

Depression: Health Focus Area 7



Excerpted from Component A of *The Rhode Island State Health Improvement Plan*

July 28, 2017

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Definition

Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest.¹ Major depression is characterized by a depressed mood or loss of interest or pleasure in daily activities that represents a significant change from the person's normal mood, has persisted for the same two-week period, and has a negative impact on social, occupational, educational, or other important life functions.² Major depression can lead to a complete sense of hopelessness as well. Depression impacts how individuals feel, think, and behave, including impacting their overall well-being and participation in their healthcare.

The RI Behavioral Risk Factor Surveillance System (RI BRFSS) includes three questions that address depression among adults: "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"; "Were you ever told you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?"; and "In general, how satisfied are you with your life?" In addition, suicide rates and attempts are considered as proxy indicators of depression.

Prevalence across the Life Span

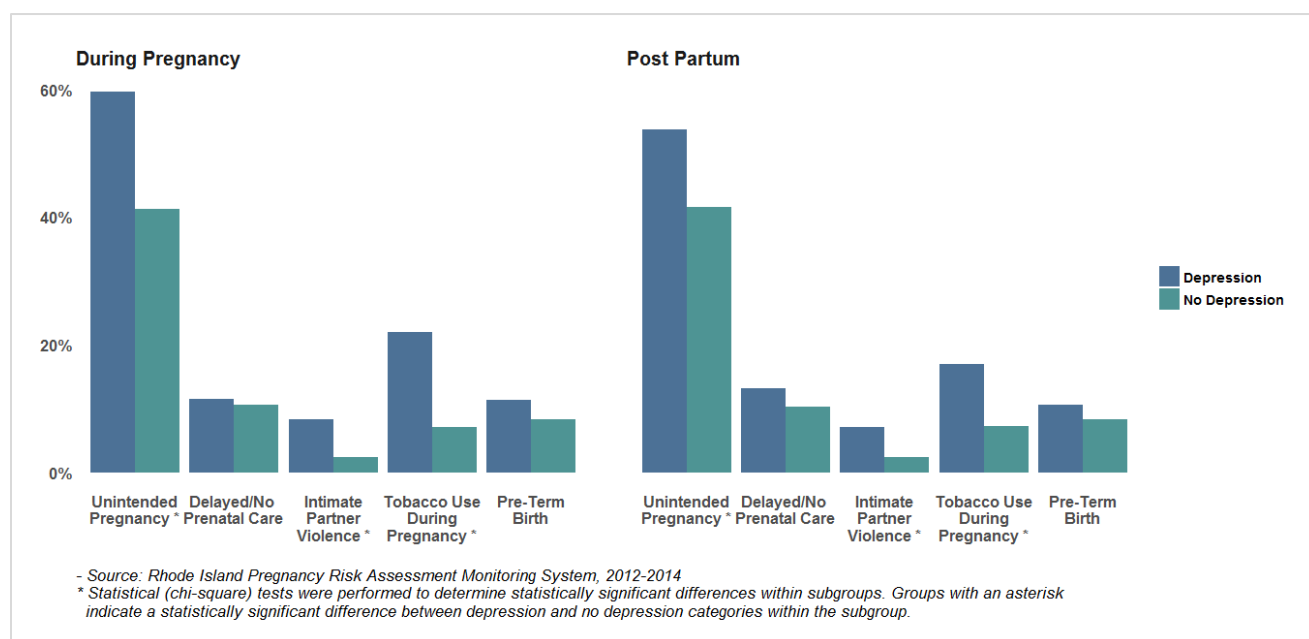
Perinatal

Depression during or after pregnancy (postpartum depression) may affect a woman's ability to perform daily activities or to take care of her infant. This, in turn, can present a risk to the physical, social, and emotional development of the child. According to the Rhode Island Pregnancy Risk Assessment Monitoring System (RI PRAMS) data:

- The proportion of Rhode Island mothers diagnosed with depression during pregnancy ranged from 6.8% to 10.5% during 2004-2014.³
- The proportion of Rhode Island mothers with postpartum depressive symptoms (PDS) ranged from 11.0% to 14.0% during 2012-2014.⁴

Mothers diagnosed with depression during pregnancy and postpartum were significantly more likely than non-diagnosed mothers to report certain risk behaviors (See Figure 1.). Other factors associated with postpartum depression include low birth weight baby (10%), fussy babies (12.3%), and never breastfeeding (24.8%).⁵ Figure 1 illustrates the rates of multiple risk factors and the presence of diagnosed depression during or after pregnancy.

