2003 NEW MEXICO SOCIAL INDICATOR REPORT

Substance Abuse Epidemiology Unit
Office of Epidemiology, Public Health Division
New Mexico Department of Health

Acknowledgements

This report was produced by the Substance Abuse Epidemiology Unit, Office of Epidemiology, New Mexico Department of Health, and was made possible by the generous support of the Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment (CSAT).

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December 29, 2003

Dear Citizens of New Mexico,

Reducing the burden of substance abuse is an essential part of this administration's vision for the future of New Mexico. The *2003 New Mexico Social Indicator Report* plays an important role in that vision by providing a valuable tool to be used in combating alcohol and drug abuse in our state.

I am pleased that the Office of Epidemiology, New Mexico Department of Health, has chosen to produce this useful report. Efforts such as this one will strengthen our treatment and prevention programs, and will bring us closer to our vision of a healthy New Mexico.

Sincerely,

Bill Richardson
Governor

NEW MEXICO
DEPARTMENT OF
HEALTH

Patricia T. Montoya, R.N., M.P.A.
Secretary

Bill Richardson Governor

Fredrick Sandoval, M.P.A.
Deputy Secretary
Gary L.J. Girón, M.B.A.
Deputy Secretary

December 29, 2003

Dear Fellow New Mexicans,

Substance abuse exacts a heavy toll on the citizens of New Mexico and their families. The *2003 New Mexico Social Indicator Report* responds to the burden imposed by alcohol and drugs on our state by providing information that can be used by policy makers and program planners in designing and targeting prevention, intervention, and treatment programs.

This report quantifies 22 different indicators of substance abuse. Comparisons are made between counties within New Mexico, the state as a whole, and where appropriate, the entire nation. This attention to local level data makes this report equally useful to those working in their communities and to those working at the statewide level.

The New Mexico Department of Health provides this report in the hope that it will be a valuable decision-making tool to all those working in the field of substance abuse prevention and treatment in the state of New Mexico.

Sincerely,

Patricia T. Montoya

Patricia T. Montoya, RN, MPA
Secretary

2003 New Mexico Social Indicator Project
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EXECUTIVE SUMMARY

The 2003 New Mexico Social Indicator Report presents county-level and statewide data on indicators relevant to alcohol and drug abuse in New Mexico. The data presented here allow comparisons of the relative burden of substance abuse among New Mexico counties and the state as a whole. As such, this report will be equally useful to program planners and policy-makers working at the statewide level or the community level. The report should prove to be a helpful decision-making tool in designing and targeting prevention, intervention, and treatment programs.

Both direct and indirect indicators of substance abuse are included in the Social Indicator Report. Direct indicators include age-adjusted rates of alcohol– and drug– related mortality, and crude rates of alcohol– and drug–related hospitalizations, driving while impaired (DWI) arrest rates, alcohol-related automobile crashes, alcohol-related crash fatalities, alcohol– and drug–treatment admissions, and alcohol– and drug– related crime. Indirect indicators include age-adjusted suicide and homicide rates, liquor license density, unemployment rates, Medicaid-funded birth rates, and high school dropout rates. Also presented are survey-based direct indicators of substance use by high school students (Table 1). A detailed discussion of each indicator, its sources, and its limitations can be found in Appendix A. While most of the data in this report is presented graphically in bar charts and maps, Table 2 presents rates by county for each indicator as well as the rank of each county according to the relative magnitude of the indicator.

Results clearly show that some counties bear a heavier burden from substance abuse than others. Rio Arriba County, in north-central New Mexico, had the highest combined alcohol– and drug-related death rate in the state. The drug-related death rate Rio Arriba County (42.9 per 100,000 population) was twice that of the county with the second highest rate (Lincoln County, 25.1), was almost three times the statewide rate (15.2), and was six times the national rate (7.0). The alcohol-related death rate in Rio Arriba County ranked fourth in the state. Rio Arriba County ranked first in the state for rates of alcohol– and drug-related hospitalizations, alcohol– and drug-treatment rates, and high school dropout rates. For alcohol-involved crash rates and alcohol-involved crash fatality rates, Rio Arriba ranked 5th and 3rd in the state, respectively.

McKinley County, in the northwest part of the state, had the second highest rate of combined alcohol– and drug– related deaths, and had the highest rate of alcohol-related deaths. McKinley County had the highest DWI arrest rate, the highest alcohol-involved automobile crash rate, the second highest alcohol-related crime rate, and the fifth highest alcohol-involved crash fatality rate. Cibola County, neighboring McKinley to the south, had the fourth highest rate of combined alcohol– and drug-related deaths and the third highest alcohol-related death rate. Cibola County also had high rates of alcohol– and drug– related hospitalizations, DWI arrests, alcohol-involved crashes, and alcohol-involved crash fatalities.

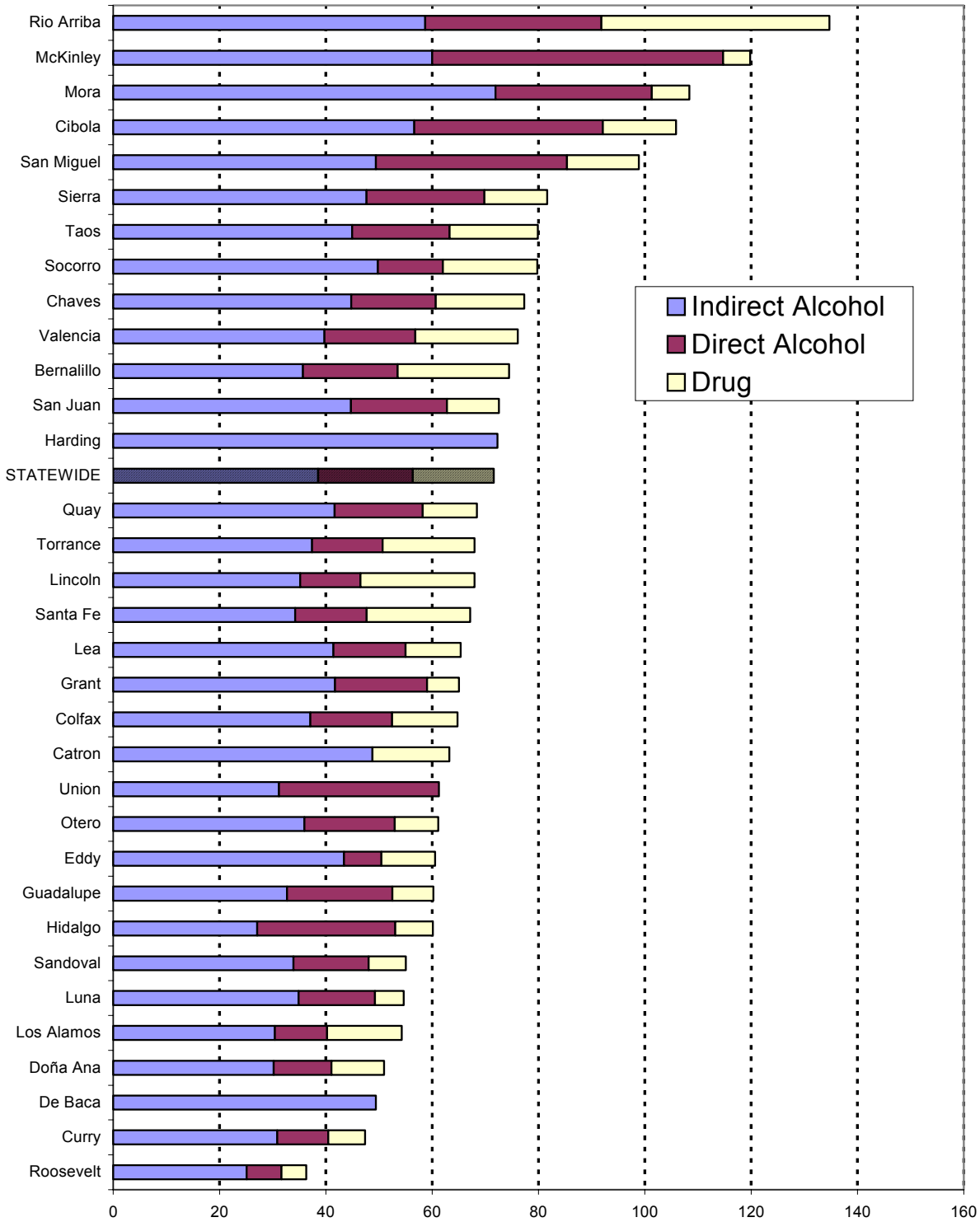
While the alcohol-related death rate in Bernalillo County was slightly lower than the statewide rate, it had the third highest drug-related death rate in the state (21.0 per 100,000 population). This rate represents 356 deaths over the three-year period from 1999-2001, or 44% of the state total. This number far outstrips the number of drug-related deaths for the same time period in either Santa Fe County (78) or Rio Arriba County (52), which rank second and third, respectively, in the number of drug-related deaths. Bernalillo County ranks fourth in the state for it's drug-related hospitalization rate and sixth in the state for it's combined alcohol– and drug-related hospitalization rate. It's high school dropout rate is the second highest in the state.

Mora and San Miguel, two neighboring counties in northern New Mexico, are ranked third and fifth in the state, respectively, for combined alcohol– and drug-related death rates, and second and fifth, respectively, for alcohol-related death rates. Both counties have higher rates than New Mexico as a whole for DWI arrests, alcohol-involved crashes, and alcohol-involved crash fatalities. While San Miguel has a high rate for alcohol– and drug–related hospitalizations, Mora does not.

Grant County, in the southern part of the state, has the second highest rate of alcohol– and drug-related hospitalizations. Grant and Doña Ana County, also in the southern part of the state, have high rates of alcohol– and drug-related crime. Sierra County, bordering Doña Ana County to the north, has the highest homicide rate and the third highest suicide rate in the state.

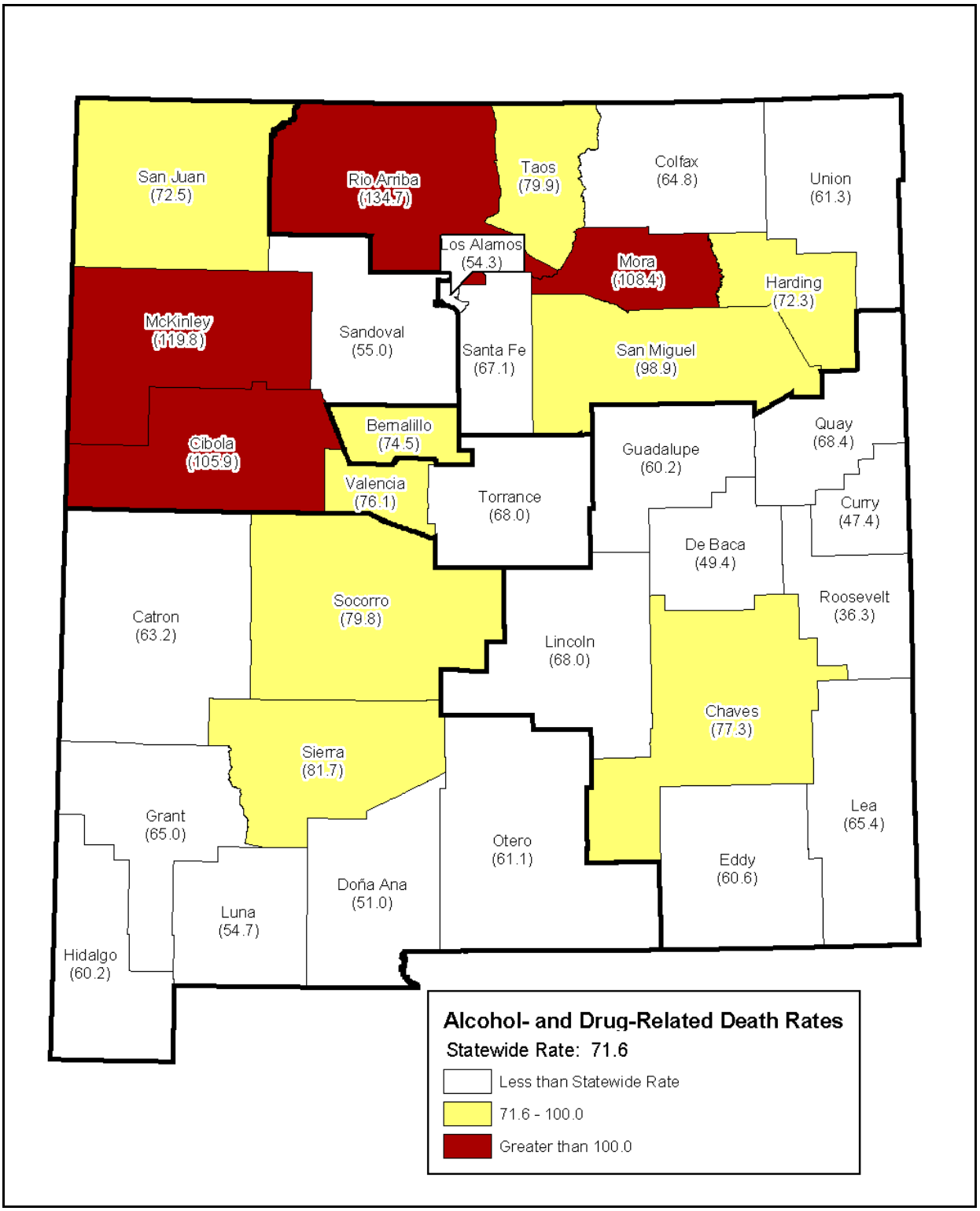
This snapshot of social indicators does not include trend data. While this minimizes major improvements in social indicators over time, particularly for McKinley County, the Social Indicator Report will hopefully be very useful for program planning and health policy development in New Mexico.

Figure 1. Alcohol- and Drug-Related Death Rates by County of Residence 1999-2001



Rates are per 100,000 population per year and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health. Estimates of the number of indirectly-attributable alcohol deaths were calculated by the Office of Epidemiology, NMDOH (Appendix A and Appendix C).

Figure 2. Alcohol- and Drug-Related Death Rates by County of Residence, 1999-2001



Rates are per 100,000 population per year and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health. Estimates of the number of indirectly-attributable alcohol deaths were calculated by the Office of Epidemiology, NMDOH (Appendix A and Appendix C).

Figure 3. Alcohol-Related Death Rates by County of Residence
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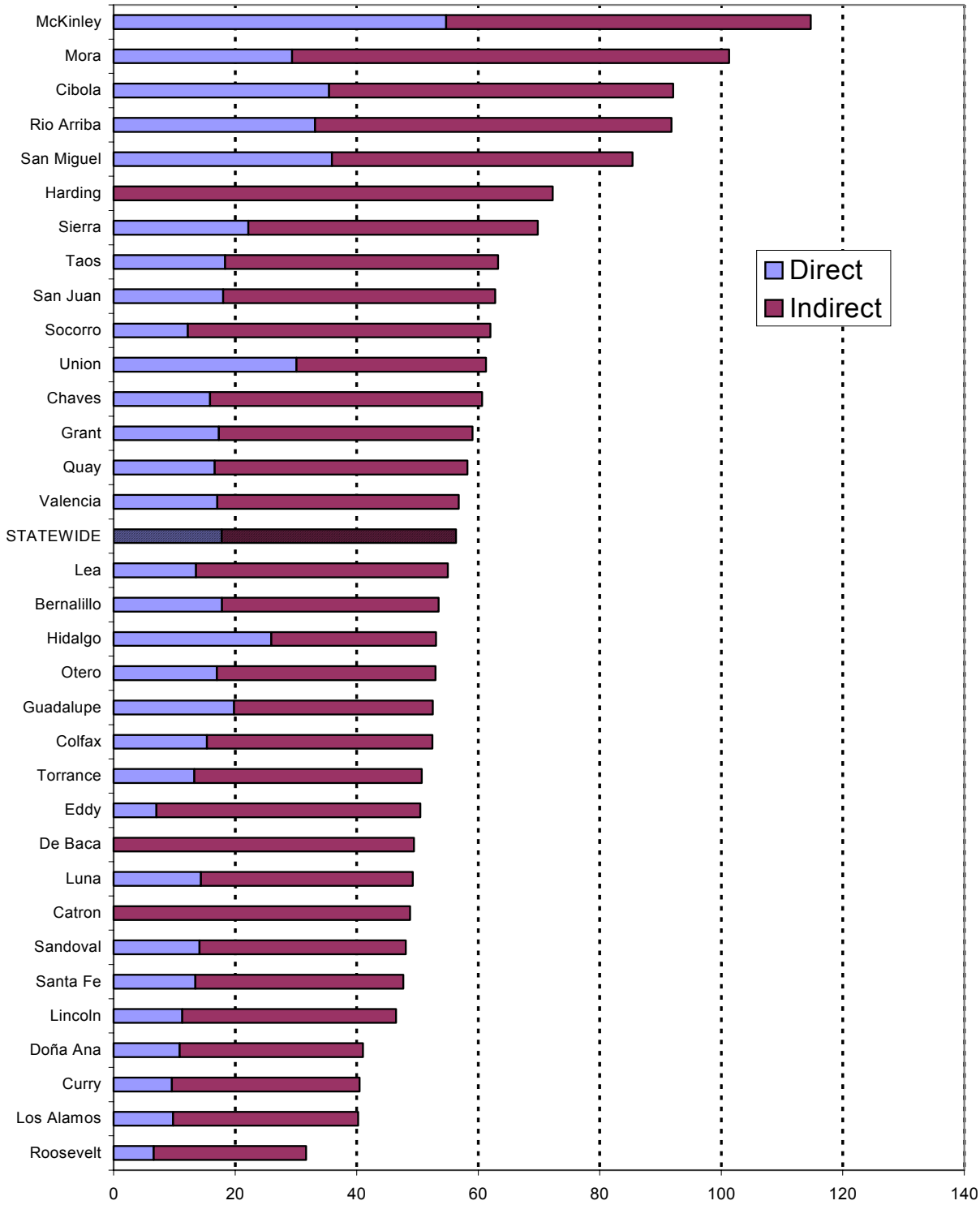
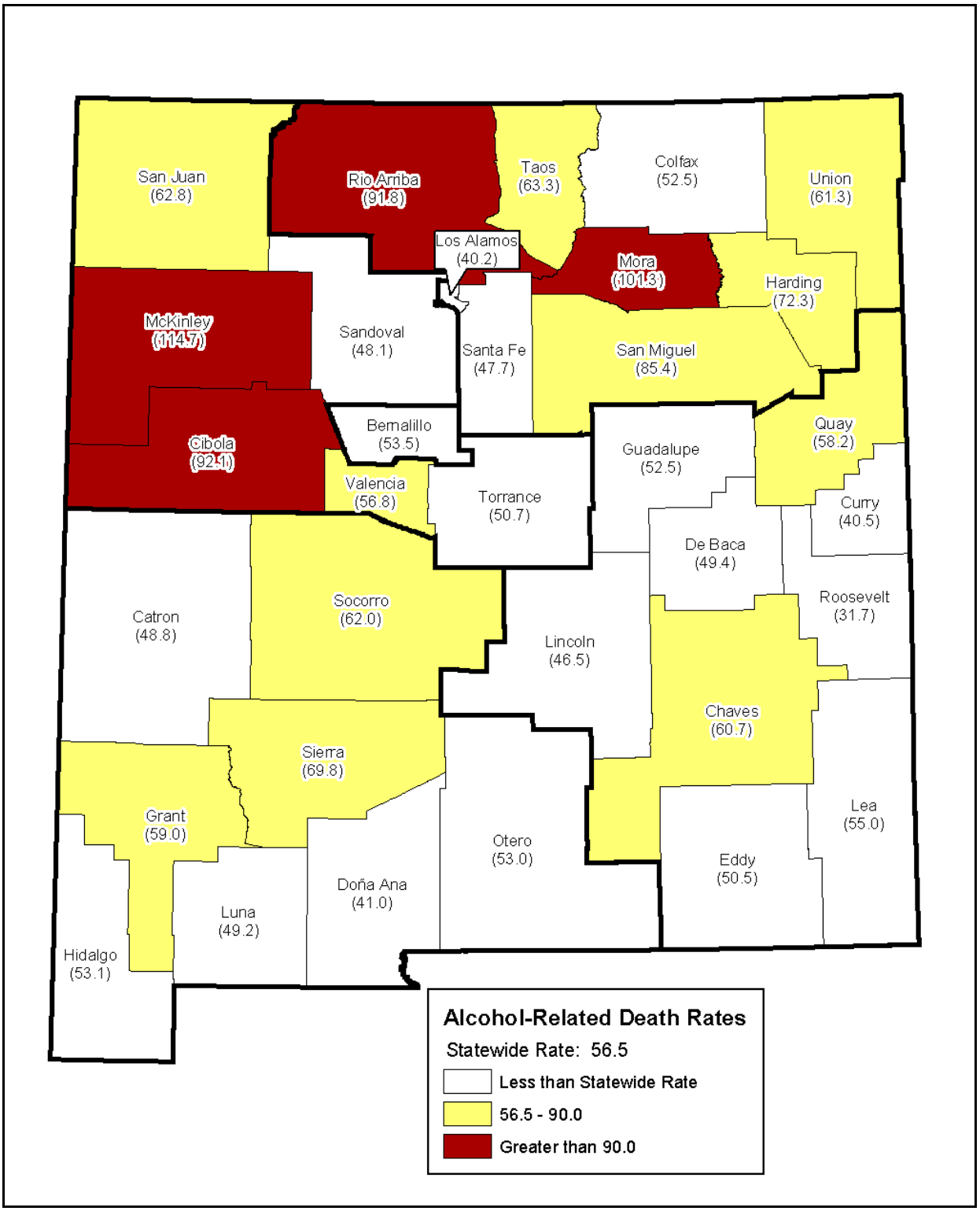


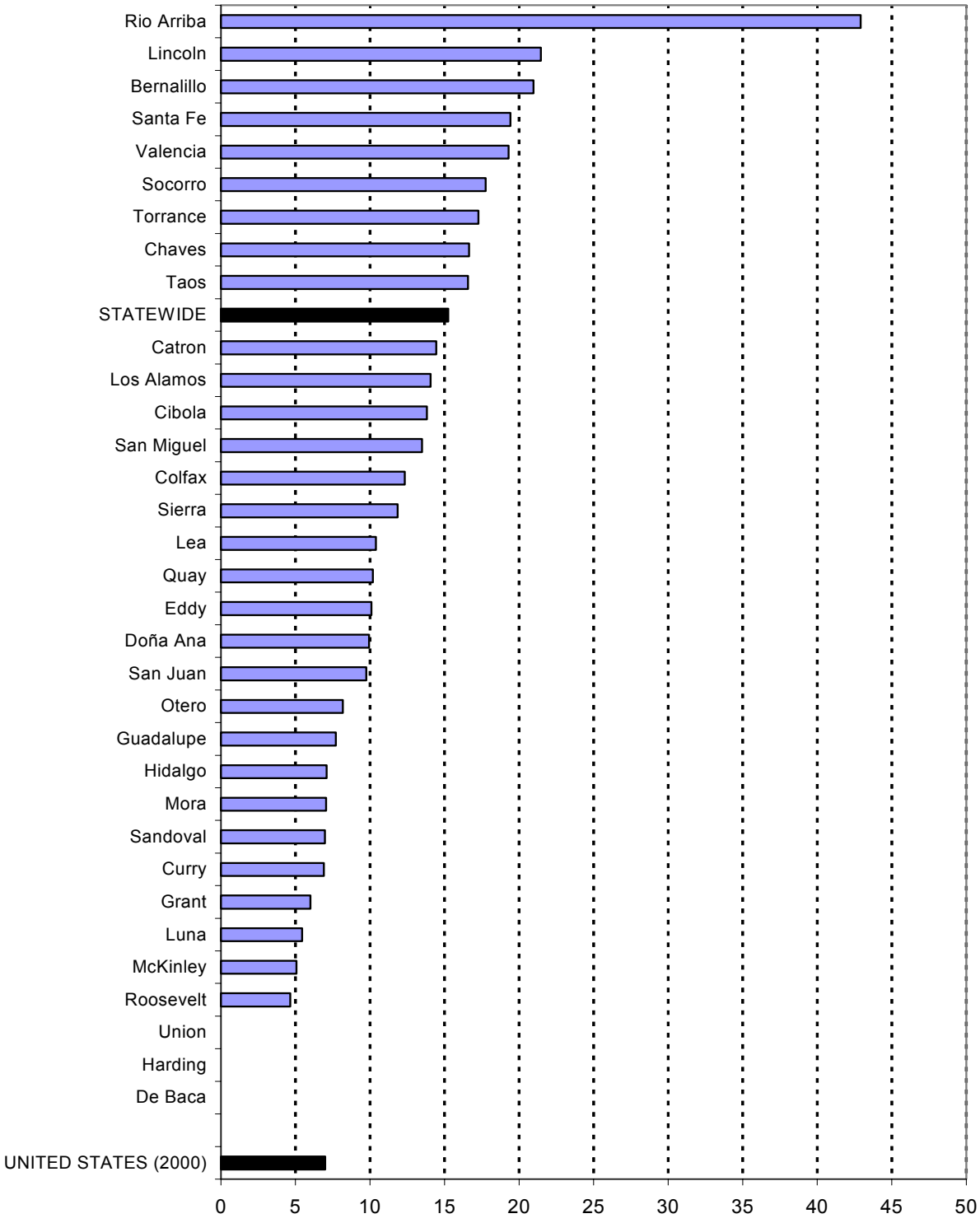
Rates are per 100,000 population per year and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health. Estimates of the number of indirectly-attributable alcohol deaths were calculated by the Office of Epidemiology, NMDOH (Appendix A and Appendix C).

