

# Attempted Suicide by Adults

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**S**UICIDE is the sixth leading cause of death in the United States among 15- to 24-year-olds, fifth among 25- to 44-year olds, and seventh for those between the ages of 45 and 54 (1). Suicide ranks 11th for the total population and 8th for the total white male population. Despite these statistics, suicide has received little attention as a public health problem, not so much, perhaps, because of its complexities but because of the fears, anxieties, and guilt aroused by death in our society. Suicide, in particular, intensifies these feelings, which may account for the seeming public apathy. Studies of completed and attempted suicides are needed to develop a better understanding of this cause of death. They would also lead to improved methods of identifying persons who might act out suicidal impulses and to the designing of preventive and treatment programs.

## Sample and Procedure

In a previous study, the focus was upon attempted suicide by children and adolescents under the age of 18 (2). This study examines 1,112 consecutive attempted suicides by persons 18 years of age and over who came to the attention of the Philadelphia Police Department in the 2-year period April 1959 to April 1961. The sample excludes persons who subsequently died as a result of their attempt and those who police doubted had actually made an attempt. When more than one at-

tempt was reported for a particular individual in the report period, only the first attempt was considered. Suicide or attempted suicide is not a punishable offense in Philadelphia, but the police department becomes involved in attempted suicide not only to provide help in getting persons to hospitals for emergency care but also to rule out any violation of the law because of foul play, attempted homicide, or harm to the life of neighbors as a consequence of the attempt.

Data about attempted suicide were obtained from the standard form used by the police department in all such cases. Information on age, race, sex, occupation, place of residence, and date and time of occurrence was available for almost the entire sample. However, for items not specifically listed on the standard form, such as events leading to the attempt, motivation, seriousness of intent, impulsiveness of the act, and reaction of spouse or close relative, there were important gaps in the data. This was not unexpected for two reasons. First, the purpose of the police investigation, and understandably so, is to check on possible violations of the law and not to study systematically the nature and dynamics of suicidal behavior; and second, the content of the investigation varies with the skill, interest, and experience of the particular police officer.

The data were classified by either of two investigators after a period of orientation, consultation, and training on a sample of 50 randomly selected cases. In a subsequent randomly selected sample of 25 cases, the amount of agreement between the two raters on the 32 items studied appeared to be adequate. On these cases the percentage of agreement varied from 72 to 100, with an overall agreement of 92. As might be expected, there was full agree-

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ment on explicit items such as age, race, sex, and date and time of occurrence, and lesser agreement on items not specifically required on the standard form, such as marital status or items requiring inference or interpretation of the narrative report of the police officer; for example, the precipitating circumstances as reported by a respondent other than the person making the attempt.

### Characteristics of Attempted Suicides

In addition to the 1,112 persons 18 years or older attempting suicide who came to the attention of the police department from April 1959 to April 1961, another, unduplicated group of 139 were known to the Poison Control Center of the Philadelphia Department of Public Health during the same 2-year period. Thus, the number of attempted suicides from these 2 sources alone was 1,251.

During the same period 395 cases were classified as suicide by the office of the medical examiner of the Philadelphia Department of Public Health, which exercises by statute exclusive jurisdiction for determining the cause of death of all persons not attended by a physician or not due to natural causes. The ratio of attempted to completed suicide is 3.2 to 1. This ratio is probably an underestimation, since all attempted suicides do not come to the attention of the police department or the poison control center.

In a previous study it was found that the number of attempted suicides among children and adolescents under age 18 was 60 per year (2). If the present study had included young

**Table 2. Persons attempting suicide, by age group, Philadelphia, 1959-61**

Age group (years)	Number	Percent
Total.....	1, 112	100
75 and over.....	14	1
65-74.....	38	3
55-64.....	63	6
45-54.....	132	12
35-44.....	239	21
25-34.....	352	32
18-24.....	274	25

people under the age of 18, the ratio of attempted to completed suicide would be 3.4 to 1. In either instance, the ratio in this study is higher than the 2 to 1 reported by Crocetti (3) and the 2.25 found by the present investigators for data gathered by Schmid and Van Arsdol (4), but not as high as the ratio of 7.69 to 1 reported by Farberow and Shneidman (5) or the 5 to 1 commonly mentioned in the literature on suicide.

