New Jersey Department of Children and Families

2014 Youth Suicide Report

A Data Overview Report on Youth Suicide in New Jersey

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Commissioner

Every life lost to suicide is a tragedy and the New Jersey Department of Children and Families (DCF) is committed to decreasing youth suicide. The ***2014 Youth Suicide Data Report*** focuses on youth suicide and suicide attempts for New Jersey youth from age 10 to 24. Compared to the national rate, New Jersey continues to have a lower rate of suicide. Nevertheless, one life lost to suicide is one too many. New Jersey has consistently been a leader among states in addressing suicide, conducting public awareness efforts and educating and training direct service providers and the community.

Continuously enhancing the quality of services to even more effectively reduce youth suicide, DCF relies significantly on data. Several data systems and surveys are employed to collect and analyze data, which informs recommendations for legislative and regulatory action. In addition, data guides DCF's suicide prevention and intervention programming.

Through a cooperative agreement with the Centers for Disease Control and Prevention (CDC) and the New Jersey Department of Health, New Jersey is one of 18 states participating in the National Violent Death Reporting System, a central registry for data related to violent deaths, including suicides.

The New Jersey Department of Education participates in CDC's national Youth Risk Behavior Surveillance System (YRBS). As part of the surveillance system, information collected in the ***New Jersey Student Health Survey*** addresses the prevalence of behaviors that are highly related to the causes of preventable premature illness and death among youth and young adults, including suicide.

In collaboration with the New Jersey Youth Suicide Prevention Advisory Council (NJYSPAC), DCF administered a Youth Suicide Prevention State Plan Survey in April 2014. The goal was to identify strengths, gaps, and awareness of suicide prevention resources for youth from age 10 to 24. Over 800 community and direct service providers responded to the survey. The results served as a baseline to help New Jersey update its Youth Suicide Prevention Plan and ensure services are effective.

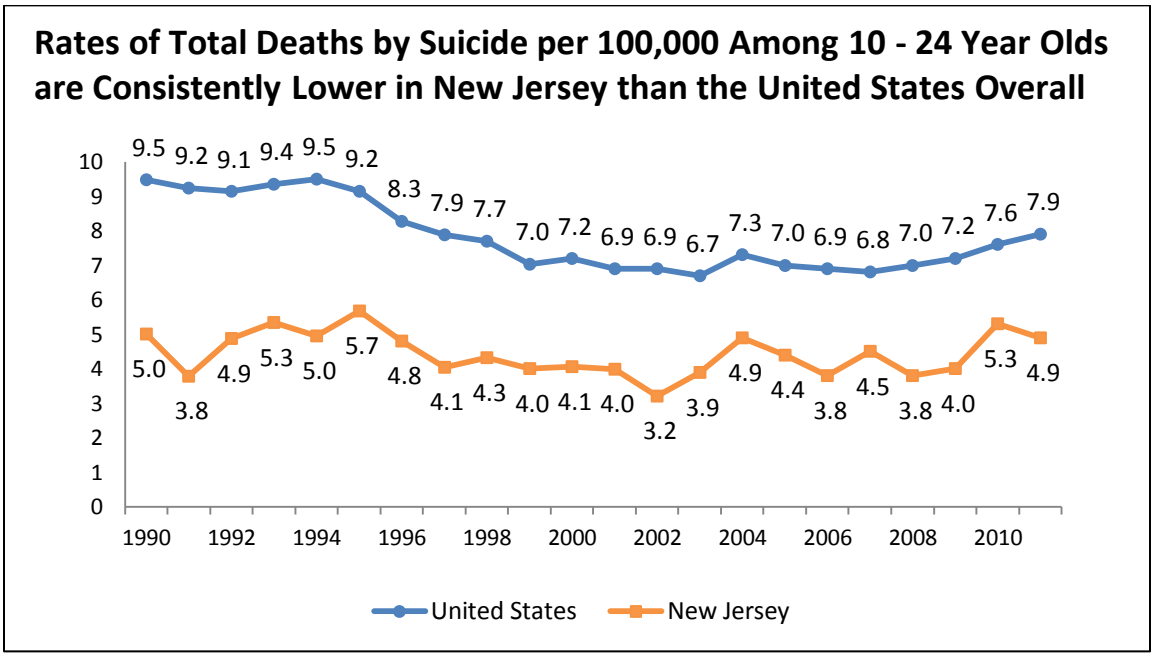
Over the last three years, there has been a slight decrease in the overall rate of suicide in New Jersey. The latest data reveals:

SUICIDES

- Suicide is the third leading cause of death for youth age 10 to 24 in New Jersey.
- Between 2011 and 2013, there were 232 suicides in New Jersey involving youth age 10 to 24.
- In 2013, 73 New Jersey youth age 10 to 24 died by suicide, a rate of 4.2 per 100,000.

- Youth age 19 to 24 continue to die by suicide at a higher rate than youth age 10 to 18.
- Between 2011 and 2013, the primary method of suicide for New Jersey male and female youth ages 10-24 was hanging/strangling/suffocation.

