New Jersey Youth Suicide Report

2017

Introduction

In accordance with N.J. Statute. 30:9A-27, the New Jersey Department of Children and Families (DCF) in collaboration with the New Jersey Department of Health (DOH) presents this annual report of suicide attempts and youth who have died by suicide in New Jersey.

This report is issued to the New Jersey Youth Suicide Prevention Advisory Council (Council), the Governor, and the Legislature. In accordance with statute, this report contains a summary of aggregate demographic information about youth who attempt or die by suicide.

This report normally relies on data from the Centers for Disease Control and Prevention (CDC), which has undertaken an effort to strengthen the scientific integrity of its data. The CDC's ongoing effort has caused two significant data sets (Death of New Jersey Residents Occurring Out-of-State and Suicide Attempt) to be unavailable for this report.

Therefore, we have included in this report updates to Death of New Jersey Residents Occurring Out-of-State data and Suicide Attempt data published in last year's report. The update reflects new information and data adjustments unavailable when last year's report was issued.

Fourteen suicide-related deaths from 2013-2015 have been identified and added to our data since the 2016 annual suicide report. These newly identified suicides are due to a combination of several factors, including corrections to data submitted to DOH's online query system (New Jersey State Health Assessment Data) and new information about the cause of the death. This report identifies where changes were made and if such changes significantly altered data trends or conclusions.

DCF's Family and Community Partnerships (FCP), in collaboration with DCF's Office of Research, Evaluation, and Reporting (ORER), and DOH, compiled the presenting data for tables, graphs, and trends.

Rates are not calculated for fewer than 20 observations due to high standard errors associated with the statistic.
Estimates based on a random sample of a population are subject to error due to sampling variability, known as the "standard error". Rates and percentages based on a full population count may also be considered estimates, and as such also have a standard error that describes the variation of the estimate from the true or "underlying" rate. This error may be substantial when there are fewer than 20 observations; combining multiple years is a common way to minimize this effect.
Two or more years of data may be combined to increase the number of observations and thereby reduce the standard error to produce a more stable estimate.

For this report, as in previous years, annual figures are provided when the number of observations is 20 or more, and in the case of small numbers, 3 years are combined to produce a three-year average rate.
Cell sizes of fewer than 5 observations (and complimentary cells) may be suppressed in order to reduce the chance of unintentionally identifying an individual.

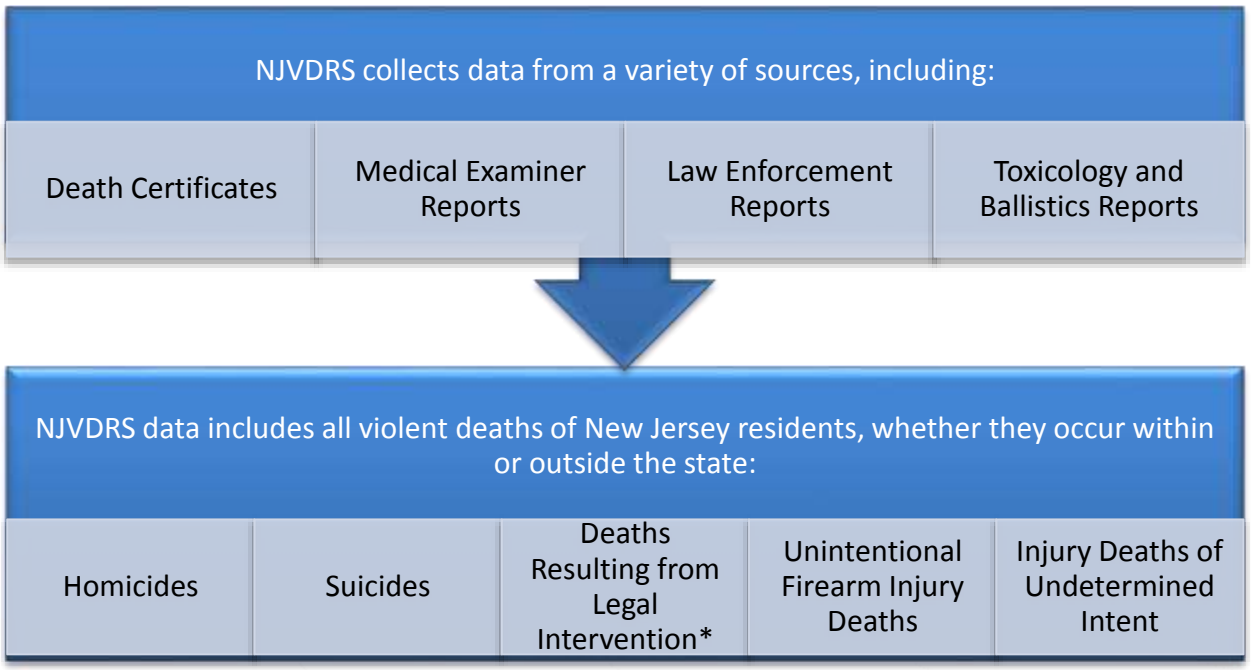
For more information, contact the Center for Health Statistics and Informatics at chs@doh.nj.gov.

Data Surveillance Systems on Youth Suicide in New Jersey

DATA COLLECTION SYSTEM

The New Jersey Violent Death Reporting System (NJVDRS) enables the state to analyze accurate and timely suicide data. And because it participates in the National Violent Death Reporting System, New Jersey can reliably compare its data with other participating states.