This report will be limited to the cases known to the police department, since little information was available on those known to the poison control center.

Sex, race, and age distributions are shown in tables 1 and 2. Of the 1,112 persons, 68 percent were women and 32 percent men. By race, 70 percent were whites and 30 percent nonwhites. The age distribution indicated a preponderance of young people. The median age was 39.2 years for white men, 33.8 for white women, 30.0 for nonwhite men, 28.5 for nonwhite women, and 33.0 years for the entire sample.

To take into account the age distribution of men and women and of whites and nonwhites in the general population, age-specific rates were computed. The age-specific rate is obtained by dividing the number of attempted suicides in an age group during a 1-year period by the number of persons in that age group in the general population and multiplying by 100,000.

The age-specific rates given in table 3 indicate a clear tendency for attempted suicide to decrease with age. The decrease shows a gradient for women, white and nonwhite, and for the entire sample. Although there is no gradient for men, the decrease of attempt with age is unmistakable. For the total group, the

**Table 1. Persons attempting suicide, by sex and race, Philadelphia, 1959-61**

Race and sex	Number	Percent
Both races.....	1, 112	100
Male.....	355	32
Female.....	757	68
White.....	777	70
Male.....	261	23
Female.....	516	46
Nonwhite.....	335	30
Male.....	94	8
Female.....	241	22

rates range from 78.7 per 100,000 for persons 18-24 to 10.9 for those 75 years and older.

By contrast, completed suicide shows a clear tendency to increase with age (6). The rank order correlation (rho) between the rates of attempted suicide in the present study and of completed suicide in the study just referred to is -1.00. Clearly, attempted suicide is a function of youth and completed suicide a function of age.

The data in table 3 also indicate that nonwhites are over-represented in attempted suicide, more so for women than for men. Nonwhites have about one and one-half times the rate of whites, 50.3 to 36.9, but the overall rate is not uniform throughout the age range. Under 25, the rate for nonwhites is more than twice that for whites, 130.7 compared with 59.7; between 25 and 44, the rate is about the same, 59.3 for nonwhites and 54.0 for whites; but over 45, the rate for whites is almost twice that for nonwhites, 19.9 compared with 10.4. The finding of over-representation of nonwhites in attempted suicide should be interpreted with considerable caution since whites, having greater resources, may tend to turn to the family physician rather than the police department in such situations. By contrast, nonwhites are under-represented in completed suicide (6). These findings concerning nonwhites are similar to those reported in another study (4).

It is also evident from the data in table

3 that women are over-represented in attempted suicide. The rate for women is almost twice that for men, 51.4 compared with 27.3, but again the overall rate is not uniform over the entire age range. Under age 45, the rate for women (84.5) is more than twice that for men, (36.0); but over 45, the rate is about the same, 18.3 for women and 18.0 for men.

Because information about marital status, living arrangements, occupation, and employment status was not available in a large proportion of cases, comparisons of these factors with age, sex, and race, and with characteristics of the general population were possible only in a few instances, and data are reported for the total group only. Forty-four percent were married, 14 percent single, 13 percent separated or divorced, 2 percent widowed, and there was no information about 26 percent. However, separation and divorce were more frequent in the sample (13 percent) than in the general population (6.6 percent), according to the 1960 Philadelphia census. Of the group, 73 percent lived with others, usually relatives; 5 percent lived alone; and there was no information for 22 percent.

The classification of occupations according to the Dictionary of Occupational Titles (7) showed 6 percent of the men in professional, semiprofessional, managerial, and proprietary occupations; 6 in clerical; 3 percent in sales; 11 in skilled; 6 percent in semiskilled; and 26

**Table 3. Attempted suicide rate<sup>1</sup> per 100,000 population, by age, sex, and race, Philadelphia, 1959-61**

Age group (years)	White		Nonwhite		Total (N=1,112)
	Male (N=261)	Female (N=516)	Male (N=94)	Female (N=241)	
Total <sup>2</sup> .....	26.3	46.3	30.7	67.0	40.1
75 and over.....	18.5	<sup>3</sup> 7.4	<sup>3</sup> 13.9	0	10.9
65-74.....	22.8	9.5	0	0	13.1
55-64.....	13.2	18.6	<sup>3</sup> 7.5	<sup>3</sup> 11.7	14.8
45-54.....	24.7	31.5	12.9	17.8	25.4
35-44.....	26.9	57.0	30.3	55.2	43.0
25-34.....	43.3	91.4	39.2	104.1	69.4
18-24.....	25.8	91.7	81.3	168.8	78.7

<sup>1</sup> Rates calculated by dividing the total number of attempted suicides in each age group in the 2-year period by the appropriate 1960 census total multiplied by 2.

