

Suicide in Youth: Epidemiology, Assessment and Treatment

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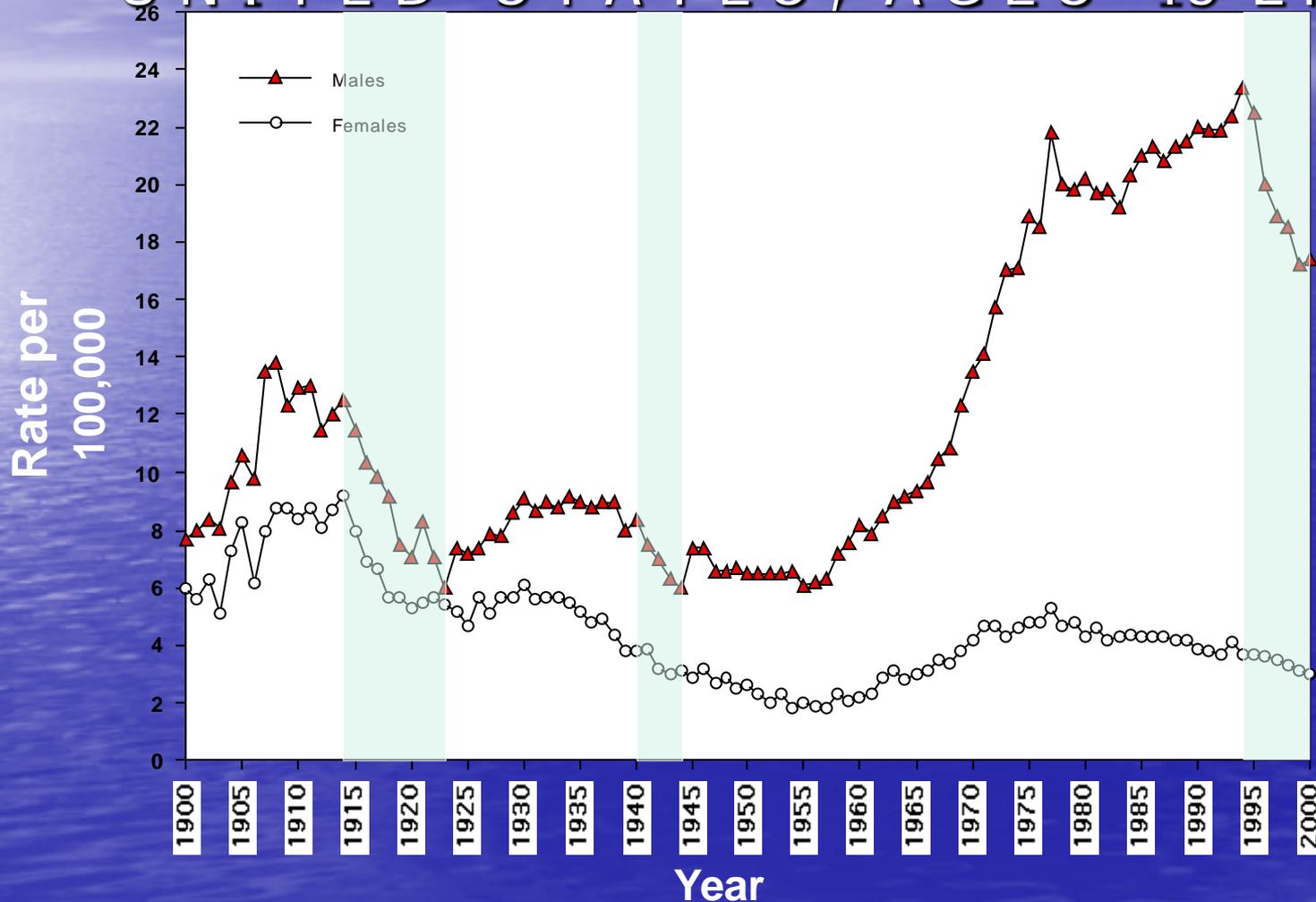
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Overview

- Definition
- Epidemiology of Suicide
- Suicide increasing teens and young adults
- Suicide Methods In Idaho and US
- Recognizing high risk patients
- Treatment

FLUCTUATIONS IN 20TH-CENTURY YOUTH SUICIDE RATES

— UNITED STATES, AGES 15–24 —



Leading Causes of Death in the United States (2016)