Data on non-fatal suicide attempts/self-inflicted injury is from DOH's hospital visit billing data set. This data set includes information on discharge disposition, including whether the patient lived or died. NJVDRS provides data only on fatalities.



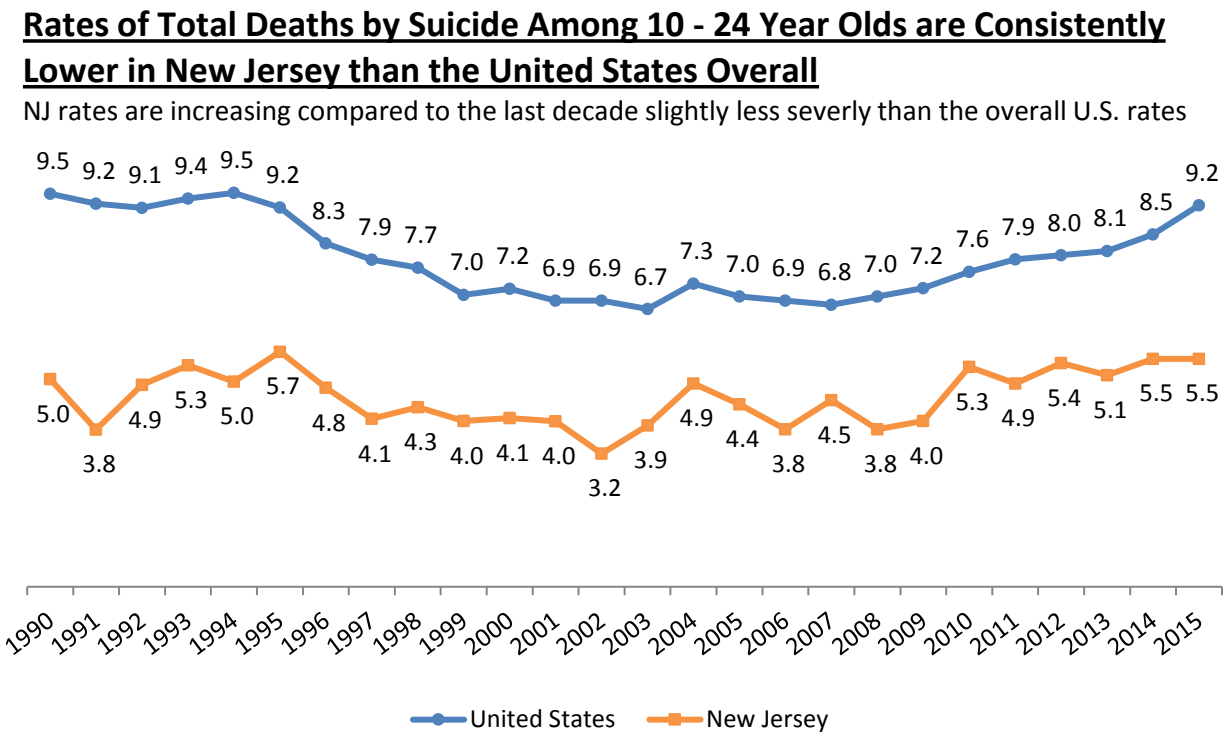
* Individuals are killed by law enforcement personnel in the line of duty.

A "violent" death is defined as a death that results from the intentional use of physical force or power, threatened or actual, against oneself, another person, or a group or community.

NJVDRS links data from multiple sources into a single standardized record of a violent death incident.

Confirmed Suicides: New Jersey Compared to National Trends

Chart 1:



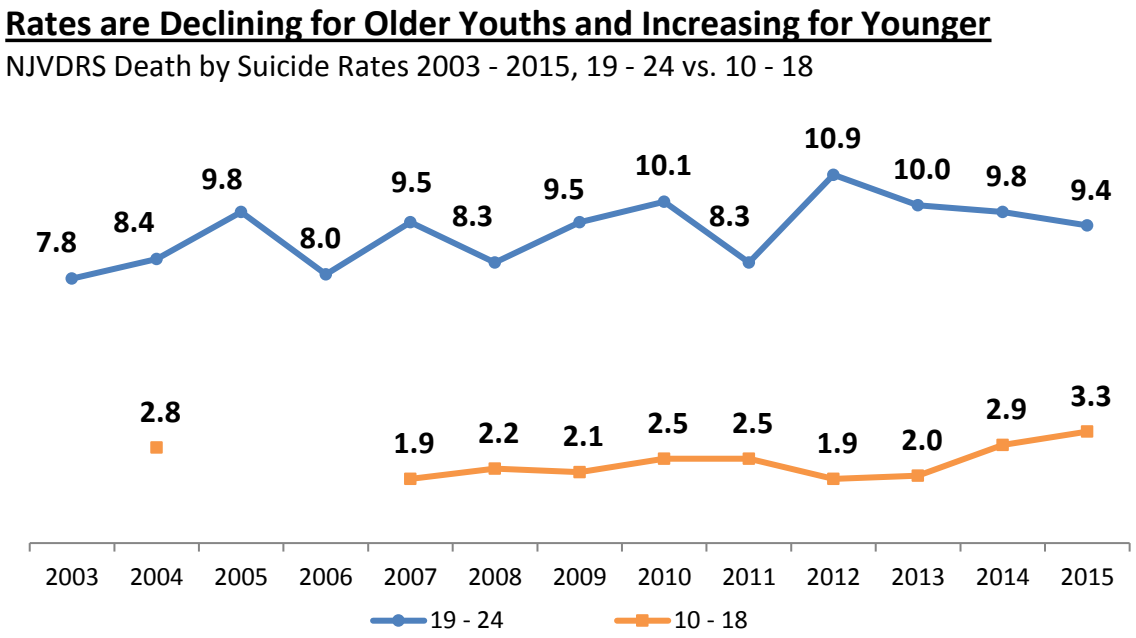
Source: WISQARS, CDC (August 2017). Rates are per 100,000 age-specific population.