<sup>2</sup> Does not take into account the age-specific rate for each group.

<sup>3</sup> Based on 5 or fewer persons.

percent in unskilled and service occupations. Two percent were without occupations; these included students and some persons who had never worked. Occupations were not reported for 40 percent.

Almost half of the women (48 percent) were housewives, and for an additional 22 percent, occupation was not reported. For the remaining 30 percent, the occupational distribution showed 5 percent in professional and managerial; 9 percent in clerical; 1 percent in sales; 1 percent in skilled; 3 percent in semiskilled; and 11 percent in unskilled and service occupations.

The observed differences between whites and nonwhites, both male and female, with respect to occupational distribution followed the same pattern as in the general population; that is, a larger proportion of whites in higher and of nonwhites in lower level occupations.

Of persons with an occupation, 19 percent were reported as employed at the time of the attempt, 28 percent were out of work, and 5 percent in retirement. Although no information was available in about one-half the cases, the amount of unemployment, 30 percent of the men and 28 percent of the women, which was considerably higher than that in the general population, suggests a possible relationship between economic stress and attempted suicide.

Almost all, 94 percent, were born in the continental United States. Three percent were born in Puerto Rico, 2 percent were foreign born, and no information was available for 1 percent. Ninety-seven percent were Philadelphia residents, 2 percent nonresidents, and no informa-

tion was available concerning 1 percent of the group. Using the addresses of Philadelphia residents, rates were computed for each of the 10 health districts into which the city is divided. The rates varied from 16.1 to 53.4 per 100,000 population. Health districts with high rates tend to be areas characterized by poor housing, low income, high morbidity, and delinquency, factors associated with social disorganization.

#### Characteristics of the Act

The methods employed in the attempt are shown in table 4. In line with the findings of other investigators (4, 8, 9), poison was the preferred method, used by 63 percent of the group. Gas or carbon monoxide was used by 12 percent; cutting or piercing, by 17 percent; jumping, hanging, firearms, or drowning combined, by less than 5 percent; and a combination of the methods already mentioned or other methods, by 4 percent.

Women used poison to a greater extent than men (70 percent compared with 48 percent), while men used cutting or piercing more than women (26 percent compared with 12 percent). For other methods, there was little difference between the sexes. (Throughout this study, only differences significant below the 0.01 level will be reported.)

Since two out of three persons used poisons, an analysis was made of the types of poisons employed. These were classified in the following categories.

*Analgesics*—aspirin, aspirin compounds, bromides, other pain-killing medications except narcotics.

**Table 4. Method used in attempted suicides, by race and sex (in percentages), Philadelphia, 1959-61**

Method	White		Nonwhite		Total (N=1,112)
	Male (N=261)	Female (N=516)	Male (N=94)	Female (N=241)	
Poison.....	46	70	52	69	63
Gas, carbon monoxide.....	14	9	13	13	12
Cutting or piercing.....	27	13	24	12	17
Jumping.....	3	2	3	2	2
Hanging.....	3	( <sup>1</sup> )	1	0	1
Firearms.....	2	1	1	( <sup>1</sup> )	1
Drowning.....	0	( <sup>1</sup> )	1	( <sup>1</sup> )	( <sup>1</sup> )
Combination of, or other methods.....	3	4	4	3	4
Not stated.....	( <sup>1</sup> )	( <sup>1</sup> )	0	0	( <sup>1</sup> )

<sup>1</sup> Less than 0.5 percent.

**Table 5. Type of poison used in attempted suicides, by race and sex (in percentages), Philadelphia, 1959-61**

Type of poison	White		Nonwhite		Total (N=731)
	Male (N=127)	Female (N=382)	Male (N=52)	Female (N=170)	
Analgesics.....	5	9	2	11	8
Sedatives or tranquilizers.....	60	68	19	36	56
Other internal medicines.....	3	2	2	2	2
External medicines.....	12	6	27	14	10
Nonmedicinal preparations.....	11	5	36	27	13
Combination of any of the above.....	6	5	10	6	6
Not stated.....	4	3	4	4	4

*Sedatives or tranquilizers*—barbituates and any of a wide variety of sleeping pills and tranquilizers sold under many different brand names.