Chart 1



According to CDC, in 2011 suicide was the third leading cause of death for New Jersey youth age 10 to 24 , and the second leading cause of death for youth age 10 to 24 nationally (Web-based Injury Statistics Query and Reporting System - WISQARS Data online).

SUICIDE ATTEMPTS

- Female youth are hospitalized for suicide attempts at a rate of 54.5 per 100,000 youth. The rate for males is 29.0 per 100,000 youth.
- Youth age 10 to 24 were more often treated for nonfatal suicide attempts in the emergency room between 2011 and 2013.
- From 2001 to 2013, the number of students considering suicide declined from 17% to 14%, while the number of students who self-reported attempting suicide increased from 8% to 10%. However, neither of these differences was statistically significant. (CDC-NJ Student Health Survey)

INTRODUCTION

DCF's Family and Community Partnerships (FCP), in collaboration with the New Jersey Department of Health, compiled this report's data, which includes aggregate demographic information about youth from age 10 to 24 who have attempted or completed suicide.

The annual Youth Suicide Report is presented to the Governor, the New Jersey State Legislature, and NJYSPAC by DCF, pursuant to N.J.S.A. 30:9A-27.

DATA OVERVIEW

Four database systems feed the New Jersey Violent Death Reporting System, providing data to assess suicides and suicide attempts.

Electronic Death Reporting System (EDRS): Funeral directors, medical examiners, and physicians have access to, and enter data into, this system.

Report Investigation of the Medical Examiner (RIME): This state database collects data from the county database system. County medical examiners enter data, which is analyzed by the state medical examiner.

Law enforcement: Includes details from local and state police reports as well as reports from the prosecutor's office.

New Jersey Hospital Discharge Data Collection System (NJHDDCS): This database collects nonfatal emergency room data and inpatient hospitalizations. Utilization data includes admission and discharge dates, hospital codes, services rendered, charges, and type of insurers.

YOUTH RISK BEHAVIOR SURVEY

The national ***Youth Risk Behavior Survey (YRBS)*** is conducted every two years during the spring semester and provides data representative of 9th through 12th grade students in public and private schools throughout the United States. The ***New Jersey Student Health Survey (NJSHS)*** was administered to a sample of public high school students during the spring of 2013 by the New Jersey Department of Education (NJDOE) and the Bloustein Center for Survey Research at the Edward J. Bloustein School of Planning and Public Policy, Rutgers University.

Among those surveyed, during the past year 29% felt sad or hopeless for two weeks straight, 18% harmed themselves on purpose by cutting or burning without wanting to die, 14% considered suicide, 12% made a suicide plan, and 10% attempted suicide at least once.

YOUTH SUICIDE PREVENTION STATE PLAN SURVEY 2014

In April 2014, DCF's Office of School Linked Services and the Office of Research, Evaluation and Reporting conducted a statewide needs assessment survey.

LESSONS LEARNED

Data collected for this report outlines several ongoing challenges.

1. Real Time Accurate Mortality Data Collection – New Jersey uses standardized forms across the state to collect suicide data, but the manual entry of suicide data into the system varies in several ways, including the definition of suicide, how cases are classified, the investigation of potential suicides, and accuracy of cause of death. Standardizing data entry will ensure the quality, uniformity, and accuracy of suicide data.
2. Data Quality of Nonfatal Suicidal Behavior – New Jersey uses the New Jersey Discharge Data System to collect data on suicide attempts. There is neither a systematic nor mandatory reporting requirement for nonfatal suicidal behavior. This is in contrast to Oregon, which requires hospitals to report any person under age 18 that has attempted suicide. Oregon has standard procedures to collect this information and reports are used to:

    a. Estimate the magnitude of suicide attempts among Oregon adolescents and monitor changes and trends.
    b. Understand factors associated with suicide and suicide attempts among adolescents.
    c. Increase public awareness and develop programs that support suicide prevention.

3. The National Violent Death Reporting System alone cannot provide sufficient data to advance understanding of the risk of death from suicide. It offers little data on interpersonal dynamics, personality profiles, barriers to health service utilization, or detailed medical history. (Bossarte, R. M., & Caine, E. D. (2008).
4. New Jersey has a relatively high number of suicides by train. From 2011 to 2013, New Jersey had 16 deaths by "other land transport" (train). For the most recent three year period available nationally (2009 – 2011), there were 80.
5. Only 38% of Youth Suicide Prevention State Plan Survey respondents felt moderately knowledgeable of youth suicide prevention efforts in their community.
6. Over 80% of respondents believed youth suicide is a problem in New Jersey.