Figure 4. Map of Alcohol-Related Death Rates by County of Residence 1999-2001



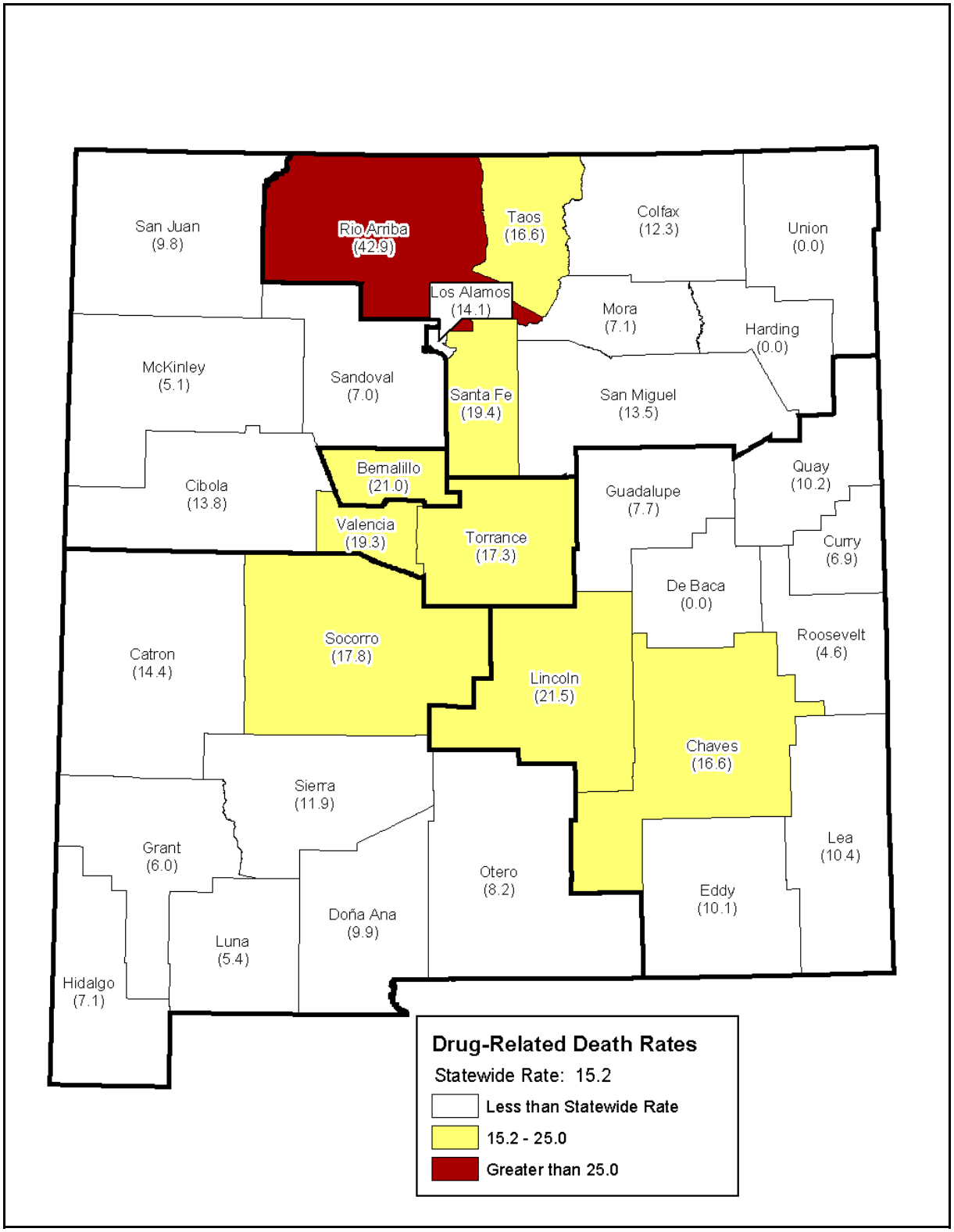
Rates are per 100,000 population per year and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health. Estimates of the number of indirectly-attributable alcohol deaths were calculated by the Office of Epidemiology, NMDOH (Appendix A and Appendix C).

Figure 5. Drug-Related Death Rates by County of Residence, 1999-2001



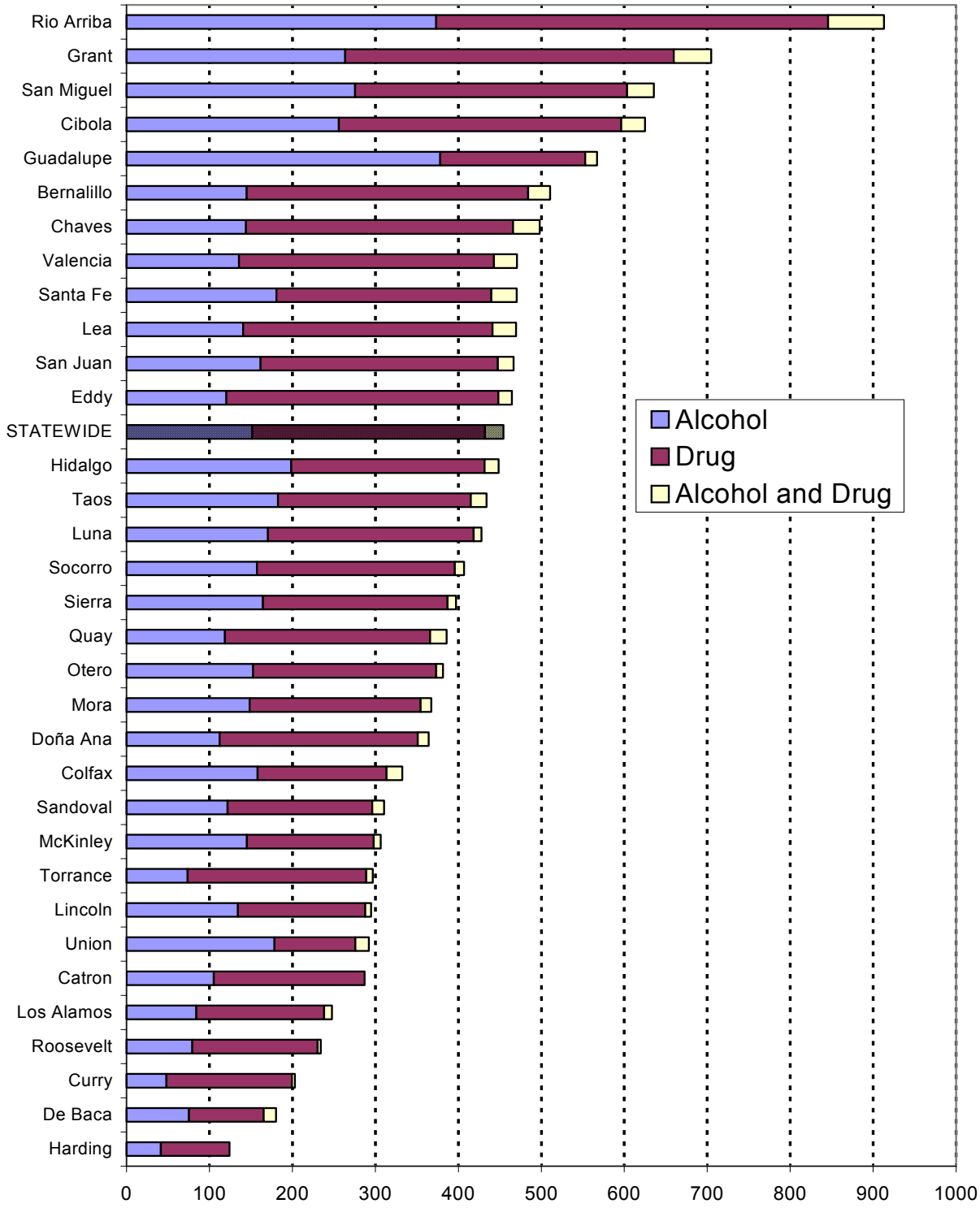
Rates are per 100,000 population per year and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health

Figure 6. Map of Drug-Related Death Rates by County of Residence 1999-2001



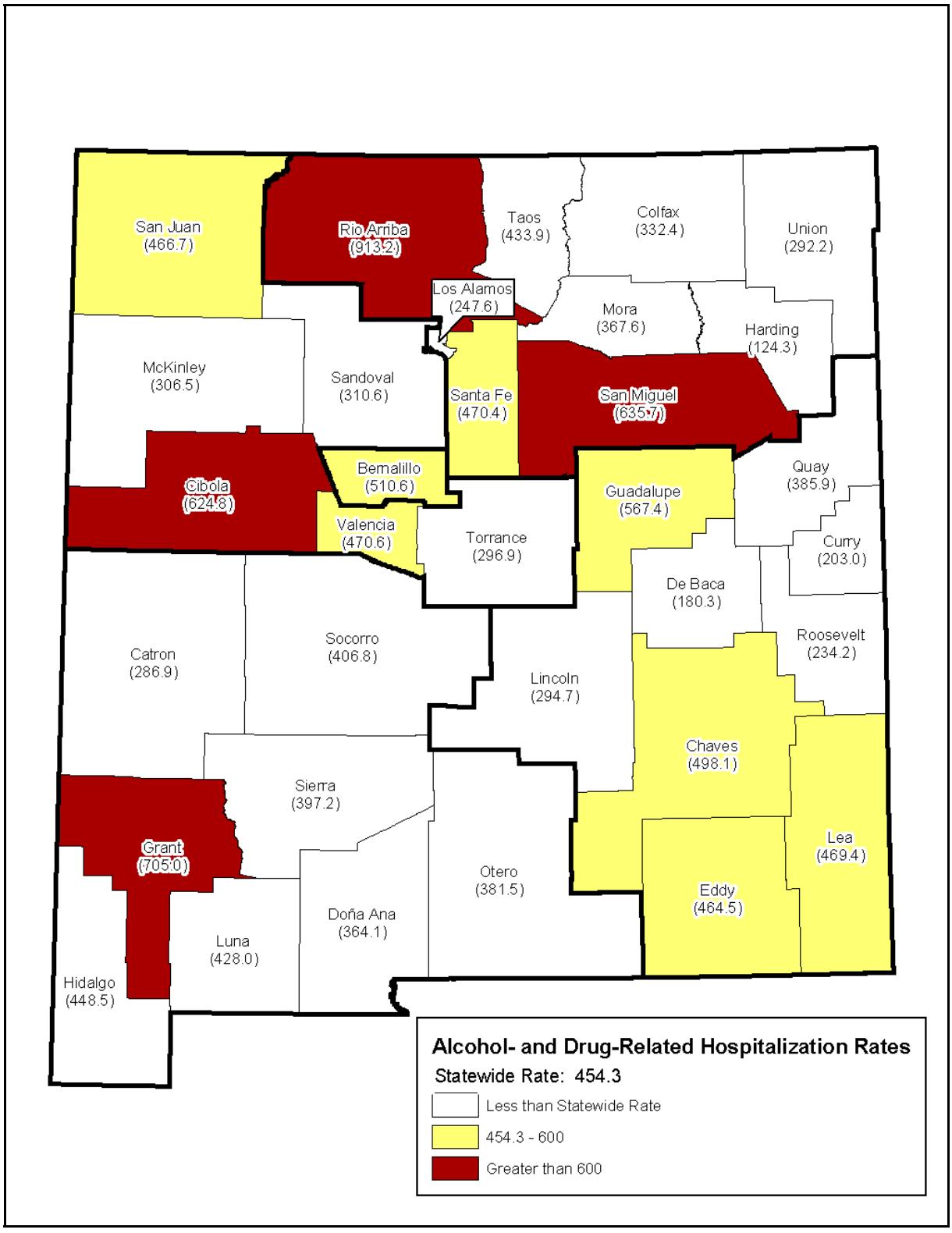
Rates are per 100,000 population per year, and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health

Figure 7. Alcohol and Drug-Related Hospitalization Rates by County of Residence, 1999-2001



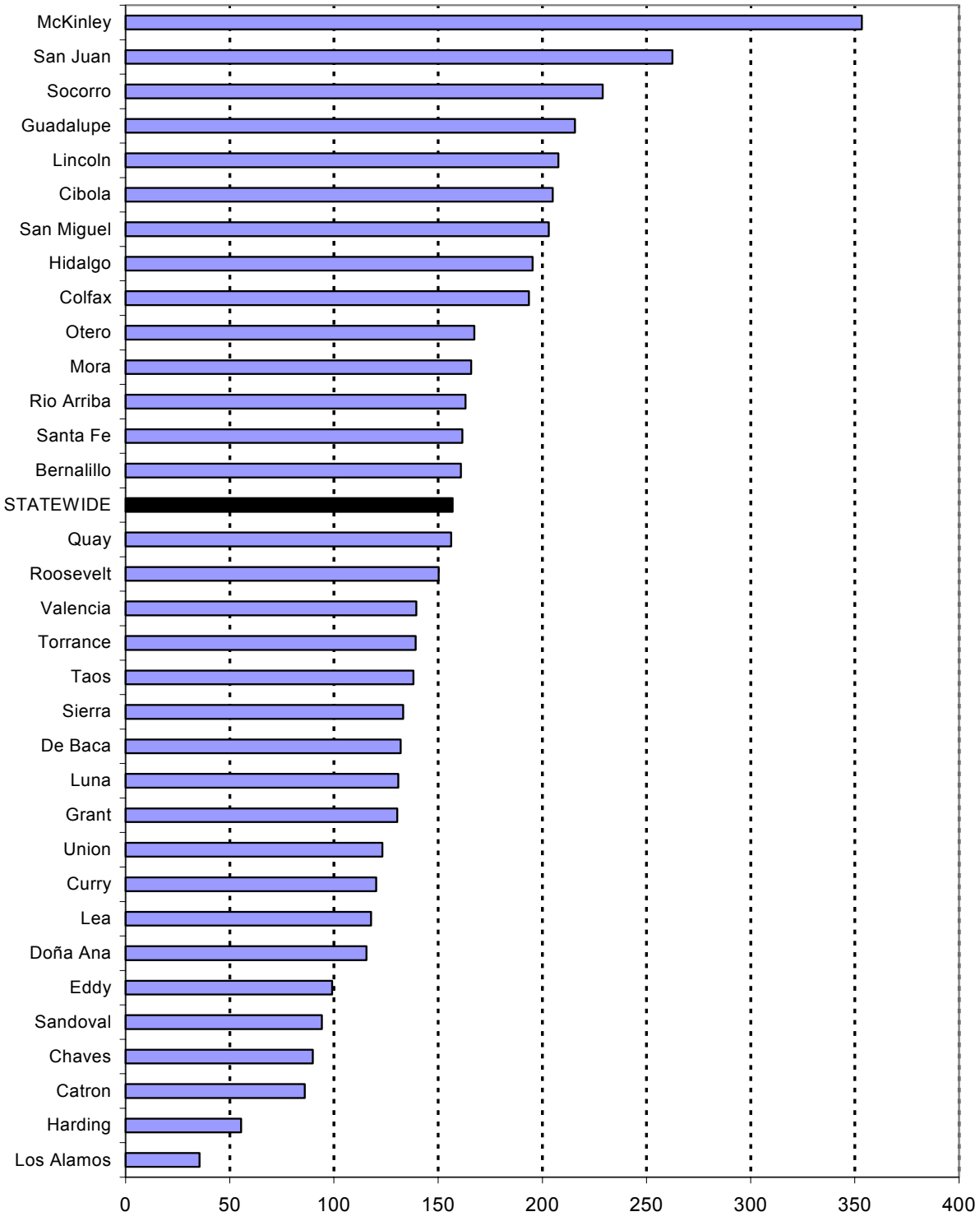
Rates are per 100,000 population per year.
Source: Hospital Inpatient Discharge Database, New Mexico Health Policy Commission

Figure 8. Map of Alcohol and Drug-Related Hospitalization Rates by County of Residence, 1999-2001



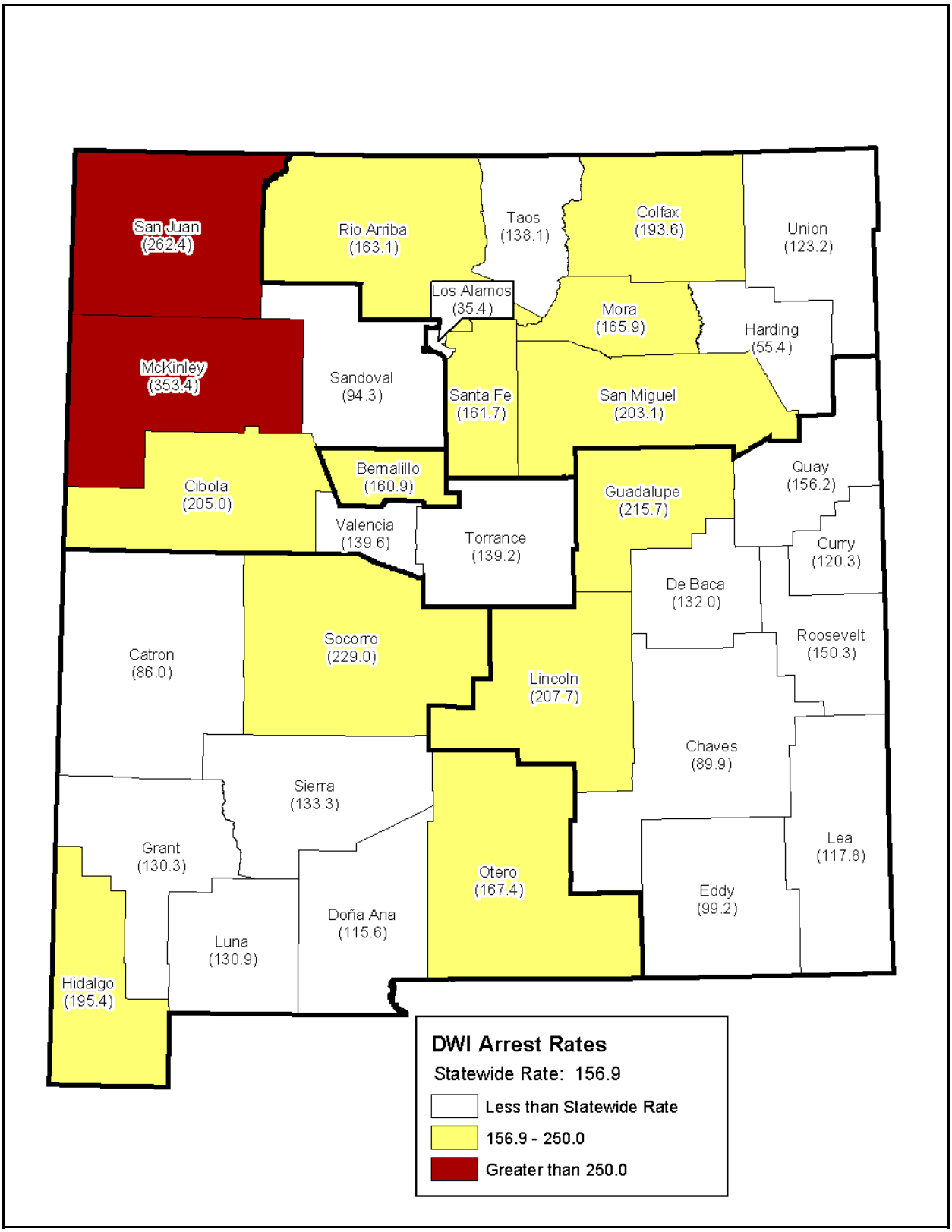
Rates are per 100,000 population per year.
Source: Hospital Inpatient Discharge Database, New Mexico Health Policy Commission

Figure 9. Driving While Impaired Arrest Rates by County of Occurrence 1999-2001



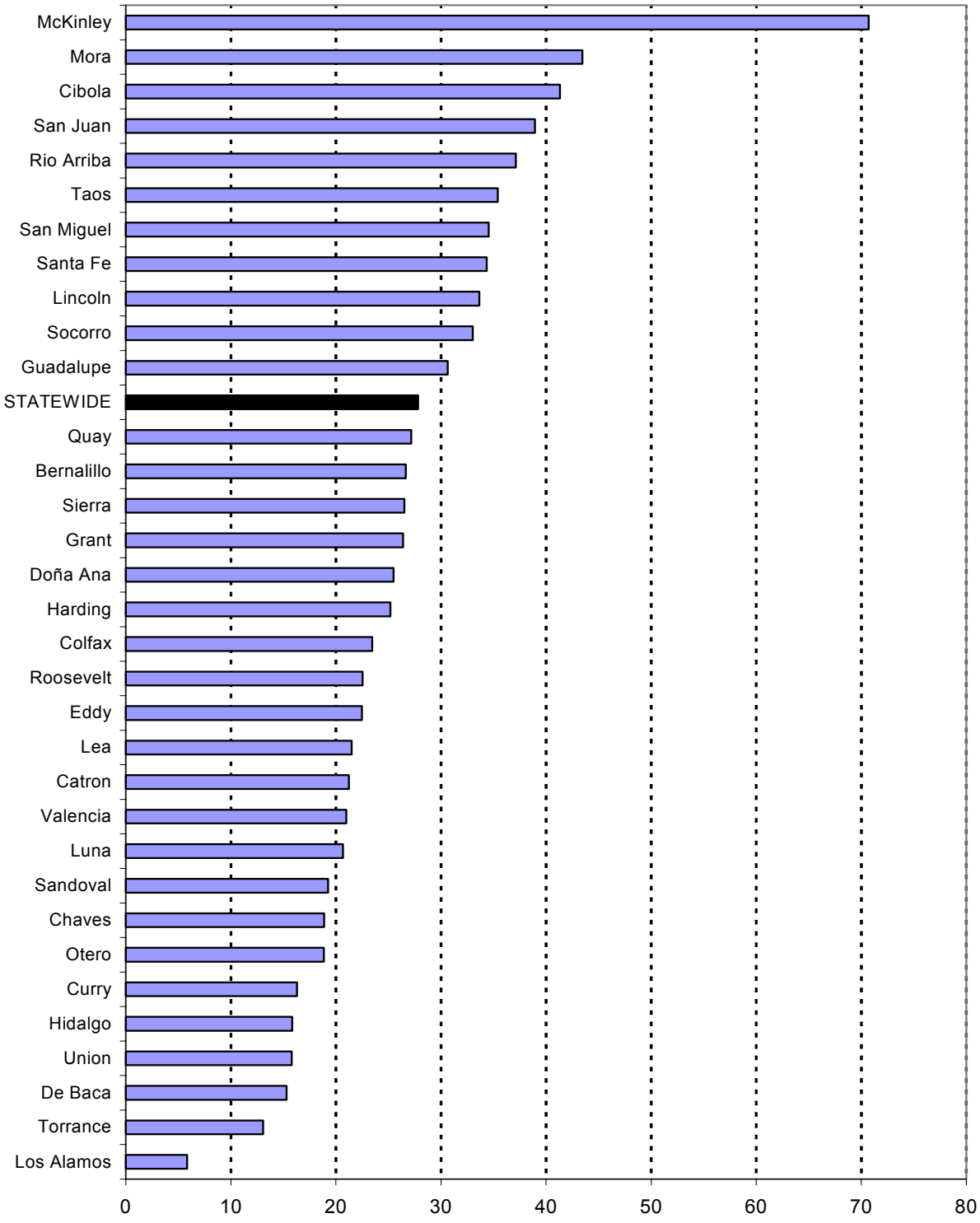
Rates are per 10,000 licensed drivers per year.
Source: New Mexico Traffic Safety Bureau through Division of Government Research, UNM

Figure 10. Map of DWI Arrest Rates by County of Occurrence
1999-2001



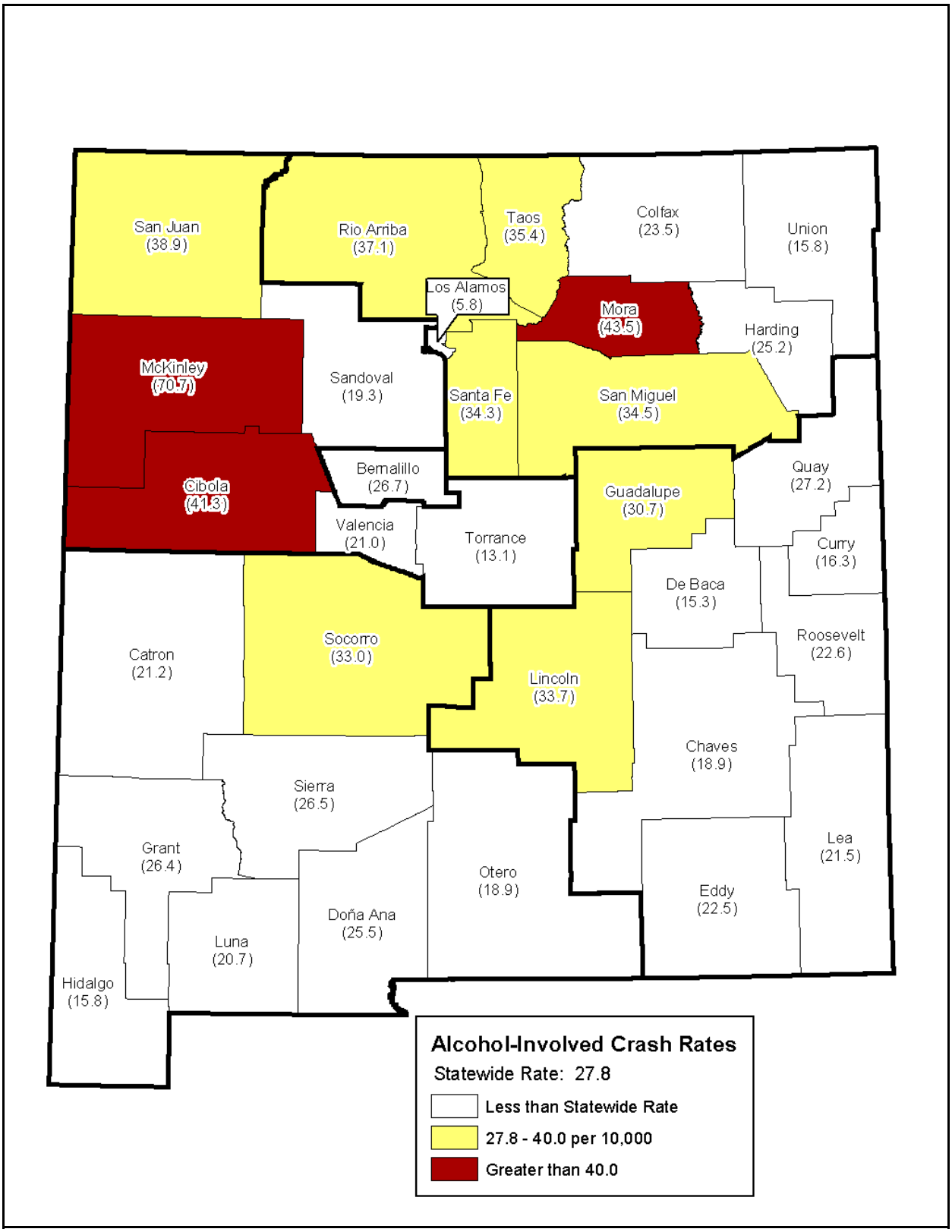
Rates are per 10,000 licensed drivers per year.
Source: New Mexico Traffic Safety Bureau through Division of Government Research, UNM

