The Carter-Jenkins Center presents
Adult Suicide

by

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Suicide

Though the info here presented refers mostly to the United States this is really a universal problem with 37 countries having higher rates of suicide than the U.S.

Suffice it to say that in the year 2000 the World Health Organization estimated that approximately one million people will die by suicide across the world and that 10 to 20 times more people would attempt suicide.

This represents one death every 40 seconds and one attempt every 3 seconds on average.
Figure 1 - Global suicide rates (per 100,000), by gender, 1950-1995

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>10.1</td>
<td>16.6</td>
<td>5.2</td>
</tr>
<tr>
<td>1955</td>
<td>12.3</td>
<td>17.5</td>
<td>7.4</td>
</tr>
<tr>
<td>1960</td>
<td>10.9</td>
<td>14.9</td>
<td>7.0</td>
</tr>
<tr>
<td>1965</td>
<td>11.6</td>
<td>16.7</td>
<td>6.7</td>
</tr>
<tr>
<td>1970</td>
<td>13.2</td>
<td>20.0</td>
<td>7.7</td>
</tr>
<tr>
<td>1975</td>
<td>14.1</td>
<td>23.2</td>
<td>8.0</td>
</tr>
<tr>
<td>1980</td>
<td>15.8</td>
<td>24.1</td>
<td>8.0</td>
</tr>
<tr>
<td>1985</td>
<td>14.0</td>
<td>21.4</td>
<td>7.4</td>
</tr>
<tr>
<td>1990</td>
<td>13.9</td>
<td>21.0</td>
<td>6.8</td>
</tr>
<tr>
<td>1995</td>
<td>16.0</td>
<td>24.7</td>
<td>6.9</td>
</tr>
</tbody>
</table>
Table 2 - Ranking of the top ten countries by number of suicides (estimated by the year 2000) and suicide rates (most recent year available).

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of suicides</th>
<th>Rate per 100,000</th>
<th>Ranking by suicide rate</th>
<th>Country</th>
<th>Number of suicides</th>
<th>Rate per 100,000</th>
<th>Ranking by number of suicides</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>195,000</td>
<td>16.1</td>
<td>24</td>
<td>Lithuania</td>
<td>1,600</td>
<td>41.9</td>
<td>22</td>
</tr>
<tr>
<td>India</td>
<td>87,000</td>
<td>9.7</td>
<td>45</td>
<td>Estonia</td>
<td>600</td>
<td>40.1</td>
<td>25</td>
</tr>
<tr>
<td>Russia</td>
<td>52,500</td>
<td>41.5</td>
<td>3</td>
<td>Russia</td>
<td>52,500</td>
<td>37.6</td>
<td>3</td>
</tr>
<tr>
<td>USA</td>
<td>31,000</td>
<td>11.9</td>
<td>38</td>
<td>Latvia</td>
<td>850</td>
<td>33.9</td>
<td>23</td>
</tr>
<tr>
<td>Japan</td>
<td>20,000</td>
<td>16.8</td>
<td>23</td>
<td>Hungary</td>
<td>3,000</td>
<td>32.9</td>
<td>16</td>
</tr>
<tr>
<td>Germany</td>
<td>12,500</td>
<td>15.8</td>
<td>25</td>
<td>Sri Lanka</td>
<td>5,400</td>
<td>31.0</td>
<td>9</td>
</tr>
<tr>
<td>France</td>
<td>11,600</td>
<td>20.7</td>
<td>14</td>
<td>Kazakhstan</td>
<td>4,500</td>
<td>28.6</td>
<td>13</td>
</tr>
<tr>
<td>Ukraine</td>
<td>11,000</td>
<td>22.6</td>
<td>11</td>
<td>Belarus</td>
<td>2,800</td>
<td>28</td>
<td>17</td>
</tr>
<tr>
<td>Brazil</td>
<td>5,400</td>
<td>3.5</td>
<td>71</td>
<td>Slovenia</td>
<td>600</td>
<td>26.6</td>
<td>24</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>5,400</td>
<td>31.0</td>
<td>7</td>
<td>Finland</td>
<td>1,300</td>
<td>24.3</td>
<td>21</td>
</tr>
</tbody>
</table>
Map of Suicide rates
(per 100,000, most recent year available as of March 2002)

Taken from the WHO
Suicide

1) In the United States, in 2006, 33,300 persons committed suicide and well over 30,000 suicide each year before that.

2) Thus, suicide is the eleventh leading cause of death in this country but the third for the young.

3) Estimating suicide attempts (modestly) at 10 times the reported number of suicides, at least 300,000 persons attempt suicide in any given year.
Suicide: General Information

4) By this time tomorrow 84 persons would have taken their own lives, that is one every 17 minutes and at least 800 would have attempted to do so.

