you can compare your LSAA over time to the State of Utah average and the highest and lowest LSAAs (represented by bars.) In addition, Tables 10a and 10b present the combined opiate data by age. Table 10a provides the data for your specific LSAA and counties, and breaks the data into 3 large age categories. (The numbers are too small at the LSAA level to break into smaller age groups.) Table 10b breaks the data into smaller age groups but presents the entire state only, not broken down by LSAA or county. These state data are also presented graphically.

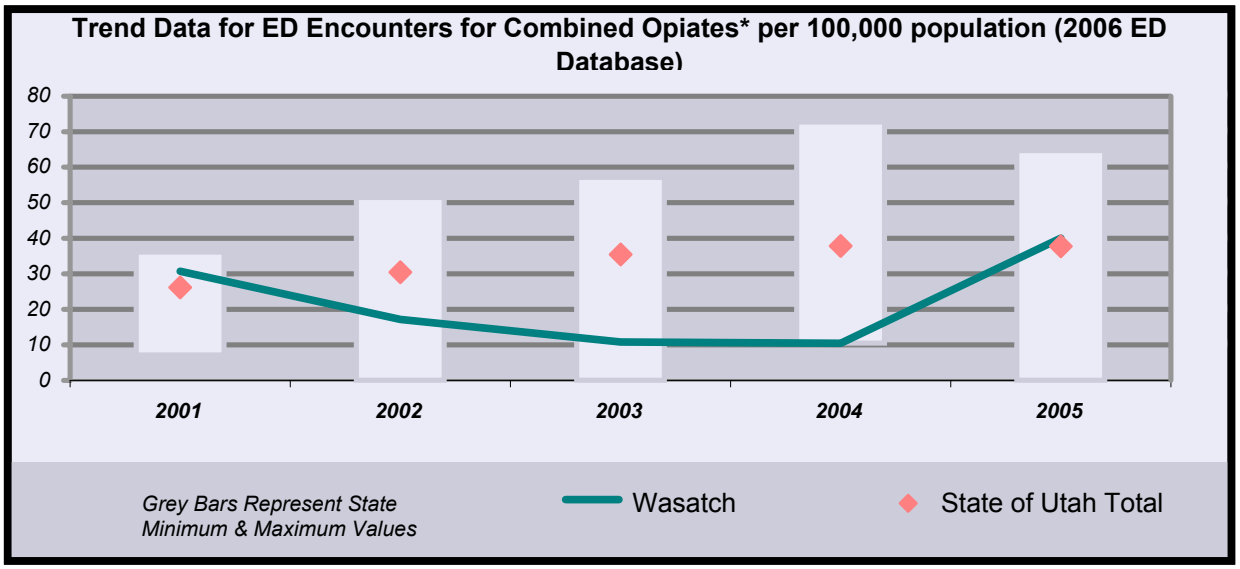


Table 10a. Trend Data for Emergency Department Encounters per 100,000 population for Combined Opiates* by Age (2006 ED Database)

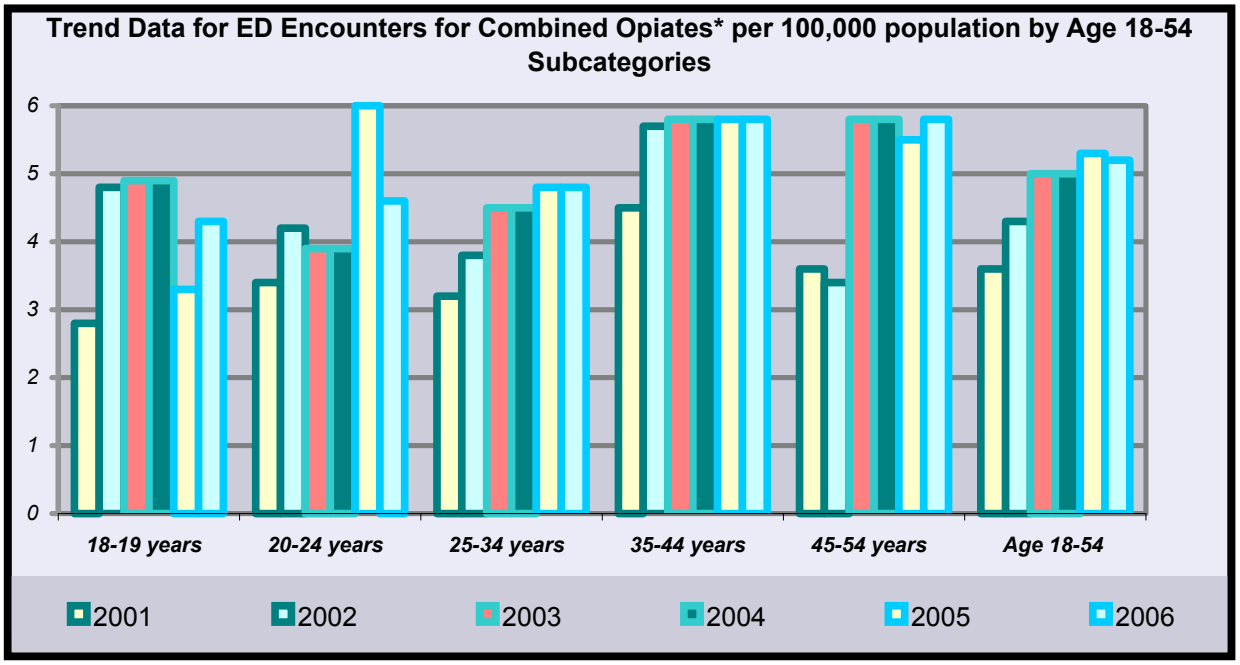
LSAA		1999	2000	2001	2002	2003	2004	2005	2006
Ages 10-17	Wasatch	0.0	4.2	4.1	0.0	0.0	0.0	11.4	0.0
	State of Utah Total	*2.2*	*2.2*	*2.5*	*2.9*	*2.9*	*3.2*	*3.3*	*2.9*
Ages 18-54	Wasatch	0.0	0.0	4.8	3.3	1.0	2.0	4.7	0.9
	State of Utah Total	*2.5*	*2.8*	*3.7*	*4.4*	*5.1*	*5.4*	*5.3*	*6.0*
Age 55+	Wasatch	0.0	0.0	0.0	0.0	3.6	0.0	0.0	3.1
	State of Utah Total	*1.3*	*1.7*	*2.0*	*2.3*	*2.7*	*3.4*	*3.6*	*4.5*