Figure 11. Alcohol-Involved Crash Rates by County of Occurrence 1999-2001



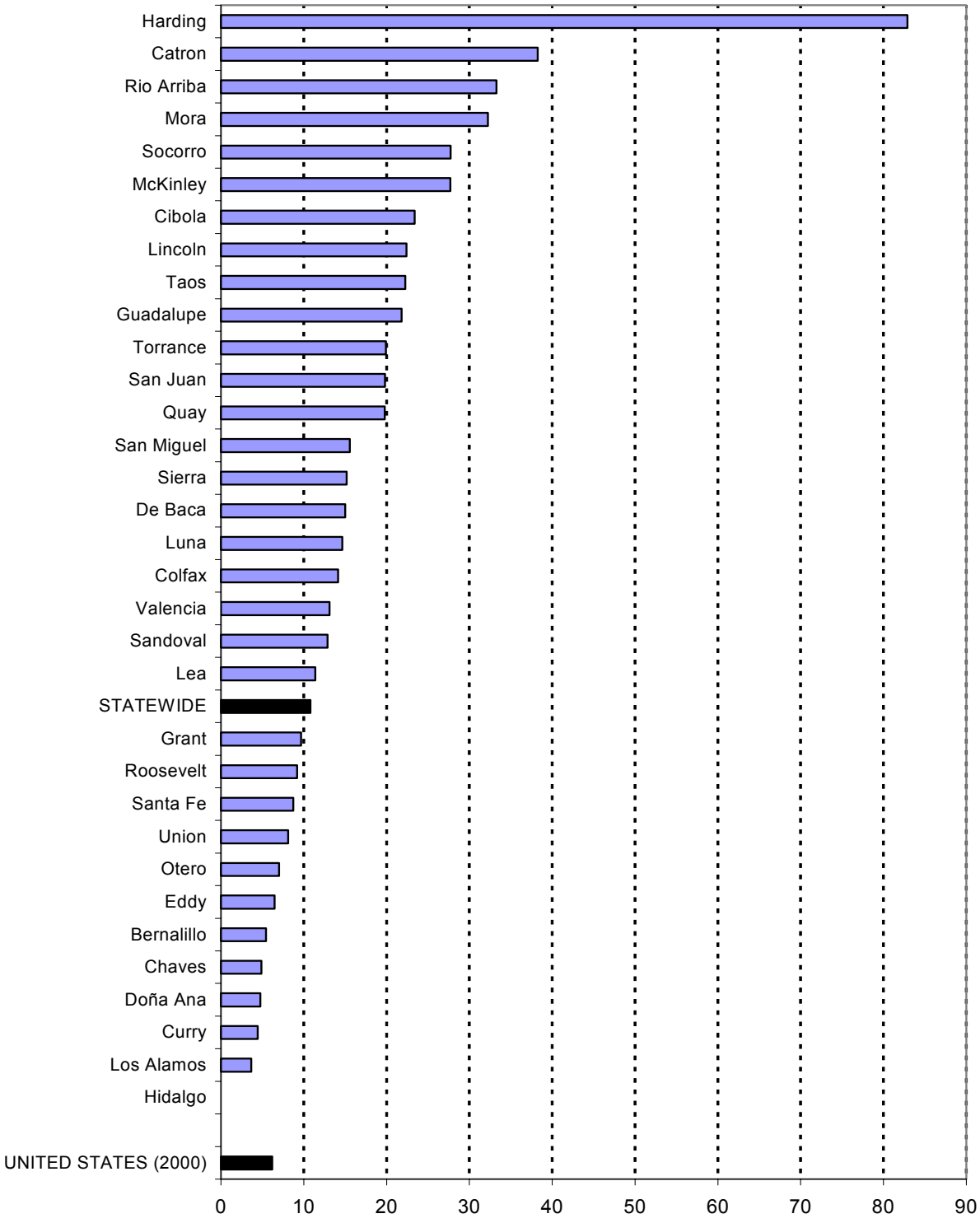
Rates are per 10,000 licensed drivers per year.
Source: New Mexico Traffic Safety Bureau through Division of Government Research, UNM

Figure 12. Map of Alcohol-Involved Crash Rates by County of Occurrence 1999-2001



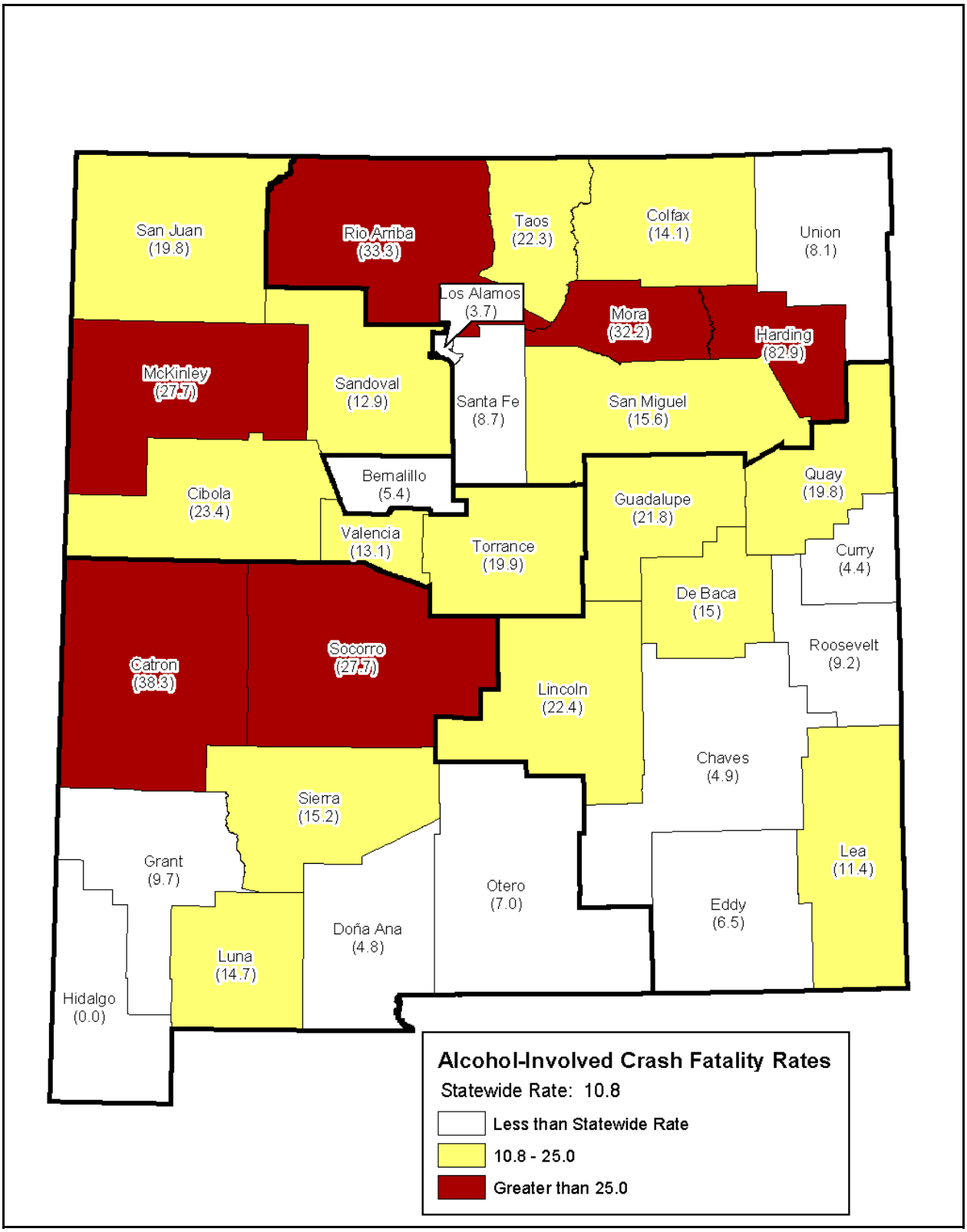
Rates are per 10,000 licensed drivers per year.
Source: New Mexico Traffic Safety Bureau through Division of Government Research, UNM

Figure 13. Alcohol-Involved Crash Fatality Rates by County of Occurrence 1999-2001



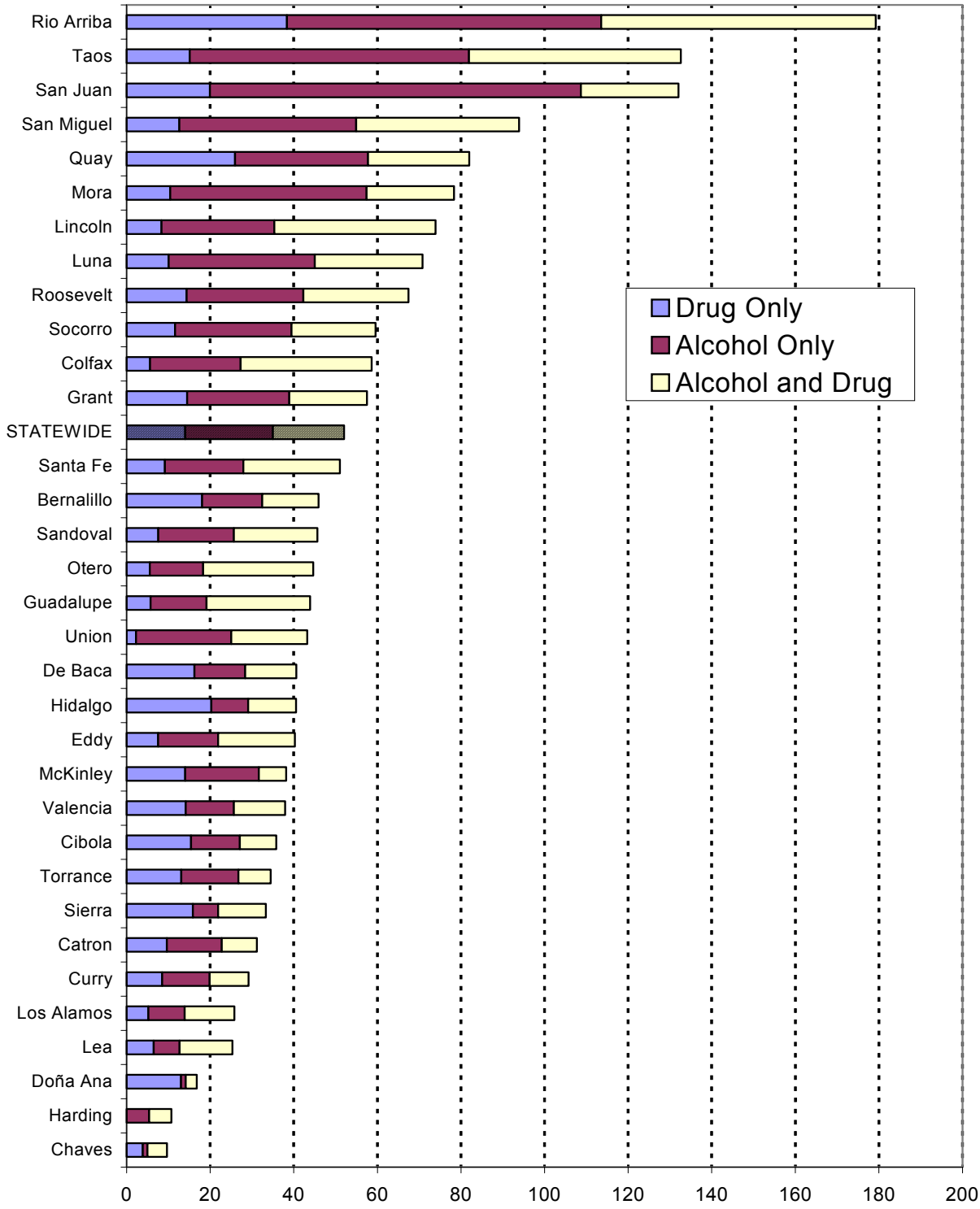
Rates are per 100,000 population per year.
Source: New Mexico Traffic Safety Bureau through Division of Government Research, UNM

Figure 14. Map of Alcohol-Involved Crash Fatality Rates by County of Occurrence, 1999-2001



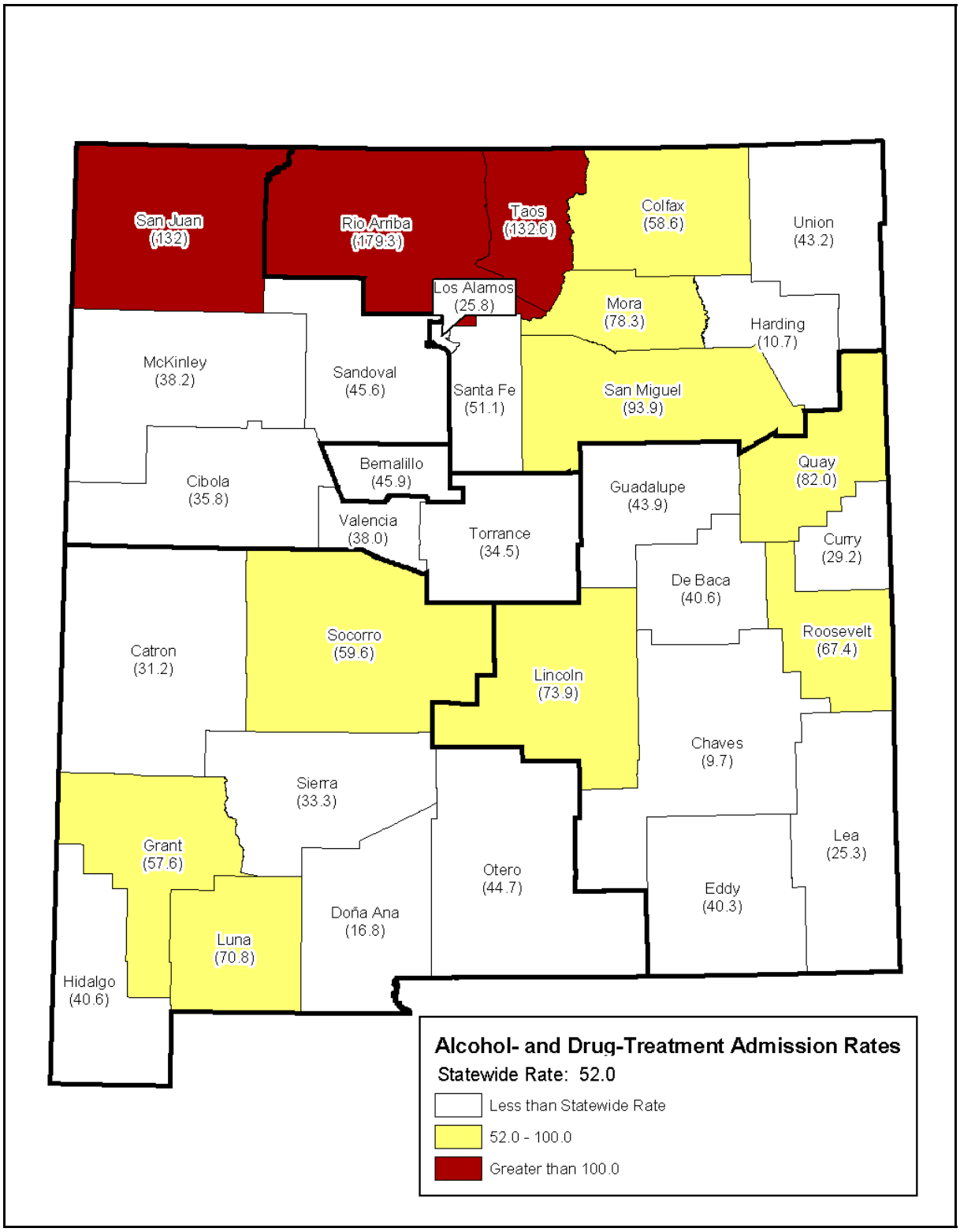
Rates are per 100,000 population per year.
Source: New Mexico Traffic Safety Bureau through Division of Government Research, UNM

Figure 15. Alcohol and Drug-Treatment Admission Rates by County of Residence, July 2000-June 2003



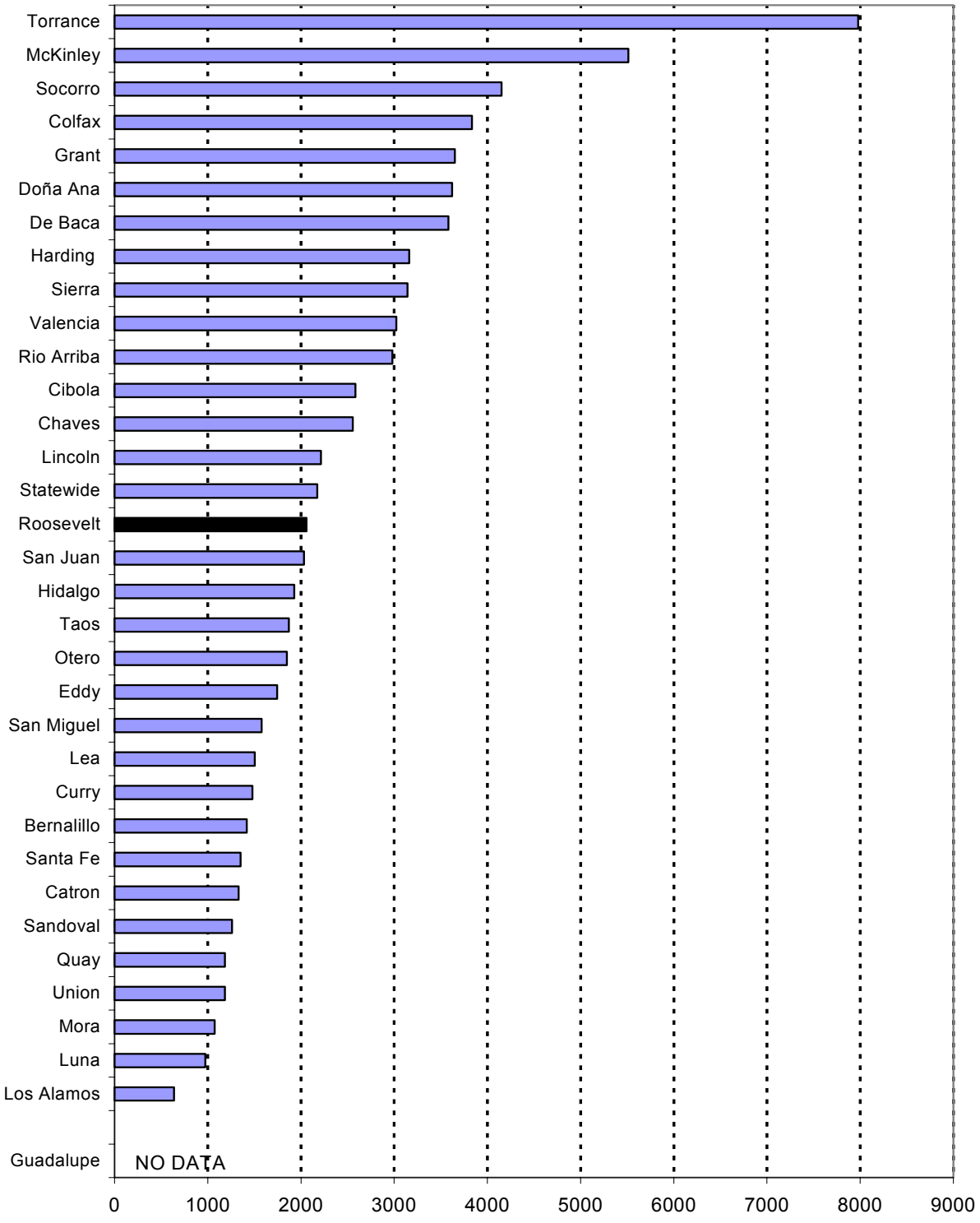
Rates are per 10,000 population age 18 and over per year.
Source: Behavioral Health Information System, Behavioral Health Services Division, New Mexico Department of Health

Figure 16. Map of Alcohol and Drug-Treatment Admissions Rates by County of Residence, July 2000-June 2003



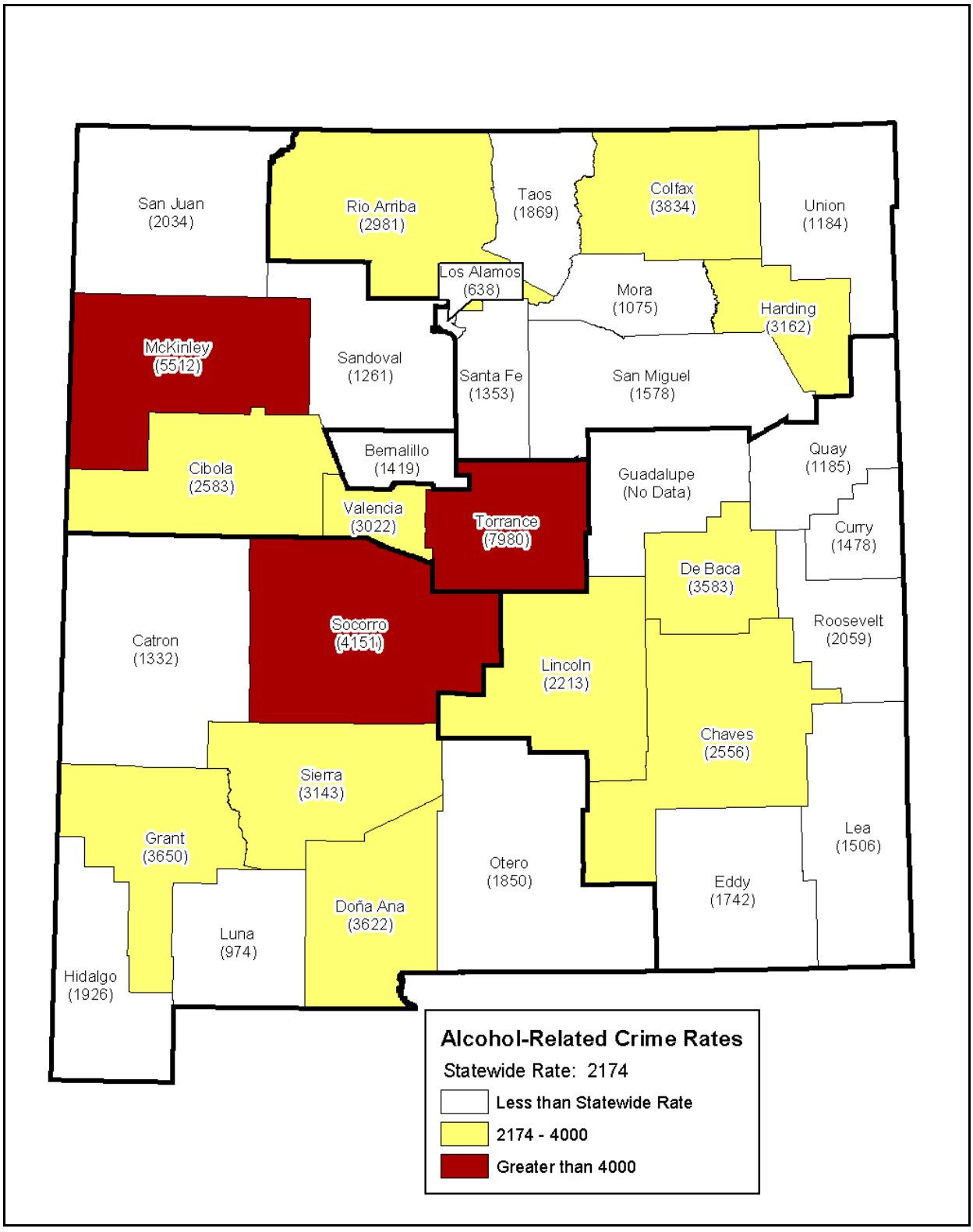
Rates are per 10,000 population age 18 and over per year.
Source: Behavioral Health Information System, Behavioral Health Services Division, New Mexico Department of Health

Figure 17. Alcohol-Related Crime Rates by County of Occurrence, 2000



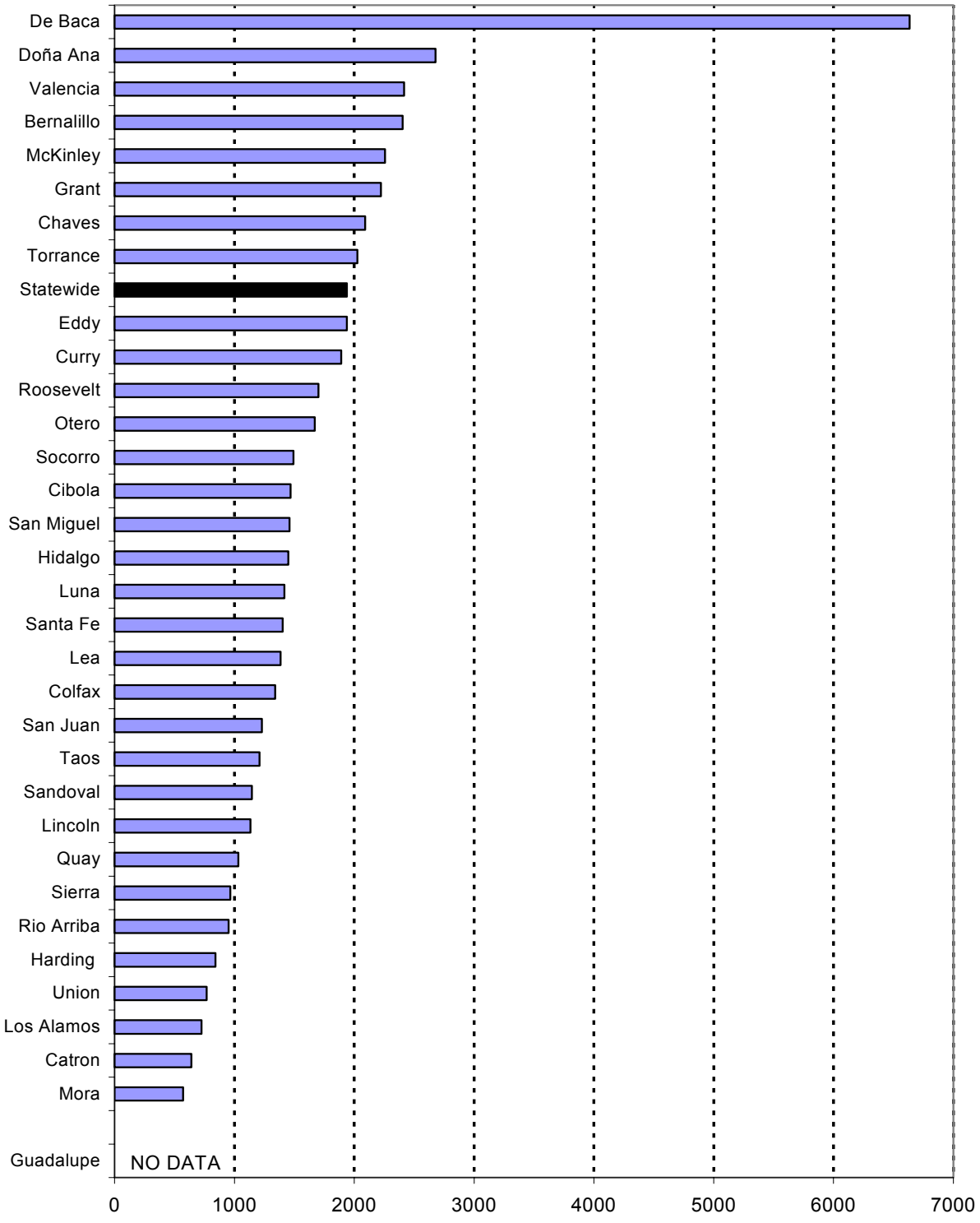
Rates are per 100,000 population.
Source: Uniform Crime Report Data Set, National Archive of Criminal Justice Data, and the Department of Government, New Mexico State University