The CDC usually releases national data one year later than New Jersey releases its preliminary NJVDRS data. This is why the CDC data for 2015 in **Chart 1** is new to this report. New Jersey continues to show a lower rate of total deaths by suicide among 10 – 24 year olds. While there appears to be a slight increase since the start of this decade, it is far less severe than the yearly increases reported nationally.

The national rate increased 0.07 percent from 2014 to 2015. New Jersey's rate was unchanged.

Confirmed Suicides: Trends by Age

Chart 2:



Rates are per 100,000 age-specific population.
*2015 NJVDRS data are preliminary and subject to change.
**2003, 2005 & 2006 rates not calculated because there were fewer than 20 observations.

While preparing its data set for its online query system (New Jersey State Health Assessment Data), DOH carefully re-analyzed its data and adjusted the number of deaths for eight of 13 years (see **Table 1** below). The adjustments added 40 deaths and slightly changed the trend for 19 – 24 year olds.

The original data pointed to large decreases in rate in 2008 and 2011, and a significant increase in 2012. **Chart 2** (above), which reflects the adjusted data, presents a steadier trend that shows the rate of death by suicide for older youth has remained between 7.8 and 10.9 per 100,000 over the past 13 years. The spike reported for 2012 has since been declining.

Table 1. Suicide rate, New Jersey, ages 10-18 and 19-24 years, 2003 -2014						
	10-18		19-24		Total	
	N	Rate	N	Rate	N	Rate
2003	17		47	7.8	64	3.8
2004	31	2.8	51	8.4	82	4.8
2005	17		60	9.8	77	4.5
2006	19		49	8.0	68	4.0
2007	21	1.9	59	9.5	80	4.7
2008	24	2.2	52	8.3	76	4.4
2009	23	2.1	61	9.5	84	4.9
2010	27	2.5	66	10.1	93	5.4
2011	27	2.5	55	8.3	82	4.7
2012	20	1.9	73	10.9	93	5.4
2013	21	2.0	68	10.0	89	5.2
2014	30	2.9	67	9.8	97	5.6
2015	33	3.3	64	9.4	97	5.7

*Red font indicate changes.

Confirmed Suicides: Demographic Data

Updated demographic data is shown in red and highlights any significant changes to conclusions in last year's report.

Table 2. Suicides by age group and gender, New Jersey, 2013-2015						
	Age Group				Total	
	10-18		19-24		10-24	
Gender	N	Rate	N	Rate	N	Rate
Male	52	3.2	152	14.4	204	7.7
Female	32	2.1	47	4.7	79	3.1
Total*	84	2.7	199	9.7	283	5.5
***Total includes 1 youth of unknown gender.**						

Source: New Jersey Violent Death Reporting System v.09/15/2017, NJDOH. Rates are per age-specific 100,000 population. *Red font indicates changes.

Eight of the newly identified deaths were males and four were females. Seven of the eight males were between 19 and 24 years old. This adjustment increased the rate for males between 19 and 24 year of age from 13.8 to 14.4. The overall trend remained the same, males die by suicide at a much higher rate than females.

This difference is much less stark for 10 – 18 year olds. Younger Males between 10 – 18 years of age die by suicide at a rate of 3.2, while the female rate is slightly lower at 2.7. Males between 19 – 24 years of age die by suicide at a rate of 14.4, while the female rate is only 4.7. The gender differences in suicide rate within the 19 – 24 age segment is likely due to older males using more lethal means (e.g. firearms) more often than younger males and females. (see Chart 3 on methods)

Keep in mind the rate of death by suicide for 10 – 18 year old females may be unstable because the number is small. The confidence interval ranges from 2.8 to 1.4, which is greater than 30% from the rate estimate. Conclusions from a rate this volatile should be made with caution.

Updated gender statistics remain consistent with the conclusion identified in last year's report. While the overall rate for males who die by suicide has decreased slightly, the overall rate for females has increased. In comparison to the 2012 – 2014 report period, the overall rate for males decreased from 7.9 to 7.7 while the overall rate for females increased from 2.2 to 3.1.