Data Courtesy of CDC

Rank	Select Age Groups							
	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Unintentional Injury 847	Unintentional Injury 13,895	Unintentional Injury 23,984	Unintentional Injury 20,975	Malignant Neoplasms 41,291	Malignant Neoplasms 116,364	Heart Disease 507,118	Heart Disease 635,260
2	Suicide 436	Suicide 5,723	Suicide 7,366	Malignant Neoplasms 10,903	Heart Disease 34,027	Heart Disease 78,610	Malignant Neoplasms 422,927	Malignant Neoplasms 598,038
3	Malignant Neoplasms 431	Homicide 5,172	Homicide 5,376	Heart Disease 10,477	Unintentional Injury 23,377	Unintentional Injury 21,860	CLRD 131,002	Unintentional Injury 161,374
4	Homicide 147	Malignant Neoplasms 1,431	Malignant Neoplasms 3,791	Suicide 7,030	Suicide 8,437	CLRD 17,810	Cerebro-vascular 121,630	CLRD 154,596
5	Congenital Anomalies 146	Heart Disease 949	Heart Disease 3,445	Homicide 3,369	Liver Disease 8,364	Diabetes Mellitus 14,251	Alzheimer's Disease 114,883	Cerebro-vascular 142,142
6	Heart Disease 111	Congenital Anomalies 388	Liver Disease 925	Liver Disease 2,851	Diabetes Mellitus 6,267	Liver Disease 13,448	Diabetes Mellitus 56,452	Alzheimer's Disease 116,103
7	CLRD 75	Diabetes Mellitus 211	Diabetes Mellitus 792	Diabetes Mellitus 2,049	Cerebro-vascular 5,353	Cerebro-vascular 12,310	Unintentional Injury 53,141	Diabetes Mellitus 80,058
8	Cerebro-vascular 50	CLRD 206	Cerebro-vascular 575	Cerebro-vascular 1,851	CLRD 4,307	Suicide 7,759	Influenza & Pneumonia 42,479	Influenza & Pneumonia 51,537
9	Influenza & Pneumonia 39	Influenza & Pneumonia 189	HIV 546	HIV 971	Septicemia 2,472	Septicemia 5,941	Nephritis 41,095	Nephritis 50,046
10	Septicemia 31	Complicated Pregnancy 184	Complicated Pregnancy 472	Septicemia 897	Homicide 2,152	Nephritis 5,650	Septicemia 30,405	Suicide 44,965

SEROTONIN AND THE CLINICAL FEATURES OF SUICIDE

- Autopsy studies: Abnormalities in serotonergic neurons, serotonin transport, receptor binding and Serotonin levels in key areas of the brain impacting conduction
- Decreased/underactivation of serotinergetic activity:
 - associated with excitable, impulsive, and violent behavior
- Serotonergic activity/conduction is reduced
 - *in males, after alcohol/drug use, in the elderly*
- *Role of Glutamate and it's interaction on Serotonin function*

The Serotonin system in Mood disorder; Jj Mann, Biol Sci 2013

TEEN SUICIDE METHODS

15-19 year olds

- Firearms: U.S. 63%, Idaho - 74%
- Hanging: U.S. 25%, Idaho - 17%
- Ingestion: 3% and 3%
- Co poisoning: 3% and 2%
- Jumping from height 2% and 0
- Other: 4% and 4%

CDC 2003 (WISQARS) (*accessed 06/15/03*)

Demographic risk factors

- Young and Elderly White non-Hispanic Men
- Native American or Caucasian
- Being single (widowed > divorced > separated > single)
- Economic or occupational stress, losses
- New incarceration: humiliation
- History of gambling: impulsivity
- ***Easy access to firearms***
- ***Social Isolation***

Factors Specific to Youth associated with suicide attempts

- Unwanted pregnancy
- ***Lack of family support***
- History of abuse
- School problems
- Social ostracism
- Conduct disorder
- ***Homosexual orientation***
- ***Hx of cutting***

Predictors of Suicide Attempts in Suicide Ideators

- Current SI, then past SI
- Previous serious suicide attempts
- Feeling like a burden/lack of belongingness
- Reasons to live/hopelessness
- Social Isolation/hx of not telling others
- Access to Lethal means
- Family hx of suicide
- Command voices to hurt self
- Intoxication with Alcohol/drugs

Management and Treatment of suicidal adolescent patients

- Hospitalization
- Outpatient Treatment
- Psychotherapy
- Medication
- Exercise
- Eat Healthy/diet

CURRENT "WISDOM"

- "Suicide is a fatal complication of an untreated or undertreated, and less frequently untreatable bio-psychosocial condition"