CONFIRMED SUICIDES

Table 1

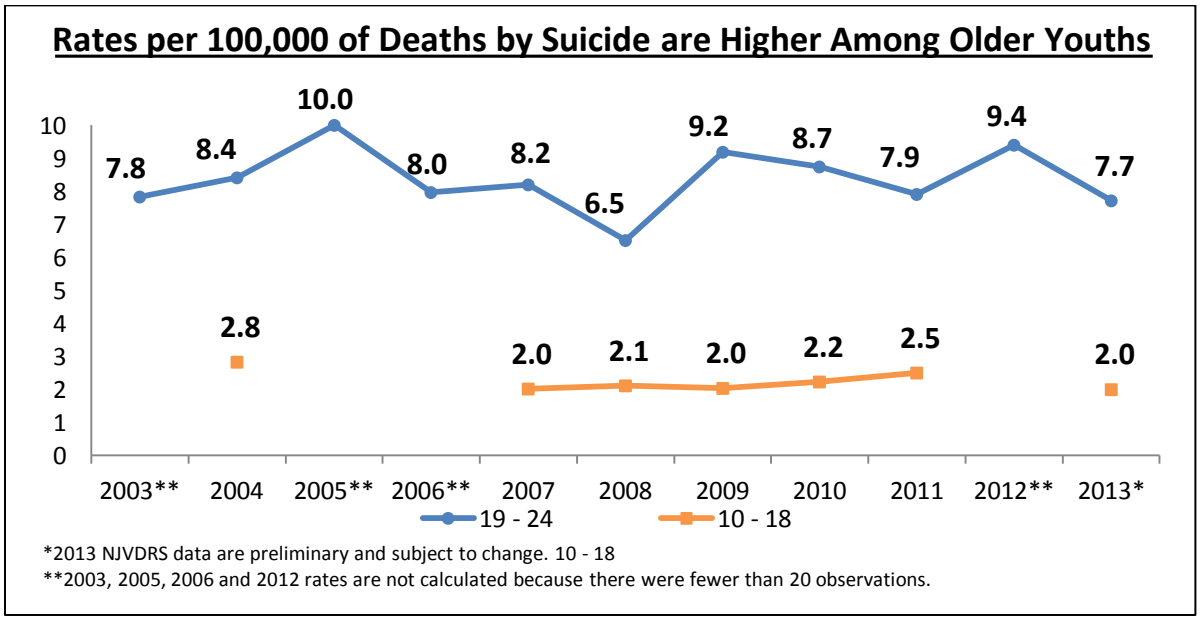
The New Jersey Violent Death Reporting System (NJVDRS) v.09/25/2014 Data

	New Jersey (WISQARS)						New Jersey (NJVDRS)					
	10-18		19-24		Total		10-18		19-24		Total	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
2003	17	**	48	8.0	65	3.9	18	**	47	7.8	65	3.9
2004	32	2.9	52	8.6	84	4.9	31	2.8	51	8.4	82	4.8
2005	20	1.8	55	9.0	75	4.4	17	**	61	10.0	78	4.6
2006	18	**	47	7.6	65	3.8	19	**	49	8.0	68	4.0
2007	20	1.8	57	9.2	77	4.5	22	2.0	51	8.2	73	4.2
2008	20	1.8	46	7.3	66	3.8	23	2.1	41	6.5	64	3.7
2009	22	2.0	46	7.2	68	4.0	22	2.0	59	9.2	81	4.7
2010	27	2.5	65	10.0	92	5.3	24	2.2	57	8.7	81	4.7
2011	27	2.5	58	8.8	85	4.9	25	2.3	48	7.3	73	4.2
2012	Data not available yet.						17	**	63	9.4	80	4.6
2013*	Data not available yet.						21	2.0	52	7.7	73	4.2
Total	203		474		677		241		583		824	

* 2013 NJVDRS data are preliminary and subject to change. **Rates not calculated for fewer than 20 observations.

In 2013, the number of completed suicides by youth age 10 to 18 increased from 17 to 21, while the number of youth age 19 to 24 who completed suicide decreased from 63 to 52. Since the decrease in older youth was larger, the overall total rate for New Jersey decreased from 2012 to 2013.

Chart 2



Youth age 19 to 24 were nearly four times more likely to die by suicide than youth age 10 to 18.

Note: The rate refers to the number of cases occurring during a given time period divided by the population at risk during that same period, multiplied by a unit chosen for standardization (typically 100,000 for deaths). There may or may not be 100,000 people in the population of interest, but multiplying it by this standard unit allows comparison between bigger or smaller populations (counties, age groups, etc.). This is a standard way of calculating statistics in public health so comparisons can be made across different populations. By using rates instead of raw numbers, the occurrence of disease (or, in this case, suicide) in one group can be fairly compared with another.

Age and Gender

Table 2

Suicides by age group and gender, New Jersey, 2011-2013

	Age Group					
	10-18		19-24		Total (10 – 24)	
Gender	N	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000
Male	54	3.3	134	12.9	188	7.1
Female	10	**	33	3.4	43	1.7
Total	64	2.0	167	8.3	232*	4.5

*Total includes 1 youth of unknown gender. **Rates are not calculated for fewer than 20 observations. Rates are per 100,000 age-specific population.

Table 2 above captures the age and gender of the 232 youth suicides in New Jersey over the last three years. The data reveals that 72% (167) of these deaths by suicide were youth age 19 to 24. In this same age category, young men complete suicide at a rate nearly four times higher (12.9) than young women (3.4). In addition, the rate of death by suicide among male youth age 10 to 18 is 3.3, which is also higher than female youth in this same age category. The actual rate of suicide among female youth age 10 to 18 is not calculated because there were fewer than 20 deaths in this group.

