CHAPTER 10:
MENTAL HEALTH STATUS

Mental health problems cause a significant amount of suffering and disability. In this chapter, we present data for the more severe mental illnesses or related outcomes, including depression, bipolar disorders, schizophrenia, suicide, and substance abuse. These conditions may provide some indication of the impact of mental health problems. Because hospitalization and death for psychiatric illnesses is uncommon compared to outpatient treatment and many mental problems are not treated at all, the available data only represent a small portion of the whole burden of mental health problems. The main findings of this chapter include:

♦ There is a high suicide rate among elderly males and a high hospitalization rate for attempted suicide among adolescents and young adults.

♦ The death rate of accidental poisoning, mostly due to illicit drug use, increased 3.3 times in King County between 1991 and 1996. The majority of these deaths were among men age 25-54.

♦ Depression is common and often under-diagnosed and under-treated.

♦ The rates of hospitalization for mental health conditions among residents of Central Seattle were substantially higher than the rates for the rest of King County.

Mental health and mental disorders are associated with a large number of biological, psychological, social, and environmental factors. Some examples of the risk factors include genetic factors, child abuse and neglect, and stressful life events. Intervention for mental health illnesses includes pharmacological and psychological treatment, strengthening social support for individuals, and improving stress management skills.
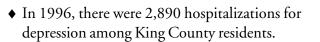
"NOT-GOOD MENTAL HEALTH DAYS"

As summarized in Table 3-6 on page 18, the Behavioral Risk Factor Survey data indicate that on the average, King County adults had 3 "not-good mental health days" per month or about 36 days per year. Overall, 19% of King County adults had 1-3 days, 10% had 4-9 days, and 11% had 10 or more days per month during which their mental health was not good.[1] Younger adults, females, and persons of lower income levels had more "not-good mental health days" than their respective counterparts.

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[1] Based on the following question in the Behavioral Risk Factor Survey: "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?".
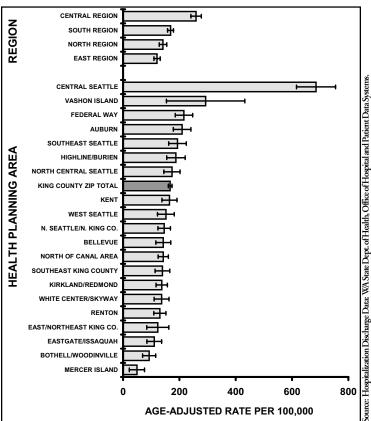
DEPRESSION

Depression is one of the most common mental health illnesses in the U.S. It is estimated that depression and other affective/mood disorders affect about 5% of the population at any given time.[2] Depression is a major risk factor for suicide and a major contributor to disability and loss of productivity. It causes more bed-days than arthritis and back problems. The hospitalization data on depression presented here only represent the most severe cases of the illness and do not include patients admitted to Western State Hospital.
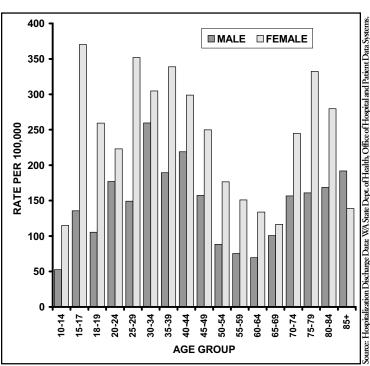
- ◆ In 1996, there were 2,890 hospitalizations for depression among King County residents.

- ◆ The age-adjusted hospitalization rate per 100,000 in King County was 167.1 for the total population, 125.3 for males and 209.0 for females.

- ◆ Between 1988 and 1996, the age-adjusted hospitalization rate for depression in King County remained relatively stable.

- ◆ The age-adjusted hospitalization rate for depression was significantly associated with neighborhood poverty level.   In 1996 the rate was 390.8 in high poverty neighborhoods, compared to 174.4 and 120.8 in medium and low poverty neighborhoods respectively.

- ◆ In 1996, the depression hospitalization rate for residents of Central Seattle was 4.1 times the county average rate. The rates for residents of Federal Way and Auburn were also significantly higher than the county average (Figure 10-1).

Figure 10-1:
Depression, Age-Adjusted Hospitalization Rates
By Region and Health Planning Area, King County
1996

Source: Hospitalization Discharge Data: WA State Dept. of Health, Office of Hospital and Patient Data Systems.