* Defined as Methadone, Opium Alkaloids and 'Other Opiates'

Table 10b. Trend Data for ED Encounters for Combined Opiates* per 100,000 population by Age 18-54 Subcategories

Age Categories	State of Utah					
	2001	*2002*	*2003*	*2004*	*2005*	*2006*
18-19 years	2.8	4.8	4.9	3.3	4.3	4.0
20-24 years	3.4	4.2	3.9	6.0	4.6	5.3
25-34 years	3.2	3.8	4.5	4.8	4.8	5.7
35-44 years	4.5	5.7	5.8	5.8	5.8	6.2
45-54 years	3.6	3.4	5.8	5.5	5.8	6.5
Age 18-54	3.6	4.3	5.0	5.3	5.2	5.8

* Defined as Methadone, Opium Alkaloids and 'Other Opiates'



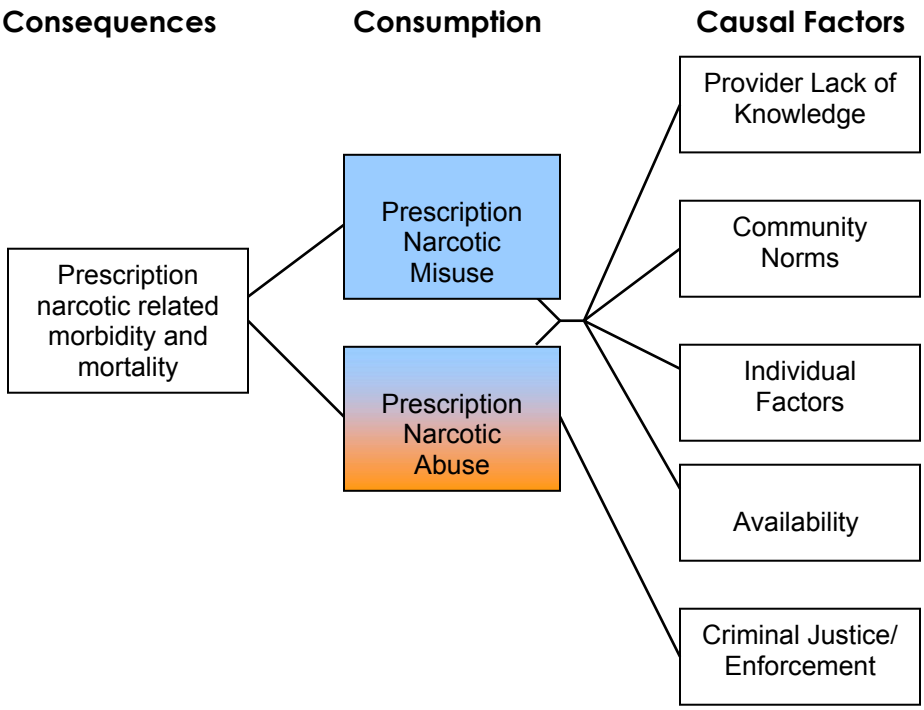
Unintentional Opioid Fatalities

The Utah Medical Examiner Database provides information on fatalities caused by opioids. The types of opioids are not presented separately, the way they are for emergency department encounters. The opioid data presented below include both illicit and non-illicit opioids. Unlike the ED data, the fatality data are separated into unintentional and intentional (suicide) deaths. Only the unintentional opioid fatalities are presented here.

Table 11. Number of Illicit and Non Illicit Opioid Overdose Deaths as Determined by the Medical Examiner by Year (2004-05)

LSAA	2004		2005	
	Non-illicit	Illicit	Non-illicit	Illicit
Bear River	8	4	13	0
Weber	30	7	27	12
Salt Lake	97	73	120	71
Davis	19	10	19	8
Utah	29	21	48	26
Wasatch	1	1	2	0
Summit	1	1	2	0
Tooele	6	4	5	1
Central Utah	10	3	10	4
Southwest	20	2	21	1
Northeastern	3	0	9	0
Four Corners	8	2	3	4
San Juan	0	0	2	0
State of Utah Total	*232*	*128*	*281*	*127*

PRESCRIPTION NARCOTIC CONSUMPTION DATA



Ultimately, prescription narcotic consequences such as morbidity and mortality are the result of prescription narcotic consumption. Therefore, in order to have an impact on the consequences, you must have an understanding of the consumption patterns that likely contribute to the problems. It is critical that you examine prescription narcotic consumption data in the context of the consequences you are interested in affecting. You must think about what consumption patterns are most likely to lead to the consequences of interest and make those a priority, both in terms of patterns of behaviors and populations to focus on. With this outcomes-based approach, you will be more likely to choose strategies that will lead to the outcomes you hope to achieve. The SEOW has collected several indicators of prescription narcotic consumption that may be helpful to you in identifying the consumption patterns of greatest priority in your community. This section of the LSAA epidemiological profile report highlights the prescription narcotic consumption indicators identified in the SPF logic model. Two primary indicators have been identified:

a) Prescription narcotic misuse (incorrect use of prescription narcotics for medical conditions)
b) Prescription narcotic abuse (recreational use of prescription narcotics)

Unfortunately, in the majority of the currently available data on prescription narcotic consumption, it is not possible to distinguish between misuse and abuse. Likewise, it is not possible to distinguish between misuse and abuse in the prescription narcotic consequence data either. Therefore, LSAAs may wish to collect additional data where available to determine whether misuse or abuse is the prevalent problem in their communities.