Figure 18. Map of Alcohol-Related Crime Rates by County of Occurrence 2000



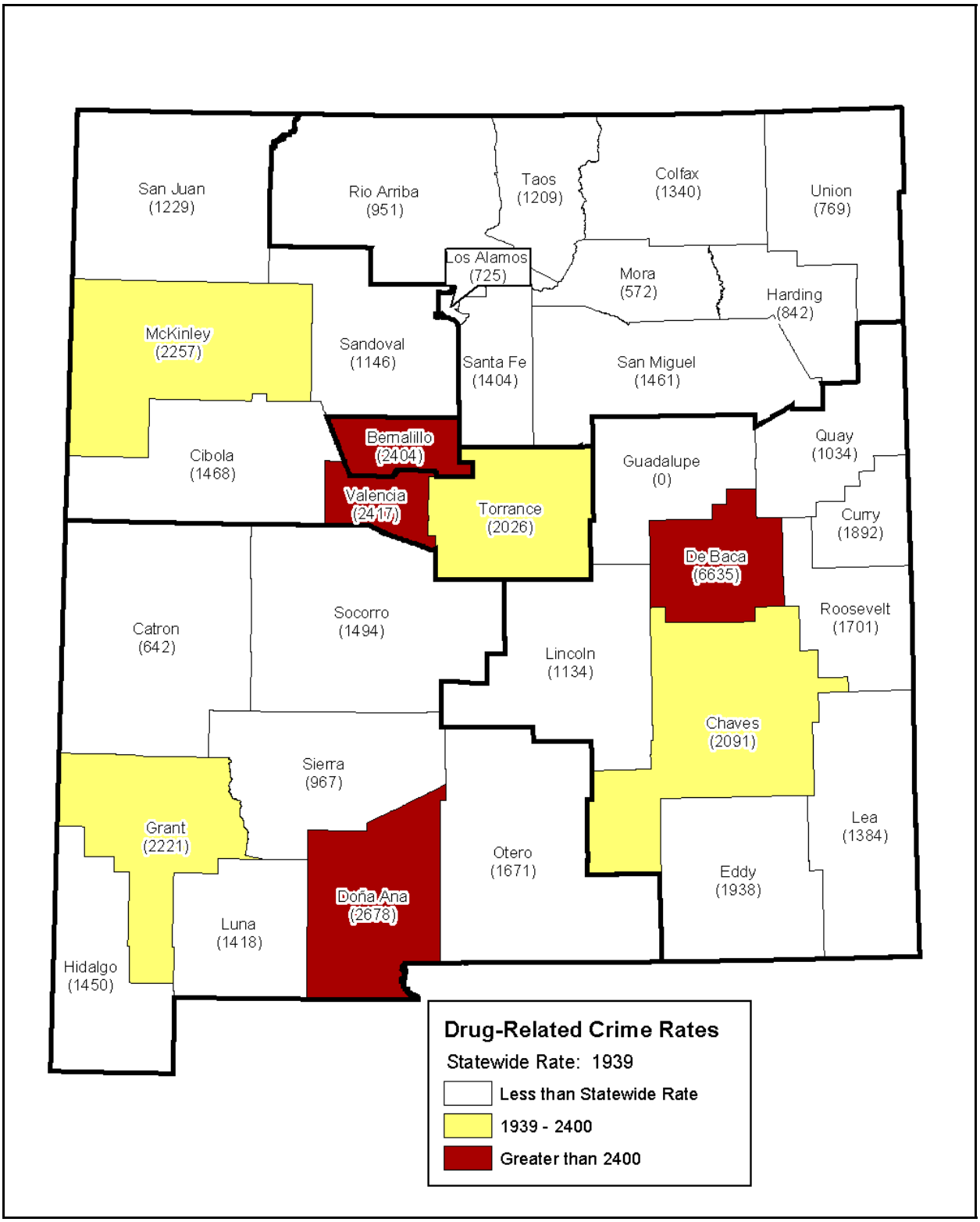
Rates are per 100,000 population.
Source: Uniform Crime Report Data Set, National Archive of Criminal Justice Data, and the Department of Government, New Mexico State University

Figure 19. Drug-Related Crime Rates by County of Occurrence
2000



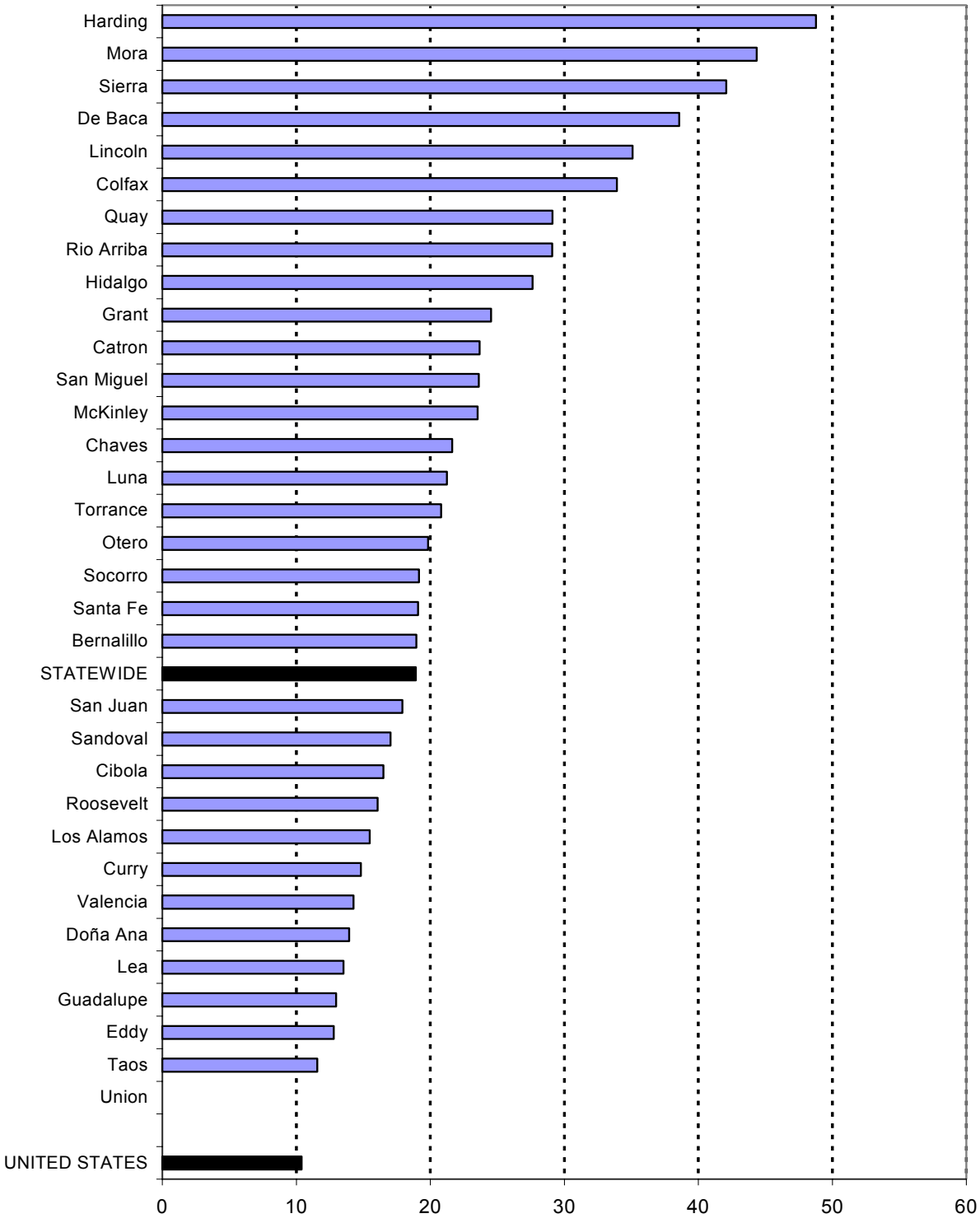
Rates are per 100,000 population.
Source: Uniform Crime Report Data Set, National Archive of Criminal Justice Data, through the Department of Government, New Mexico State University

Figure 20. Map of Drug-Related Crime Rates by County of Occurrence 2000



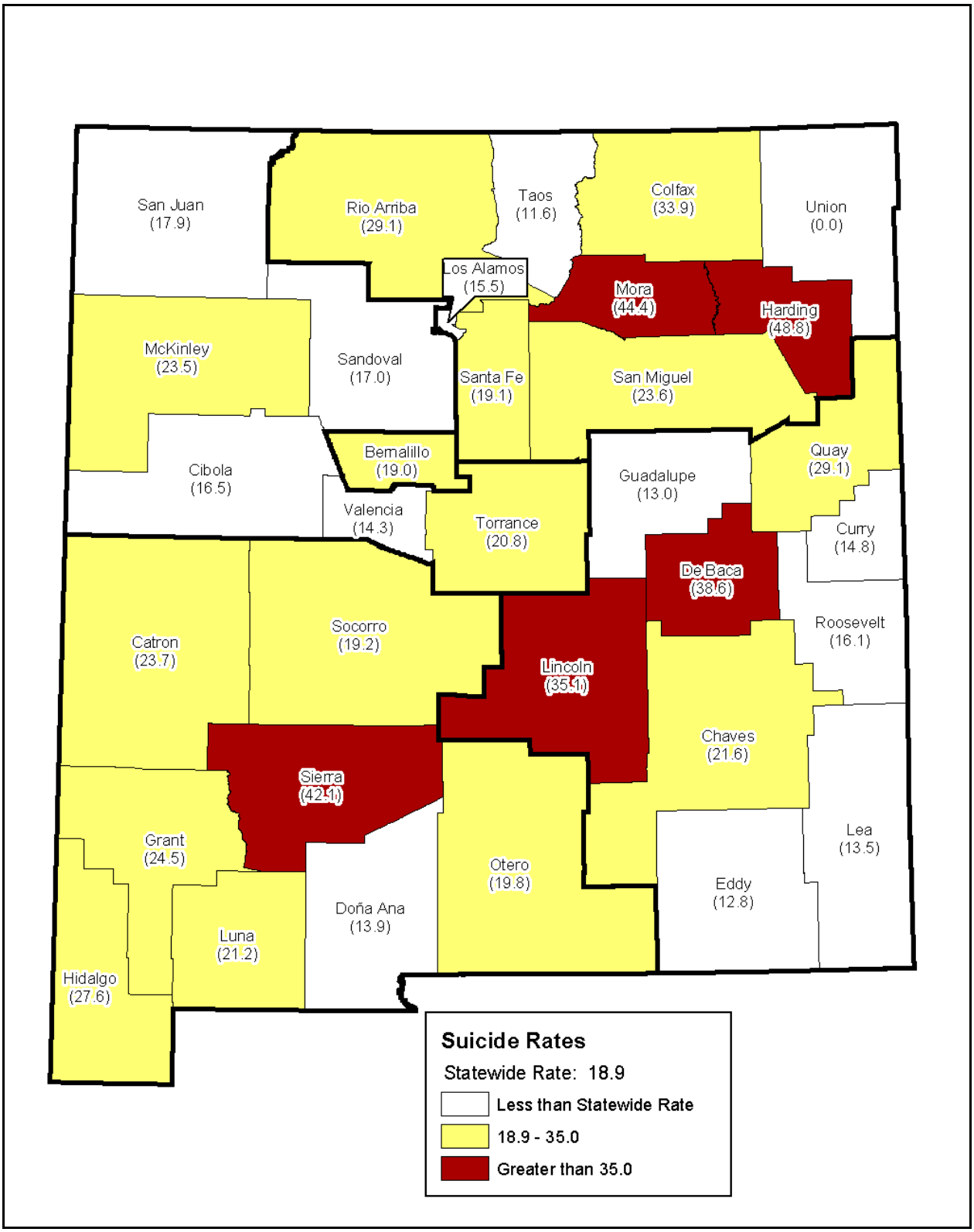
Rates are per 100,000 population.
Source: Uniform Crime Report Data Set, National Archive of Criminal Justice Data, through the Department of Government, New Mexico State University

Figure 21. Suicide Rates by County of Residence, 1999-2001



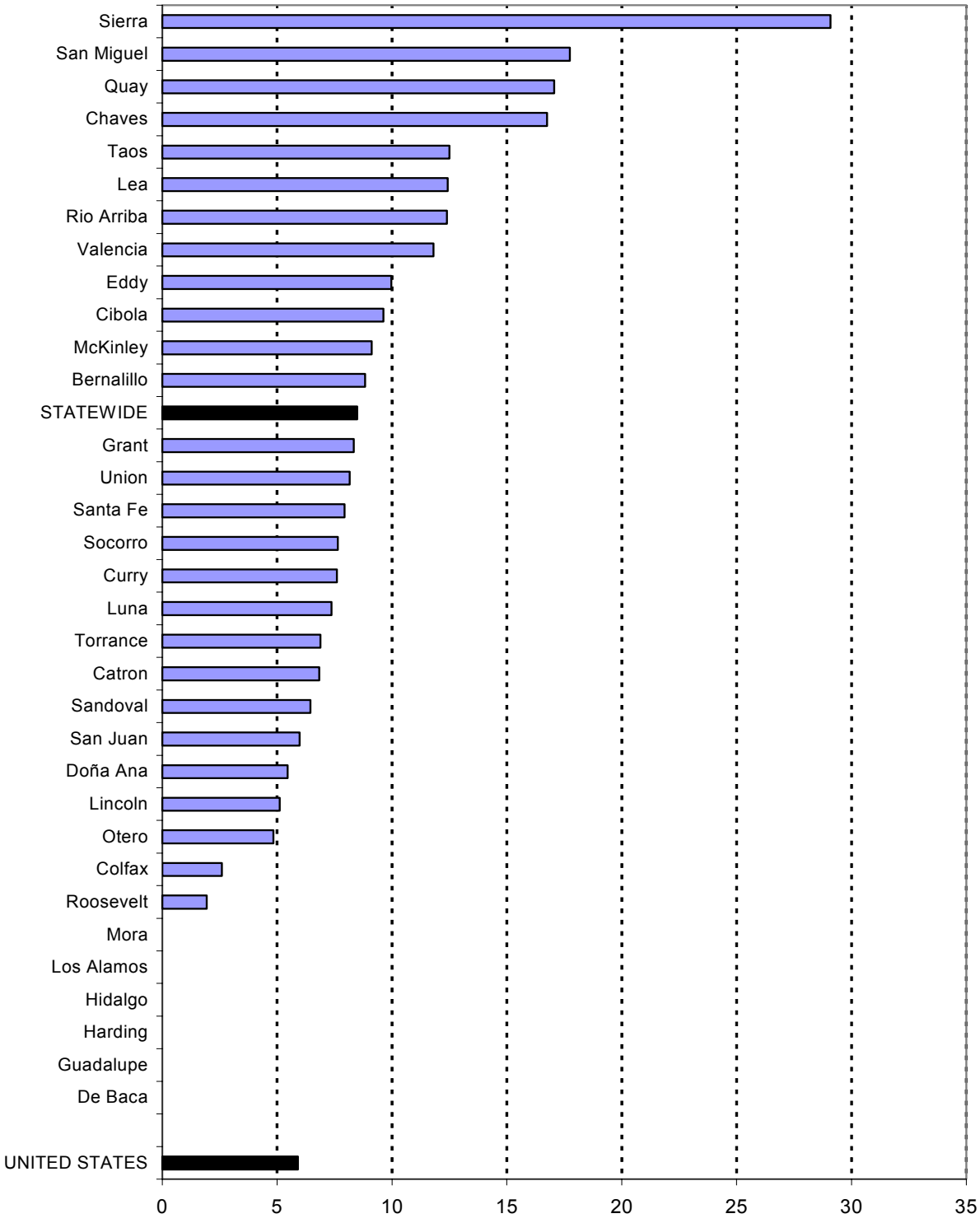
Rates are per 100,000 population per year and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health

Figure 22. Map of Suicide Rates by County of Residence, 1999-2001



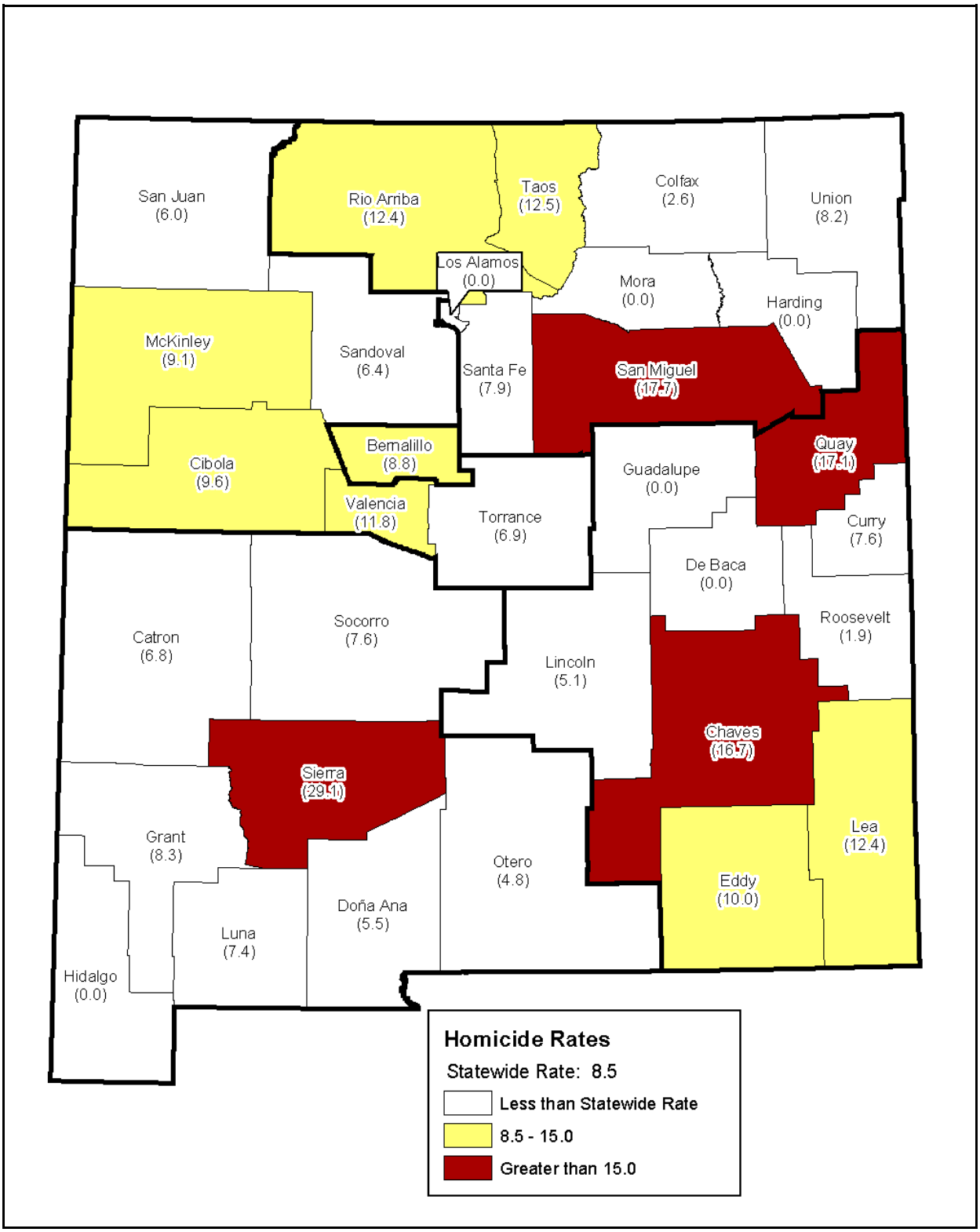
Rates are per 100,000 population per year and are age-adjusted to the year 2000 standard U.S. population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health

Figure 23. Homicide Rates by County of Residence, 1999-2001



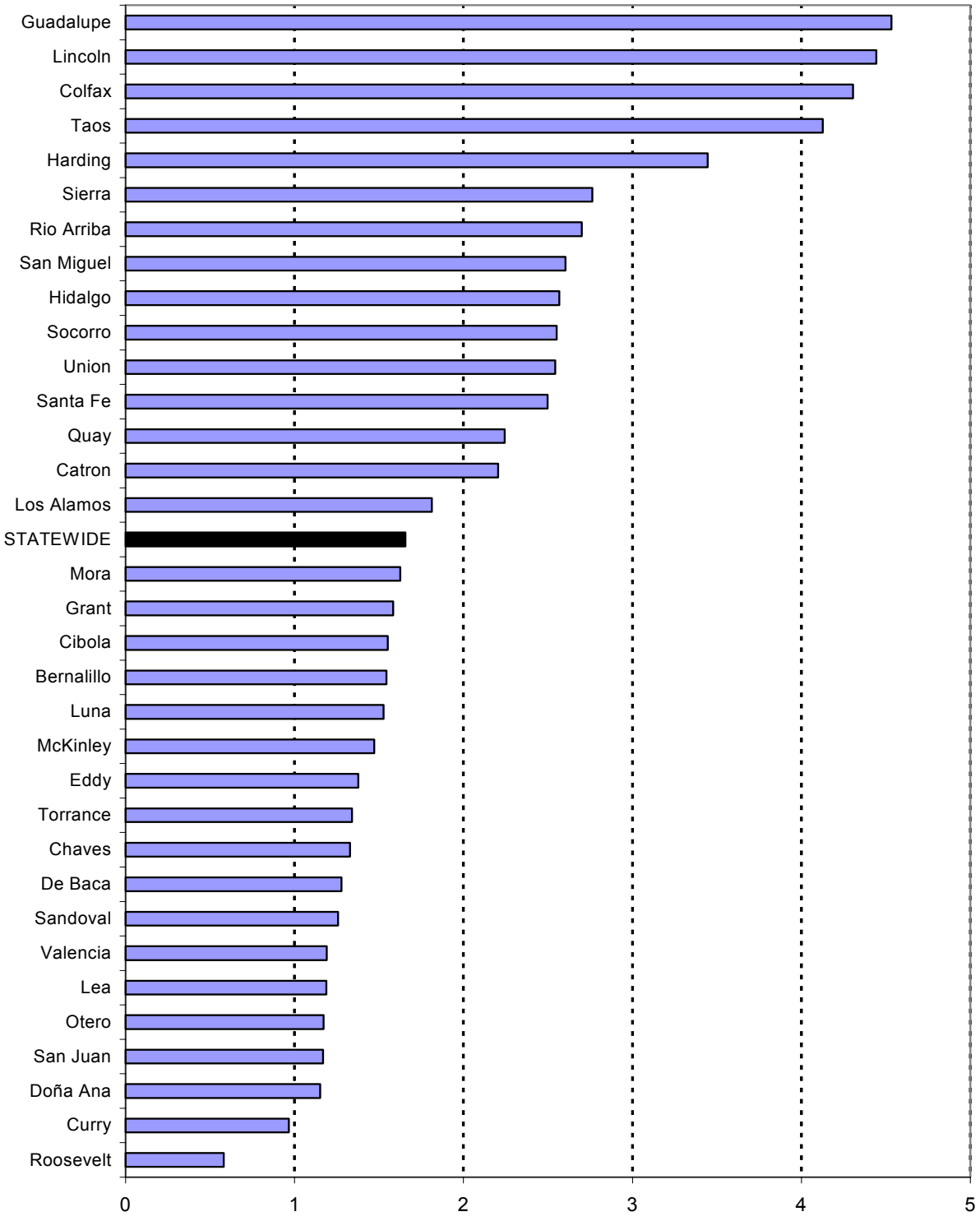
Rates are per 100,000 population per year and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health