2   Regier, D.A., et al. (1988): One-month prevalence of mental disorders in the United States: Based on five epidemiologic catchment area sites. Archives of General Psychiatry. 45: 977-986.
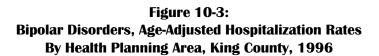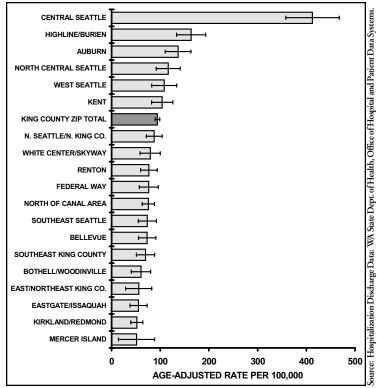
Figure 10-2:
Depression, Hospitalization Rates
By Age Group, King County
1996

Source: Hospitalization Discharge Data: WA State Dept. of Health, Office of Hospital and Patient Data Systems.

♦ The hospitalization rate for depression was higher among females than among males. When compared by age groups (excluding children under age 15), the lowest rates were found among those between the ages of 50 to 69 (Figure 10-2).

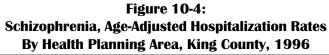# BIPOLAR (MANIC-DEPRESSIVE) DISORDERS AND SCHIZOPHRENIA

In addition to depressive disorders, bipolar disorders and schizophrenia are the major causes of hospitalization for mental health conditions.
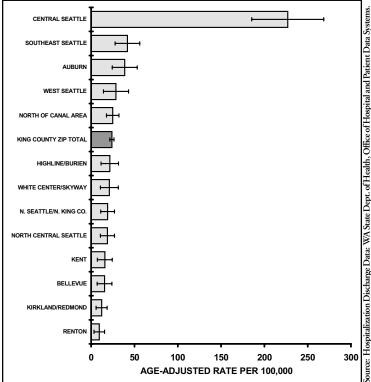
♦ In 1996, of the 9,116 hospitalizations for mental health conditions among King County residents, bipolar disorders accounted for 18% and schizophrenia accounted for 5%.

♦ The age-adjusted hospitalization rate for schizophrenia for males (34.0) was 2.5 times the rate for females (13.5). For bipolar disorders, the female rate (111.7) was 1.5 times the male rate (76.1).

Figure 10-3:
Bipolar Disorders, Age-Adjusted Hospitalization Rates
By Health Planning Area, King County, 1996

Source: Hospitalization Discharge Data: WA State Dept. of Health, Office of Hospital and Patient Data Systems.

Note: Vashon Island Health Planning Area is not included because of small numbers (<10).

Figure 10-4:
Schizophrenia, Age-Adjusted Hospitalization Rates
By Health Planning Area, King County, 1996

Source: Hospitalization Discharge Data: WA State Dept. of Health, Office of Hospital and Patient Data Systems.

◆ The rates of hospitalization for both bipolar disorders and schizophrenia among residents of Central Seattle were significantly higher than the rates for the other King County areas (Figures 10-3 and 10-4).

Note: Eastgate/Issaquah, Federal Way, Southeast King County, Bothell/Woodinville, Vashon Island, East/Northeast King County, and Mercer Island Health Planning Areas are not included because of small numbers (<10).

SUICIDE

Suicide is the act of killing oneself. The result of a suicidal act can be either fatal (completed suicide) or nonfatal (attempted suicide). The risk of suicide is associated with a variety of factors such as mental illnesses, alcohol/drug dependence, social isolation, and stressful life events. For the elderly, poor physical health, especially when it includes pain, is a major factor contributing to depression and substance abuse, and in the most severe cases, suicide. The presence of a gun in the home is also associated with increased risk of suicide.

Table 10-1:
Suicide Rates per 100,000
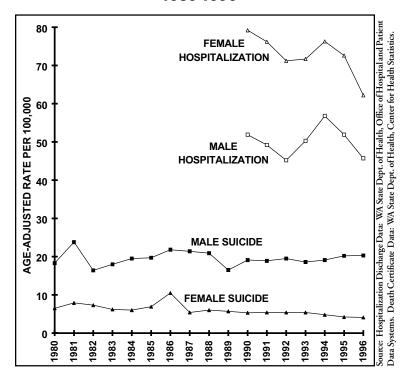**King County, Seattle, Washington State, and U.S.**