5) An average of three to four men complete suicide for each woman. Women on the other hand attempt suicide three times as frequently as men do.

6) The rate among married persons is 11.3 per 100,000.
Suicide: General Information

7) The rate among single, never married, is about 20 per cent per 100,000

8) Rate for widowed males is 24 per 100,000

9) Rate for divorced males is 69 per 100,000 while for divorced females is only 18 per 100,000
### Methods by Gender/Sex

<table>
<thead>
<tr>
<th>Method</th>
<th>Men - Percent of Total</th>
<th>Men - Number of Suicides (24,538 total)</th>
<th>Men</th>
<th>Women - Percent of Total</th>
<th>Women - Number of Suicides (6,037 total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms and Explosives</td>
<td>61.6%</td>
<td>15,104*</td>
<td>38.4%</td>
<td>2,320</td>
<td></td>
</tr>
<tr>
<td>Hanging, Strangulation, Suffocation</td>
<td>19.2%</td>
<td>4,713</td>
<td>16.8%</td>
<td>1,013</td>
<td></td>
</tr>
<tr>
<td>Gas Poisons</td>
<td>5.4%</td>
<td>1,322</td>
<td>6.7%</td>
<td>404</td>
<td></td>
</tr>
<tr>
<td>Solid &amp; Liquid Poisons</td>
<td>7.0%</td>
<td>1,709</td>
<td>27.1%</td>
<td>1,637</td>
<td></td>
</tr>
<tr>
<td>All Other Methods (total)</td>
<td>6.9%</td>
<td>1,690</td>
<td>11.0%</td>
<td>663</td>
<td></td>
</tr>
<tr>
<td>Jump from high place</td>
<td>1.8%</td>
<td>432</td>
<td>3.1%</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>Cutting &amp; Piercing</td>
<td>1.6%</td>
<td>388</td>
<td>1.5%</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>Drowning</td>
<td>1.0%</td>
<td>236</td>
<td>2.3%</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td>Jump/Lie before moving object</td>
<td>1.0%</td>
<td>248</td>
<td>1.2%</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>
By Gender in 2006

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number of Suicides</th>
<th>Population</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>26,308</td>
<td>147,160,189</td>
<td>17.9</td>
</tr>
<tr>
<td>Females</td>
<td>6,962</td>
<td>151,594,830</td>
<td>4.6</td>
</tr>
<tr>
<td>Total</td>
<td>33,300</td>
<td>298,754,819</td>
<td>11.2</td>
</tr>
</tbody>
</table>

Figures from the National Center for Health Statistics for the year 2006. All rates are per 100,000 population.
By age in 2006

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of Suicides</th>
<th>Population</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-14</td>
<td>219</td>
<td>40,260,779</td>
<td>0.5</td>
</tr>
<tr>
<td>15-24</td>
<td>4,189</td>
<td>42,268,411</td>
<td>9.9</td>
</tr>
<tr>
<td>25-34</td>
<td>4,985</td>
<td>40,182,221</td>
<td>12.4</td>
</tr>
<tr>
<td>35-44</td>
<td>6,501</td>
<td>43,554,885</td>
<td>15.1</td>
</tr>
<tr>
<td>45-54</td>
<td>7,426</td>
<td>43,226,850</td>
<td>17.2</td>
</tr>
<tr>
<td>55-64</td>
<td>4,583</td>
<td>31,556,836</td>
<td>14.5</td>
</tr>
<tr>
<td>65-74</td>
<td>2,384</td>
<td>18,909,923</td>
<td>12.6</td>
</tr>
<tr>
<td>75-84</td>
<td>2,075</td>
<td>13,057,166</td>
<td>15.9</td>
</tr>
<tr>
<td>85+</td>
<td>840</td>
<td>5,285,976</td>
<td>15.9</td>
</tr>
<tr>
<td>Unknown</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33,300</td>
<td>298,754,819</td>
<td>11.2</td>
</tr>
</tbody>
</table>

Figures from the National Center for Health Statistics for the year 2006.
All rates are per 100,000 population.
10) Suicide rates are highest in older white men

11) Almost all suicide victims are psychiatrically ill at the time of death

12) Many suicide victims had been in psychiatric treatment shortly before the event

13) All studies show depression and alcoholism as the diagnoses accounting for 2/3 of all suicides
14) Severe depressed patients were 500 times more likely to commit suicide than men with no psychiatric diagnoses.

15) Undesirable events such as blows to self-esteem, object loss, personal sickness preceded suicide frequently.