Figure 24. Map of Homicide Rates by County of Residence, 1999-2001



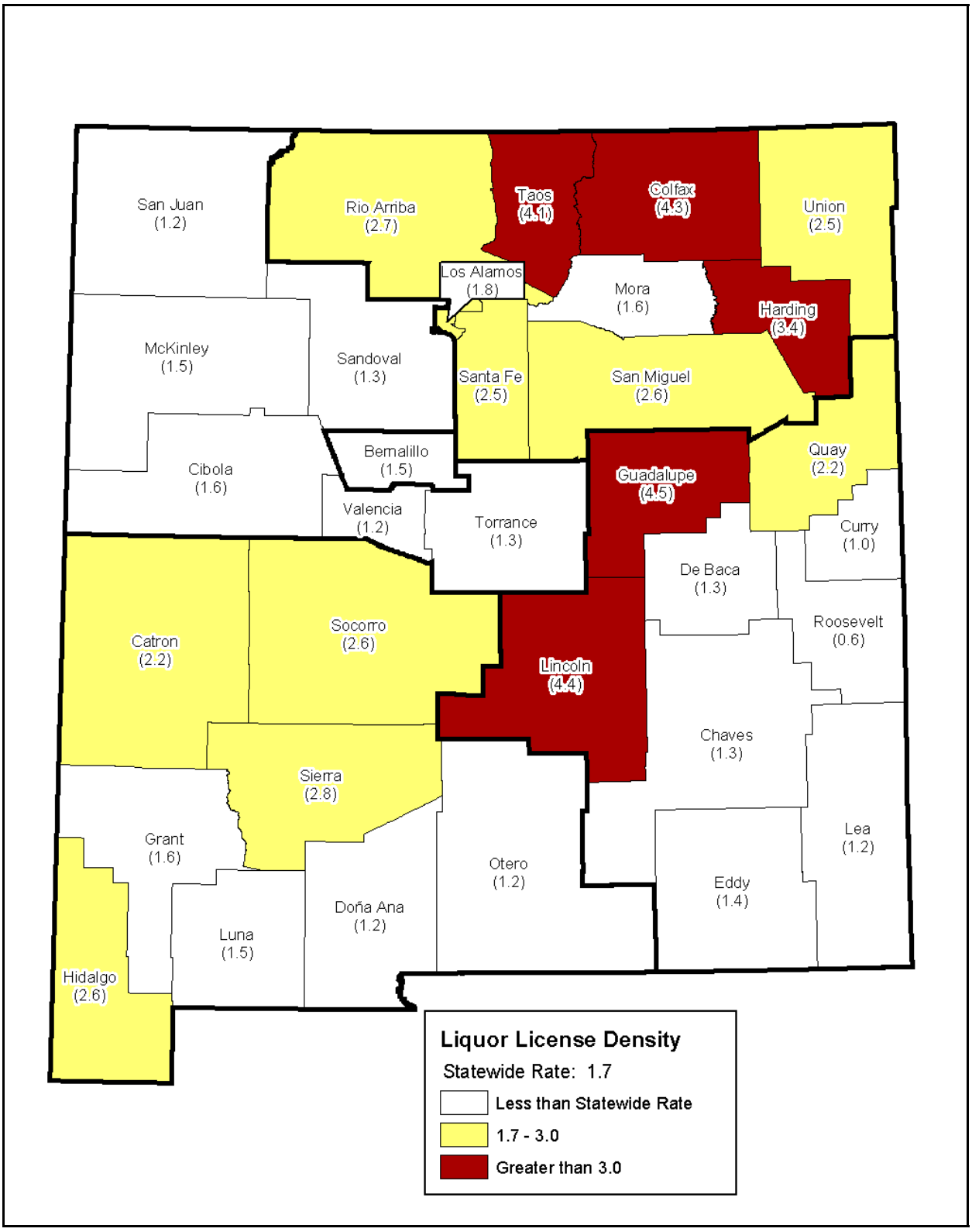
Rates are per 100,000 population per year and are age-adjusted to the year 2000 U.S. standard population.
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health

Figure 25. Liquor License Density by County, 2002



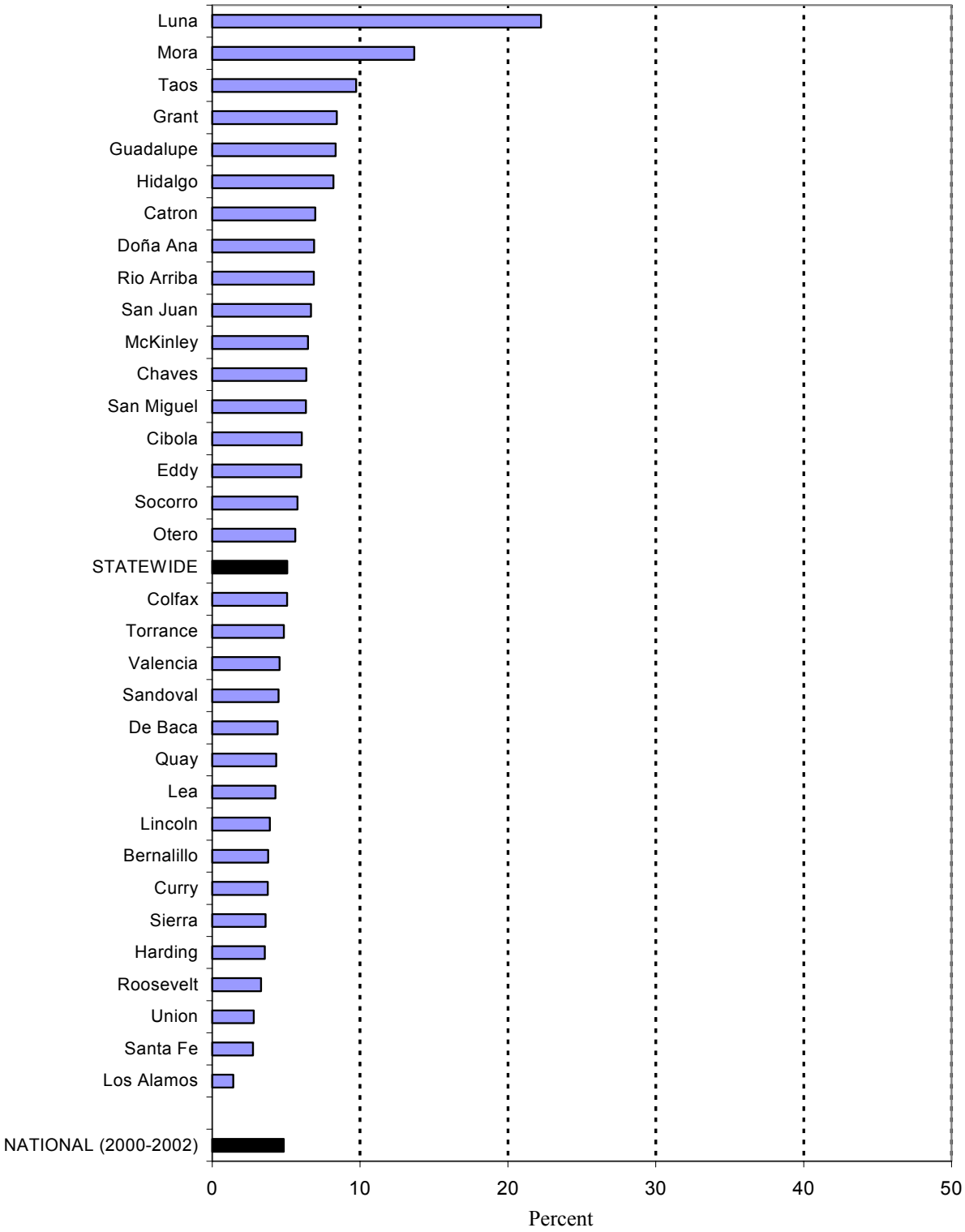
Rates are per 1,000 population age 20 or older.
Source: New Mexico Alcohol and Gaming Division, Regulation and Licensing Department

Figure 26. Map of Liquor License Density by County, 2002



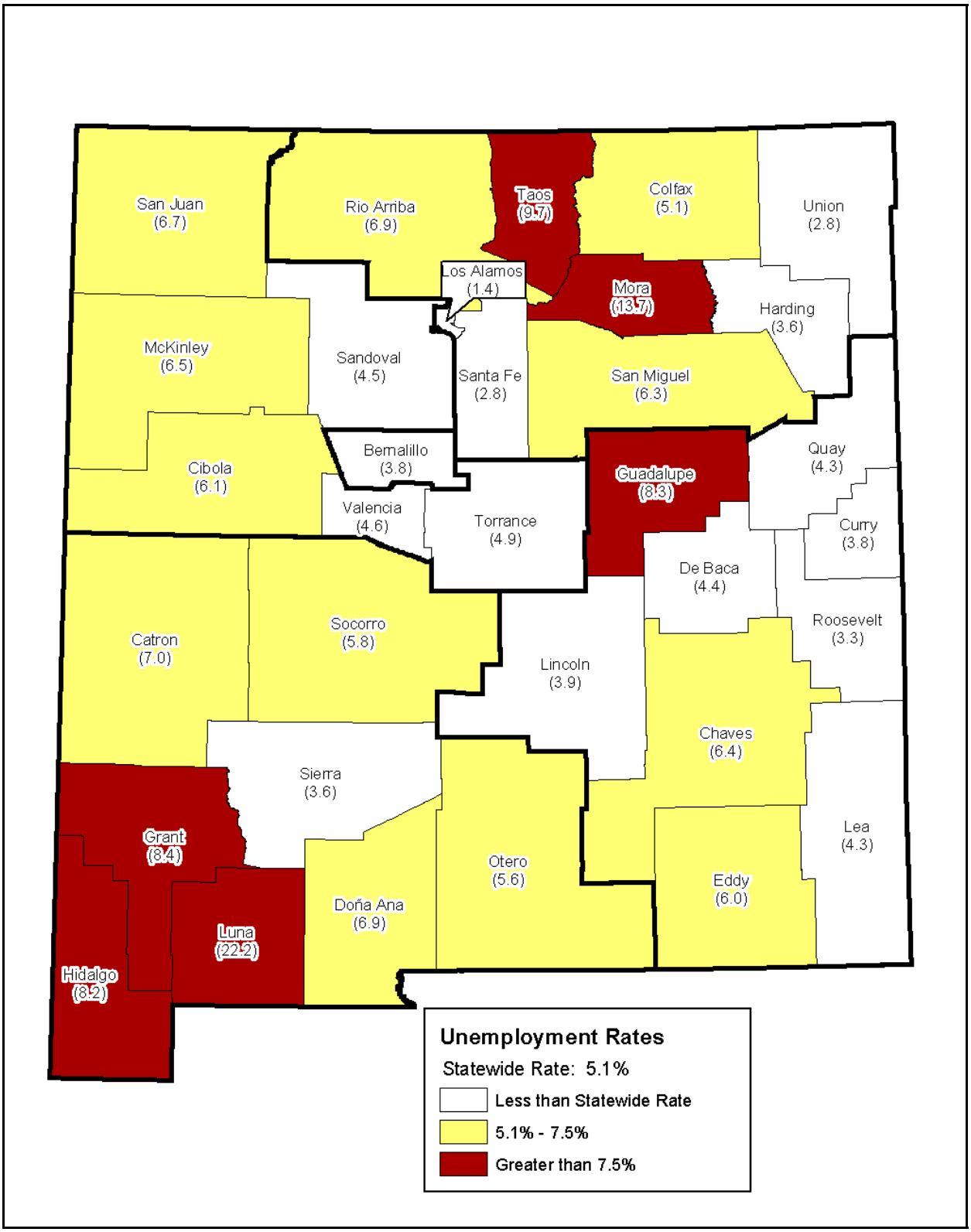
Rates are per 1,000 population age 20 or older.
Source: New Mexico Alcohol and Gaming Division, Regulation and Licensing Department

Figure 27. Unemployment Rates by County, 2000-2002



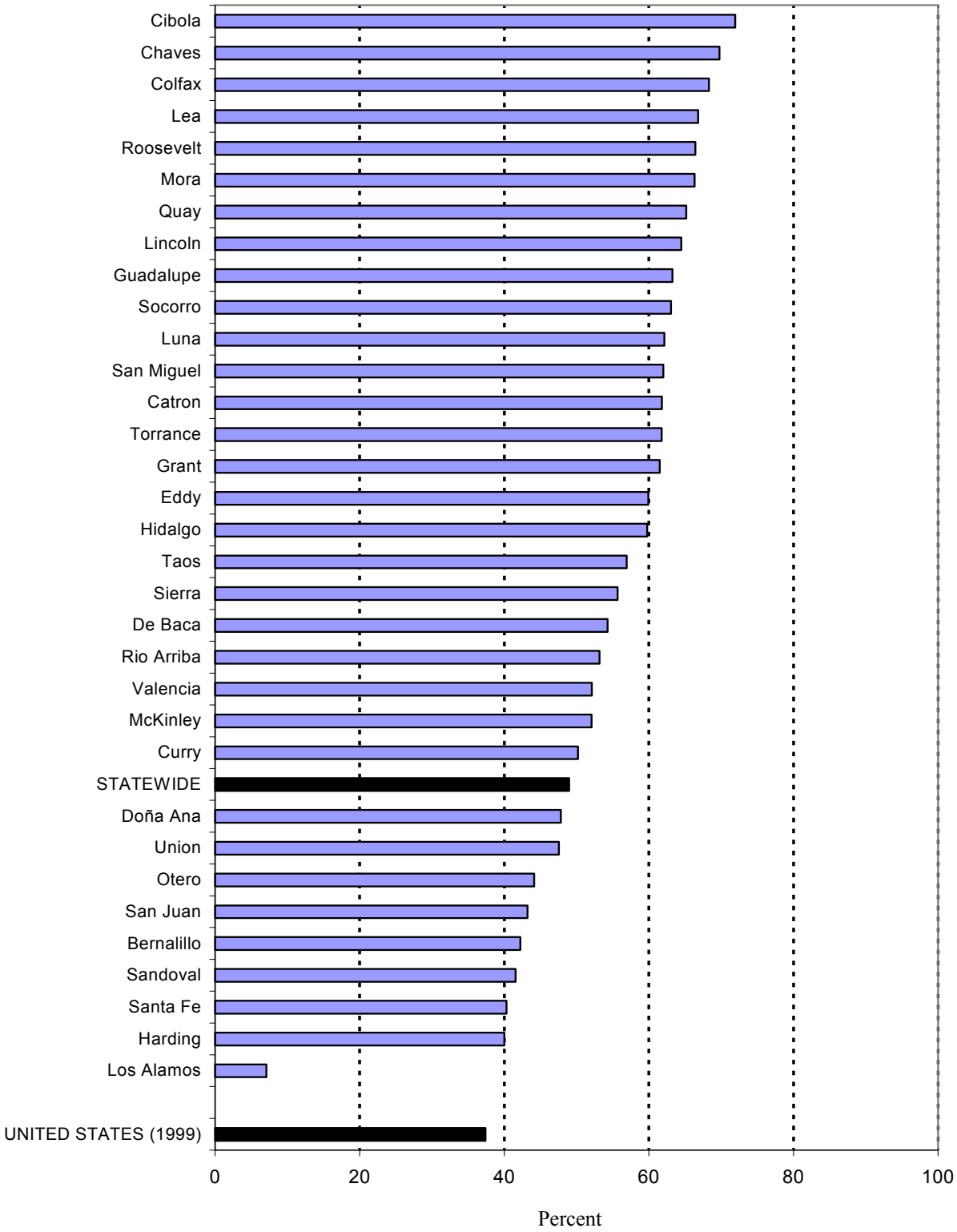
Rates are expressed as a percentage of the civilian workforce population per year.
Source: Economic Research and Analysis Bureau, New Mexico Department of Labor

Figure 28. Map of Unemployment Rates by County, 2000-2002



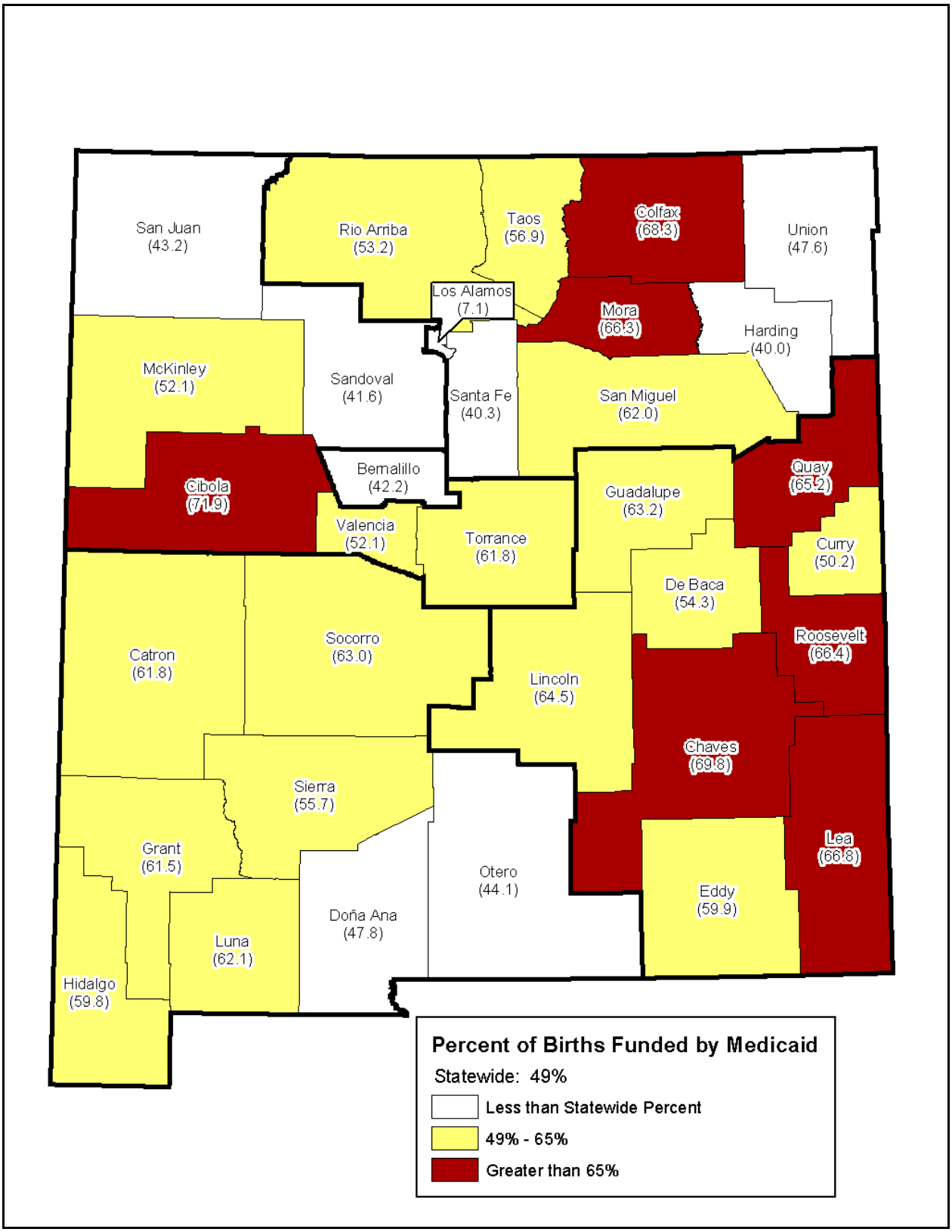
Rates are expressed as a percentage of the civilian workforce per year.
Source: Economic Research and Analysis Bureau, New Mexico Department of Labor

Figure 29. Percent of Births Funded by Medicaid by County of Residence 1999-2000



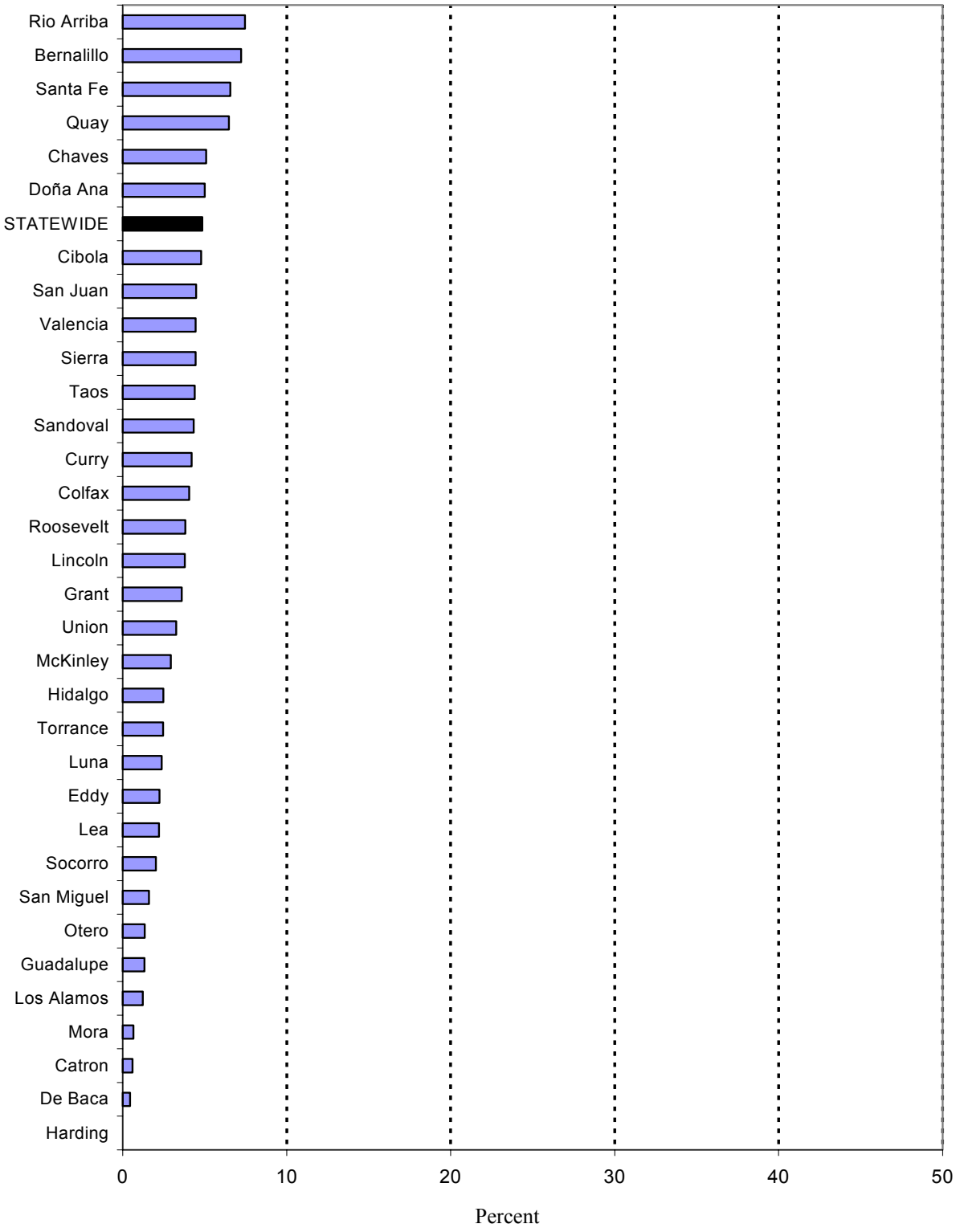
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health

Figure 30. Map of Medicaid-Funded Births by County of Residence 1999-2000



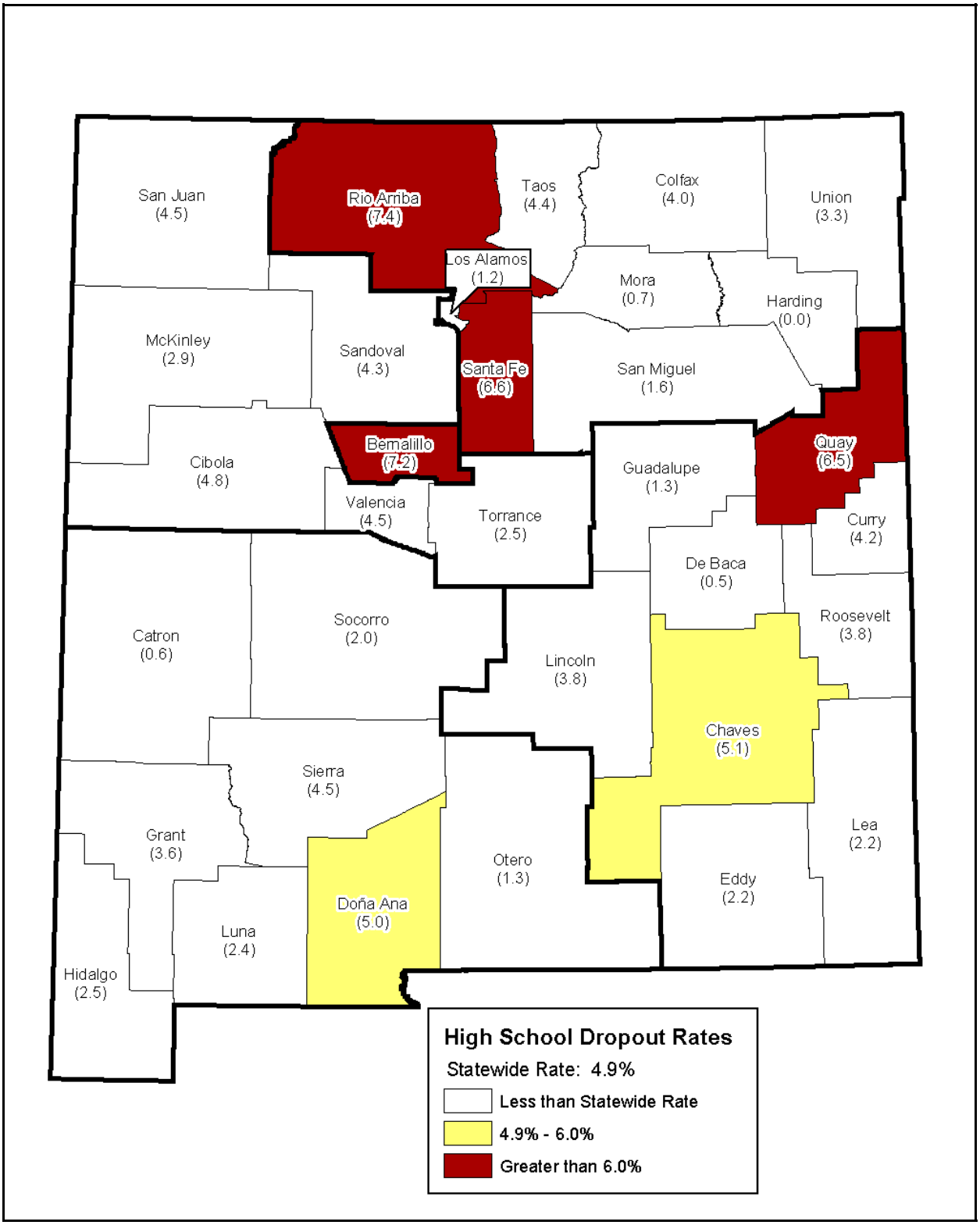
Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health