	King County	Seattle	WA State	U.S. (1995)	U.S. 2000 Goal*
Total Population, Age-Adjusted	12.1 (1996)	12.7 (1996)	13.3 (1996)	11.2	10.5
Adolescents Age 15-19	8.9 (94-96)	7.6 (94-96)	12.0 (94-96)	10.5	8.2
Males Age 20-34	31.0 (94-96)	38.1 (94-96)	32.8 (94-96)	26.3	21.4
White Males Age 65+	47.3 (94-96)	44.4 (94-96)	48.8 (94-96)	38.7	39.2

* These goals are presented in Healthy People 2000, published by the U.S. Department of Health and Human Services, 1991. The goals were set based on 1987 baseline data. Some of the goals have been achieved.
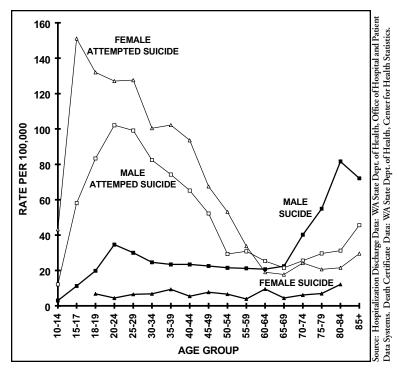
Source: Death Certificate Data: WA State Dept. of Health, Center for Health Statistics.

◆ In King County 1996, suicide was the ninth leading cause of death in the total population and the second leading cause of death among youth age 15-24.

◆ Since 1990, suicide has replaced motor vehicle crashes as the leading cause of death from injuries.   In 1996, there were 216 suicides and 170 deaths from motor vehicle crashes among King County residents.

◆ In addition to completed suicide, there were 875 hospitalizations for attempted suicide.

◆ The suicide rates in King County declined among females but remained practically unchanged among males between 1980 and 1996 (Figure 10-5).

Figure 10-5:
Time Trend of Suicide and Attempted Suicide
King County
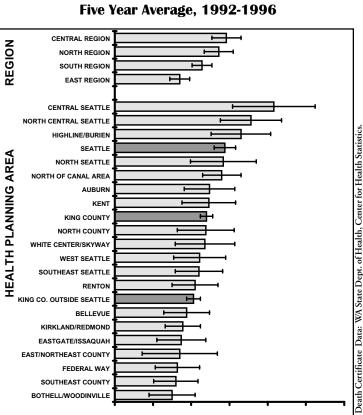**1980-1996**

Figure 10-6:
Suicide and Attempted Suicide Rates
By Age Group, King County
Five Year Average, 1992-1996

◆ The suicide rates in King County, especially those for young adult males and elderly males, remained higher than the US Year 2000 goals.

◆ The highest suicide rate was among elderly males while the highest hospitalization rate for attempted suicide was among females age 15-17 (Figure 10-6).

◆ The suicide rate for Native Americans (14.8) was higher than the rate for whites (12.7) during 1987-1996. Because of the relative small number, however, the difference was not statistically significant. The suicide rate for whites (12.7) was significantly higher than the rates for African Americans (9.0) and Asians (6.9). The rate for Hispanics was 9.4, which was not significantly different from the rate for whites.

♦ High poverty neighborhoods had significantly higher suicide rate (17.6) compared to medium (13.0) and low poverty neighborhoods (9.0) during the 1992-1996 period.

♦ Among King County regions, the highest suicide rate was observed in Central Region, followed by North, South, and East Regions (Figure 10-7).

Figure 10-7:
Suicide, Age-Adjusted Rates
By Region and Health Planning Area, King County
Five Year Average, 1992-1996

Source: Death Certificate Data: WA State Dept. of Health, Center for Health Statistics.

Note: Vashon Island and Mercer Island are not included because of small numbers (<10).

Figure 10-8: Attempted Suicide,
Age-Adjusted Hospitalization Rates
By Region and Health Planning Area, King County
Three Year Average, 1994-1996

Source: Hospitalization Discharge Data: WA State Dept. of Health, Office of Hospital and Patient Data Systems.

♦ Among the health planning areas, the age-adjusted suicide rates for residents of Central Seattle and North Central Seattle were significantly higher than the county average (Figure 10-5). The age-adjusted hospitalization rate of attempted suicide for residents of Central Seattle was 3.8 times the county average (Figure 10-8).
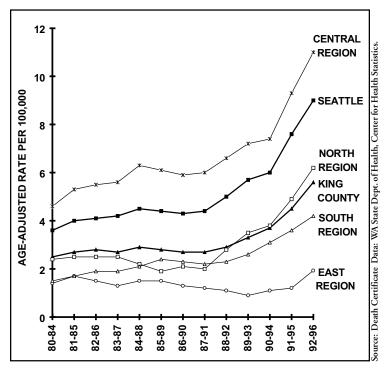
SUBSTANCE ABUSE

Health problems associated with drug abuse include psychosis, depression, overdose, skin and lung infections, AIDS, pulmonary tuberculosis, motor vehicle crashes and other unintentional injuries, homicide, and injuries caused by violent crimes.