16) Humiliating events in the areas of work and legal problems were especially ominous.
Suicide in women: General Information

1) Suicide more common among single women, divorced, separated or widowed recently
2) As mentioned they attempt suicide three times more frequently than men
3) Problems, losses or crisis in social or family relations tend to be the triggering factor in females
4) Suicide rates in women peak between the ages of 45 and 54, and after 75 years of age
5) The frequency of completed suicide for females is 4.5/100,000
6) Firearms are nowadays the preferred method in women
Suicide in men: General Information

1) **In men** suicides increase with age and more so after 65+
2) Thus, rate of suicide at 65+ is seven times higher than in women of same age
3) On average there is an elderly suicide every 90 minutes. Depression and social isolation are determinant factors
4) Men **complete suicide 4 times more frequently than women**
5) Men’s completed suicides peak between 45 and 54 and after 75 years of age, when rate is 37.97%/100,000
6) Rate of completed suicide for all men is 17.9%/100,000
7) The leading method of suicide in men is firearms
1) The stress of war is a significant factor. Suicide among active duty and veteran military personal has increased tremendously since 2003.

2) In 2007 up to 2,100 soldiers in the Army attempted suicide with more than a hundred completions

3) One in five people who complete suicide in the US is a military veteran
Suicides and the Emergency Rooms

- In 2005, 372,722 people went to an emergency room for self inflicted injuries (suicide and mutilations)

- In 2006, 162,359 people were hospitalized for self inflicted injuries

- In 2006, intentional injuries accounted for 2.5 million (5.9%) visits to Emergency Departments
Suicide: Methods used

Methods vary with locality, “tradition”, economic means, etc:

- Firearms
- Hanging
- Medications, drugs or poisons
- Gas poisoning
- Carbon monoxide (cars, garages etc)
- Jumping from buildings, bridges, etc
- Jumping in front of trains, cars, etc
- Cutting, stabbing, and slashing
- Drowning (V.W)
# Methods of Suicide: Detailed (1998 data)

## National Figures

<table>
<thead>
<tr>
<th>Method</th>
<th>Percent of Total (30,575 suicides)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms and explosives</td>
<td>57.0%</td>
</tr>
<tr>
<td>Hanging, strangulation, suffocation</td>
<td>18.7%</td>
</tr>
<tr>
<td>Solid &amp; Liquid Poisons</td>
<td>10.9%</td>
</tr>
<tr>
<td>Gas Poisons</td>
<td>5.6%</td>
</tr>
<tr>
<td>All Other Methods</td>
<td>7.7%</td>
</tr>
<tr>
<td>&quot;All Other&quot; category includes:</td>
<td></td>
</tr>
<tr>
<td>Jump from high place</td>
<td>2.0%</td>
</tr>
<tr>
<td>Cutting &amp; Piercing</td>
<td>1.6%</td>
</tr>
<tr>
<td>Drowning</td>
<td>1.2%</td>
</tr>
<tr>
<td>Jump/Lie before moving object</td>
<td>1.0%</td>
</tr>
<tr>
<td>Burns, Fire</td>
<td>0.5%</td>
</tr>
<tr>
<td>Crashing of motor vehicle</td>
<td>0.4%</td>
</tr>
</tbody>
</table>
Suicide: Methods used

1) In 2006 firearms accounted for 16,883 deaths out of the total of 33,000 completed suicides (5.6%/100,000 of population)

2) Suffocation accounted for 7,491 deaths (2.5%/100,000)

3) Poisoning accounted for 6,109 deaths (2%/100,000)

4) Suicides account for 1.3% of all deaths in the USA
Identification of risks factors
Nosology and Suicide:

A) In Depression
B) In Alcohol Abuse
C) In Schizophrenia
D) In Bipolar Disorders
E) In Panic Disorder
F) In Medical Illness
G) Creativity / Depression
H) PTSD
I) Eating Disorders
J) Personality Disorders
A) In Depression

1) Most depressed people are not suicidal. Nevertheless, as a risk factor depression is at the top of the list. It is a factor in 40 to 70% of suicides. 2/3 of those that die by suicide had depressive illness (*).

2) 30% of depressed people will attempt suicide.

3) Psychotic depressions are at 5.3 times higher risk than non-psychotic depressed patients.

4) Adult patients with mixed states, or undergoing a switch in polarity are particularly vulnerable to suicide.
5) A new recent study from Harvard Medical School published online March 31, 2009 published in *Molecular Psychiatry* (*) claimed that though depression is the most frequent cause of suicidal ideation, it does not predict as well whether they will make a suicidal plan or an attempt.