Alternatively, if data are not available, LSAAs may wish to focus prevention efforts on both consumption indicators.

Data for these indicators are available from four main sources: the Prevention Needs Assessment (PNA), the Behavioral Risk Factor Surveillance System (BRFSS), the National Survey on Drug Use and Health (NSDUH), and the Utah Treatment Needs Survey. The surveys are described briefly here; how they contribute to the indicators is described in the respective indicator sections.

The PNA is a survey conducted as part of the Student Health and Risk Prevention (SHARP) statewide survey. The PNA collects substance use and risk and protective factor data from 6th through 12th graders every two years. The survey was first administered in 2003, with the most current administration in 2007. If you would like access additional PNA data, visit Utah's Department of Human Services website.

The BRFSS is a national adult population phone survey conducted by the Center for Disease Control and Prevention (CDC) which collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury from adults across the state every year via telephone survey. The NSDUH is a household in-person interview survey conducted yearly by SAMHSA which assesses substance use behaviors. Both the BRFSS and NSDUH are surveys that are sampled to provide state level estimates of the variables they collect. As such, the samples are not always large enough to provide sub-state (e.g., LSAA) level estimates. When they are, they are available at the Health District level, not the LSAA level. The two generally correspond, however, the Northeastern LSAA is called the TriCounty Health District and the Four Corners and San Juan LSAAs are combined into one Health District, the Southeastern Health District.

The Treatment Episodes Data Set (TEDS) provides data regarding unduplicated treatment admissions for FY2007 by LSAA for alcohol. This Data Set is maintained by the Utah Department of Health. Treatment admissions should not necessarily be viewed as direct indicators of treatment need, rather these indicators reflect the number of admissions to treatment facilities only. These data reflect admissions to publicly funded facilities, and do not cover privately funded facilities. Public treatment facilities are not equally available across the state; therefore the data may disproportionately represent areas where facilities are more available. Additionally, the number of treatment admissions reflects available resources for treatment not just the existing need for treatment in the community. Therefore, falling admissions rates may indicate funding cuts to treatment facilities just as easily as reflecting a decrease in need (and use). While these data may be useful for planning purposes within your LSAA, we encourage you to think critically and consult local prevention and treatment professionals who will be in a position to explain the limitations of this indicator within the context of your specific community.

The 2005 Utah Treatment Needs Survey is a telephone survey conducted with adults statewide. The survey was designed to assess incidence and prevalence of substance use, and need for substance abuse treatment. Data are available at both the state and LSAA level. Please note that the surveys sample and survey through different methodologies, therefore, estimates may differ between the surveys. It is advised that you discuss with other prevention partners in your community how you may gain a better understanding of adult consumption patterns specific to your community, including identifying other data that may be available locally or other means for collecting data relevant to prescription narcotic consumption.

Further, regardless of the statewide sample size, it is important for you to consider the sample size and participation rate of the sample for any data available at your LSAA level in

order to interpret to what extent the data are likely to represent your LSAA accurately. Appendix A provides the sample sizes and participation rates for the PNA for your LSAA.

Note that if your LSAA includes a publicly funded institution of higher education, additional data for the college student population are potentially available. All nine Utah schools participated in the Utah Higher Education Health Behavior Survey. In the 2007 survey administration, questions were added pertaining to prescription drug abuse (although these questions were not specific to prescription narcotics.) State level college student data are available from the Division of Substance Abuse and Mental Health. Institution level data are available only with permission of the individual college. The Division of Substance Abuse and Mental Health can provide contact information for the prevention coordinators at each college.

Youth Narcotic Prescription Drug Use

For the first time in 2007, the PNA assessed youth prescription narcotic use. Specifically, the survey asks students to indicate on how many occasions, if any, they used "narcotic prescription drugs (such as OxyContin, methadone, morphine, codeine, Demerol, Vicodin, Percocet) without a doctor telling you to take them." Table 12 below presents past 30 day use rates, which indicates a measure of current use. Table 13 presents lifetime use which indicates how many students have ever used prescription narcotics without a prescription. Because 2007 in the only year for which this data is available, no trend data is presented.

Table 12. Percentage of Youth Reporting Prescription Drugs Use (30 day use) by LSAA (2007 PNA)

LSAA	6th Grade	8th Grade	10th Grade	12th Grade
Bear River	0.0%	0.6%	2.6%	3.0%
Weber	0.1%	1.7%	2.4%	2.5%
Salt Lake	0.1%	0.7%	2.8%	4.4%
Davis	0.1%	0.6%	2.0%	2.2%
Utah	0.0%	0.5%	1.8%	2.4%
Wasatch	0.0%	0.0%	0.0%	2.2%
Summit	0.0%	1.3%	5.4%	13.3%
Tooele	0.0%	0.8%	2.8%	4.2%
Central Utah	0.0%	1.0%	1.8%	4.3%
Southwest	0.3%	1.0%	2.1%	1.7%
Northeastern	0.0%	1.7%	3.0%	1.6%
Four Corners	0.0%	0.0%	3.9%	7.2%
San Juan	0.0%	0.0%	2.7%	7.7%
State of Utah Total	*0.1%*	*0.8%*	*2.4%*	*3.5%*

Table 13. Percentage of Youth Reporting Prescription Drugs Use (Lifetime use) by LSAA (2007 PNA)