Alcohol is often present in cases of non-alcohol drug intoxication. Also, there is more morbidity caused by alcohol than by illegal drugs. Data on alcohol abuse, including chronic liver disease, motor vehicle crashes, and the prevalence of alcohol misuse are presented in Chapter 5, 6, and 7. In this section, we will focus on abuse of drugs other than alcohol.

Note that in the death and hospitalization data presented below, deaths and hospitalizations due to *accidental poisoning* were caused by drug overdose, while hospitalizations for *illicit drug-related conditions* include those for drug psychoses (such as drug withdrawal syndrome and pathological drug intoxication), drug dependence, and nondependent abuse of drugs in addition to drug overdose. Also, some of the drug overdose cases treated in the emergency room may not be reflected in the hospitalization data.
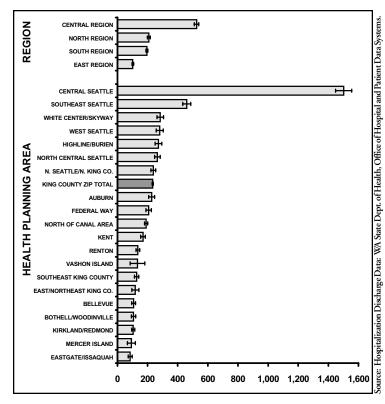
Figure 10-9:
Accidental Poisoning, Age-Adjusted Death Rates
By Region, King County
Five Year Rolling Averages, 1980-1996

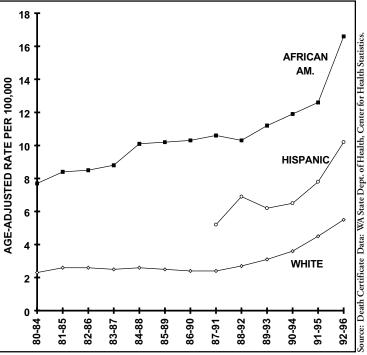Source: Death Certificate Data: WA State Dept. of Health, Center for Health Statistics.

♦ Among King County residents in 1996, there were 141 deaths and 441 hospitalizations caused by accidental poisoning.

♦ Opiates, such as heroin, were found in 78% of the deaths caused by accidental poisoning during 1994-1996. Cocaine and related drugs were found in 42% of the deaths. About half of the deaths involved more than one type of drug.

♦ The age-adjusted death rate for accidental poisoning increased sharply between 1991 and 1996. The increasing trend was significant in all regions of King County. Data from the King County Medical Examiner's office indicate, however, that in 1997 the number of drug-caused deaths declined 17% from 1996.

♦ There were significant differences in the death rate among the four regions. The rate in Central Region (11.0) was significantly higher than the rates in North (6.2), South (4.2), and East (1.9) Regions during 1992-1996 (Figure 10-9).

Figure 10-10:
Accidental Poisoning, Age-Adjusted Death Rates
By Race, King County
Five Year Rolling Averages, 1980-1996

- Of the accidental poisoning deaths between 1994 and 1996, 82% were males and 18% were females.

- Most of the accidental poisoning deaths (89%) were among persons age 25-54 (49% age 35-44, 22% age 25-34, and 18% age 45-54).

- The age-adjusted death rates of accidental poisoning for African Americans and Hispanics were significantly higher than that for whites (Figure 10-10).

- The age-adjusted death rate was significantly associated with neighborhood poverty level. Averaged over 1992-1996, the rate was 16.9 in high poverty neighborhoods, 6.1 in medium poverty neighborhoods, and 2.5 in low poverty neighborhoods.

Figure 10-11:
Illicit Drug-Related Conditions,
Age-Adjusted Hospitalization Rates
By Region and Health Planning Area, King County
Three Year Average, 1994-1996

- The age-adjusted hospitalization rate for illicit drug-related conditions in Central Region was significantly higher than the rates in the other regions during 1994-1996. Among the health planning areas, the hospitalization rate in Central Seattle was 6.4 times the county average rate. Southeast Seattle, White Center/Skyway, West Seattle, Highline/Burien, and North Central Seattle also had above average rates (Figure 10-11).