*Other internal medicines*—antihistamines, insulin.

*External medicines*—iodine, rubbing alcohol, oil of wintergreen.

*Nonmedicinal preparations*—ammonia, bleach, insecticide, rat poison.

*Combination of poisons*—poisons in more than one of these categories.

Of those taking poisons, 56 percent used sedatives or tranquilizers, 13 percent nonmedicinal preparations, 10 percent medicines usually prescribed for external use, and 8 percent analgesics (table 5). Women used sedatives or tranquilizers (59 percent) more frequently than men (48 percent), and also analgesics (10 percent of the women compared with 4 percent of the men). Men used external medicines more often (16 percent) than women (9 percent) and also nonmedicinal preparations (18 percent of the men compared with 12 percent of the women). The greater utilization by women of sedatives and tranquilizers, obtained in most instances by prescription, may be due to the fact that a higher proportion of women than of men had been under medical care.

There were also race differences in the type of poisons employed; whites used sedatives and tranquilizers more frequently (66 percent) than nonwhites (32 percent), and nonwhites used external medicines more frequently (17 percent of nonwhites compared with 8 percent of the whites). This may be due to the fact that a higher proportion of whites than of nonwhites had been under medical care. Data on the medical supervision of the group will be discussed subsequently. Nonwhites also used

nonmedicinal preparations, such as strong cleaning solutions and insecticides, more frequently (29 percent) than whites (6 percent), suggesting problems associated with substandard housing. The race differences probably reflect socioeconomic differences.

Most attempts (84 percent) took place in the person's own home. Six percent occurred in someone else's home, and an additional 4 percent in other premises such as restaurant, police station, beauty parlor, or place of employment. Five percent of the attempts were made out-of-doors, on the streets, on piers, or on bridges.

In 18 percent of the cases the attempt was discovered almost immediately (table 6). In some instances, the person discovering the attempt witnessed it; more often, he sensed through attitude, action, or other cue that something unusual had occurred. In 30 percent of the cases the attempt was not discovered immediately but some time after its occurrence: 5 percent within an hour, 5 percent after more than an hour, and in 20 percent it was not possible to estimate the time interval. As might be expected, in the majority of cases the person discovering the attempt was a relative.

In another 30 percent, the act was not discovered by others but was reported by the person making the attempt. In these cases, the time interval between attempt and self-report was unknown. Some clues to the motivation for self-report were inferred from the police records. After making the attempt, some became panicky and sought help because they thought they might die, some intended to use the attempt to control or change the situation by creating fear and anxiety or to punish someone, and

some planned the attempt to coincide with the arrival of spouse or other person but misjudged the timing. In 22 percent information about time interval between the attempt and its discovery was not stated in the police record.

Among nonwhites more frequently than among whites, the act was discovered almost immediately or was reported by the person making the attempt (54 percent for nonwhites compared with 45 percent for whites); while among whites more frequently than among nonwhites, the attempt was not discovered until later (34 percent for whites compared with 21 percent for nonwhites). On the assumption that the longer the interval between the attempt and its discovery, the more serious the attempt, whites are more serious than nonwhites about taking their own lives.

In the police description of the condition of the attempted suicide, explicitly required on the standard form, the person's physical state was reported in some cases; in others, the men-

tal condition (table 7). The basis for mentioning one category rather than the other is not known since the narrative section of the police report frequently mentioned both. Of the total sample, 41 percent were classified as disturbed (jittery, tense, hysterical, irrational, psycho, disturbed, unbalanced); and 7 percent were reported by the police to have been drinking. Twenty-two percent were found in an unconscious or semiconscious condition, and 14 percent were classified as physically ill (hurt, bleeding, burnt, cut, and similar notations). The police listed 6 percent as apparently normal. In 9 percent of the cases, the report carried no description of the attempted suicide's condition, and in 1 percent, the description appeared to be irrelevant to the person's condition at the time; for example, "mentally retarded." A higher proportion of whites (27 percent) than of nonwhites (10 percent) were found in an unconscious or semiconscious condition. On the assumption that an unconscious or semi-