Two additional deaths were confirmed among 10 – 18 year old females, bringing the total to 32. This is a sharp increase from the 16 deaths reported for this group in the 2012 – 2014 reporting period. **Over this time the total number of young female suicides increased by 100%.**

Table 3. Suicides by age group and race/ethnicity, New Jersey, 2013-2015

	Age Group				Total	
	10-18		19-24		10-24	
Race/ethnicity	N	Rate	N	Rate	N	Rate
White Non-Hispanic	42	2.5	113	11.0	155	5.7
Black Non-Hispanic	12	**	33	9.6	45	5.6
Hispanic	18	**	23	4.7	41	3.4
Asian/Pacific Islander	8	**	20	11.4	28	6.1
Other/Unknown Race	4	**	10	**	14	**
Total	84		199		283	

Source: New Jersey Violent Death Reporting System v.09/15/2017, NJDOH. Rates are per 100,000 population. *Red font indicates changes.

Consistent with prior reports, New Jersey's non-Hispanic White and Black youth between 10 and 24 die by suicide at nearly the same rate, with White Non-Hispanic youth rate slightly higher. DOH did identify additional deaths for each of these two race/ethnicity categories, but the data adjustments left the trend for both groups nearly unchanged. Researchers have noted

that nationally blacks generally tend to have significantly lower rates of suicide than whites (Bridge, et al, JAMA Pediatr. 2015; Sheftall, et al, Pediatrics, 2016).

There were no changes to the data on New Jersey's Hispanic population. As in past reports, race and ethnicity data should be interpreted with caution because Hispanic youth are often reported in other categories.

One additional Asian/Pacific Islander death was confirmed, bringing the total to 28. This is a significant increase from the 2012 – 2014 period, when there were 19 deaths by suicide among Asian/Pacific Islanders. **This represents a 47% increase in suicides for the Asian/Pacific Islander population.**

Suicide Completions by Region (Map 1)

Bergen (28), Monmouth (22), and Essex (21) counties each had 20 or more deaths by suicide between 2013 and 2015 and each had two confirmed deaths added to their count since publication of the *2016 New Jersey Youth Suicide Report*. That report also showed Morris County had 20 suicide related deaths, but that figure has been adjusted downward because two deaths are no longer listed as suicide.

Suicide rates are not calculated for fewer than 20 suicides. Small numbers are statistically unreliable because of a large standard error. Due to this limitation, New Jersey's 21 counties are grouped into regions to more reliably determine the suicide rate in these regions.

The updated data in **Map 1** is consistent with the data reported in the 2016 report. The Skyland Region has the highest rate of deaths by suicide, followed by the Shore, Delaware, and Gateway regions. However, there is a slight change in the suicide trends seen in each region from 2012 – 2014. The new data shows the Delaware region's suicide rate increased rather than decreased. The Gateway region's suicide rate increased rather than remained unchanged, as reported in the 2016 report. The following are details for each region:

Skyland Regions (7.5 per 100,000) again has the highest rate of youth suicide.

Skyland's rate increased from 7.4 per 100,000 in 2012-2014 to 7.5 per 100,000 in 2013-2015.

Shore Regions (6.5 per 100,000) has the largest rate increase among all 4 regions.

Shore's rate increased from 5.4 per 100,000 in 2012-2014 to 6.5 per 100,000 in 2013-2015.

Delaware Regions (5.6 per 100,000)

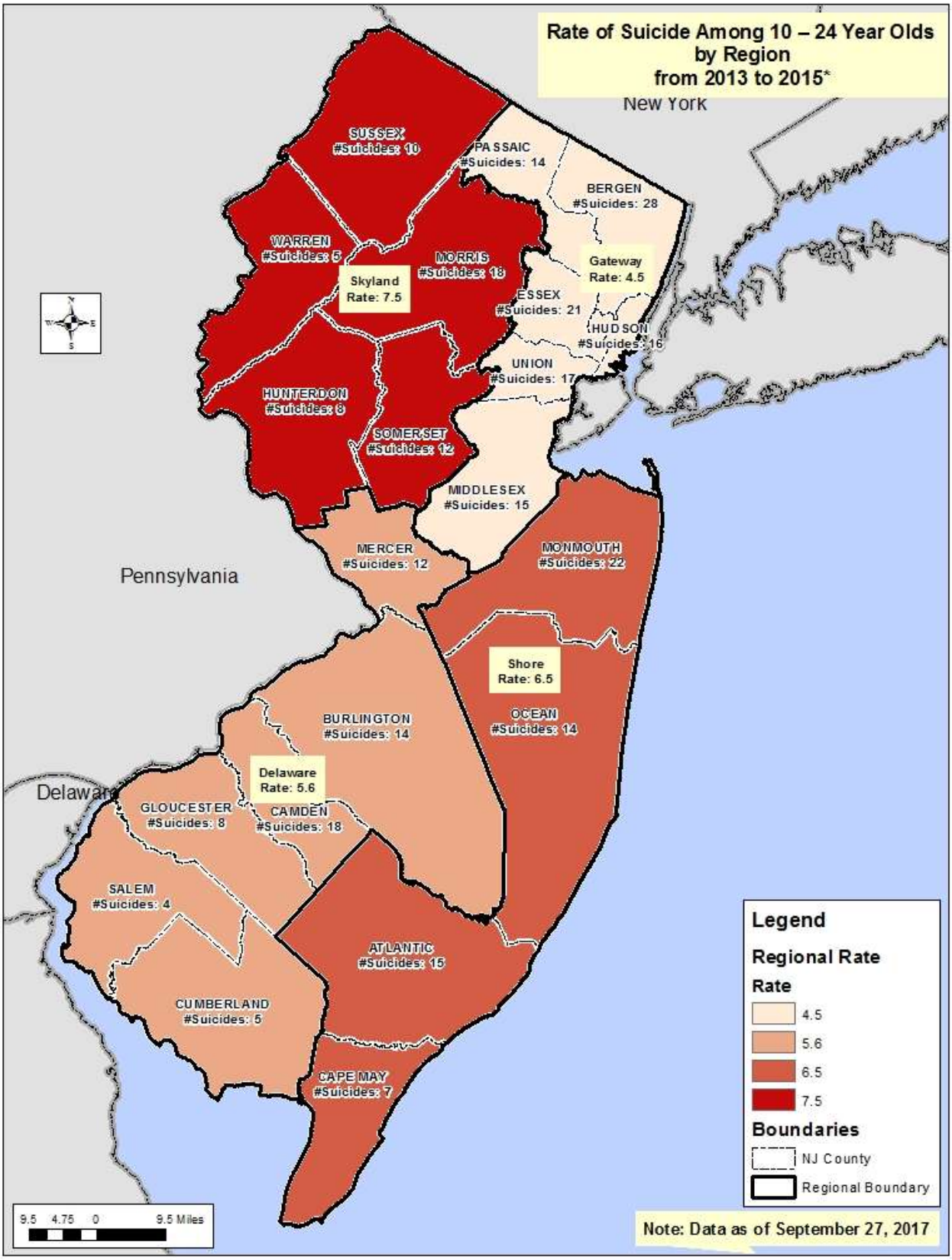
Delaware increased from 5.2 in 2012-2014 to 5.6 per 100,000 in 2013-2015.