Figure 31. High School Dropout Rates by County
1999/2000—2001/2002



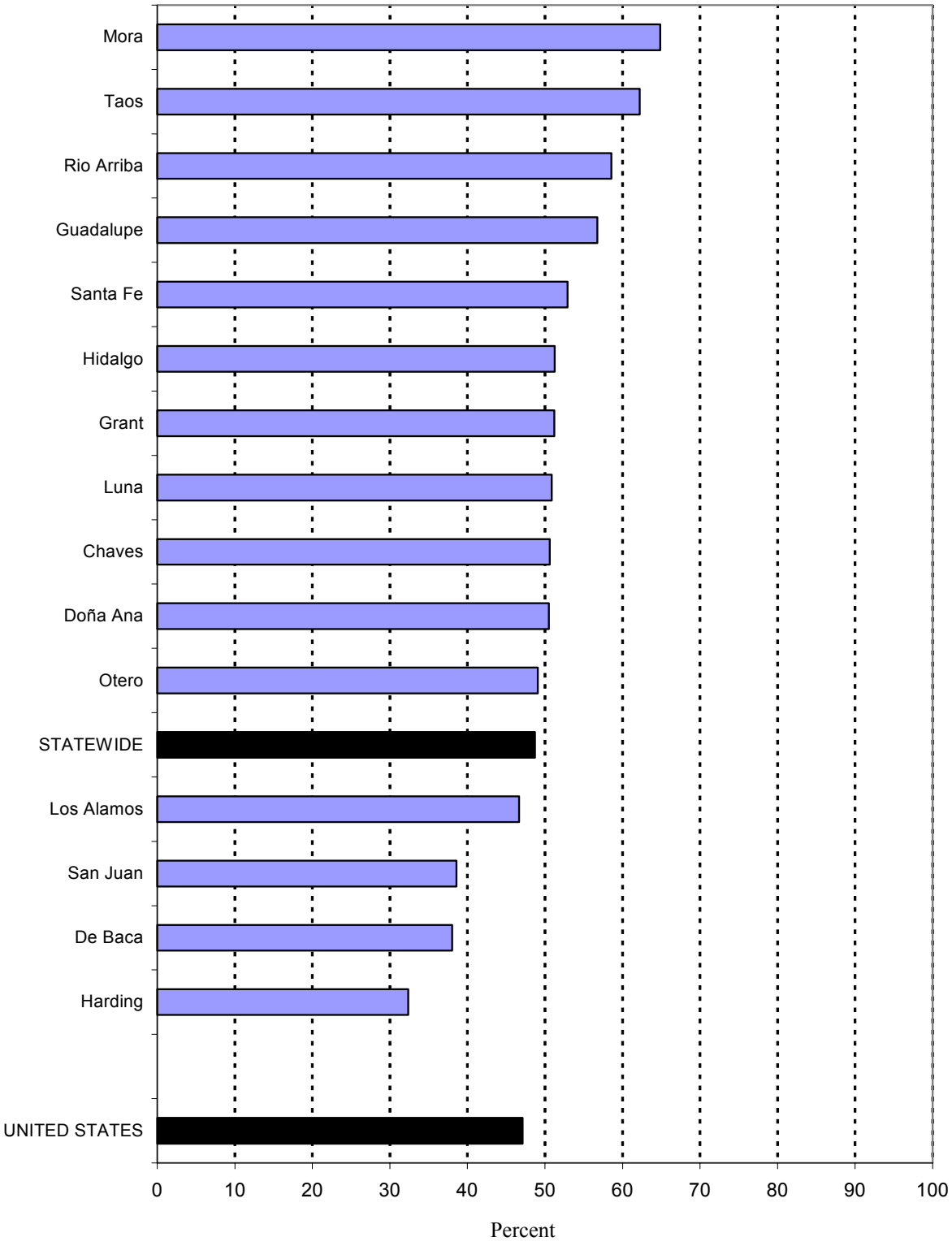
Rates are per 100 enrolled high school students per school year.
Source: New Mexico Public Education Department

Figure 32. Map of High School Dropout Rates by County
1999/2000—2001/2002



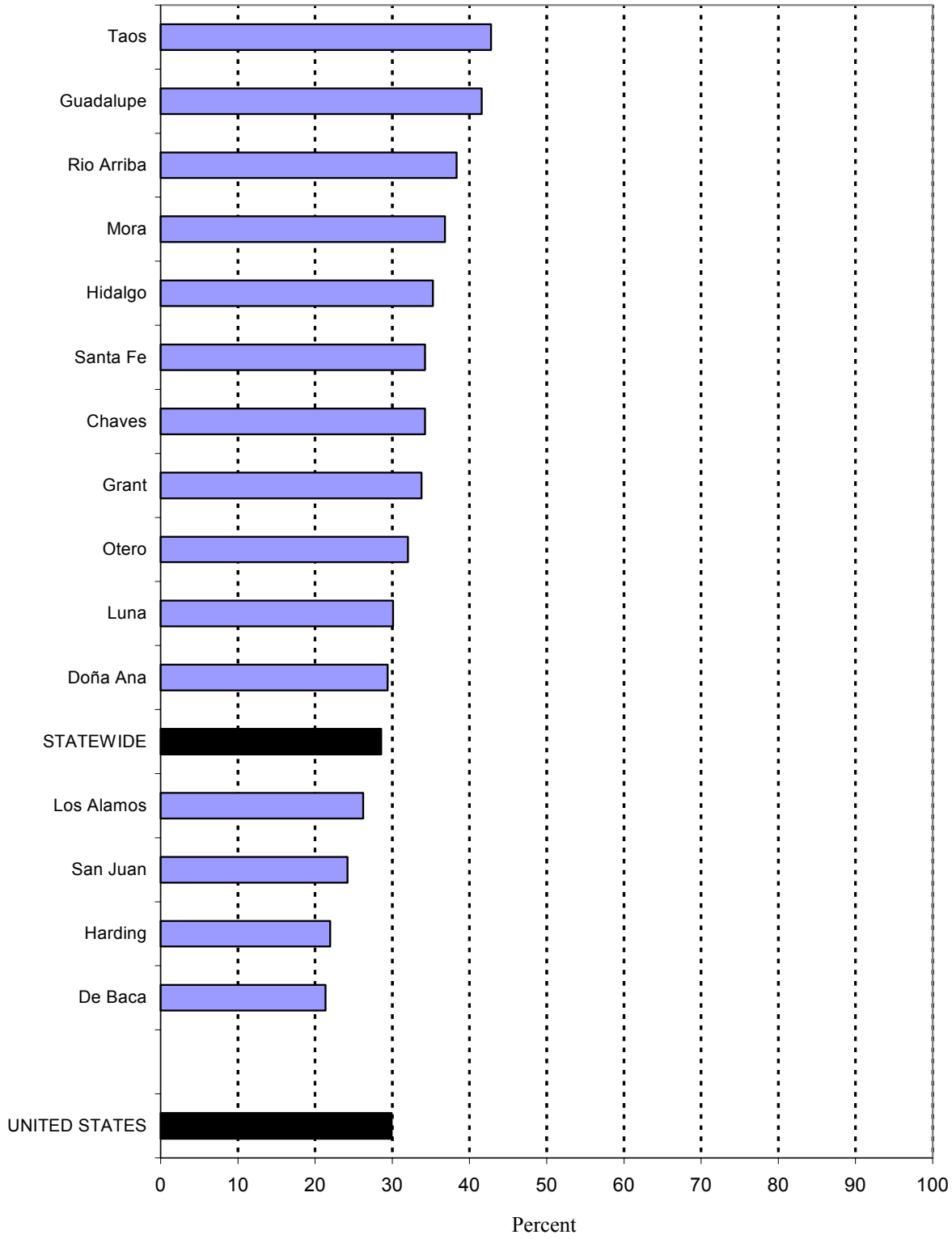
Rates are per 100 enrolled high school students per school year.
Source: New Mexico Public Education Department

Figure 33. Past 30-Day Alcohol Use by County, Grades 9-12, 2001



Source: New Mexico Youth Risk and Resiliency Survey, New Mexico Department of Health and New Mexico Public Education Department

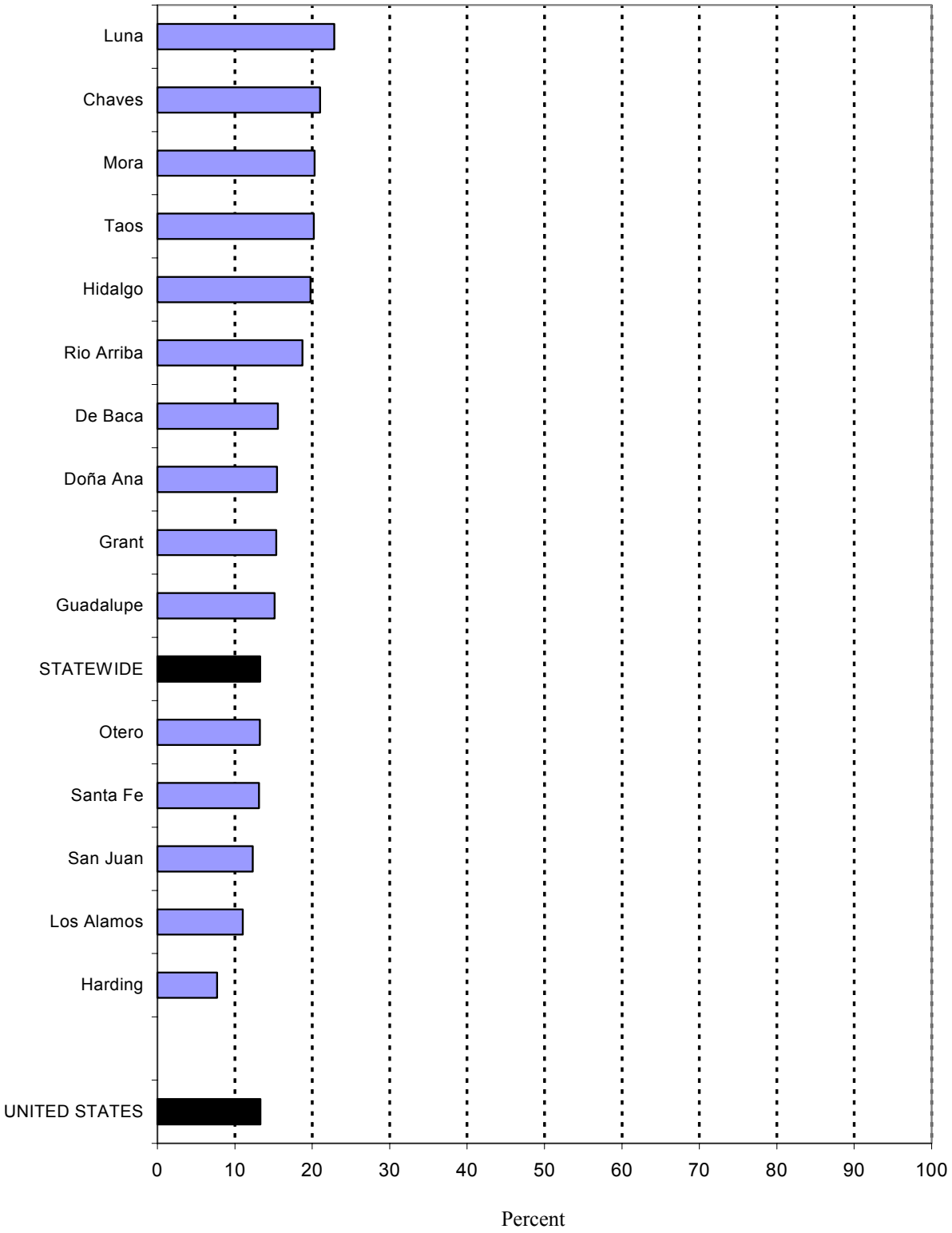
Figure 34. Past 30-Day Binge Drinking* by County, Grades 9-12, 2001



*Binge Drinking: Five or more alcoholic drinks on one occasion

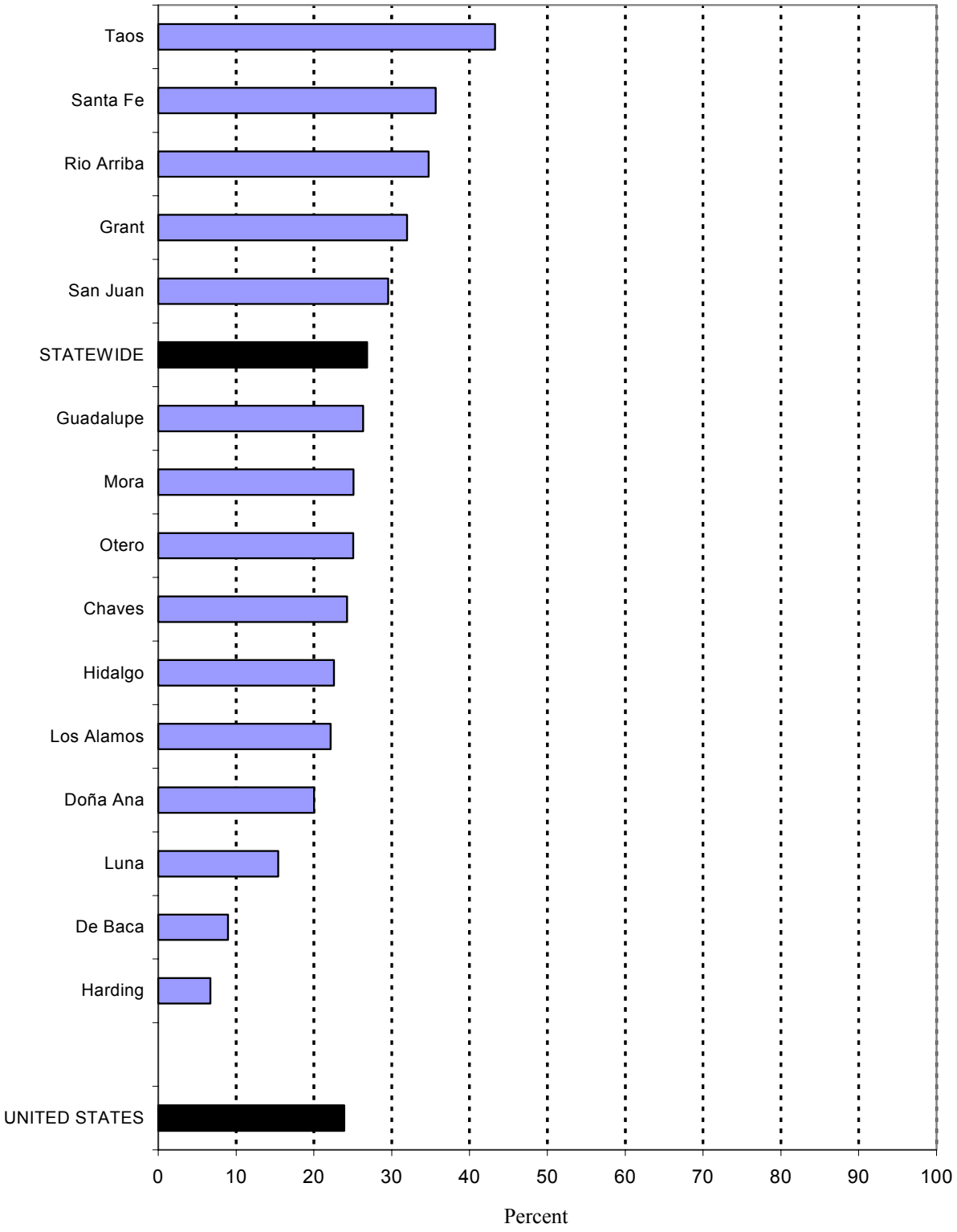
Source: New Mexico Youth Risk and Resiliency Survey, New Mexico Department of Health and New Mexico Public Education Department

Figure 35. Past 30-Day Drinking and Driving by County, Grades 9-12
2001



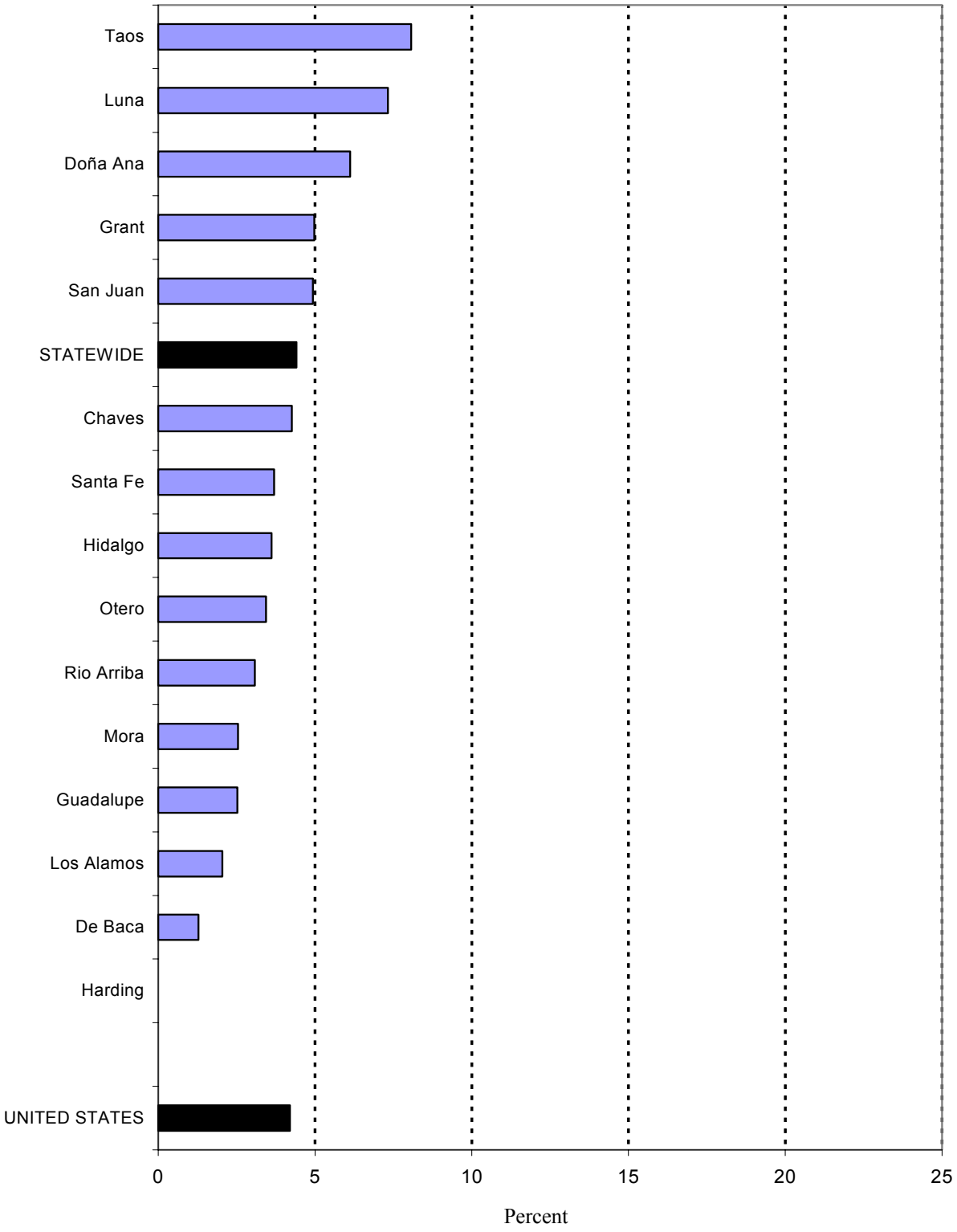
Source: New Mexico Youth Risk and Resiliency Survey, New Mexico Department of Health and New Mexico Public Education Department

Figure 36. Past 30-Day Marijuana Use by County, Grades 9-12, 2001



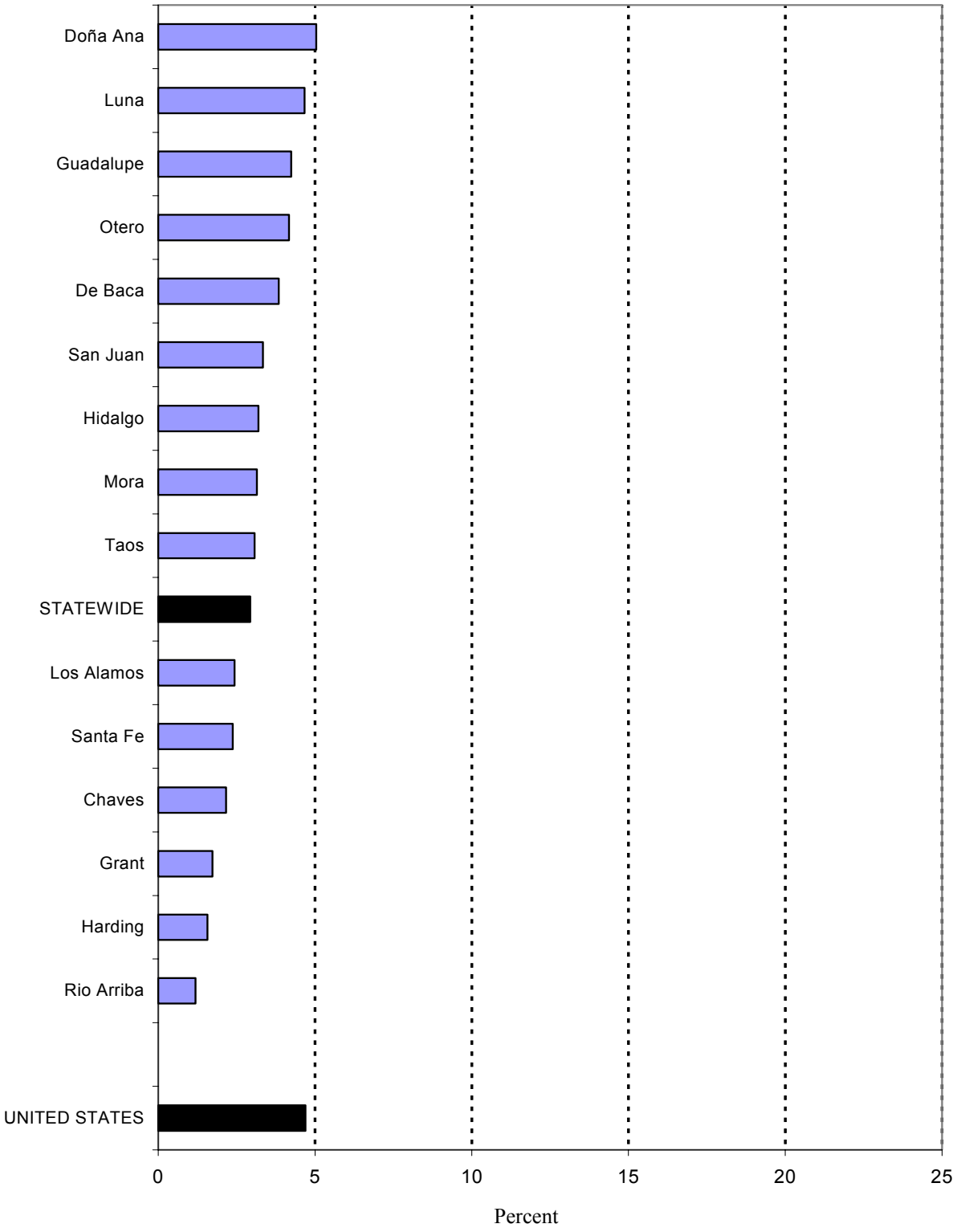
Source: New Mexico Youth Risk and Resiliency Survey, New Mexico Department of Health and New Mexico Public Education Department

Figure 37. Past 30-Day Cocaine Use by County, Grades 9-12, 2001



Source: New Mexico Youth Risk and Resiliency Survey, New Mexico Department of Health and New Mexico Public Education Department

Figure 38. Past 30-Day Inhalant Use by County, Grades 9-12, 2001



Source: New Mexico Youth Risk and Resiliency Survey, New Mexico Department of Health and New Mexico Public Education Department

METHODS

The 2003 New Mexico Social Indicator Report is an update of earlier reports published by the New Mexico Department of Health (NMDOH), the most recent occurring in 1999 and presenting rates from 1995-1997. This update has been expanded to include sections on indirectly attributable alcohol-related mortality and alcohol- and drug- related crime and treatment. The current report presents annual rates for various substance abuse indicators for the years 1999-2001 unless otherwise indicated. Three year periods are presented in order to smooth out the yearly fluctuations commonly observed in counties with small populations.

The county is the basic unit of analysis for this report. Each indicator is presented first with a bar chart illustrating county and statewide rates in descending order, and then as a map showing the geographical distribution of indicator rates by county. Where available, national comparisons are presented.

Data on selected indicators were compiled by the Office of Epidemiology, New Mexico Department of Health. The data used here were generally obtained from government agencies charged with collecting and keeping them. Among others, these agencies included the Office of New Mexico Vital Records and Health Statistics, which keeps statewide data on births and deaths, and the New Mexico Health Policy Commission, which collects hospital discharge data from non-federal New Mexico hospitals (Table 1). International Classification of Disease codes are used by both of these agencies to indicate either cause of death or diagnoses of hospitalization. ICD-9 and ICD-10 codes used in this report can be found in Appendix B and Appendix C.

Annual age-adjusted mortality rates were computed from these data using the U.S. 2000 Standard Population. Population denominators used for mortality rates, hospitalization rates, treatment admission rates, crime rates, and liquor license density were mid-year estimates of county populations obtained from the Bureau of Business and Economic Research (BBER), University of New Mexico. For other indicators, the denominators were limited to the groups among which the events generally occur. For DWI and alcohol-related crash rates, population denominators were the numbers of licensed drivers in the state and in each county, and were obtained from the Division of Government Research at the University of New Mexico. Unemployment rate denominators were the estimated size of the workforce population in each county and in New Mexico, and were obtained from the Economic Research and Analysis Bureau, New Mexico Department of Labor.

RESULTS

Alcohol– and Drug-Related Death Rates

Rio Arriba County had the highest combined alcohol– and drug-related death rate (134.7 per 100,000), followed by McKinley County (119.8), Mora County (108.4), Cibola County (105.9), and San Miguel County (987.9). Each of these counties is in the northern part of the state, with Rio Arriba, Mora, and San Miguel neighboring each other in the north-central part of the state, and McKinley and Cibola bordering each other in the northwest.

The alcohol-related death rate for the state of New Mexico was 56.4 per 100,000. McKinley County had the highest alcohol-related death rate in the state (114.7), followed by Mora County (101.3), Cibola County (92.1), Rio Arriba County (91.8), and San Miguel County (85.4).