Figure 1: Risk Behaviors Outcomes by Maternal Depression Status during Pregnancy and Postpartum, 2012-2014.



Source: 2014 RI PRAMS Databook

Children and Adolescents

Children and adolescents exposed to stressful life events are at greater risk of developing depression, especially children and adolescents who have multiple negative life events. Risk factors include genetics, chemical changes in the brain, environmental factors, and/or traumatic events.⁶ Negative family relationships, peer victimization through bullying, and maltreatment are examples of traumatic events.

Based on 12-month prevalence data for a major depressive episode as reported from the National Survey on Drug Use and Health (NSDUH), in 2015:

- 12.5% of United States adolescents age 12-17 had at least one major depressive episode in the past year.⁷
- Of those reporting an episode:
 - 70.7% reported the depression at a level of severe impairment, resulting in disruption in their lives for at least a period of two weeks; and
 - 39.3% of those reporting an episode reported receiving treatment for their depression.⁸

In Rhode Island, one source of data on child and adolescent depression is the SurveyWorks! annual survey of middle and high school students. Respondents are asked if they have depression, and students who

indicate experiencing depression are then asked additional questions about recent suicidal thoughts and attempts. Key findings from 2010-2014 are shown in Table 1.

Table 1: Rhode Island Middle and High School Students Reporting Depression, 2011 - 2014.

	Middle School		High School	
	N	%	n	%
Students reporting depression	7,231	27.68	8,266	28.45
Among students reporting depression				
Students with recent suicide ideation	2,568	35.51%	3,412	41.28%
Students with recent suicide attempt	1,059	14.6%	1,650	19.96%

Source: RI SurveyWorks!, 2010-2014

Comparing Rhode Island students to national prevalence data, rates of self-reported depression among Rhode Island students are well above the national average⁹. The level of depression among Rhode Island students is so severe that:

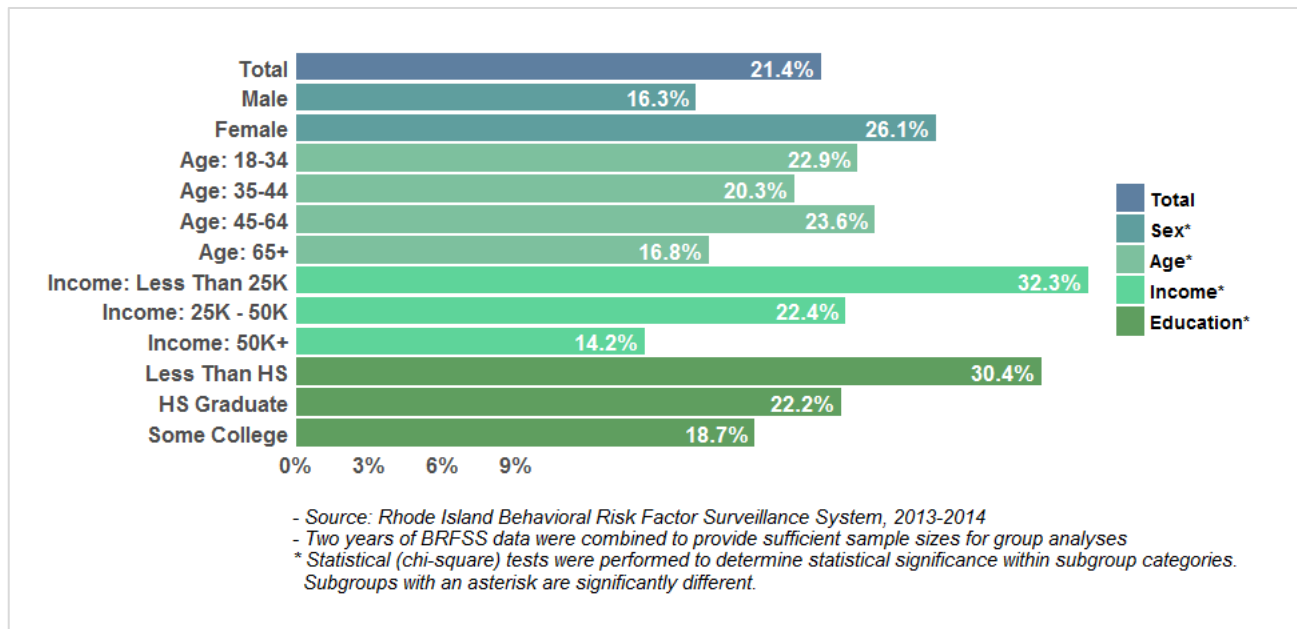
- More than one in three middle school students with depression reported recent thoughts of suicide.
- Two out of five high school students with depression reported recent thoughts of suicide.
- One in five high school students reported a recent suicide attempt.