LSAA	6th Grade	8th Grade	10th Grade	12th Grade
Bear River	0.3%	1.5%	5.0%	7.1%
Weber	0.1%	3.9%	7.0%	8.8%
Salt Lake	0.5%	1.8%	7.7%	11.5%
Davis	0.3%	1.9%	5.2%	7.5%
Utah	0.2%	2.4%	5.9%	7.4%
Wasatch	0.0%	1.1%	4.9%	12.9%
Summit	0.0%	3.8%	17.4%	29.0%
Tooele	0.0%	2.3%	10.7%	14.0%
Central Utah	0.0%	2.9%	5.7%	10.6%
Southwest	0.6%	2.0%	6.8%	6.9%
Northeastern	0.0%	4.2%	5.6%	7.4%
Four Corners	0.0%	2.0%	11.8%	11.2%
San Juan	0.0%	0.0%	7.8%	23.1%
State of Utah Total	*0.3%*	*2.3%*	*6.8%*	*9.5%*

Adult Non-medical Pain Reliever Use

The 2005 Utah Treatment Needs Survey asks respondents several questions about non-medical pain reliever use, specifically, "pain relievers or other opiates, such as Codeine or Percocet." In addition, the survey instructions specify that if the substance was prescribed, that it was taken for "psychic effect not intended by the prescriber." The NSDUH data also refer to prescription pain relievers used for non-medical purposes. Therefore the rates of non-medical pain reliever use in these surveys can be considered to represent abuse rather than misuse. In Table 14 below, lifetime and past 30 day use rates for non-medical pain relievers are presented for each LSAA for 2005 from the Utah Treatment Needs Survey. Table 15 presents non-medical pain reliever use rates by age at the state and national levels for 2004-2006 from NSDUH. In addition to providing the percentage needing treatment in each category, this table provides an estimate of the numbers of individuals who need treatment statewide. Table 16 provides heroin and any drug use rates for comparison.

Table 14. Non-medical Pain Reliever Use by LSAA (2005 Utah Treatment Needs Survey)

LSAA	Sample Size	Non-medical Pain Reliever Use	
		Used within last 30 days	Ever used
Bear River	299	0.4%	3.3%
Weber	500	0.7%	3.6%
Salt Lake County	1,800	0.3%	3.4%
Davis	450	0.0%	3.9%
Utah County	800	0.3%	3.4%
Wasatch	125	0.0%	3.6%
Summit	125	0.7%	4.5%
Tooele	150	0.0%	6.9%
Central Utah	177	0.0%	4.7%
Southwest	403	0.0%	0.9%
Northeastern	125	0.4%	2.0%
Four Corners	125	0.5%	7.0%
San Juan	276	0.3%	3.4%
State Totals	*5,355*	*0.3%*	*3.6%*

Table 15. Non-medical Pain Reliever Use by Age (2004-2006 NSDUH)

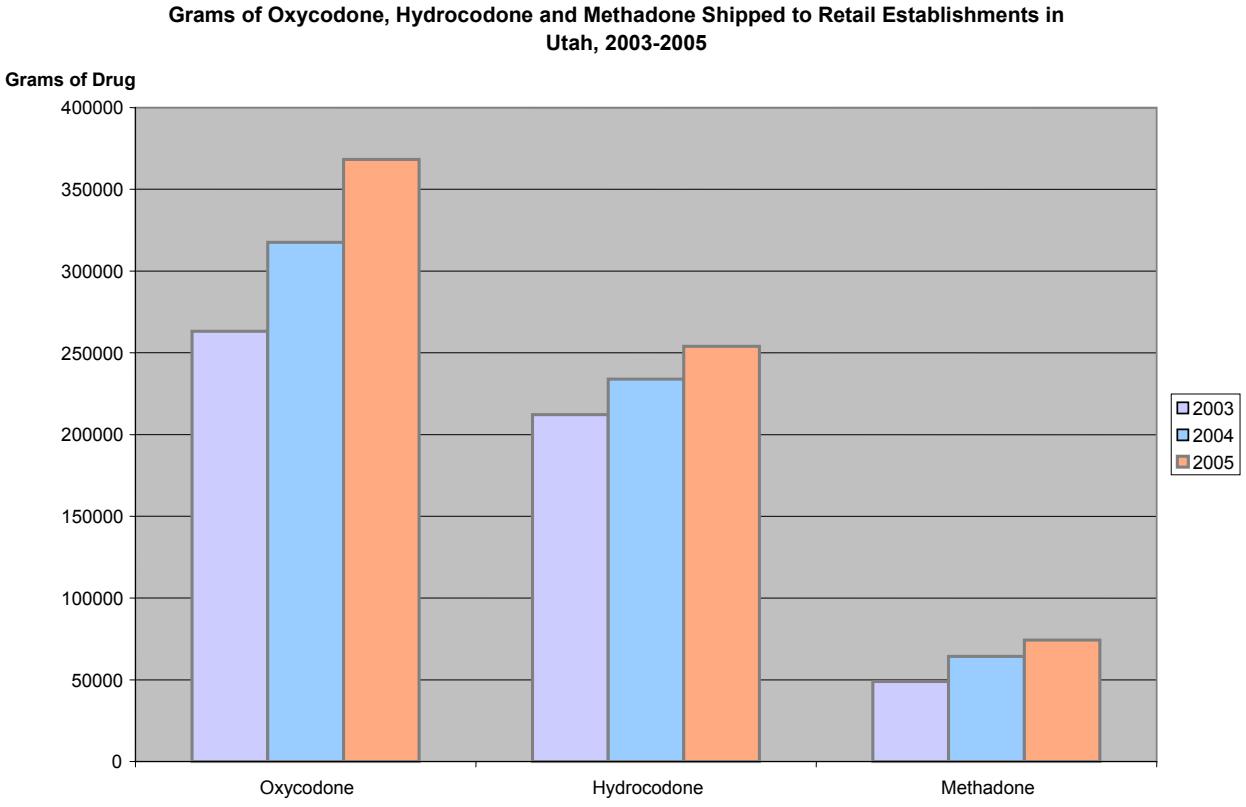
Age	Utah County						United States		
	2004		2005		2006		2004	2005	2006
	%	*Est. #*	*%*	*Est. #*	*%*	*Est. #*	*%*	*%*	*%*
Ages 12 thru 17	7.1%	16,000	7.9%	18,000	7.8%	18,000	7.9%	7.9%	7.8%
Ages 18 thru 25	14.1%	50,000	13.5%	48,000	12.5%	45,000	13.5%	13.5%	12.5%
Ages 26 and over	3.6%	45,000	4.3%	56,000	4.2%	57,000	4.3%	4.3%	4.2%
Total (12 and over)	6.1%	112,000	6.5%	123,000	6.2%	121,000	6.5%	6.5%	6.2%