The directly-attributable alcohol-related death rate for New Mexico was more than double that of the nation (17.8 and 6.9 per 100,000, respectively). McKinley County (54.7) had a rate more than three times that of the state and nearly 8 times that of the nation (6.9). Other counties with very high rates were San Miguel County (33.1), Cibola County (35.5), and Rio Arriba County (33.1).

New Mexico's drug-related death rate was twice the national rate (15.2 and 7.0 per 100,000, respectively). Rio Arriba County had the highest drug-related death rate in the state (42.9 per 100,000), a rate that was almost three times that of New Mexico as a whole (15.2) and 7 times that of the nation (7.0). Rio Arriba County's drug-related death rate was followed by that of Lincoln County (21.5), Bernalillo County (21.0), Santa Fe County (19.4), Valencia County (19.3), and Socorro County (19.3).

Alcohol– and Drug-Related Hospitalization Rates

The alcohol- and/or drug-related hospitalization rate for the state was 454.3 per 100,000. The county with the highest rate was Rio Arriba, with a rate of 913.2, more than twice that of the state. Rio Arriba County was followed by Grant County (705.0), San Miguel County (635.7), Cibola County (624.8), and Guadalupe County (567.4).

Rio Arriba County had the highest drug-related hospitalization rate (472.4 per 100,000), followed by Grant County (396.1), Cibola County (340.3), and Bernalillo County (339.1). Guadalupe County had the highest alcohol-related hospitalization rate, followed by Rio Arriba County (373.4), San Miguel County (275.6), Grant County (263.7), and Cibola County (255.9). While Rio Arriba, Grant, Cibola, and San Miguel Counties each had relatively high rates for both alcohol– and drug– related hospitalization, this was not true for Bernalillo County or Guadalupe County. Bernalillo County had the fourth highest drug-related hospitalization rate, but only the 18th highest alcohol-related hospitalization rate. Guadalupe, which had the highest alcohol-related hospitalization rate, ranked 23rd for drug-related hospitalizations.

Alcohol– and Traffic-Related Indicators

The alcohol-involved crash fatality rate for New Mexico was 10.8 per 100,000 population, well above the national rate of 6.2. The New Mexico statewide rate for DWI arrests was 156.9 per 10,000 licensed drivers, and the rate for alcohol-involved automobile crashes was 27.8 per 10,000 licensed drivers . McKinley County had the highest rate in the state for both DWI arrests and alcohol-involved automobile crashes, and the 6th highest rate for alcohol-involved crash fatalities. In each of these cases, the McKinley County rate was more twice that of the entire state (DWI arrests—353.4 per 10,000 licensed drivers; alcohol-involved automobile crash rate— 70.7 per 10,000 licensed drivers; alcohol-involved crash fatality rate—27.7 per

100,000 population). Other counties that ranked very high in at least two of these three indicators were Rio Arriba (3rd in alcohol-involved crash fatality rate and 5th in alcohol-related crash rate), Mora (4th in alcohol-involved crash fatality rate and 2nd in alcohol-related crash rate), Socorro (5th in alcohol-involved crash fatality rate and 3rd in DWI arrest rate), Cibola (7th in alcohol-involved crash fatality rate and 3rd in alcohol-involved crash rate), and San Juan (2nd in DWI arrest rate and 3rd in alcohol-involved crashes).

While the sparsely populated counties of Harding and Catron had very high rates for alcohol-involved crash fatalities, these were based on only a few incidents (2 deaths in Harding and 4 deaths in Catron from 1999-2001).

Alcohol– and Drug-Treatment Admission Rates

Treatment admission rates presented here include only state funded treatment. Treatment funded by private payers or by programs such as Medicaid are not included.

The rate of alcohol and/or drug treatment admissions in New Mexico was 52.0 per 10,000 persons age 18 and over. Rio Arriba, Taos, and San Juan, three contiguous counties in northern New Mexico, had the three highest substance-abuse treatment admission rates in the state, at 179.3, 132.6, and 132.0, respectively.

Alcohol– and Drug-Related Crime

McKinley County, Socorro County, and Torrance County had the highest alcohol-related crime rates in the state, while De Baca County, Doña Ana County, Valencia County, and Bernalillo County had the highest drug-related crime rates in the state.

Suicide

New Mexico had a suicide rate of 18.9 per 100,000 population, or 1.8 times the national rate of 10.4 per 100,000 in 2000. Harding County (48.8), Mora County (44.4), and Sierra County (42.1) all had suicide rates more than two times the statewide rate. In the case of Harding County, this rate was based on a very few cases, so this rate may not be stable.

Homicide

The homicide rate in New Mexico from 1999-2001 (8.5 per 100,000) was 1.4 times the national rate (5.9 per 100,000). The four counties in New Mexico with the highest homicide rates were Sierra (29.1), San Miguel (17.7), Quay (17.1), and Chavez (16.7). In the case of Chaves County, this rate was based on only four cases.

Liquor License Density

The highest liquor license density rates in the state were found in Guadalupe County (4.5 per population age 20 and over), Lincoln (4.4), Colfax (4.3), Taos (4.1), and Harding (3.4). Each of these rates is at least twice the statewide rate of 1.7.

Unemployment

The New Mexico statewide unemployment rate was slightly higher than the national rate (5.1% and 4.8% of the civilian workforce population, respectively).

The highest unemployment rate in the state was found in Luna County, where more than 22% of the workforce are unemployed. Mora County, in northern New Mexico, follows Luna County with an unemployment rate of 13.7%. Taos County and Guadalupe County also have high unemployment rates, as do Grant and Hidalgo counties, both of which border Luna County in the Mexico border region of southwestern New Mexico.

Medicaid-Funded Birth Rates

Forty-nine percent (49%) of all births in New Mexico were funded by Medicaid, substantially higher than the national figure of 37.4%. The highest percentage of Medicaid-funded births are found in Cibola County (71.9%), Chaves County (69.8%), Colfax County (68.3%), Lea County (66.8%), Roosevelt County (66.4%), Mora County (66.3%), and Quay County (65.2%). Los Alamos County is notable for an extremely low 7.1% of births funded by Medicaid.

High School Dropout Rates

In New Mexico as a whole, 4.9% of high school students failed to finish school. The highest dropout rates were in Rio Arriba County (7.4%), Bernalillo County (7.2%), Santa Fe County (6.6%), and Quay County (6.5%).

Youth Indicators

With respect to the three alcohol-related youth indicators, past 30-day alcohol use, past 30-day binge drinking, and past 30-day drinking and driving, New Mexico was very similar to the rest of the nation. In New Mexico, 48.7% of high school students reported drinking alcohol within the previous 30 days, compared to 47.1% of students nationally. Nearly thirty percent (29.9%) of students reported binge drinking within the previous 30 days, and 28.6% of students in New Mexico reported the same. In New Mexico and also nationally, 13.3% reported drinking and driving within the previous 30 days.

Mora, Taos, Rio Arriba, and Guadalupe counties had the highest rates of past 30-day alcohol use and binge drinking. Luna, Chaves, Mora, and Taos were the counties with the highest rates of youth drinking and driving.

Past 30-day marijuana use was more common among New Mexico youth than national youth (26.9% and 23.9%, respectively). Taos, Santa Fe, and Rio Arriba counties had the highest rates in the state for marijuana use.

The US and New Mexico rates for past 30-day cocaine use were similar (4.2% and 4.4%, respectively). The highest New Mexico rates were found in Taos, Luna, and Doña Ana counties.

Inhalant use was less commonly reported in New Mexico (2.9%) than in the rest of the nation (4.7%). In New Mexico, inhalants were most commonly used in Doña Ana, Luna, Guadalupe, and Otero counties.

CONCLUSIONS

If it can be said that death is the most devastating consequence of alcohol and drug abuse, then it is clear that Rio Arriba and McKinley Counties bear a heavier burden, per capita, from substance abuse than any other counties in the state. McKinley and Rio Arriba have the highest alcohol– and drug-related death rates in the state. Various other indicators, including hospitalization rates, automobile and alcohol-related indicators, crime rates, and various youth indicators point to either one or both of these two counties as being greatly affected by alcohol and drug abuse.

Bernalillo County, having a very high drug-related death rate and at the same time a very large population, has the largest absolute number of people directly affected by substance abuse. This, together with the many other problems facing a large urban center, should place Bernalillo County in a position to receive special attention in statewide substance abuse prevention and treatment plans.

This report is meant to benefit the efforts of those working in alcohol and drug abuse prevention and treatment at both the local and the statewide level. The information presented in this report should be useful to program planners and policy makers in assessing prevention and treatment needs, allocating resources based on those needs, and planning and designing substance abuse interventions.

Table 1. Social Indicators and Sources

Direct Substance Abuse Indicators	Source
Alcohol– and Drug-Related Death Rates (1999-2001) Alcohol-Related Death Rates (1999-2001) Drug-Related Death Rates (1999-2001)	Office of New Mexico Vital Records and Health Statistics, Public Health Division, New Mexico Department of Health.
Alcohol– and Drug-Related Hospitalization Rates (1999-2001)	Hospital Inpatient Discharge Database, New Mexico Health Policy Commission.
DWI Arrest Rates (1999-2001) Alcohol-Involved Traffic Crash Rates (1999-2001) Alcohol-Involved Crash Fatality Rates (1999-2001)	New Mexico Traffic Safety Bureau through Division of Government Research, UNM.
Drug- and Alcohol-Treatment Admission Rates	Treatment Episode Data Set (TEDS), Behavioral Health Services Division, New Mexico Department of Health.
Alcohol–Related Crime Rates Drug-Related Crime Rates	Uniform Crime Report Data Set, National Archive of Criminal Justice Data, and the Department of Government, New Mexico State University.
Indirect Substance Abuse Indicators	
Suicide Rates Homicide Rates	Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health.
Liquor License Density	New Mexico Alcohol and Gaming Division, Regulation and Licensing Department.
Unemployment Rates	Economic Research and Analysis Bureau, New Mexico Department of Labor.
Medicaid-Funded Birth Rates	Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health.
High School Dropout Rates	New Mexico Public Education Department.
Youth Indicators	
Past 30-Day Alcohol Use Past 30-Day Binge Drinking Past 30-Day Drinking and Driving Past 30-Day Marijuana Use Past 30-Day Cocaine Use Past 30-Day Inhalant Use	2001 New Mexico Youth Risk and Resiliency Survey, New Mexico Public Education Department and the New Mexico Department of Health.

Table 2. Social Indicators, Rates and Rankings: Direct Indicators

County	Alcohol-and Drug-Related Death Rates, 1999-2001	County Ranking by Alcohol-and Drug-Related Death Rates	Alcohol-Related Death Rates, 1999-2001	County Ranking by Alcohol-Related Death Rates	Directly Attributable Alcohol-Related Death Rates, 1999-2001	County Ranking by Directly Attributable Alcohol-Related Death Rates	Drug-Related Death Rates, 1999-2001	County Ranking by Drug-Related Death Rates
UNITED STATES (2000)					6.9		7.0	
STATEWIDE	71.6		56.4		17.8		15.2	
Bernalillo	74.5	11	53.5	17	17.8	12	21.0	3
Catron	63.2	21	48.8	26	0.0	31	14.4	10
Chaves	77.3	9	60.7	12	15.9	17	16.6	8
Cibola	105.9	4	92.1	3	35.5	3	13.8	12
Colfax	64.8	20	52.5	21	15.4	18	12.3	14
Curry	47.4	32	40.5	31	9.6	28	6.9	26
De Baca	49.4	31	49.4	24	0.0	32	0.0	32
Doña Ana	51.0	30	41.0	30	10.9	26	9.9	19
Eddy	60.6	24	50.5	23	7.0	29	10.1	18
Grant	65.0	19	59.0	13	17.3	13	6.0	27
Guadalupe	60.2	25	52.5	20	19.8	9	7.7	22
Harding	72.3	13	72.3	6	0.0	33	0.0	33
Hidalgo	60.2	26	53.1	18	26.0	7	7.1	23
Lea	65.4	18	55.0	16	13.6	21	10.4	16
Lincoln	68.0	16	46.5	29	11.3	25	21.5	2
Los Alamos	54.3	29	40.2	32	9.8	27	14.1	11
Luna	54.7	28	49.2	25	14.4	19	5.4	28
McKinley	119.8	2	114.7	1	54.7	1	5.1	29
Mora	108.4	3	101.3	2	29.4	6	7.1	24
Otero	61.1	23	53.0	19	17.0	15	8.2	21
Quay	68.4	14	58.2	14	16.6	16	10.2	17
Rio Arriba	134.7	1	91.8	4	33.1	4	42.9	1
Roosevelt	36.3	33	31.7	33	6.6	30	4.6	30
San Juan	72.5	12	62.8	9	18.0	11	9.8	20
San Miguel	98.9	5	85.4	5	36.0	2	13.5	13
Sandoval	55.0	27	48.1	27	14.1	20	7.0	25
Santa Fe	67.1	17	47.7	28	13.5	22	19.4	4
Sierra	81.7	6	69.8	7	22.2	8	11.9	15
Socorro	79.8	8	62.0	10	12.2	24	17.8	6
Taos	79.9	7	63.3	8	18.3	10	16.6	9
Torrance	68.0	15	50.7	22	13.3	23	17.3	7
Union	61.3	22	61.3	11	30.1	5	0.0	31
Valencia	76.1	10	56.8	15	17.1	14	19.3	5

Table 2 (continued). Social Indicators, Rates and Rankings: Direct Indicators

	Alcohol-Related Hospitalization Rates, 1999-2000	County Ranking by Alcohol-Related Hospitalization Rates	Drug-Related Hospitalization Rates, 1999-2000	County Ranking by Drug-Related Hospitalization Rates	Alcohol and/or Drug-Related Hospitalization Rates, 1999-2000	County Ranking by Alcohol and/or Drug-Related Hospitalization Rates	DWI Arrest Rates, 1999-2001	County Ranking by DWI Arrest Rates
UNITED STATES (2000)								
STATEWIDE	151.6		280.5		454.3		**156.9**	
Bernalillo	144.9	18	339.1	4	510.6	6	160.9	14
Catron	105.2	27	181.7	22	286.9	28	86.0	31
Chaves	144.1	19	321.9	7	498.1	7	89.9	30
Cibola	255.9	5	340.3	3	624.8	4	205.0	6
Colfax	158.0	13	155.6	25	332.4	22	193.6	9
Curry	48.2	32	151.2	30	203.0	31	120.3	25
De Baca	75.1	30	90.1	32	180.3	32	132.0	21
Doña Ana	112.3	26	238.9	14	364.1	21	115.6	27
Eddy	120.3	24	328.0	5	464.5	12	99.2	28
Grant	263.7	4	396.1	2	705.0	2	130.3	23
Guadalupe	378.2	1	174.6	23	567.4	5	215.7	4
Harding	41.4	33	82.9	33	124.3	33	55.4	32
Hidalgo	198.7	6	232.8	16	448.5	13	195.4	8
Lea	140.5	20	300.7	9	469.4	10	117.8	26
Lincoln	134.4	22	153.4	27	294.7	26	207.7	5
Los Alamos	84.4	28	154.0	26	247.6	29	35.4	33
Luna	170.7	10	248.0	12	428.0	15	130.9	22
McKinley	145.2	17	152.8	28	306.5	24	353.4	1
Mora	148.3	16	206.4	21	367.6	20	165.9	11
Otero	152.5	15	220.9	19	381.5	19	167.4	10
Quay	118.7	25	247.4	13	385.9	18	156.2	15
Rio Arriba	373.4	2	472.4	1	913.2	1	163.1	12
Roosevelt	79.3	29	151.2	29	234.2	30	150.3	16
San Juan	161.7	12	285.8	10	466.7	11	262.4	2
San Miguel	275.6	3	327.8	6	635.7	3	203.1	7
Sandoval	121.8	23	174.4	24	310.6	23	94.3	29
Santa Fe	180.9	8	259.0	11	470.4	9	161.7	13
Sierra	164.4	11	222.6	18	397.2	17	133.3	20
Socorro	157.2	14	238.5	15	406.8	16	229.0	3
Taos	182.5	7	232.5	17	433.9	14	138.1	19
Torrance	73.7	31	215.2	20	296.9	25	139.2	18
Union	178.6	9	97.4	31	292.2	27	123.2	24
Valencia	135.5	21	307.4	8	470.6	8	139.6	17

Table 2 (continued). Social Indicators, Rates and Rankings: Direct Indicators

	Alcohol-Involved Crash Rates, 1999-2001	County Ranking by Alcohol-Involved Crash Rates	Alcohol-Involved Crash Fatality Rates, 1999-2001	County Ranking by Alcohol-Involved Crash Fatality Rates, 1999-2001
UNITED STATES (2000)			6.2	
STATEWIDE	27.8		10.8	
Bernalillo	26.7	13	5.4	28
Catron	21.2	22	38.3	2
Chaves	18.9	26	4.9	29
Cibola	41.3	3	23.4	7
Colfax	23.5	18	14.1	18
Curry	16.3	28	4.4	31
De Baca	15.3	31	15.0	16
Doña Ana	25.5	16	4.8	30
Eddy	22.5	20	6.5	27
Grant	26.4	15	9.7	22
Guadalupe	30.7	11	21.8	10
Harding	25.2	17	82.9	1
Hidalgo	15.8	29	0.0	33
Lea	21.5	21	11.4	21
Lincoln	33.7	9	22.4	8
Los Alamos	5.8	33	3.7	32
Luna	20.7	24	14.7	17
McKinley	70.7	1	27.7	6
Mora	43.5	2	32.2	4
Otero	18.9	27	7.0	26
Quay	27.2	12	19.8	13
Rio Arriba	37.1	5	33.3	3
Roosevelt	22.6	19	9.2	23
San Juan	38.9	4	19.8	12
San Miguel	34.5	7	15.6	14
Sandoval	19.3	25	12.9	20
Santa Fe	34.3	8	8.7	24
Sierra	26.5	14	15.2	15
Socorro	33.0	10	27.7	5
Taos	35.4	6	22.3	9
Torrance	13.1	32	19.9	11
Union	15.8	30	8.1	25
Valencia	21.0	23	13.1	19

Table 2 (continued). Social Indicators, Rates and Rankings: Direct Indicators

	Alcohol and/or Drug Treatment Admission , July 1999-July 2003	County Ranking by Alcohol and/ or Drug Treat-ment Admis-sions Rates	Drug Only Treatment Admissions Rates, July 1999-July 2003	County Ranking by Drug Only Treatment Admissions Rates, July 1999-July 2003	Alcohol Only Treatment Admissions Rates, July 1999-July 2003	County Ranking by Alcohol Only Treatment Admissions Rates
UNITED STATES (2000)						
STATEWIDE	52.0		14.0		20.9	
Bernalillo	45.9	14	18.1	5	14.3	18
Catron	31.2	27	9.6	20	13.2	21
Chaves	9.7	33	3.9	31	1.1	33
Cibola	35.8	24	15.4	8	11.7	24
Colfax	58.6	11	5.6	28	21.6	13
Curry	29.2	28	8.5	22	11.4	26
De Baca	40.6	19	16.2	6	12.2	23
Doña Ana	16.8	31	13.0	15	1.1	32
Eddy	40.3	21	7.5	25	14.4	17
Grant	57.6	12	14.5	10	24.5	11
Guadalupe	43.9	17	5.7	27	13.4	20
Harding	10.7	32	0.0	33	5.4	31
Hidalgo	40.6	20	20.3	3	8.8	27
Lea	25.3	30	6.5	26	6.2	29
Lincoln	73.9	7	8.3	23	27.0	10
Los Alamos	25.8	29	5.2	30	8.7	28
Luna	70.8	8	10.1	19	34.9	6
McKinley	38.2	22	14.0	13	17.6	16
Mora	78.3	6	10.4	18	47.0	4
Otero	44.7	16	5.6	29	12.7	22
Quay	82.0	5	26.0	2	31.8	7
Rio Arriba	179.3	1	38.3	1	75.2	2
Roosevelt	67.4	9	14.4	11	27.9	8
San Juan	132.0	3	20.0	4	88.8	1
San Miguel	93.9	4	12.6	16	42.3	5
Sandoval	45.6	15	7.6	24	18.1	15
Santa Fe	51.1	13	9.1	21	18.8	14
Sierra	33.3	26	15.9	7	6.0	30
Socorro	59.6	10	11.6	17	27.8	9
Taos	132.6	2	15.1	9	66.8	3
Torrance	34.5	25	13.1	14	13.7	19
Union	43.2	18	2.3	32	22.7	12
Valencia	38.0	23	14.1	12	11.5	25

Table 2 (continued). Social Indicators, Rates and Rankings: Indirect Indicators

	Alcohol-Related Crime, 2000	County Ranking by Alcohol-Related Crime	Drug-Related Crime, 2000	County Ranking by Drug-Related Crime	Suicide Rates, 1999-2001	County Ranking by Suicide Rates	Homicide Rates, 1999-2001	County Ranking by Homicide Rates
UNITED STATES (2000)					10.4		5.9	
STATEWIDE	2174		1939		18.9		8.5	
Bernalillo	1419	24	2404	4	19.0	20	8.8	12
Catron	1332	26	642	31	23.7	11	6.8	20
Chaves	2556	13	2091	7	21.6	14	16.7	4
Cibola	2583	12	1468	14	16.5	23	9.6	10
Colfax	3834	4	1340	20	33.9	6	2.6	26
Curry	1478	23	1892	10	14.8	26	7.6	17
De Baca	3583	7	6635	1	38.6	4	0.0	30
Doña Ana	3622	6	2678	2	13.9	28	5.5	23
Eddy	1742	20	1938	9	12.8	31	10.0	9
Grant	3650	5	2221	6	24.5	10	8.3	13
Guadalupe	No Data		No Data		13.0	30	0.0	33
Harding	3162	8	842	28	48.8	1	0.0	28
Hidalgo	1926	17	1450	16	27.6	9	0.0	31
Lea	1506	22	1384	19	13.5	29	12.4	6
Lincoln	2213	14	1134	24	35.1	5	5.1	24
Los Alamos	638	32	725	30	15.5	25	0.0	32
Luna	974	31	1418	17	21.2	15	7.4	18
McKinley	5512	2	2257	5	23.5	13	9.1	11
Mora	1075	30	572	32	44.4	2	0.0	29
Otero	1850	19	1671	12	19.8	17	4.8	25
Quay	1185	28	1034	25	29.1	7	17.1	3
Rio Arriba	2981	11	951	27	29.1	8	12.4	7
Roosevelt	2059	15	1701	11	16.1	24	1.9	27
San Juan	2034	16	1229	21	17.9	21	6.0	22
San Miguel	1578	21	1461	15	23.6	12	17.7	2
Sandoval	1261	27	1146	23	17.0	22	6.4	21
Santa Fe	1353	25	1404	18	19.1	19	7.9	15
Sierra	3143	9	967	26	42.1	3	29.1	1
Socorro	4151	3	1494	13	19.2	18	7.6	16
Taos	1869	18	1209	22	11.6	32	12.5	5
Torrance	7980	1	2026	8	20.8	16	6.9	19
Union	1184	29	769	29	0.0	33	8.2	14
Valencia	3022	10	2417	3	14.3	27	11.8	8

Table 2 (continued). Social Indicators, Rates and Rankings: Indirect Indicators

	Liquor License Density, 2002	County Ranking by Liquor License Density	Unemployment, 2000-2002	County Ranking by Unemployment	Medicaid-Funded Birth Rates, 1999-2000	Medicaid-Funded Birth Rates, 1999-2000	High School Dropout Rates, 1999-2001	County Ranking by High School Dropout Rates
UNITED STATES (2000)			4.8		37.4			
STATEWIDE	1.7		5.1		49.0		4.9	
Bernalillo	1.5	19	3.8	26	42.2	29	7.2	2
Catron	2.2	14	7.0	7	61.8	13	0.6	31
Chaves	1.3	24	6.4	12	69.8	2	5.1	5
Cibola	1.6	18	6.1	14	71.9	1	4.8	7
Colfax	4.3	3	5.1	18	68.3	3	4.0	14
Curry	1.0	32	3.8	27	50.2	24	4.2	13
De Baca	1.3	25	4.4	22	54.3	20	0.5	32
Doña Ana	1.2	31	6.9	8	47.8	25	5.0	6
Eddy	1.4	22	6.0	15	59.9	16	2.2	23
Grant	1.6	17	8.4	4	61.5	15	3.6	17
Guadalupe	4.5	1	8.3	5	63.2	9	1.3	28
Harding	3.4	5	3.6	29	40.0	32	0.0	33
Hidalgo	2.6	9	8.2	6	59.8	17	2.5	20
Lea	1.2	28	4.3	24	66.8	4	2.2	24
Lincoln	4.4	2	3.9	25	64.5	8	3.8	16
Los Alamos	1.8	15	1.4	33	7.1	33	1.2	29
Luna	1.5	20	22.2	1	62.1	11	2.4	22
McKinley	1.5	21	6.5	11	52.1	23	2.9	19
Mora	1.6	16	13.7	2	66.3	6	0.7	30
Otero	1.2	29	5.6	17	44.1	27	1.3	27
Quay	2.2	13	4.3	23	65.2	7	6.5	4
Rio Arriba	2.7	7	6.9	9	53.2	21	7.4	1
Roosevelt	0.6	33	3.3	30	66.4	5	3.8	15
San Juan	1.2	30	6.7	10	43.2	28	4.5	8
San Miguel	2.6	8	6.3	13	62.0	12	1.6	26
Sandoval	1.3	26	4.5	21	41.6	30	4.3	12
Santa Fe	2.5	12	2.8	32	40.3	31	6.6	3
Sierra	2.8	6	3.6	28	55.7	19	4.5	10
Socorro	2.6	10	5.8	16	63.0	10	2.0	25
Taos	4.1	4	9.7	3	56.9	18	4.4	11
Torrance	1.3	23	4.9	19	61.8	14	2.5	21
Union	2.5	11	2.8	31	47.6	26	3.3	18
Valencia	1.2	27	4.6	20	52.1	22	4.5	9

Table 2 (continued). Social Indicators, Rates and Rankings: Youth Indicators

	Past 30-Day Alcohol Use, 2001	County Ranking by Past 30-Day Alcohol Use	Past 30-Day Binge Drinking, 2001	County Ranking by Past 30-Day Binge Drinking	Past 30-Day Drinking and Driving, 2001	County Ranking by Past 30-Day Drinking and Driving
UNITED STATES (2000)	47.1		29.9		13.3	
STATEWIDE	48.7		28.6		13.3	
Chaves	50.6	9	34.2	7	21.0	2
De Baca	38.0	14	21.3	15	15.6	7
Doña Ana	50.5	10	29.4	11	15.5	8
Grant	51.2	7	33.8	8	15.4	9
Guadalupe	56.8	4	41.6	2	15.1	10
Harding	32.4	15	22.0	14	7.7	15
Hidalgo	51.3	6	35.3	5	19.8	5
Los Alamos	46.6	12	26.2	12	11.0	14
Luna	50.9	8	30.1	10	22.8	1
Mora	64.9	1	36.8	4	20.3	3
Otero	49.1	11	32.0	9	13.2	11
Rio Arriba	58.6	3	38.3	3	18.7	6
San Juan	38.6	13	24.2	13	12.3	13
Santa Fe	52.9	5	34.2	6	13.1	12
Taos	62.2	2	42.8	1	20.2	4

	Past 30-Day Marijuana Use, 2001	County Ranking by Past 30-Day Marijuana Use	County Ranking by Past 30-Day Cocaine Use	County Ranking by Past 30-Day Cocaine Use	Past 30-Day Inhalant Use, 2001	County Ranking by Past 30-Day Inhalant Use
UNITED STATES (2000)	23.9		4.2		4.7	
STATEWIDE	26.9		4.4		2.9	
Chaves	24.3	9	4.3	6	2.2	12
De Baca	9.0	14	1.3	14	3.8	5
Doña Ana	20.0	12	6.1	3	5.0	1
Grant	32.0	4	5.0	4	1.7	13
Guadalupe	26.3	6	2.5	12	4.2	3
Harding	6.7	15	0.0	15	1.6	14
Hidalgo	22.6	10	3.6	8	3.2	7
Los Alamos	22.1	11	2.0	13	2.4	10
Luna	15.4	13	7.3	2	4.7	2
Mora	25.1	7	2.5	11	3.2	8
Otero	25.1	8	3.4	9	4.2	4
Rio Arriba	34.7	3	3.1	10	1.2	15
San Juan	29.6	5	4.9	5	3.3	6
Santa Fe	35.7	2	3.7	7	2.4	11
Taos	43.3	1	8.1	1	3.1	9

County rankings for youth indicators refer only to those counties for which data is presented

Appendix A. The Social Indicators: Definitions, Sources, and Limitations

Direct Indicators

Alcohol- and Drug-Related Death Rates, 1999-2001

Definition: The alcohol- and drug-related death rate is the number of deaths due to alcohol and drugs per 100,000 population per year. Alcohol– and drug-related deaths include deaths for which alcohol or drugs were the primary cause (directly-attributable alcohol– and drug-related deaths). For alcohol-related deaths, an estimation of the number of deaths for which alcohol is a contributing factor is included (indirectly-attributable alcohol-related deaths). Drug-related causes of death include drug dependence and drug poisoning, as well as drug abuse that is specifically not due to alcohol or tobacco.