Race and Ethnicity

Table 3

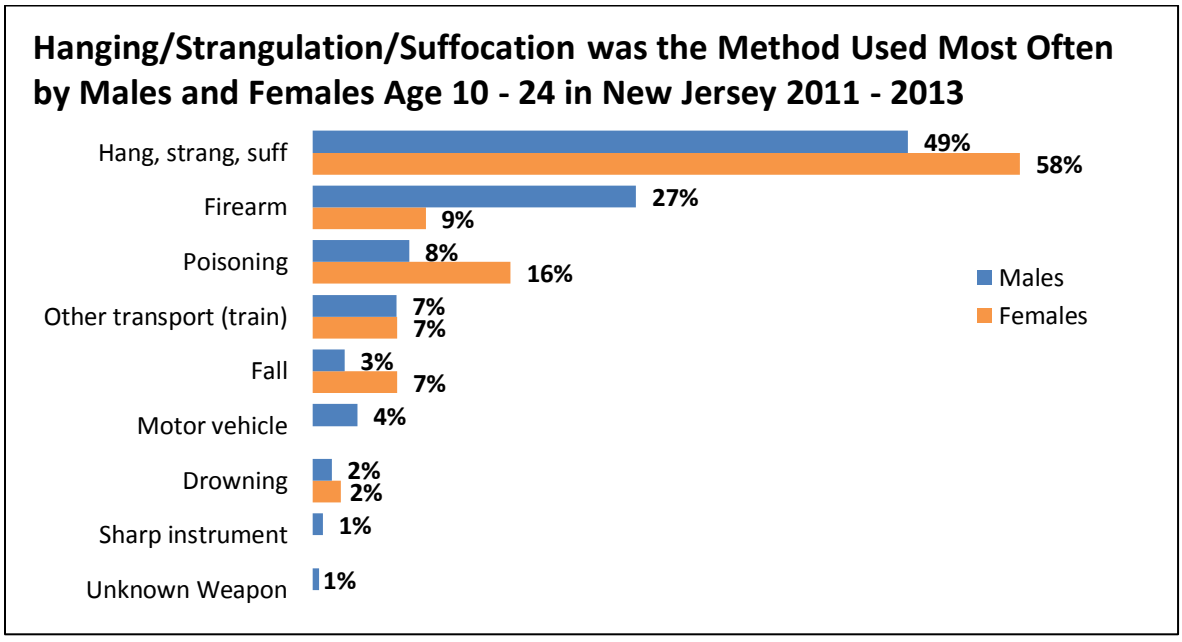
Suicides by age group and race/ethnicity, New Jersey, 2011-2013

Race/Ethnicity	Age Group					
	10-18		19-24		Total 10-24	
	N	Rate per 100,000	N	Rate per 100,000	N	Rate per 100,000
White Non-Hispanic	44	2.5	98	9.7	142	5.2
Black Non-Hispanic	9	**	33	9.8	42	5.1
Hispanic	8	**	24	5.0	32	2.8
Asian/Pacific Islander	3	**	7	**	10	**
Other Race	1	**	5	**	6	**
Total	65	2.0	167	8.3	232	4.5