Gateway Regions (4.5 per 100,000) has the lowest rate of youth suicides.

Gateway increased from 4.3 in 2012 – 2014 to 4.5 per 100,000 in 2013 – 2015.

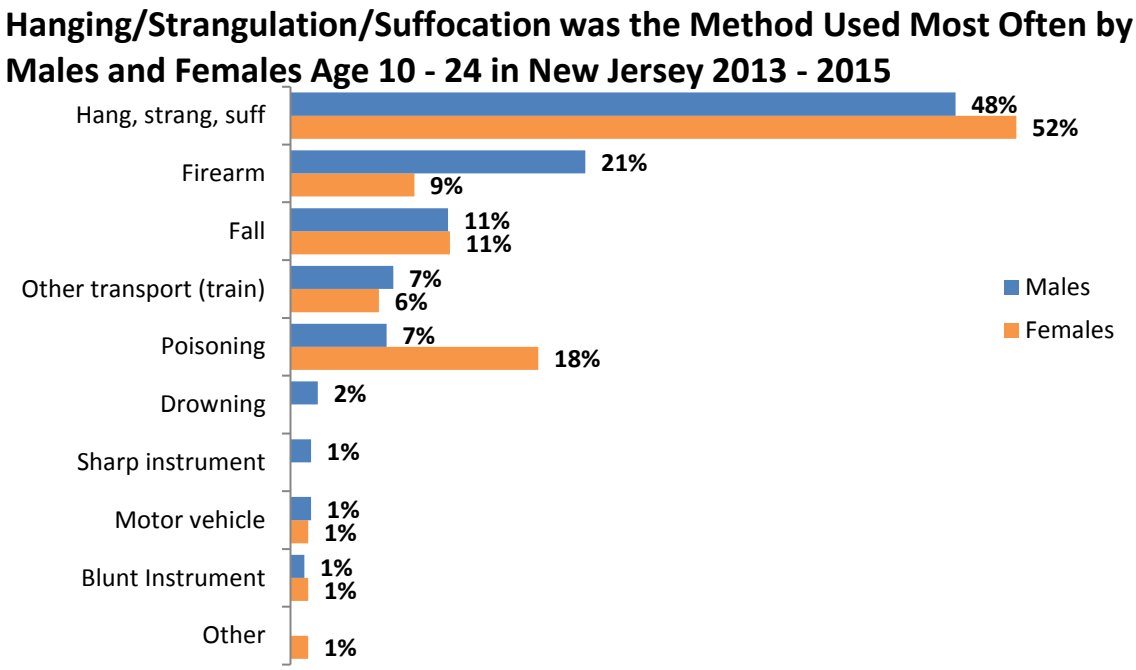
Although the Gateway region has a greater number of youth suicides,

fewer youth die by suicide per capita than in less densely populated regions.


Rate of Suicide Among 10 – 24 Year Olds by Region from 2013 to 2015*
New York
Pennsylvania
Delaware
SUSSEX #Suicides: 10
PASSAIC #Suicides: 14
BERGEN #Suicides: 28
WARREN #Suicides: 5
MORRIS #Suicides: 18
Skyland Rate: 7.5
Gateway Rate: 4.5
ESSEX #Suicides: 21
HUDSON #Suicides: 16
UNION #Suicides: 17
HUNTERDON #Suicides: 8
SOMERSET #Suicides: 12
MIDDLESEX #Suicides: 15
MERCER #Suicides: 12
MONMOUTH #Suicides: 22
Shore Rate: 6.5
OCEAN #Suicides: 14
BURLINGTON #Suicides: 14
Delaware Rate: 5.6
GLOUCESTER #Suicides: 8
CAMDEN #Suicides: 18
SALEM #Suicides: 4
ATLANTIC #Suicides: 15
CUMBERLAND #Suicides: 5
CAPE MAY #Suicides: 7
9.5 4.75 0 9.5 Miles
Legend
Regional Rate
Rate
4.5
5.6
6.5
7.5
Boundaries
NJ County
Regional Boundary
Note: Data as of September 27, 2017

Primary Method of Suicide Death

Chart 3:



The 14 additional identified deaths did not significantly change any of the overall method of suicide trends or gender differences reported in the 2016 suicide report.