Table 16. Statewide Heroin, Non-medical Pain Reliever Use, and Any Drug Use by Age (2005 Utah Treatment Needs Survey)

Drug	18-24		25-44		45-64		65+		All Adults	
	30dy	*Lifetime*	*30dy*	*Lifetime*	*30dy*	*Lifetime*	*30dy*	*Lifetime*	*30dy*	*Lifetime*
Heroin	0.2%	0.8%	0.6%	0.6%	0.6%	0.6%	0.0%	0.0%	0.0%	0.6%
Pain Relievers	0.8%	8.0%	0.2%	3.3%	0.1%	2.2%	0.0%	0.6%	0.3%	3.6%
Any Drug	3.5%	21.0%	1.2%	22.5%	1.2%	23.3%	0.2%	3.1%	1.5%	20.0%

Prescription Narcotic Shipment Amounts

Another indicator of consumption of prescription narcotic drugs is the amount of drugs shipped into the state to retail establishments each year. The graph below provides the amount of oxycodone, hydrocodone, and methadone shipped into Utah in 2003, 2004, and 2005. Because therapeutic doses of these drugs may differ, it is not appropriate to compare the drugs to each other. However, what can be seen is a clear increase in the amount of prescription narcotics being shipped into the state from 2003 to 2005 for all three of these drugs.



Treatment Admissions for Prescription Drugs

One important indicator of prescription narcotic drug abuse or misuse is treatment admissions for prescription drugs. Although drug or alcohol dependence is typically considered an indicator for consequences rather than consumption, it is presented here as a way to assess consumption because the data are so sparse for prescription narcotics in general. The Treatment Episodes Data Set (TEDS) provides data regarding unduplicated treatment admissions for FY2007 by LSAA for drugs relevant to prescription narcotic abuse, including methadone, oxycodone, hydrocodone, morphine, and other opiates/synthetics. Admissions to treatment for heroin dependence are also presented for the sake of comparison. Treatment admissions should not necessarily be viewed as direct indicators of treatment need, rather these indicators reflect the number of admissions to treatment facilities only. These data reflect admissions to publicly funded facilities, and do not cover privately funded facilities. Public treatment facilities are not equally available across the state; therefore the data may disproportionately represent areas where facilities are more available. Additionally, the number of treatment admissions reflects available resources for

treatment not just the existing need for treatment in the community. Therefore, falling admissions rates may indicate funding cuts to treatment facilities just as easily as reflecting a decrease in need. While these data may be useful for planning purposes within your LSAA, we encourage you to think critically and consult local prevention and treatment professionals who will be in a position to explain the limitations of this indicator within the context of your specific community.

The tables below present unduplicated numbers of adults and juveniles admitted to treatment in each LSAA for FY2007. (Because of high recidivism rates for substance abuse treatment, it is important that each adult be counted only one time, regardless of how many times they enter treatment.) Data are presented for adults for methadone, oxycodone, hydrocodone, morphine, and other opiates/synthetics. For youth, only oxycodone, hydrocodone, and other opiates/synthetics are presented because there were no morphine or methadone cases for youth in 2007. Data for heroin treatment are also provided for comparison purposes.

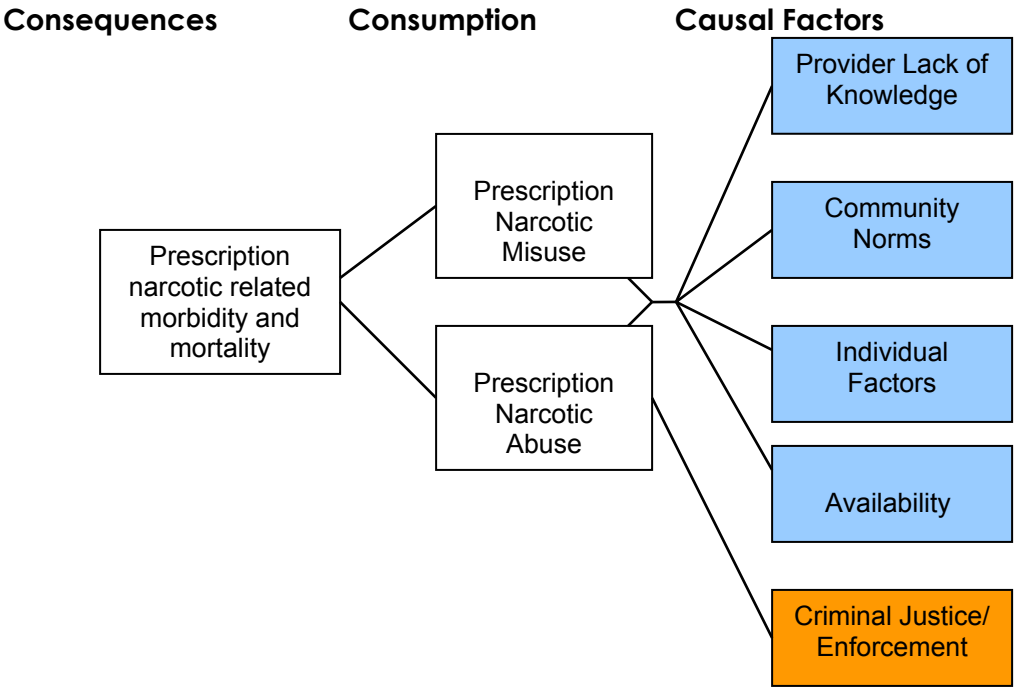
Table 17. Number of Adults Treated for Substance Use in FY2007 by Primary Substance and LSAA (TEDS)