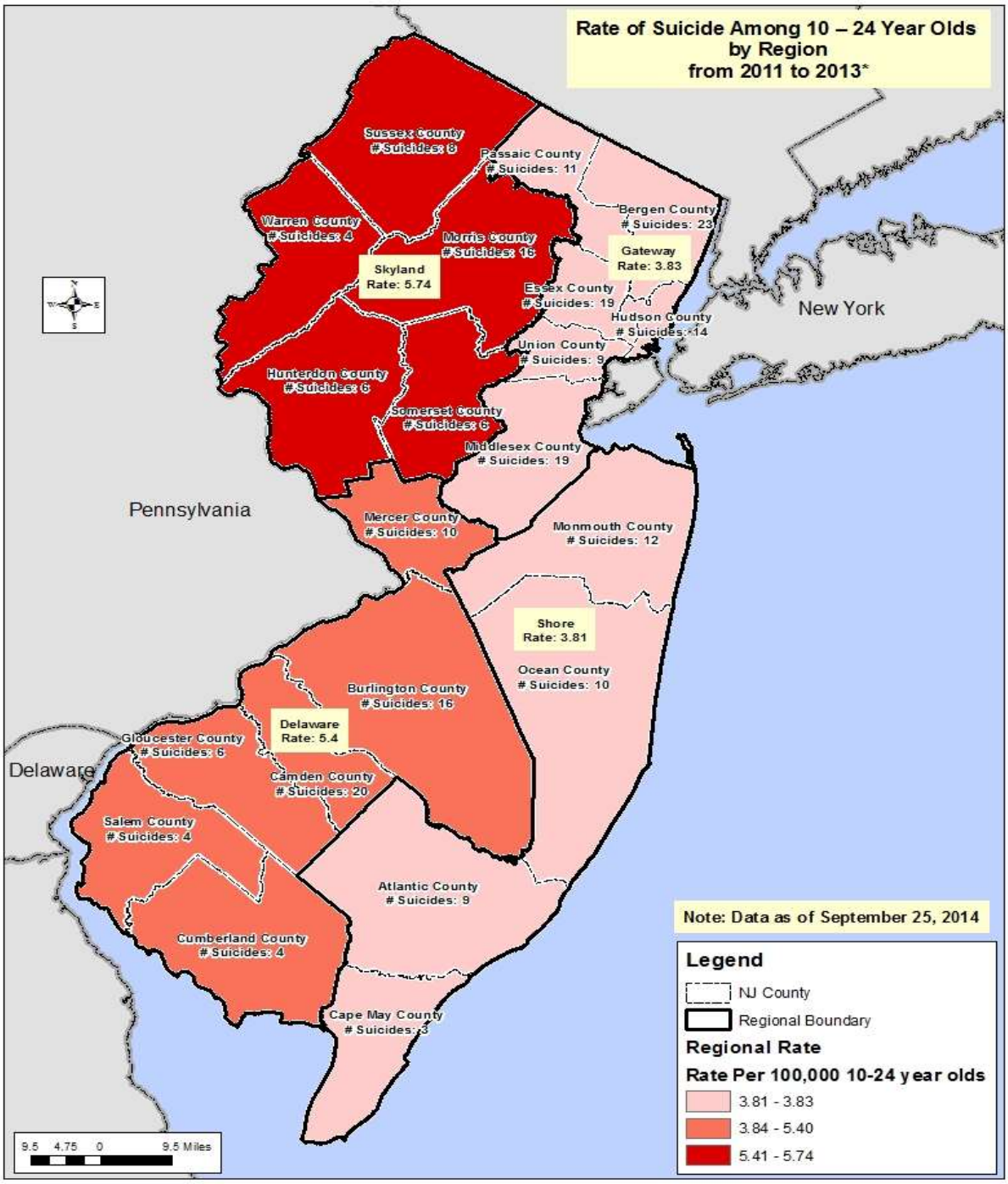
Table 3 above captures the race and ethnicity of the 232 youth suicides in New Jersey over the last three years. Race and ethnicity data should be interpreted with caution because Hispanic youth are often reported as "Other Race" or "White Non-Hispanic." Regardless, based on current data, among those age 10 to 24, non-Hispanic white and black youth complete suicide at nearly the same rate. In comparison, for Hispanic youth age 10 to 24, the rate of death by suicide is 45% lower (2.8).

PRIMARY METHOD

Chart 3



Hanging, strangulation, and suffocation were the most common means of suicide among females and males in New Jersey. Males were three times more likely to use firearms, while females were twice as likely to use poisoning. It is noteworthy that suicide by train is the fourth most common means for both males and females in New Jersey. Compared to national statistics, New Jersey has a relatively high number of suicides by train. According to CDC's NCHS Vital Statistics System (retrieved from WISQARS), in the most recent comparable period available from 2009 to 2011, there were 80 suicides (both males and females age 10 to 24) by "other land transport," a rate of 0.04. In a similar, though more recent three year period, New Jersey had 16 suicides by other land transport. From 2010 to 2012, New Jersey had 14 suicides by other land transport. This suggests a significant number of the nation's suicides by other land transport occur in New Jersey.



County of Residence: Map 1

In New Jersey, only two counties had more than 20 deaths by suicide. In accordance with National Center for Health Statistics standards, rates based on fewer than 20 deaths or fewer than 20 persons in the population are considered unreliable for analysis purposes. Due to this

limitation, DCF grouped New Jersey's 21 counties into four regions to determine what areas of the state have higher rates of deaths by suicide. The above map shows the Skyland region (5.7) has the highest rate of youth suicides, followed by the Delaware region (5.4). Although the Gateway region has a greater number of youth suicides, the rate (3.83) shows it is a smaller proportion of their total population. In other words, in the Gateway region fewer youths die by suicide per capita than in New Jersey's more sparsely populated regions. The Shore region (3.81) had nearly the same rate as the Gateway region.

LIFE CIRCUMSTANCE

NJVDRS collects data on circumstance/life condition of youth age 10 to 24 who attempt or complete suicide. Each youth may have multiple circumstances applicable to them. Table 4 provides data captured from 2011 to 2012. It reveals mental health, relationships, and substance abuse are prevalent challenges for youth that complete suicide.

- 44% of the 130 suicides over the last two years were completed by youth who had a current mental health problem. About a quarter of these youth were actively receiving mental health treatment at the time of their suicide.
- Relationship problems were another important circumstance for New Jersey youth. 31% reported intimate partner problems. 21% indicated an "other" relationship problem.
- Substance abuse (25%) was a much higher problem than alcohol (8%) for New Jersey youths age 10 to 24. Males were more likely to have substance abuse as a circumstance (27%) than females (16%).
- School problems (48%) were a very significant circumstance for younger males age 10 to 18. For younger females age 10 to 18, it was a factor in 29% of cases. For all youths age 10 to 24, school problems were a circumstance for only 16% of cases.

A number of New Jersey youth who completed suicide over the last two years either left a note and/or disclosed in advance their intent to complete suicide. A third of youth (32%) left a suicide note, while nearly one out of four (22%) disclosed in advance their intent to complete suicide. 35% of male youth age 10 to 18 disclosed intent prior to completing suicide.