**Table 6. Time between attempted suicide and discovery, by race and sex (in percentages), Philadelphia, 1959-61**

Discovery	White		Nonwhite		Total (N=1,112)
	Male (N=261)	Female (N=516)	Male (N=94)	Female (N=241)	
Almost immediately-----	21	15	29	17	18
Within 1 hour-----	5	6	3	4	5
After 1 hour-----	3	7	3	2	5
Interval unknown, but not immediate discovery-----	22	22	10	16	20
Reported by person making the attempt, but interval unknown-----	28	29	36	34	30
Not stated-----	21	22	19	26	22

**Table 7. Police description of condition of attempted suicides, by race and sex (in percentages), Philadelphia, 1959-61**

Police description	White		Nonwhite		Total (N=1,112)
	Male (N=261)	Female (N=516)	Male (N=94)	Female (N=241)	
Apparently normal-----	4	5	14	8	6
Disturbed-----	42	37	39	47	41
Unconscious, semiconscious-----	20	31	5	12	22
Physically ill-----	16	12	18	15	14
Drinking-----	8	5	11	7	7
Other-----	2	1	0	2	1
Not stated-----	8	9	13	10	9

conscious condition is related to seriousness, whites are more serious than nonwhites about taking their own lives.

Attempts occurred most frequently between 3 p.m. and midnight, and least often between 3 a.m. and 9 a.m. The second finding was not unexpected since people are usually asleep, preparing breakfast, sending children off to school, or getting ready to go to work at these hours. Following are the attempts by time periods.

<i>Time period</i>	<i>Percent of attempts</i>
12-2:59 a.m.-----	11
3-5:59 a.m.-----	7
6-8:59 a.m.-----	6
9-11:59 a.m.-----	10
12-2:59 p.m.-----	13
3-5:59 p.m.-----	19
6-8:59 p.m.-----	18
9-11:59 p.m.-----	16

Sex, race, or marital status had no bearing on time of day of the attempt, but there were age differences. A higher proportion of persons 45 years of age and older (54 percent) than those under 45 (39 percent) made the attempt between 9 a.m. and 6 p.m., while 37 percent of those under 45 compared with 26 percent of those 45 and older made the attempt between 6 p.m. and midnight. It was expected that older people would be more likely to make the attempt in the evening when they would be more sensitive to their loneliness and isolation, but a more reasonable explanation for the age differences suggests that younger people with job and family responsibilities may have less opportunity during the day than older people with fewer of these responsibilities.

Although certain times of the day were preferred to others, no relationship was found between attempt and month or season of the year.

### Motivation for the Attempt

The circumstances or events preceding or precipitating the attempt are shown in table 8. The reason most frequently given by the person making the attempt was disturbed family relationships (27 percent), a category covering a wide range of interpersonal difficulties involving conflict with spouse, with parent or children, with siblings, or with other relatives. Less frequently given as reasons (from 2 to 7

percent) were financial and job difficulties, unhappy love affair, physical illness, mental disorder, death or illness of relatives.

In more than 40 percent of the cases, information was not available regarding the precipitating circumstances: in 29 percent, the person making the attempt was not interviewed, usually because his physical or mental condition did not permit it, and in 15 percent, the information was not given in the police record although the person had been interviewed.

There were differences between whites and nonwhites, but these involved only the percentage of cases not interviewed (36 percent for whites and 15 percent for nonwhites). This finding was not unexpected since a higher percentage of whites than of nonwhites had been found in an unconscious or semiconscious condition.

The circumstances precipitating the attempt differed with marital status. Disturbed family relationships were given as the reason by 43 percent of the separated and divorced combined and by 39 percent of the married, but by only 12 percent of the single. By contrast, an unhappy love affair was given by 31 percent of single persons, but by only 1 percent of the married and 4 percent of the separated-divorced persons. Despite gaps in information about marital status and precipitating circumstances, the differences between single and married or separated-divorced persons are to be expected, representing a somewhat different focus for problems in interpersonal relationships.