- Hanging, strangulation, and suffocation remain the most common method of suicide among male and female youth age 10-24.
- Consistent with prior years, males are more likely to use firearms and females are more likely to use poisoning.

Jumping/falling continued to increase during this period as compared to 2012 – 2014, replacing poisons as the third most common method of suicide.

The updated data did slightly change the observed differences between the younger and older age groups. The 2016 report identified death by train as the second most common method for 10 – 18 year olds, followed by firearms. The increased firearm deaths identified for this report made the rates of death by train and death by firearm equal. Regardless of these rates, it remains more common for the younger age group to die by the method of *other transport - train*. Additionally, *death by other transport-train* was the fifth most common method with older youth (19 – 24 year olds) who are more likely to use firearms.

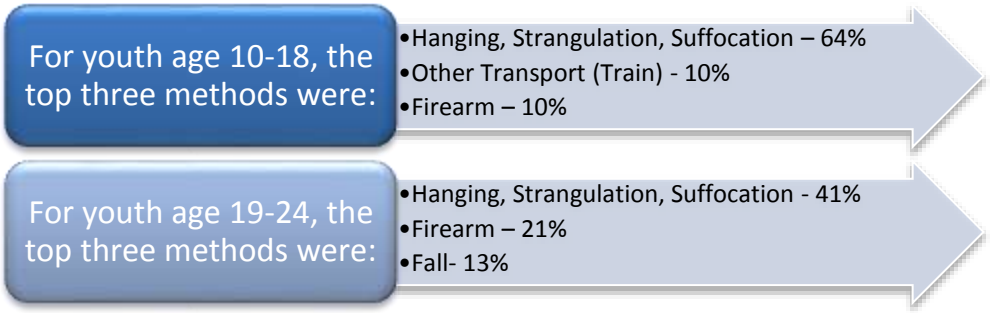


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Table 4. Suicides by age group and method/weapon used, New Jersey, 2013-2015

	10-18		19 - 24		Total	
Method/Weapon	**N**	**%**	**N**	**%**	**N**	**%**
Hanging, Strangling, Suffocation	54	64%	84	42%	138	49%
Firearm	8	10%	42	21%	50	18%
Fall	6	7%	26	13%	32	11%
Poisoning	6	7%	22	11%	28	10%
Other transport (train)	8	10%	12	6%	20	7%
Drowning	0	0%	4	2%	4	1%
Motor vehicle	1	1%	3	2%	4	1%
Blunt Instrument	1	1%	2	1%	3	1%
Sharp instrument	0	0%	3	2%	3	1%
Other	0	0%	1	1%	1	0%
Unknown Weapon	0	0%	0	0%	0	0%
Total	84	100%	199	100%	283	100%

Source: New Jersey Violent Death Reporting System v.09/15/2017, NJDOH. *Red font indicate changes.

Suicide Circumstance—* *gender differences highlighted in green*

Table 5. Suicide circumstances by age group, New Jersey, 2014-2015

Suicide Circumstance	Male						Female						Total	
	10-18		19-24		10-24		10-18		19-24		10-24		10-24	
	N	*%**	*N*	*%**	*N*	*%**	*N*	*%**	*N*	*%**	*N*	*%**	*N*	*%**
Crisis within 2 weeks	12	36%	24	24%	36	27%	12	40%	5	16%	17	28%	53	27%
Current depressed mood	4	12%	17	17%	21	16%	8	27%	5	16%	13	21%	34	18%
Current mental health problem	13	39%	25	25%	38	29%	13	43%	11	35%	24	39%	62	32%
Current mental health treatment	9	27%	20	20%	29	22%	12	40%	7	23%	19	31%	48	25%
History of mental health treatment	11	33%	25	25%	36	27%	13	43%	11	35%	24	39%	60	31%
Substance abuse problem	4	12%	15	15%	19	14%	3	10%	2	6%	5	8%	24	12%
Alcohol problem	2	6%	7	7%	9	7%	0	0%	0	0%	0	0%	9	5%
History of suicide attempts	1	3%	13	13%	14	11%	8	27%	3	10%	11	18%	25	13%
Disclosed intent	7	21%	9	9%	16	12%	9	30%	2	6%	11	18%	27	14%
Suicide note	12	36%	18	18%	30	23%	10	33%	5	16%	15	25%	45	23%
Recent death of friend or family	2	6%	1	1%	3	2%	2	7%	0	0%	2	3%	5	3%
Recent suicide of friend or family	1	3%	1	1%	2	2%	2	7%	2	6%	4	7%	6	3%
School problem	8	24%	3	3%	11	8%	8	27%	1	3%	9	15%	20	10%
Financial problem	0	0%	2	2%	2	2%	0	0%	0	0%	0	0%	2	1%
Physical health problem	1	3%	2	2%	3	2%	0	0%	1	3%	1	2%	4	2%
Recent criminal legal problem	2	6%	14	14%	16	12%	1	3%	0	0%	1	2%	17	9%
Intimate partner problem	4	12%	11	11%	15	11%	5	17%	4	13%	9	15%	24	12%
Job problem	1	3%	6	6%	7	5%	0	0%	0	0%	0	0%	7	4%
Legal problem	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Other relationship problem	1	3%	2	2%	3	2%	4	13%	0	0%	4	7%	7	4%
Perpetrator of interpersonal violence	1	3%	1	1%	2	2%	0	0%	1	3%	1	2%	3	2%
Victim of interpersonal violence	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Other addiction	1	3%	1	1%	2	2%	0	0%	0	0%	0	0%	2	1%
Family stressors	6	18%	10	10%	16	12%	10	33%	0	0%	10	16%	26	13%
Eviction, loss of home	1	3%	1	1%	2	2%	0	0%	0	0%	0	0%	2	1%
Anniversary of a traumatic event	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
History of childhood sexual abuse	0	0%	0	0%	0	0%	3	10%	0	0%	3	5%	3	2%
Other suicide circumstance	5	15%	19	19%	24	18%	9	30%	9	29%	18	30%	42	22%
Number of suicides in age group	33		100		133		30		31		61		194	
Number of suicides w/ known circs	29		60		89		25		20		45		134	
% of suicides w/ known circs		88%		60%		67%		83%		65%		74%		69%