Table 4

Suicide circumstances by age group, New Jersey, 2011-2012

	Age Group & Gender													
	Male						Female						Total	
	10-18		19-24		10-24		10-18		19-24		10-24		10-24	
Suicide Circumstance	*N*	*%**	*N*	*%**	*N*	*%**	*N*	*%**	*N*	*%**	*N*	*%**	*N*	*%**
Current mental health problem	13	42%	31	42%	44	42%	2	29%	11	61%	13	52%	57	44%
History of mental health treatment	12	39%	31	42%	43	41%	1	14%	9	50%	10	40%	53	41%
Crisis within 2 weeks	15	48%	23	31%	38	36%	2	29%	6	33%	8	32%	46	35%
Current mental health treatment	10	32%	15	20%	25	24%	1	14%	7	39%	8	32%	33	25%
Substance abuse problem	8	26%	20	27%	28	27%	1	14%	3	17%	4	16%	32	25%
Current depressed mood	7	23%	16	22%	23	22%	2	29%	4	22%	6	24%	29	22%
Alcohol problem	1	3%	7	9%	8	8%	0	0%	2	11%	2	8%	10	8%
Suicide note	10	32%	22	30%	32	30%	6	86%	3	17%	9	36%	41	32%
Disclosed intent	11	35%	12	16%	23	22%	1	14%	4	22%	5	20%	28	22%
History of suicide attempts	5	16%	14	19%	19	18%	1	14%	7	39%	8	32%	27	21%
Other suicide circumstance	16	52%	37	50%	53	50%	2	29%	14	78%	16	64%	69	53%
Intimate partner problem	12	39%	17	23%	29	28%	4	57%	7	39%	11	44%	40	31%
Other relationship problem	12	39%	8	11%	20	19%	4	57%	3	17%	7	28%	27	21%
School problem	15	48%	2	3%	17	16%	2	29%	2	11%	4	16%	21	16%
Recent criminal legal problem	5	16%	12	16%	17	16%	0	0%	2	11%	2	8%	19	15%
Legal problem	2	6%	6	8%	8	8%	1	14%	0	0%	1	4%	9	7%
Perpetrator of interpersonal violence	2	6%	5	7%	7	7%	0	0%	0	0%	0	0%	7	5%
Job problem	0	0%	5	7%	5	5%	1	14%	1	6%	2	8%	7	5%
Financial problem	0	0%	5	7%	5	5%	0	0%	1	6%	1	4%	6	5%
Recent death of friend or family	3	10%	3	4%	6	6%	0	0%	0	0%	0	0%	6	5%
Physical health problem	1	3%	1	1%	2	2%	0	0%	1	6%	1	4%	3	2%
Victim of interpersonal violence	2	6%	0	0%	2	2%	0	0%	0	0%	0	0%	2	2%
Recent suicide of friend or family	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%	1	1%
Number of suicides in age group	35		94		129		8		21		29		158	
Suicides w/ known circs	31	89%	74	79%	105	81%	7	88%	18	86%	25	86%	130	82%

*Percent of suicides with **known** circumstances

SUICIDE ATTEMPTS

Age and Gender

Chart 4

Rates of Non-fatal Suicide Attempts/Self-inflicted Injuries Treated in the Emergency Room and Released Versus Resulting in Hospitalization by Age Group and Gender in New Jersey, 2011 – 2013