LSAA	Heroin	Opiates (other than heroin)					
		Non-Prescription Methadone	Other Opiates/ Synthetics	Oxy-codone	Hydro-codone	Morphine	All Opiates Combined
Bear River	12	1	59	17	15	0	92
Weber	26	3	15	34	26	2	80
Salt Lake	1032	16	235	107	41	10	409
Davis	57	0	25	37	23	2	87
Utah	203	4	17	89	25	4	139
Wasatch	5	0	2	2	0	2	6
Summit	6	0	5	2	2	0	9
Tooele	11	0	3	4	2	0	9
Central Utah	8	0	6	1	12	2	21
Southwest	15	1	5	7	9	0	22
Northeastern	1	0	7	3	1	0	11
Four Corners	10	1	49	0	0	0	50
San Juan	0	0	0	1	0	0	1
State of Utah Total	*1386*	*26*	*428*	*304*	*156*	*22*	*936*

Table 18. Number of Youth Treated for Substance Use in FY2007 by Primary Substance and LSAA (TEDS)

LSAA	Heroin	Other Opiates/ Synthetics			
		Other Opiates/ Synthetics	Oxycodone	Hydrocodone	All Opiates Combined
Bear River	0	0	0	0	0
Weber	0	0	2	0	2
Salt Lake	13	3	0	1	4
Davis	0	0	0	0	0
Utah	1	0	1	0	1
Wasatch	0	0	0	0	0
Summit	1	0	0	0	0
Tooele	1	0	0	0	0
Central Utah	0	2	0	0	2
Southwest	0	0	0	0	0
Northeastern	0	1	0	0	1
Four Corners	0	0	1	3	4
San Juan	0	0	0	0	0
State of Utah Total	*16*	*6*	*4*	*4*	*14*

Prescription Narcotic Causal Factor Data



The earlier sections of this epidemiological profile provide you with data that will help you better understand the SPF SIG consequence priority for your community, as well as the consumption patterns that likely contribute to those consequences. This section of the profile report provides data that will shed light on the possible causes of the prescription narcotic consumption patterns you identified as contributing most to prescription narcotic morbidity and mortality. Understanding the causal variables or factors that lead to prescription narcotic abuse and misuse in your community is vital for ensuring that you choose prevention strategies that are most likely to be effective in impacting the prescription narcotic problems you hope to reduce. Whatever strategies you choose should relate directly to a causal factor(s), and by extension a consumption pattern and prescription narcotic morbidity and mortality.

The SPF PNMM logic model identifies five general causal variables that may contribute to the problematic prescription narcotic consumption patterns that lead to morbidity and mortality. By examining data pertinent to each of these five causal variables, you will be able to determine which of the causal variables might be contributing most in your community to the consumption patterns that are driving the priority consequence you are trying to change. The five general causal factors are:

1) *Provider lack of knowledge* – Do providers (doctors, dentists and pharmacists) recognize potential misuse and diversion?

2) *Individual Factors* - Are individuals high on risk and low on protective factors for prescription narcotic misuse/abuse?

a) Perceived Risk – Are prescription drugs seen as safer than "street" drugs for recreational purposes? Are prescription drugs seen as safe for misuse more generally?
b) Knowledge of proper use - Do users lack knowledge of the consequences of mixing substances or altering dose and timing of intake? When there is a change in medication, are the consequences explained and understood?

3) *Availability* – How easy is it to obtain narcotic prescription drugs?
   a) Extra Pills – Is it common that prescription sizes are "larger" than needed and result in leftover pills?
   b) Is sharing of prescription drugs via friends or family common?
   c) Are prescription drugs easily available for misuse and abuse due to stealing from family/friends?
   d) Are prescription drugs obtained illegally via the internet?
   e) Are fraudulent prescriptions (e.g., through forgery or tampering) or obtaining multiple prescriptions a common method of accessing prescription drugs?

4) *Criminal justice/enforcement* – Are laws against prescription narcotic abuse enforced? Is prescription fraud or illicit consumption prosecuted?

5) *Community Norms* - Are community norms favorable toward prescription drug misuse and abuse?
   a) Perceived risk - What is the community's perception of harm in using prescription narcotics in a non-directed manner? What is the community's perception regarding the general safety of using prescription narcotics?
   b) Availability – What is the community's perception regarding the acceptability of sharing prescription drugs with family or friends (who have similar ailments)? What are the community norms regarding how to deal with leftover or extra pills?

As you peruse the causal factor data provided in this profile report, you will see that data availability differs greatly across the six causal factors identified in the logic model. It will be important for you to work with your prevention partners in the community to fill gaps in the data in order to obtain enough data to form an accurate picture of the community and to ensure that you focus on the causal variables of highest priority. Sections 5, 6 and 7 of the SPF SIG Training Manual developed for the SPF SIG Project walks you through collecting additional data and provide several tools that you may find useful for collecting data relevant to the causal factors identified in the model. These will allow you to consolidate relevant data into one document, which will then be submitted to the State as part of your LSAA SPF SIG plan.

Criminal Justice/Enforcement

A potentially important set of causal factors for prescription narcotic abuse and misuse patterns fits into the category of enforcement or criminal justice. The enforcement or perception of enforcement of laws may be an important deterrent to prescription narcotic abuse and misuse at both the state and community levels. However, laws intended to deter prescription narcotic abuse may not be particularly effective if they are not enforced routinely or there is a perception of low enforcement in the community. Similarly, if arrests for violations are often dismissed, laws in your community may not have their intended impact. For this reason, it may be helpful for you to examine indicators that shed light on the extent to which criminal justice/enforcement issues are an important causal factor in your community.