**Table 8. Circumstances precipitating attempted suicides, self-reported and reported by other respondent (in percentages), Philadelphia, 1959-61**

Precipitating circumstances	Self-report (N = 1,112)	Other respondent (N = 1,112)
Disturbed family relationships	27	22
Financial and job difficulties	7	4
Unhappy love affair	6	5
Physical illness	5	7
Mental disorder (including alcoholism)	4	18
Death or illness of relatives	2	3
Other	4	2
No one interviewed	29	19
Not stated or not known	15	19

The precipitating circumstances also varied with age. It was not surprising to find that the percentage of those reporting physical illness as the reason increased with age: 3 percent of those under 45 and 11 percent of those 45 and older. By contrast, with age there was a decrease in reports of disturbed family relationships, 31 percent of those under 45 and 14 percent of those 45 and older; and of unhappy love affairs, 8 percent for those under 45 and none for those 45 and older.

In 81 percent of the cases, the police interviewed other respondents who might have been able to provide pertinent information about the person making the attempt. Although the police sometimes interviewed as many as three or four respondents in a particular case, only one was selected for this study. If there were relatives, the individual with the closest relationship was selected; if there were none, the respondent who appeared to have most knowledge of the situation was chosen. Of the respondents included in this study, 80 percent were relatives, 5 percent boy or girl friends, and 15 percent unrelated individuals, such as neighbor, landlord, physician, or employer. The respondents' reports of the precipitating circumstances may not be substantially different from the self-reports even though a significant difference was found between the two (table 8). A larger proportion of the respondents (18 percent) than of those making the attempt (4 percent) gave mental disorder as the reason, but the difference may be more apparent than real since a larger proportion of those making the attempt (29 percent) than of the respondents (19 percent) were not interviewed. As

mentioned previously, physical and mental conditions were the principal reasons for not interviewing those who attempted suicide.

Fifteen percent of the total group were reported to be in poor health, a category limited to health problems, acute or chronic, in the 6-month period prior to the attempt. Only 1 percent were reported to be in good health; and for 84 percent, the police record gave no information. This lack might be interpreted to mean that the police did not consider poor health as a contributing factor in these cases. Based on this assumption, the analysis showed age and race but no sex differences. Poor health was reported more frequently among persons 45 years and older (34 percent) than among those under 45 (10 percent), and more frequently among whites (17 percent), than among nonwhites (10 percent).

The mental condition of the attempted suicides was classified into three categories: presumably normal, nervous or mental disorder, and mood or behavioral symptoms, including alcoholism. A person was classified as suffering from a nervous or mental condition if he had ever been hospitalized or had consulted or been treated by a physician for a nervous or mental condition. Excluded from this category were a few persons who at one time had been treated for a mental condition but had made a satisfactory adjustment for many years prior to the attempt.

A person was classified as showing disturbance of mood or behavioral symptoms, including alcoholism, if these symptoms had extended over a period of time, in contrast to brief situational reactions, and he had not consulted or

**Table 9. Attempted suicides under medical care, by race and sex (in percentages), Philadelphia, 1959-61**

Supervision	White		Nonwhite		Total (N=1,112)
	Male (N=261)	Female (N=516)	Male (N=94)	Female (N=241)	
Physician other than psychiatrist.....	19	32	4	10	22
Psychiatrist.....	9	10	7	4	8
Both.....	1	2	1	1	1
Unspecified.....	1	1	0	0	1
None.....	1	2	0	1	1
Not stated.....	69	53	87	84	66

been under the care of a physician. Twenty-one percent of the total sample were reported to be suffering from a nervous or mental condition; 25 percent to be showing mood or behavioral symptoms; and for 53 percent, the police record gave no information.

Again, on the assumption that the lack of information indicated that the police did not consider nervous or mental disorder as a contributing factor in these cases, the analysis showed age and race, but no sex differences. Nervous or mental disorder and mood or behavioral symptoms were reported more frequently among persons 45 years and older (63 percent) than among those under 45 (41 percent) and more frequently among whites (53 percent) than among nonwhites (30 percent).

Of the total group, 32 percent had been under medical supervision within the 6-month period preceding the attempt (table 9): 22 percent under the supervision of a physician other than a psychiatrist (often for a nervous and mental condition), 8 percent under the supervision of a psychiatrist, 1 percent under both, and 1 percent under unspecified care. For two-thirds of the cases, there was no information about medical supervision. Assuming that no information meant no supervision, the analysis showed age and race differences in the same direction as those found for physical health and mental condition: medical supervision was reported more frequently among persons 45 years and older (43 percent) than among those under 45 (29 percent) and more frequently among whites (40 percent) than among nonwhites (15 percent).