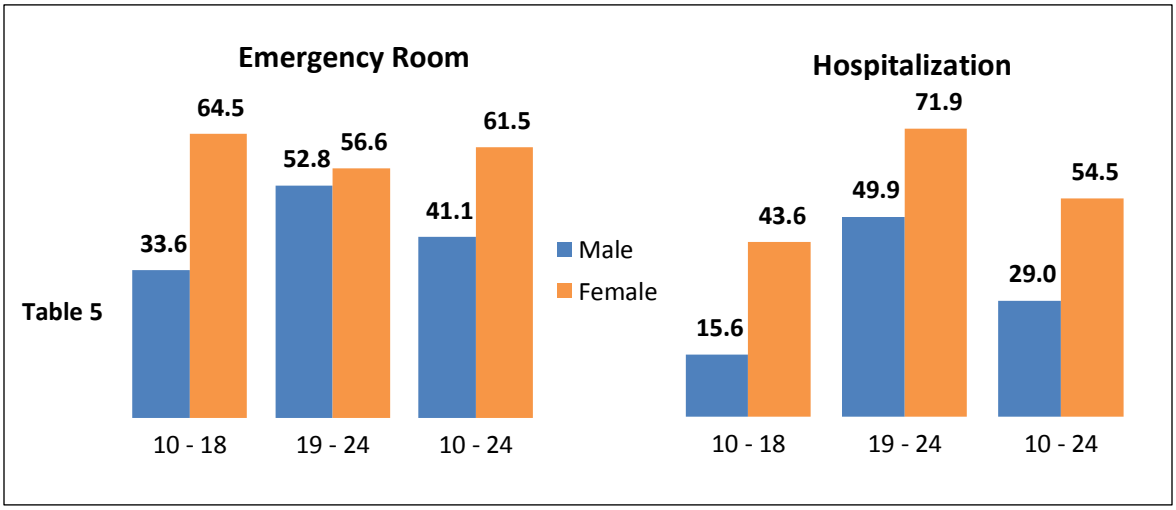


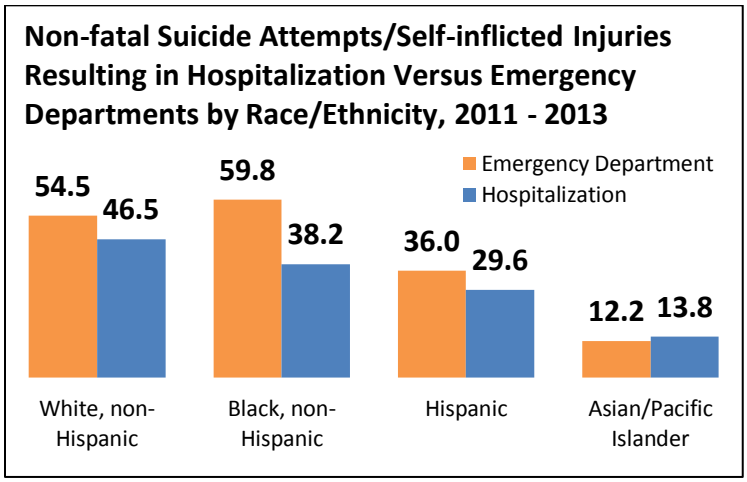
Table 5

	Age group				Total	
	10-18		19-24		10-24	
Gender	N	Rate	N	Rate	N	Rate
Emergency Room	1,543	48.6	1,094	54.7	2,637	51.0
Hospital	929	29.3	1,211	60.5	2,140	41.4

Overall, youth ages 10 to 24 were more often treated for nonfatal suicide attempts in the emergency room during this three year period. However, this difference can be attributed to youth age 10 to 18, who are more likely to be treated in the emergency room. On the other hand, older youths ages 19 to 24 are treated in the hospital at a slightly higher rate than the emergency room. Females age 19 to 24 are the reason for this difference; this group is the only group being treated in the hospital at a higher rate than the emergency room. As discussed in DCF's report last year, for the period 2010 to 2012, the trends were slightly different with both males and females age 19 to 24 more likely to be treated in the hospital.

Race and Ethnicity

Chart 5



When looking at the rates of nonfatal suicide attempts/self-inflicted injuries in emergency departments versus hospitals by race and ethnicity, we again see that, overall, whites and blacks have higher rates of suicide attempts than Hispanics and Asian/Pacific Islanders. Most groups are also more often treated in the emergency department. The only exception is Asian/Pacific Islanders, who are treated in the hospital at a slightly higher rate than in the emergency department. Non-Hispanic blacks have the greatest difference in emergency room and hospital use. The rate blacks are treated in the emergency department is approximately 56% higher than the hospital. The Hispanic emergency department rate is 21% higher than the hospital, and whites use the emergency department at a 17% higher rate.

Note: Race and ethnicity in hospital discharge data are known to be inconsistent, and these data should be used with caution.

PRIMARY MEANS OF NON-FATAL SUICIDE ATTEMPTS

Table 6

Means of Non-fatal Suicide Attempts/Self-inflicted Injuries among 10 – 24 Year Olds in the Emergency Department versus Hospitalization, New Jersey, 2011-2013

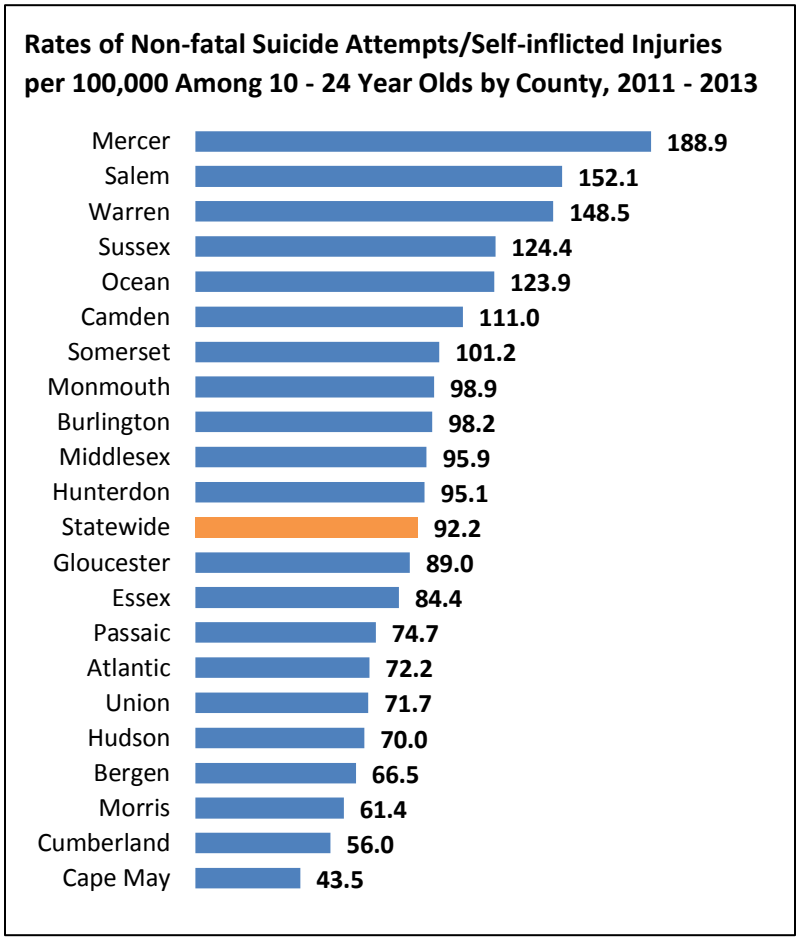
Means/weapon	Emergency Dept.		Hospital	
	N	%	N	%
Poisoning	1,485	56%	2,000	93%
Other or not specified	576	22%	45	2%
Cut/pierce	534	20%	52	2%
Fall	21	1%	27	1%
Hanging/Strangulation/ Suffocation	19	1%	7	0.3%
Firearm	*	*	*	*
Unknown weapon	*	*	*	*
Total	2,637	100%	2,140	100%