A general note of caution regarding law enforcement data: Interpretation of these data is complicated because increases in numbers or rates can represent increases in drug prevalence or increases in enforcement. Without multiple data sources, discerning which led to the increases can be impossible. This underscores the importance of always using data from more than one source.

Adult arrests and Juvenile Arrests for Sale and Distribution of Synthetic Narcotics

The following data were compiled by the Bureau of Criminal Identification (BCI) in Utah's Department of Public Safety. The following tables present the rate of adult (18 and older) and juvenile (age 10 to 17) arrests for synthetic narcotic possession and synthetic narcotic sale and distribution (per 100,000 population) by LSAA for 2005, the most recent year data are available. Rates over time (2001 to 2005) are also presented for your LSAA so that you may see trends in the data.

Table 19. Adult Arrests for Sale and Distribution of Synthetic Narcotics (2005 BCI)

LSAA	Number of Arrests	Adult Population (Age 18+)	Rate per 100,000 Population
Bear River	0	102,331	0.0
Weber	1	154,665	0.6
Salt Lake	2	684,827	0.3
Davis	2	187,326	1.1
Utah	36	298,899	12.0
Wasatch	0	13,667	0.0
Summit	1	26,487	3.8
Tooele	0	34,574	0.0
Central Utah	17	49,012	34.7
Southwest	2	133,016	1.5
Northeastern	2	29,372	6.8
Four Corners	1	28,175	3.5
San Juan	0	9,682	0.0
State of Utah Total	*64*	*1,752,033*	*3.7*

Table 20. Adult Arrest Rate for Sale and Distribution of Synthetic Narcotics per 100,000 population (2001-2005 BCI)

LSAA	2001	2002	2003	2004	2005
Wasatch	0.0	0.0	0.0	0.0	0.0
State of Utah Total	*3.5*	*3.6*	*4.0*	*4.4*	*3.7*

Table 21. Juvenile Arrests for Sale and Distribution of Synthetic Narcotics (2005 BCI)

LSAA	Number of Arrests	Juvenile Population (Ages 10-17)	Rate per 100,000 Population
Bear River	0	19,226	0
Weber	1	28,182	4
Salt Lake	4	120,351	3
Davis	0	38,752	0
Utah	1	57,791	2
Wasatch	0	2,640	0
Summit	0	4,480	0
Tooele	0	7,001	0
Central Utah	0	10,353	0
Southwest	0	22,134	0
Northeastern	1	6,240	16
Four Corners	1	4,968	20
San Juan	0	2,504	0
State of Utah Total	*8*	*324,622*	*2.5*

Table 22. Juvenile Arrest Rate for Sale and Distribution of Synthetic Narcotics per 100,000 population (2001-2005 BCI)

LSAA	2001	2002	2003	2004	2005
Wasatch	0.0	0.0	0.0	0.0	0.0
State of Utah Total	*2.5*	*4.1*	*1.6*	*5.6*	*2.5*

Table 23. Adult Arrests for possession of Synthetic Narcotics (2005 BCI)

LSAA	Number of Arrests	Adult Population (Age 18+)	Rate per 100,000 Population
Bear River	2	102,331	2
Weber	6	154,665	4
Salt Lake	23	684,827	3
Davis	23	187,326	12
Utah	148	298,899	50
Wasatch	0	13,667	0
Summit	1	26,487	4
Tooele	1	34,574	3
Central Utah	48	49,012	98
Southwest	50	133,016	38
Northeastern	13	29,372	44
Four Corners	4	28,175	14
San Juan	9	9,682	93
State of Utah Total	*328*	*1,752,033*	*18.7*

Table 24. Adult Arrest Rate for possession of Synthetic Narcotics per 100,000 population (2001-2005 BCI)

LSAA	2001	2002	2003	2004	2005
Wasatch	0.0	0.0	0.0	0.0	0.0
State of Utah Total	*16.3*	*17.0*	*19.2*	*21.5*	*18.7*

Table 25. Juvenile Arrests for possession of Synthetic Narcotics (2005 BCI)

LSAA	Number of Arrests	Juvenile Population (Ages 10-17)	Rate per 100,000 Population
Bear River	0	19,226	0.0
Weber	0	28,182	0.0
Salt Lake	1	120,351	0.8
Davis	2	38,752	5.2
Utah	11	57,791	19.0
Wasatch	0	2,640	0.0
Summit	6	4,480	133.9
Tooele	0	7,001	0.0
Central Utah	5	10,353	48.3
Southwest	6	22,134	27.1
Northeastern	0	6,240	0.0
Four Corners	0	4,968	0.0
San Juan	0	2,504	0.0
State of Utah Total	*31*	*324,622*	*9.5*

Table 26. Juvenile Arrest Rate for possession of Synthetic Narcotics per 100,000 population (2001-2005 BCI)

LSAA	2001	2002	2003	2004	2005
Wasatch	0.0	0.0	0.0	0.0	0.0
State of Utah Total	*6.3*	*11.7*	*8.5*	*11.0*	*9.5*

Community Norms

There is a large body of literature suggesting that social norms are an important influence on substance use. When community norms support prescription sharing or nonmedical prescription narcotic use, the likelihood of the occurrence of PNMM associated with those use patterns will rise. Unfortunately there are no data for community norms. Therefore, you will need to work with your Coalition(s) and community partners to collect data that shed light on your community's norms surrounding prescription narcotics that might contribute to PNMM in your community. SPF SIG Training Manual Section 6 provides tools for collecting data regarding the community norms promoting or condoning prescription narcotic abuse and misuse within your community; you may come up with additional sources as well. By utilizing these tools and collecting data relating to community norms, you will be able to better decide whether community norms is an important causal factor to PNMM in your community.