Source: New Jersey Violent Death Reporting System v.09/15/2017, NJDOH

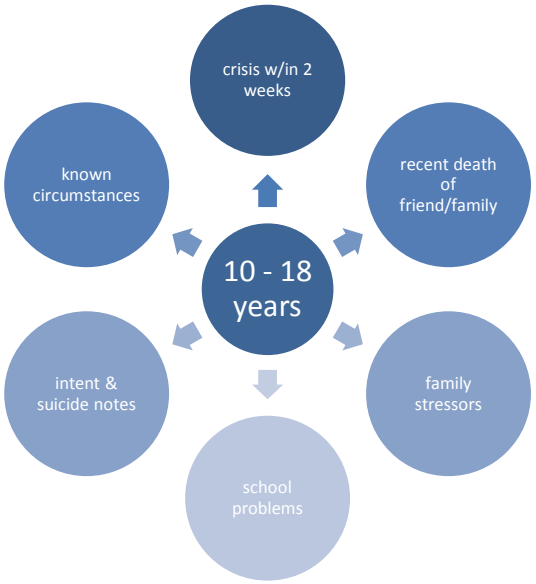
Table 5 highlights data captured to understand the circumstances associated with a youth who died by suicide from 2014 to 2015.

Collecting and analyzing information regarding the circumstances surrounding a youth's suicide is difficult because many circumstances may be involved. This usually delays the inclusion of such data in this report by one year. For this 2017 report, 2015 data on suicide circumstances reflect minimum estimates because of coding changes described earlier in this report.

With that in mind, at the time of this report only 69 percent of the circumstances associated with the suicide death of youth were known. The available data for 2014-2015 are consistent with the 2016 suicide report.

- Approximately one third of the youth (32 percent) were reported as having a current mental health problem, and only 25 percent were receiving treatment.
- The number receiving treatment was slightly higher than 2013–2014 (20 percent) and 2012 – 2013 (16 percent).

There were a number of differences between age groups and gender as illustrated below. The details of these differences are also highlighted in green in **Table 5** above.



Females

- All: "other" circumstance
- 10 - 18: history of attempts
- 10 - 18: current depressed mood
- 10 - 18: current & history of mental health treatment
- 10 - 18: intimate & other relationship problems

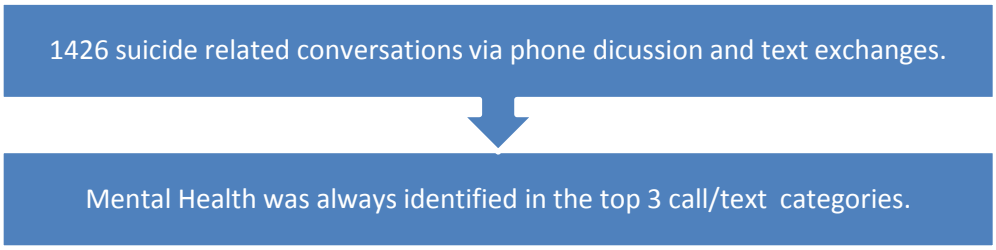
Males

- All: substance abuse & alcohol problems
- All: job problems
- 10 - 18: No history of attempt
- 19 - 24: recent criminal or legal problem