*Cells with fewer than 5 observations are suppressed.

Poisoning is the most common means of attempted suicide for youth in New Jersey. Cutting or piercing was the next most common means of nonfatal suicide attempts. Emergency rooms record the method of attempted suicide less thoroughly compared to when a patient is hospitalized. As a result, there is a large percentage of attempted suicides reported by emergency rooms where the method of the attempted suicide is listed as “other or not specified.”

RATES OF NON-FATAL SUICIDE ATTEMPTS BY COUNTY

Chart 6



The above chart shows the total rate of nonfatal suicides/self-inflicted injuries by county. It is mainly consistent with the map of suicide rates by region on page 9.

The Skyland region had the highest rate of suicides. For attempts, Warren, Sussex, Somerset, and Hunterdon all have above average rates of nonfatal suicides/self-inflicted injuries.

The Delaware region had the second highest rate of suicide. For attempts, Mercer, Salem, Camden, and Burlington had rates higher than the statewide rate. However, a different picture emerges for the Shore region. Ocean and Monmouth had high rates of suicide attempts, but an overall low rate of deaths by suicide.

SUICIDE PREVENTION ACTIVITIES

DCF's Division of Family and Community Partnerships is the state's lead agency for youth suicide prevention. DCF recognizes the value of building partnerships within and among State and local systems, with community service providers, the private sector, foundations, universities and the media in combating youth suicide. Core suicide prevention programs for youth and families in New Jersey include:

Traumatic Loss Coalition

The Traumatic Loss Coalitions for Youth Program (TLC) at University Behavioral Health at Rutgers is funded by the DCF. TLC is an interactive, statewide network that offers collaboration and support to professionals working with school-age youth. TLC's dual mission is excellence in suicide prevention and trauma response assistance to schools following losses due to suicide, homicide, accident, and illness.

2ND Floor Youth Helpline

The 2ND Floor Youth Helpline 1-888-222-2228 www.2ndfloor.org, funded by DCF, serves all youth and young adults in New Jersey. Youth who call the hotline receive assistance with daily life challenges by professional staff and trained volunteers. Anonymity and confidentiality are assured except in life-threatening situations. 2ND Floor is accredited by the American Association of Suicidology.

Jersey Voice

Jersey Voice helps teens and young adults in New Jersey who have ever had a horrible day, struggled with mental health, or lost a loved one. Jersey Voice is a peer-to-peer website that encourages teens and young adults to use their own unique Jersey voices to help each other, recognize their strengths, promote resiliency, and inspire hope.

Mobile Response and Crisis Screening

Mobile Response and Stabilization Services, available 24 hours a day, seven days a week, help children and youth who are experiencing emotional or behavioral crises. The services are designed to defuse an immediate crisis, keep children and their families safe, and maintain children in their own homes or current living situation (such as a resource foster home, treatment home or group home) in the community.

Adult and YouthMental Health Services

NJ Hopeline (1-855-NJ-HOPELINE (654-6735)) is New Jersey's peer support and suicide prevention hotline. Specialists are available for confidential telephone counseling and support 24 hours a day, seven day per week.

Screening Centers

Screening/crisis centers were established in each county for individuals in emotional crisis who cannot wait for a regular appointment for services. Emergency services are provided 24 hours a day, seven days a week, and are typically located in hospitals. An

individual may either walk in without an appointment or be brought by a parent, friend, spouse, police, mental health worker, or any other concerned individual. If the person in crisis is unable or unwilling to come to the center, a mobile outreach team can be sent to the person.

For information about adult mental health services, visit the Department of Human Services, Division of Mental Health and Addiction Services' (DMHAS) web site at http://www.state.nj.us/humanservices/divisions/dmhas/.

New Jersey Youth Suicide Prevention Advisory Council

The Youth Suicide Prevention Advisory Council was formed by state statute in January 2004. Council members regularly examine existing needs and services and make recommendations to DCF for youth suicide reporting, prevention, and intervention.

References for Data, Tables, and Figures

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