Prescriber Lack of Knowledge

The next causal factor identified in the SPF PNMM logic model is prescriber lack of knowledge. Because prescription narcotics typically get into the community through prescriptions, medical professionals are important gatekeepers of these drugs. Therefore it is important that prescribers in your community are aware of and look for the signs of prescription narcotic abuse or misuse, doctor shopping and diversion. It is also important that prescribers and pharmacists are aware of potentially harmful drug interactions and actively educate consumers on risks of combining prescription narcotics with other drugs or alcohol. Prescribers should also educate consumers on the risks of taking increased or more frequent doses than prescribed. Unfortunately, data on prescriber lack of knowledge are not readily available through state level data sets. Therefore, you will need to work with your Coalition(s) and community partners to collect data that inform you about the provider lack of knowledge that affects your community. SPF SIG Training Manual Section 6 provides tools for collecting data regarding the prescriber lack of knowledge within your community; you may come up with additional sources as well. By utilizing these tools and collecting data relating to the prescriber lack of knowledge, you will be able to better decide whether this is an important causal factor to PNMM in your community.

Availability

Availability refers to the ease with which prescription narcotics can be obtained in your community. Examples of factors that contribute to availability include frequency of prescription drug sharing, theft of prescription drugs, larger than necessary prescriptions of prescription narcotics resulting in leftover pills, internet availability, prescription forgery or tampering, and doctor shopping. Unfortunately, data on prescription narcotic availability are not readily available through state level data sets. Therefore, you will need to work with your Coalition(s) and community partners to collect data that inform you about this factor in your community. SPF SIG Training Manual Section 6 provides tools for collecting data regarding the availability within your community; you may come up with additional sources as well. By utilizing these tools and collecting data relating to availability, you will be able to better decide whether this is an important causal factor to PNMM in your community.

Individual Factors

The final category of causal factors to prescription narcotic abuse and misuse highlighted in the SPF PNMM logic model is individual factors. The individual factor category refers to a cluster of variables that characterize an individual's risk for engaging in problematic alcohol or other drug consumption. These individual factors may pertain to an individual's attitudes, temperament, genetic predisposition, family relations, etc. that affect his or her likelihood of engaging in substance use. When identifying and considering individual risk factors, it is important to remember that the SPF SIG process is focused on the public health model and *community* level change. Therefore, when examining individual factors as potential relevant causal factors and strategies to address, keep in mind that you should try to focus on individual factors that can be addressed from a community level and largely with environmental strategies. Unfortunately, there are no available data on individual factors for PNMM. Data relevant to individual factors that would be useful if available include information such as attitudes about sharing prescription narcotics or nonmedical prescription use, perceived risk of harm of using prescription narcotics in a manner other than prescribed by a health professional, and peer prescription narcotic abuse or misuse. Therefore, as with other indicators, you will need to work with your Coalition(s) and community partners to collect data that shed light on the individual factors of adults in your

community that might contribute to PNMM in your community. SPF SIG Training Manual Section 6 provides tools for collecting data in this area; you may come up with additional sources as well. By utilizing these tools and collecting data, you will be able to better decide whether individual factors is an important causal factor to PNMM in your community.

APPENDIX A

Prevention Needs Assessment (PNA) Sample Sizes and Participation Rates for 2007

When interpreting the PNA indicators in the epidemiological profile report (youth prescription narcotic use), it is important to consider the sample size and participation rates. While the samples for the PNA were generally large, representative samples for most LSAAs, there are some LSAAs where sample sizes are small enough that interpretation of the PNA indicators should be made with caution. As a general rule of thumb, as the sample size becomes larger and/or the participation rate becomes higher, the greater confidence you may have that the data represent the youth in your LSAA. Conversely, when sample sizes and participation rates are low, caution is warranted in interpreting the results of the data for your LSAA. Please note that you may be able to obtain sub-LSAA level data (e.g., specific schools within a school district) from the school superintendent of the school district you are interested in. This would be useful if you are planning prevention efforts for a specific community within your LSAA and the LSAA data as a whole do not represent the community of interest well.

Appendix A1. Participant Demographics

Wasatch								
Student Totals								
Total Students	**Region 2003**		**Region 2005**		**Region 2007**		**State 2007**	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	698	100	399	100	548	100	46152	100
Grade								
6	209	29.9	205	51.4	218	39.8	14547	31.5
8	209	29.9	78	19.5	202	36.9	13367	29.0
10	161	23.1	59	14.8	63	11.5	10164	22.0
12	119	17.0	57	14.3	65	11.9	8074	17.5
Gender								
Male	330	47.5	195	49.5	283	52.4	21987	48.3
Female	365	52.5	199	50.5	257	47.6	23576	51.7
Ethnicity*								
Native American	11	1.6	13	3.3	21	3.6	1924	3.8
African American	1	0.1	8	2.0	13	2.2	1282	2.6
Hispanic	40	5.9	31	7.8	60	10.2	5632	11.3
White	610	89.3	331	83.6	483	82.0	38909	77.8
Asian	2	0.3	1	0.3	7	1.2	1317	2.6
Pacific Islander	2	0.3	1	0.3	5	0.8	919	1.8
Multi-racial or Other	17	2.5	11	2.8	0	0.0	0	0.0

*In 2007, students could mark more than one ethnic category.

Appendix A2. Enrollment

LSAA		2003-2004	2005-06	2007-08
6th	Wasatch	320	322	364
	State of Utah Total	*36264*	*35739*	*38285*
8th	Wasatch	303	284	352
	State of Utah Total	*36217*	*36779*	*37766*
10th	Wasatch	331	311	290
	State of Utah Total	*36209*	*36544*	*38248*
12th	Wasatch	269	313	304
	State of Utah Total	*34469*	*34614*	*36703*