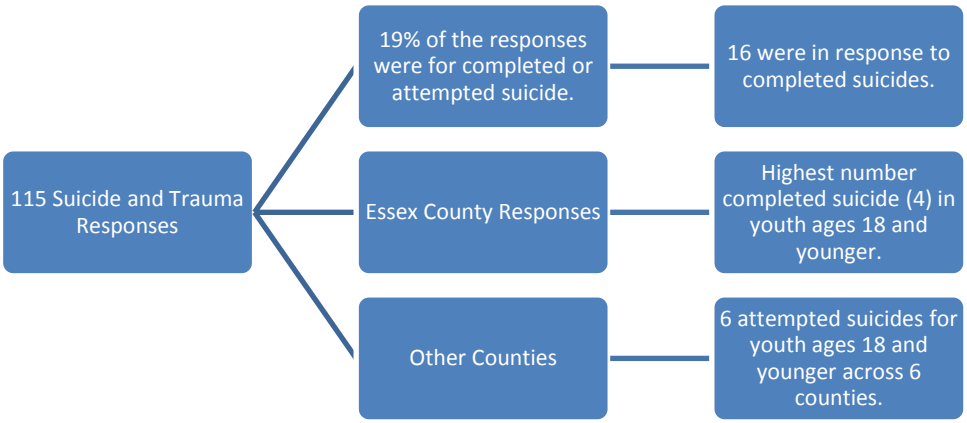
July 1, 2016-June 30, 2017 Data Highlights for NJ Statewide Suicide Prevention Programs

Two state-funded programs help educate the public and support youth suicide prevention efforts.

2NDFLOOR Youth Helpline: A confidential, anonymous helpline for New Jersey youth (ages 10-24). Youth are provided with solutions and resources to the problems they face at home at school or at play. Youth receive quality service, support, and information from trained counselors, volunteers, and interns. Trained counselors help youth make healthy decisions and manage worries about peer relationships, bullying, mental health issues, dating, sex/sexuality issues, and more. 2NDFLOOR services include a 24/7 Helpline, an interactive website and online message board, text support, Youth Advisory Council, and information and referral services.



Traumatic Loss Coalitions for Youth: Traumatic Loss Coalitions for Youth (TLC) promote mental health awareness and healing. It helps build an informed and competent school community equipped to prevent suicide and recover after a traumatic incident. TLC curricula include suicide prevention, intervention, postvention, trauma response and technical assistance to schools and communities.



Suicide Prevention Activities

DCF is the lead state agency responsible for facilitating efforts to prevent youth suicide. In this role, DCF recognizes this work cannot be accomplished by any one entity. DCF works through partnerships across all systems and communities, including but not limited to federal, state, county and local government, individuals and families, community service providers, private organizations, foundations, universities, and media. Here is a list of suicide prevention activities within the state along with current legislation as it relates to suicide:

New Jersey Suicide Prevention Hopeline

1-855-654-6735 www.njhopeline.com

The Hopeline is New Jersey's dedicated in-state peer support and suicide prevention hotline staffed by mental health professionals and peer support specialists 24 hours a day, seven days a week. The service is available to callers of all ages for confidential telephone support (except when a suicide attempt is in progress), assessment, and referral. Crisis chat is also accessible through the website and the service can be reached by texting njhopeline@ubhc.rutgers.edu.

Screening and Screening Outreach Programs

Available in each county 24-hours a day, seven-days a week to individuals in emotional crisis needing immediate attention. An individual may be seen without an appointment, or be brought to the screening center by a parent, friend, spouse, law enforcement official, mental health worker, or any other concerned individual. For information visit the DHS Division of Mental Health and Addiction Services' website at www.state.nj.us/humanservices/divisions/dmhas/.

Perform Care

PerformCare partners with the New Jersey Children's System of Care (CSOC) as the single point of entry for children, adolescents and young adults (up to age 21). When a child is facing challenges to their functioning and well-being, finding the right services and support can be overwhelming. To access care, including Mobile Response services, please call Perform Care at 1-877-652-2764. For more information, please visit www.performcarenj.org.

2NDFLOOR Youth Helpline

www.2ndfloor.org; 888.222.2228

Accredited by the American Association of Suicidology, 2NDFLOOR confidentially serves youth and young adults (ages 10 to 24). Youth who call are assisted with their daily life challenges by professional staff and trained volunteers.

Trevor Project

www.thetrevorproject.org

The Trevor Project is the leading national organization providing crisis intervention and suicide prevention services to lesbian, gay, bisexual, transgender and questioning (LGBTQ) young people ages 13 to 24.

Traumatic Loss Coalitions for Youth Program
The dual mission of TLC is suicide prevention and trauma response assistance to schools following suicide, homicide and deaths that result from accidents and/or illnesses. Functioning as an interactive, statewide network, TLC offers collaboration opportunities and support to professionals working with school-age youth via education, training, consultation and coalition building to:

- prevent suicide, and to promote recovery of persons affected by suicide and
- provide guidance and support in the response to a traumatic event

For more information and support related to suicide prevention visit http://ubhc.rutgers.edu/tlc/index.html

New Jersey Youth Suicide Prevention Advisory Council
Established in the New Jersey Department of Children and Families, the New Jersey Youth Suicide Prevention Advisory Council is comprised of appointed New Jersey citizens and representatives from state departments. The purpose of the Council is to examine existing needs and services and make recommendations for youth suicide reporting, prevention and intervention; advise on the content of informational materials to be made available to persons who report suicide attempts or deaths by suicide; and advise in the development of regulations required pursuant to N.J.S.A. § 30:9A-25 et seq. For more information related to the Council, email dpcp@dcf.state.nj.us

References

New Jersey Violent Death Reporting System (NJVDRS) v.08/15/2016. Center for Health Statistics and Informatics, Office of Population Health, New Jersey Department of Health.

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Statistics Query and Reporting System (WISQARS) [online]. (2005) Accessed 2016 Aug 15. Available from www.cdc.gov/ncipc/wisqars