Although no sex differences were found with respect to reported poor physical health and nervous or mental disorder, medical supervision was reported more frequently for women (36 percent) than for men (25 percent). The greater utilization of medical care by women than by men is also found in the general population (10).

Thirty-one percent of the total group stated that they intended to kill themselves, 12 percent that they did not, and for 57 percent, no information was available on this point. Seven percent of the group were reported to have made previous attempts, 4 percent threats, and 1 percent both attempts and threats; 12 per-

cent had made no previous attempts or threats, and for 76 percent, there was no information. No sex, race, or age comparisons were made because of the large number of "not-stated's" with respect to intent to kill and previous threats.

Eight percent left a suicide note, 1 percent did not, and for the remainder the police report gave no information. It seems reasonable to say that no note was left in most of the not-stated instances since the police make a very careful search for suicide notes. Based on this assumption, there were race and age differences: a suicide note was left more frequently by whites (10 percent) than by nonwhites (5 percent), and by persons 45 years and older (13 percent) than by those under 45 (7 percent).

The disposition of the persons following the attempt shows that 30 percent were brought by the police on their own initiative or on the advice of the attending hospital physician to the reception center, the major psychiatric evaluation center in Philadelphia operated by the Department of Public Welfare of the Commonwealth of Pennsylvania. Five percent were referred to other psychiatric resources in the community, 1 percent to the family physician and 3 percent to other sources of help such as a social agency, clergyman, or lawyer. In 43 percent of the cases, the person making the attempt was treated at the hospital and discharged to his own custody or that of a relative without referral to specialized resources, or the disposition was unknown because the person was so ill as to require hospitalization. In 19 percent, the disposition was not known but the person was currently under general medical supervision; presumably in a number of these cases, the physician was made aware of the attempt.

## Discussion

This study has provided information about the relationship of attempted suicide to a number of factors such as age, sex, race, place of residence, and method, but to arrive at a better understanding of how to prevent suicide, much more needs to be known about other personal and social characteristics of individuals attempting to take their own lives. For some characteristics, such as marital status, occupa-

tion, employment status, and educational background, data can be gathered routinely with a minimum of effort. For others, such as circumstances leading to the attempt; previous patterns of adjustment to home, job, and community; and the ability to utilize specialized resources for help with personal problems, more skill is required. For still others, such as intent (Did the person really want to kill himself?); motivation (What did the individual hope to gain by the attempt?); and attitude toward death, factors which are elusive because of the important part played by unconscious forces, still greater skill is required. It is apparent that the kind of information sought can be obtained only when the methods for seeking it are planned.

Reports from only two sources, the police department and the poison control center, indicate that about 700 persons, of whom 10 percent are children and adolescents under age 18, attempt suicide each year in Philadelphia. In addition, about 200 persons succeed in taking their own lives. At present, Los Angeles appears to be the only community with a professionally staffed suicide prevention center, but the statistics for Philadelphia as well as those for the country as a whole suggest the pressing need for more suicide control programs. Such programs may include the following aspects.

1. Evaluation and referral services for persons showing suicidal thinking and behavior.

2. Consultation services for physicians, social agencies, and the community at large with respect to potential suicides.

3. Community education, including the preparation of suitable educational materials with emphasis on diagnosis, prevention, and treatment. The introduction of material on suicide in the medical school curriculum would be very helpful.

4. Development of followup procedures for attempted suicides with special emphasis on children and young adults.

5. Casefinding to obtain a more accurate estimate of suicidal behavior in the community as well as to gather systematically data about the individual's developmental background, life experience, personality structure, and environmental stresses. These steps may lead to identification of pertinent factors in suicidal behavior and to measures for prevention.

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### National Conference on Air Pollution

A national conference on air pollution, sponsored by the Public Health Service, will be held at the Sheraton-Park Hotel in Washington, D.C., on December 10-12. For information, write the Executive Secretary, National Conference on Air Pollution, Public Health Service, U.S. Department of Health, Education, and Welfare, Washington 25, D.C.