6) However they thought that anxiety disorders, impulse control disorders, and substance abuse disorders did

7) Thus, individuals thinking of suicide that had had a bipolar disorder were more than twice as likely to make a planned suicide attempt as individuals without this illness

(*) Published in Psychiatric News/July 3, 2009
B) In Alcohol Abuse and/or Drugs

1) Alcohol abuse is a very high risk factor

2) 21 to 89% of the time has been consumed prior to suicide

3) Because it disinhibits, individuals overcome their fears or constraints to commit suicide and/or their prohibitions against violence

4) Suicide usually coincides with the onset of medical complications (cirrhosis) or the loss of an important relationship (frequently within six weeks or less of the time of the suicidal act)
B) In Alcohol Abuse and/or Drugs (cont)

5) Toxicology tests in 13 States of those who committed suicide showed:

- 33.3% tested positive for alcohol
- 16.4% tested positive for opiates
- 9.4% tested positive for cocaine
- 7.7% tested positive for marijuana
- 3.9% tested positive for amphetamines (*)
C) In Schizophrenia

1) The risk of suicide in schizophrenia is comparable to that of patients with affective disorders, i.e. 10 to 13%.

2) The risk is greater early in the hospitalization and just after discharge.

3) Hopelessness and fear of mental disintegration were more critical than psychotic symptoms in the prediction of suicide.

4) 20 to 40% of schizos make attempts and 10% will complete them eventually.
E) In Medical Illness

1) Terminal illnesses accompanied by pain, loss of function, alienation, disfigurement, etc., may precipitate suicide in the vulnerable patient.

2) Important to remember that most medically ill patients that commit suicide, even those with terminal illnesses, have a concurrent treatable major depression.

3) Common in Cancer, Parkinson’s Disease, Stroke, Heart Disease and Alzheimer.
Creativity / Depression

1) Poets are likely to suffer 4 times more frequently from depression and as such may be at greater risk of suicide. Dickinson, Eliot and Poe suffered from it.

2) Writers too: Balzac, Conrad, Dickens, Emerson, Faulkner, Fitzgerald, Ibsen, Melville, Tolstoi, Virginia Woolf, etc

3) Musicians as well such as Rachmaninoff, Schuman and Tchaikovsky, Irving Berlin, Charlie Parker and Cole Porter.

4) Painters like Van Gogh, Gaugin, Jason Pollock, Georgia O’Keeffe, Mark Rotho, etc
Clinical Assessment of Risk

1) Suicidality exists as a spectrum going from:

a) non-specific suicidal ideation, such as thoughts of death

b) to thoughts of one’s own death

c) and finally to suicidal thoughts with a plan and intent to die
Clinical Assessment of Risk

2) Hopelessness is a better predictor of suicidal thinking than is depression per se

3) A history of previous attempts significantly increases the suicide risk

4) Other issues of importance are:
   a) psychiatric diagnosis
   b) suicidal intent
   c) method contemplated
   d) severity of the hopelessness
Clinical Assessment of Risk

5) **Essential to diagnose the presence or history of:**
   a) affective disorder
   b) substance abuse (including alcoholism)
   c) schizophrenia
   d) panic disorder

6) **All the above significantly linked to self-destruction**
7) Contributory factors cutting across psychiatric syndromes include:

a) previous suicidal behavior
b) exposure to suicide (intra or extra familial)
c) other family environmental stressors
d) personality variables
e) medical illness
8) Remember that two psychiatric illnesses account for 65 to 75% of suicides:
   a) depression accounts for 40 to 70%
   b) alcoholism accounts for up to 25%

9) The wish to die also known as suicidal intent, should cause the greatest concern
Clinical Assessment of Risk

10) Admit immediately to a secure psychiatric facility:
   a) patients with formulated lethal plans
   b) patients who possess (or can acquire easily) the means to carry it out

11) Patient who leave notes, make wills, express suicidal intent, taking precautions not to be discovered, have generally high suicidal intent
12) Remember, the single, divorced or widowed are statistically speaking, at greater risk than the married

13) The idea that prediction of suicide is an easy matter is totally false at this time

14) Warning signs are: giving away precious possessions, withdrawing from friends and activities, sudden or impulsive purchase of a firearm, etc
Murder-Suicide

- More frequently enacted by men though cases of women are known

- Causes vary:
  - spousal abuse common background to it
  - occasionally depressed patients may kill members of the family and then suicide
  - occasionally psychotic delusional patients
  - merciful killings followed by suicide
Bibliography

World Health Organization at.:
www.who.int/violence_injury_prevention

American Foundation for Suicide Prevention at.:
www.afsp.org

CrisisLink at.:
www.crisislink.org/resources/suicide/index.html

Center Disease Control at.:
www.cdc.gov/injury
This has been an International informational community service of
The Carter Jenkins Center

(Nothing mentioned here should be implemented without consultation with professionals)

Any Questions?

Please visit our Web page for info about further programs at:

www.thecjc.org
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by

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production
The End

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