Directly-attributable alcohol-related deaths (alcohol as the primary cause) include: alcoholic psychoses, alcohol dependence syndrome, nondependent abuse of alcohol, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcoholic gastritis, alcoholic fatty liver, acute alcoholic hepatitis, alcoholic cirrhosis of the liver, other alcoholic liver damage, excess blood alcohol level, and accidental poisoning by ethyl alcohol. The majority of these directly-attributable alcohol-related deaths are due to chronic conditions, the most notable exceptions being excess blood alcohol level and alcohol poisoning.

Indirectly-attributable alcohol-related deaths (alcohol as a contributing factor) include respiratory tuberculosis, diabetes mellitus, certain cancers, hypertension, hepatitis, suicide, homicide, motor vehicle crashes and accidental injury. While the causes of these indirectly-attributable alcohol-related deaths include some chronic conditions such as cancer and diabetes, the majority are due to acute conditions such as motor vehicle crashes and accidental injuries.

The calculation of the number of alcohol-related deaths involves the use of an alcohol-attributable fraction (AAF). These AAFs, obtained from the Center for Substance Abuse Treatment (CSAT), were determined using appropriate studies in a national process. The AAF represents the proportion of deaths associated with alcohol consumption. These fractions, ranging from zero to one, are applied to the total number of deaths for a specific underlying cause of death to estimate the number of deaths attributed to alcohol. For directly-attributable alcohol-related deaths, the consumption of alcohol is believed to contribute 100 percent to the cause of death, resulting in an AAF of 1. For indirectly-attributable alcohol-related deaths, alcohol consumption is considered to contribute only partially to the cause of death, resulting in a AAF of less than 1. Because alcohol consumption was estimated to be involved in 42 percent of motor-vehicle crashes resulting in death at the time the methodology was developed, motor-vehicle crash fatalities were assigned AAF of 0.42. With the AAF for each specific cause of death, the total number of alcohol-involved deaths from both direct and indirect causes can be calculated. For example, if there were 150 motor vehicle crash deaths, the number of alcohol-involved deaths would be calculated by multiplying 150 deaths by 0.42 (the AAF), resulting in 63 alcohol-related deaths. Similarly, 50 deaths resulting from alcoholic cirrhosis of the liver times the AAF of 1 results in 50 alcohol-related deaths (CSAT)[1] (Appendix C).

Causes of death are based on ICD-10 (International Classification of Diseases)[2] codes from death certificates (Appendix B). More information on coding alcohol– and drug– related deaths is available from the National Center for Health Statistics (NCHS)[3].

Sources: New Mexico deaths are from the Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health. Estimates of the indirectly-attributable alcohol-

related deaths are provided by Office of Epidemiology, NMDOH. National death rates are from CDC Wonder, National Center for Health Statistics, Centers for Disease Control and Prevention (CDC)[4].

Limitations: Deaths for which drugs were a contributing factor, but not the underlying cause, were not counted. This results in an undercount of drug deaths. Fractions used to estimate the number of deaths attributable to alcohol are based on national data, and may not be completely consistent with the true fraction in New Mexico. Additionally, physicians may certify causes of death inconsistently. Although the primary physician should certify the cause of death, occasionally cause of death is certified by the attending physician who may not be aware of a patient's history of alcohol or drug use.

Alcohol– and Drug-Related Hospitalization Rates, 1999-2001

Definition: These rates are the number of hospitalizations for which a patient had an alcohol- or drug-related diagnosis per 100,000 population per year. The diagnoses for any given hospitalization were determined by the ICD-9 CM codes entered into the patient record at the time of discharge from a hospital. Because contributing causes are included in hospital discharge data, the count of substance abuse-related hospitalizations is more comprehensive than the count of similarly-related deaths, for which only the underlying cause is included. Up to nine different diagnoses and an Ecode (external cause of injury) can be entered into the hospital discharge database for any given hospitalization. An alcohol- or drug- related ICD-9 CM code listed in any of these 10 positions resulted in a hospitalization being considered alcohol– or drug-related.

Alcohol–related diagnoses for hospitalizations are equivalent to the directly attributable alcohol-related causes of death discussed above. Drug-related diagnoses for hospitalization are equivalent to the drug-related causes of death. However, hospitalizations are coded using ICD-9 CM codes rather than ICD-10 codes (Appendix B).

Source: Hospital Inpatient Discharge Data (HIDD), New Mexico Health Policy Commission.

Limitations: The HIDD system includes discharge data from all non-federal New Mexico hospitals. The primary limitation of the HIDD is that hospitals outside state jurisdiction that are used by New Mexico residents do not report to the system. Federal hospitals, such as veteran's hospitals and Indian Health Service hospitals do not report and are not included in HIDD data. Additionally, New Mexico residents who are hospitalized out of state are not included. For example, it cannot be determined how many residents of Las Cruces, New Mexico, and surrounding areas are hospitalized in El Paso, Texas, because Texas hospitals do not report to the HIDD system.

For the years covered in this report, 1999-2001, all non-Federal New Mexico hospitals reported to the HIDD system. However, discharge level data may vary in quality. Variability in physician coding, or in completeness of coding, may also result in inconsistency between and within hospitals. There is expected to be some error in key entry and while it may vary by hospital, it is not expected to vary significantly by year.

Driving While Impaired (DWI) Arrest Rates, 1999-2001

Definition: This indicator reflects the 1999-2001 arrest rate for DWI per 10,000 licensed drivers by county of arrest per year. Because a person arrested in one county may live in another county, this indicator is not a true DWI arrest rate for the residents of a given county. Rather, it is a ratio of the number of arrests occurring in a county to the number of drivers

licensed in that county.

Source: Traffic Safety Bureau, New Mexico State Highway and Transportation Department, through the Division of Government Research, University of New Mexico.[7]

Limitations: Data on arrest rates for DWI should be interpreted with caution since they reflect law enforcement activity as well as DWI behavior. DWI arrest rates rather than conviction rates are presented because convictions are influenced by variations in judicial practice as well as access to legal counsel by offenders. An additional limitation of these data is that, with the exception of the interstate highways, they do not include DWI arrests that occur on military and tribal lands (unless the arrest is made by non-tribal police). Therefore, DWI arrests in several counties (e.g., San Juan, McKinley, Cibola, Otero, Curry, Bernalillo) are likely to be undercounted.

Alcohol-Involved Traffic Crash Rates, 1999-2001

Definition: This indicator reflects the number of alcohol-involved traffic crashes per 10,000 licensed drivers by county of crash occurrence. An alcohol-involved crash is defined as: "a crash in which the Uniform Accident Report indicated that 1) a DWI citation was issued, 2) alcohol was a contributing factor to the crash, or 3) a driver or pedestrian involved in the crash had been drinking."[5] As with DWI, many alcohol-involved traffic crashes may be caused by people who do not live in the county of occurrence. Therefore, this is not a true alcohol-involved crash rate for residents of a county, but a ratio of the number of alcohol-involved crashes to the number of licensed drivers.

Source: Traffic Safety Bureau, New Mexico State Highway and Transportation Department, through the Division of Government Research, University of New Mexico.

Limitations: The number of accidents involving alcohol are likely to be undercounted. Law enforcement officers are not always able to determine the presence of alcohol use at the scene of an accident. A determination of alcohol involvement may be made at an emergency room, but this does not necessarily mean that the accident report will be revised. If a revision is made to include alcohol-involvement in an accident, there may be a delay of many months before the change is reflected in the record.

Unlike DWI arrest reports, which are not always obtained from tribal police, crash reports are obtained from tribal police. Tribal police use the standard Uniform Accident Report forms and submit them to the State Motor Vehicle Division.

Alcohol-Involved Traffic Crash Fatality Rates, 1999-2001

Definition: This indicator reflects the three-year annual rate of alcohol-involved traffic crash fatalities per 100,000 population. The denominator of this rate is different from that of alcohol-involved traffic crashes. Alcohol-involved crash fatalities are based on the total population, rather than the population of licensed drivers, because the event can happen to anyone in a vehicle, not just drivers.

Source: Traffic Safety Bureau, New Mexico State Highway and Transportation Department, through the Division of Government Research, University of New Mexico.

Limitations: These data are thought to be reliable, as they are routinely reported to the Traffic Safety Bureau through the State Police. Alcohol involvement is generally determined by the State Office of the Medical Examiner or the State Scientific Laboratory Division, New Mexico Department of Health.

Alcohol and Drug Treatment Admission Rates; July 1, 2000—June 30, 2003

Definition: Alcohol and drug treatment admission rates reflect the three-year number of substance abuse treatment admissions per 10,000 population age 18 and over. This includes only admissions to state licensed or certified facilities that receive state alcohol and/or drug agency funds (including Federal block Grant funds) for the provision of substance abuse treatment. Treatment funded by private payers or other programs such as Medicaid is not included.

For this analysis, *admissions* for substance abuse treatment were counted, rather than number of *people* admitted for treatment. In other words, if a person was admitted twice in one year for the same type of treatment, that person was counted twice.

Source: Treatment Episode Data Set (TEDS), Behavioral Health Services Division, New Mexico Department of Health.

Limitations: The total number of all treatment admissions for the state is underrepresented. TEDS does not include admissions to all substance abuse treatment facilities, only admissions to facilities receiving state alcohol and/or drug agency funds for the provision of substance abuse treatment. TEDS does not include early intervention programs or crisis intervention programs.[6]

Alcohol and Drug Related Crime Rates, 2000

Definition: These indicators are estimations of the number of alcohol and drug related crimes per 100,000 population for the year 2000. The rates reported here are based upon the Federal Bureau of Investigation's (FBI) Uniform Crime Report (UCR), a national surveillance system of crime in various U.S. jurisdictions. Because not all New Mexico law enforcement agencies report to the FBI system, the New Mexico UCR data were weighted to adjust for non-reporting. This estimation involved calculating the percent of the population not covered by crime reporting, and using this percentage to extrapolate the total number of crimes assuming full reporting.

Established alcohol– and drug-related fractions were applied to the UCR crime data. These fractions vary by type of crime (homicide, robbery, prostitution, etc.) and by type of substance (alcohol or illicit drugs). These fractions reflect a closer association of violent crimes (homicide and assault) with alcohol than with drugs, and a closer association of income-producing crimes (robbery, burglary, larceny and prostitution) with drugs than with alcohol (Appendix D).

Limitations: Total numbers of crime are underreported in UCR data. Crime that is not reported is never included. For some crimes, including homicide, aggravated assault, sexual assault, robbery, burglary, larceny, and motor vehicle theft, UCR includes all *reported* crime. For other crimes, such as other assaults, driving under the influence, liquor laws, stolen property, prostitution, and drug laws, only *arrests* are included. The inclusion of *reported* crime for certain crimes and crimes resulting in *arrests* for other crimes makes comparison of crime numbers problematic.

A further limitation is that the fractions applied to total crime to estimate alcohol- and drug-related crime are calculated from national data, and may or may not be applicable to New Mexico. Furthermore, the adjustments made to account for non-reporting assume that crime occurs at the same rate in populations for which there is no reporting as in populations for which there is reporting. This may or may not be the case.

This indicator is new for New Mexico. It is expected that further refinements will be made to improve the measure in the future. For the time being, this measure should be considered a work in progress.

Source: Uniform Crime Report (UCR), Federal Bureau of Investigation, through Department of Government, New Mexico State University.

Indirect Indicators

Suicide Rates, 1999-2001

Definition: The suicide rate reflects the annual number of deaths from suicide per 100,000 population.

Determination of suicide as the cause of death is based on ICD-10[2] codes from death certificates (Appendix C). In New Mexico, alcohol has been found to be involved in at least 44% of suicides.[7]

Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health. National death rates are from CDC Wonder, Centers for Disease Control and Prevention (CDC)[4].

Limitations: Suicide may be under-counted. Except for deaths that occur on tribal, military, or other federal lands the Office of the Medical Investigator (OMI) has jurisdiction over the investigation of all deaths that appear in any way due to unnatural or external causes. Because OMI does not investigate deaths occurring on tribal or military lands unless invited, it is possible that not all suicides are reported.

Homicide Rates, 1999-2001 Average

Definition: The homicide rate reflects the annual number of deaths from homicide per 100,000 population, 1999-2001.

Determination of homicide as the cause of death is based on ICD-10[2] codes from death certificates (Appendix C). In New Mexico, alcohol has been found to be involved in at least 53% of homicides.[7]

Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health. National death rates are from CDC Wonder, Centers for Disease Control and Prevention (CDC)[4].

Limitations: See limitations for suicide.

Liquor License Density, 2002

Definition: This indicator reflects the number of liquor licenses per 1,000 population age 20 or older, by county, in 2002. Liquor licenses include several types: 1) *beer and wine by the drink* (only in a restaurant setting, sit-down meals, waiter/waitress services, no bar); 2) *sales by the drink and package* (including spiritous liquor in addition to beer and wine - over the bar, drive-up windows, attached package stores permitted if approved); and 3) *package stores only* (spiritous liquor, beer and wine).

Source: Alcohol and Gaming Division, New Mexico Regulation and Licensing Department.

Limitations: Due to periodic changes in restaurant licensing and movement into and out of Local Option Districts (e.g., municipalities), the number of licenses in a county may fluctuate

from year to year. However, these rates generally are not subject to the types of yearly fluctuations characteristic of event-level indicators.

Percent of Births Funded by Medicaid, 1999-2000

Definition: This indicator reflects the percentage of births that are funded by Medicaid. It is used as a measure of low socioeconomic status (SES).

Source: Office of New Mexico Vital Records and Health Statistics, New Mexico Department of Health. These data were the result of a special linking project between the Office of New Mexico Vital Records and Health Statistics and the New Mexico Human Services Department. For more information, see *Paid by Medicaid*,[8] produced by the Office of New Mexico Vital Records and Health Statistics. A national comparison was obtained from the American Academy of Pediatrics.[9]

Limitations: The data linkage is not 100% complete. From 97% - 98% of Medicaid births were successfully matched to birth certificates. The accessibility of Medicaid to those eligible may vary by county, making this an uneven indicator of SES across the state.

Unemployment Rates, 2000-2002

Definition: The indicator is an estimate of the percentage of the civilian labor force that is unemployed. As an estimate, it is approximate and does not reflect exact numbers. The civilian labor force is the estimated number of civilians 16 years of age and older, classified as employed or unemployed. The unemployed are defined by the Labor Department as:

> All persons who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment some time during the 4 week-period ending with the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.[10]

Source: New Mexico Department of Labor.

Limitations: The estimates are subject to error and are periodically revised.

Rates of High School Dropout, 1999/00—2001/02 Average

Definition: This indicator reflects the percent of high school students who drop out between ninth and twelfth grade. A dropout is defined as an individual who:

- Was enrolled in school at some time during the previous school year;
- Was not enrolled at the beginning of the current year;
- Has not graduated from high school or completed a state- or district-approved educational program, and
- Does not meet any of the exclusionary conditions:
    - Transfer to another public school district, private school, or state- or district-approved education program.
    - Temporary absence due to suspension or illness, or death.[11]

School membership, the denominator upon which the dropout rate is based, is defined as the count of students enrolled as of the 40th official day of the school year.

Source: New Mexico Public Education Department.

Limitations: Before dropout information is reported to the New Mexico Public Education Department, staff at each school site must determine whether a given student should be counted as a dropout. It is often difficult to determine conclusively whether or not a student has dropped out. For instance, if a request for transcripts has been received for a student who is not in current enrollment, then it is a simple matter to conclude that the student has moved and/or enrolled elsewhere. In the absence of a request for transcripts, however, most students not currently in attendance are automatically counted as dropouts because there is no other way to track them. While there are attempts at standardization of the dropout criteria, these may not be applied uniformly across schools.

Youth Indicators

Definitions: Six different alcohol and drug use indicators are from the 2001 New Mexico Youth Risk and Resiliency Survey (YRRS). The YRRS is a school-based survey of 9th-12th graders attending public schools in New Mexico. The six indicators reported here include:

Past 30 Day Alcohol Use

Past 30 Day Binge Drinking

Past 30 Day Drinking and Driving

Past 30 Day Marijuana Use

Past 30 Day Cocaine Use

Past 30 Day Inhalant Use

Appendix E gives text of the survey questions from which these indicators are derived.

Source: New Mexico Youth Risk and Resiliency Survey, 2002, Office of Epidemiology, New Mexico Department of Health, and School Health Unit, New Mexico State Public Education Department. National comparison are taken from the Youth Risk Behavior Survey, Centers for Disease Control and Prevention.

Limitations: As with all self-administered surveys, the YRRS is subject to self reporting bias. The survey questions used for the indicators reported here are derived from the Youth Risk Behavior Survey, Centers for Disease Control and Prevention. These questions have been tested nationally and have been found to be highly valid and reliable.

Participation in the 2001 YRRS was less than optimal in many counties. Low participation calls into question whether or not the survey results are representative of the population. In this report, results are reported only for counties in which a 60% response rate was achieved.

Appendix B. ICD-9 and ICD-10 Codes

Directly Attributable Alcohol-Related Deaths (ICD-10): F10,G31.2,G62.1,I42.6,K29.2,K70, R78.0,X45,X65,Y15, Q86.0, P04.3, T51.0, T51.1, T51.9

Indirectly Attributable Alcohol-Related Deaths: See Appendix C

Drug-Related Deaths: F11.0—F11.5, F11.7—F11.9, F12.0—F12.5, F12.7—F12.9, F13.0—F13.5, F13.7—F13.9, F14.0—F14.5, F14.7—F14.9, F15.0—F15.5, F15.7—F15.9, F16.0—F16.5, F16.7—F16.9, F17.0, F17.3—F17.5, F17.7—F17.9, F18.0—F18.5, F18.7—F18.9, F19.0—F19.5, F19.7—F19.9, X40—X44, X60—X64, X85, Y10-Y14

Suicide (ICD-10): X60-X84, Y87.0

Homicide (ICD-10): X85-Y09,Y87.1

Alcohol-Related Hospitalizations (ICD-9): 291, 303, 305.0, 357.5, 425.5, 535.3, 571.0—571.3, 790.3, E860

Drug-Related Hospitalizations (ICD-9): 292, 304, 305.2—305.9, E850—E858, E950.0—E950.5, E962.0, E980.0—E980.5

Appendix C. Indirectly Attributable Alcohol-Related Deaths: Causes, ICD-10 Codes, and Alcohol Attributable Fractions

Condition	ICD-10	Fraction	Age
Directly Attributable Alcohol-Related Deaths			
Mental and behavioral disorders due to use of alcohol (Alcoholic psychosis, Alcoholic abuse, and Alcohol dependence syndrome)	F10	1.00	All Ages
Degeneration of nervous system due to alcohol	G31.2	1.00	All Ages
Alcoholic polyneuropathy	G62.1	1.00	All Ages
Alcoholic cardiomyopathy	I42.6	1.00	All Ages
Alcoholic gastritis	K29.2	1.00	All Ages
Alcoholic liver cirrhosis	K70	1.00	All Ages
Finding of alcohol in blood	R78.0	1.00	All Ages
Accidental poisoning by and exposure to alcohol	X45	1.00	All Ages
Intentional self-poisoning by and exposure to alcohol	X65	1.00	All Ages
Poisoning by and exposure to alcohol, undetermined intent	Y15	1.00	All Ages
Fetal Alcohol Syndrome	Q86.0, P04.3	1.00	All Ages
Toxic effects of ethyl alcohol	T51.0, T51.1, T51.9	1.00	All Ages
Indirectly Attributable Alcohol-Related Deaths			
Respiratory Tuberculosis	A16	0.25	>=35
Malignant neoplasms of lip, oral cavity and pharynx	C00-C14	Men: 0.50 Women: 0.40	>=35
Malignant neoplasm of esophagus	C15	0.75	>=35
Malignant neoplasm of stomach	C16	0.20	>=35
Diabetes mellitus	E10-E14	0.05	>=35
Essential hypertension	I10	0.08	>=35
Cerebrovascular diseases	I60-I69, G45	0.07	>=35
Influenza and Pneumonia	J10-J18	0.05	>=35
Diseases of esophagus, stomach, and duodenum (excluding alcoholic gastritis)	K20-K31, excluding K29.2	0.10	>=35
Chronic hepatitis	K73	0.50	>=35
Unspecified liver cirrhosis (Cirrhosis of liver without mention of alcohol, Other chronic nonalcoholic liver damage, Unspecified chronic liver disease without mention of alcohol)	K74.3-K74.6, K76.0, K76.9	0.50	>=35
Portal hypertension	K76.6	0.50	>=35
Acute pancreatitis	K85	0.42	>=35
Chronic pancreatitis	K86.0, K86.1	0.60	>=35

Appendix C (continued). Indirectly Attributable Alcohol-Related Deaths: Causes, ICD-10 Codes, and Alcohol Attributable Fractions

Condition	ICD-10	Fraction	Age
Indirectly Attributable Alcohol-Related Deaths (continued)			
Motor vehicle traffic and nontraffic accidents	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5,V81.0-V81.1, V82.0-V82.1, V83-V86,V87.0-V87.8, V88.0-V88.8,V89.0, V89.2	0.42	>=15
Pedal cycle and other road vehicle accidents (Other land transport accidents)	V01,V05-V06,V091, V093-V099,V10-V11, V15-V18,V193,V198, V199,V800-V802,V806-V809,V812-V819,V822-V829,V879, V889,V891, V893,V899	0.20	>=15
Water transport accidents	V90-V94	0.20	>=15
Air and space transport accidents	V95-V97	0.16	>=15
Accidental falls	W00-W19	0.35	>=15
Accidents caused by fires and flames	X00-X09	0.45	>=15
Accidental drowning and submersion	W65-W74	0.38	>=15
Suicide and self-inflicted injury	X60-X84, Y87.0 (exclude X65)	0.28	>=15
Homicide and injury purposely inflicted by other persons	X85-Y09,Y87.1	0.46	>=15
Other injuries and adverse effects	T68, W78-W79,W24-W31, W45, W32-W34, Y11,Y12, Y13, Y14, Y16, Y18, Y19	0.25	>=15

Appendix D. Alcohol– and Drug– Related Crime Fractions

Type of Crime	Alcohol Study Fractions	Drug Study Fractions
UCR Part I Crimes - Reported:		
Homicide	30.0	15.8
Aggravated assault	30.0	2.4
Sexual assault	22.5	5.1
Robbery	3.4	27.2
Burglary	3.6	30.0
Larceny-theft	2.8	29.6
Auto theft	3.5	6.8
UCR Part II Crimes – Arrests:		
Other assaults	30.0	5.1
Driving under the influence	100.0	0.0
Liquor laws	100.0	0.0
Public drunkenness	100.0	0.0
Stolen property	0.0	15.1
Prostitution	0.0	12.8
Drug laws	0.0	100.0

Appendix E. New Mexico Youth Risk and Resiliency Survey: Substance Abuse Indicator Questionnaire Items

During the past 30 days, how many times did you DRIVE in a car or other vehicle when YOU had been drinking alcohol?

Regarding tobacco, alcohol and other drug use, during the past 30 days, on how many days did you have at least one drink of alcohol?

Regarding tobacco, alcohol and other drug use, during the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

Regarding tobacco, alcohol and other drug use, during the past 30 days, on how many days did you use marijuana?

Regarding tobacco, alcohol and other drug use, during the past 30 days, on how many days did you use any form of cocaine, including powder, crack, or freebase?

Regarding tobacco, alcohol and other drug use, during the past 30 days, on how many days did you sniff glue, breathe the contents of aerosol spray cans, or inhale any paints or sprays to get high?

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