Adults

A number of reports indicate that older adults in Rhode Island experience poor mental health. In 2013, the CDC reported that Rhode Island scored in the top 25 states (worst scores) in the country for the number of days that seniors reported mental distress (7.2 days). The America’s Health Senior Report ranked Rhode Island 42nd highest in the country for rate of depression.¹⁰

The RI BRFSS includes three questions that address depression among adults: “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”; “Were you ever told you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?”; and “In general, how satisfied are you with your life?”. In 2013-2014, 21.4% of Rhode Islanders reported that they had been diagnosed with depression. Depression is the third most highly reported chronic condition among Rhode Islanders across the lifecourse¹¹ and rates of depression in Rhode Island exceed the national average.¹² Rates of depression in Rhode Island have remained constant from 2011 through 2014. Figure 2 illustrates the prevalence of Rhode Islanders who have been told they have a depressive disorder across subgroups.

Figure 2: Rhode Island Adults Age 18 and Older Reporting Being Told They Have a Depressive Disorder, 2013-2014.



According to the *Truven Report*,¹³ young adults in Rhode Island, age 18–24, were more likely to have serious psychological distress than young adults in other New England states and nationally. Specific to depression, adults age 18-64 living in Rhode Island reported rates of depression higher than the national average; the rate of depression among adults age 25-64 in Rhode Island was highest of all New England states (See Table 2).

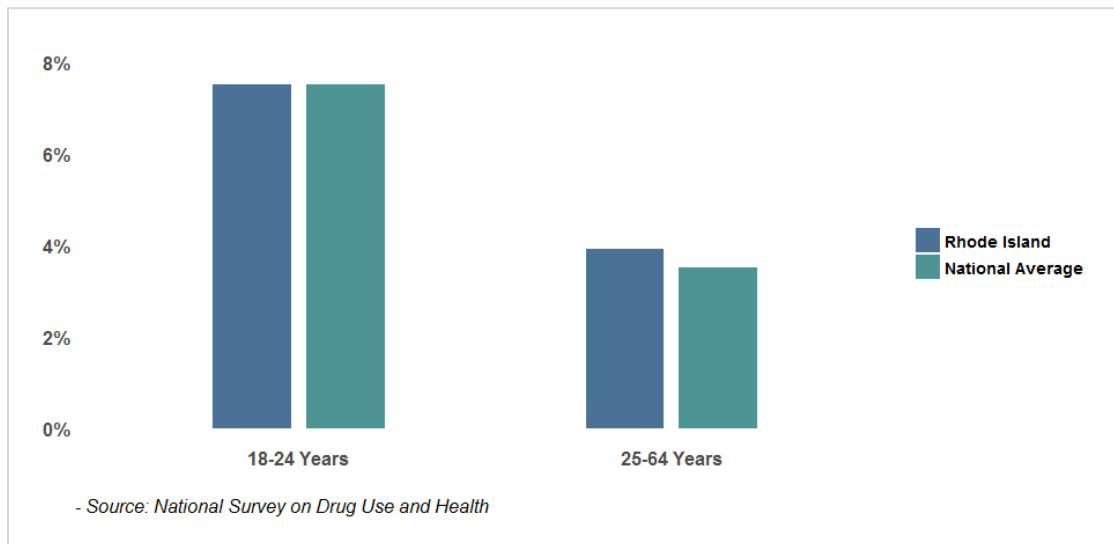
Furthermore, nearly 8% of young adults age 18-24 reported having suicidal thoughts in the previous 12 months, which is consistent with the national average, while the rate for adults age 25-64 is above the national average.¹⁴ (See Figure 3).

Table 2: Self-Report of Depression in the Last Year among Adults, National and New England State Rates, 2012-13.¹⁵

State	Percent Reporting Depressive Episode*	
	Age 18-24	Age 25-64
Rhode Island	9.7%	8.2%
Connecticut	8.4%	6.0%
Maine	9.9%	7.8%
Massachusetts	8.5%	6.3%
New Hampshire	9.8%	6.4%
Vermont	10.7%	7.1%
National	8.8%	6.4%

Source: National Survey on Drug Use and Health; *Percent reporting of at least one major depressive episode within the past twelve months.

Figure 3: Rhode Island Adults, Age 18-64, with Suicidal Thoughts in the Past 12 Months, 2012- 2013.

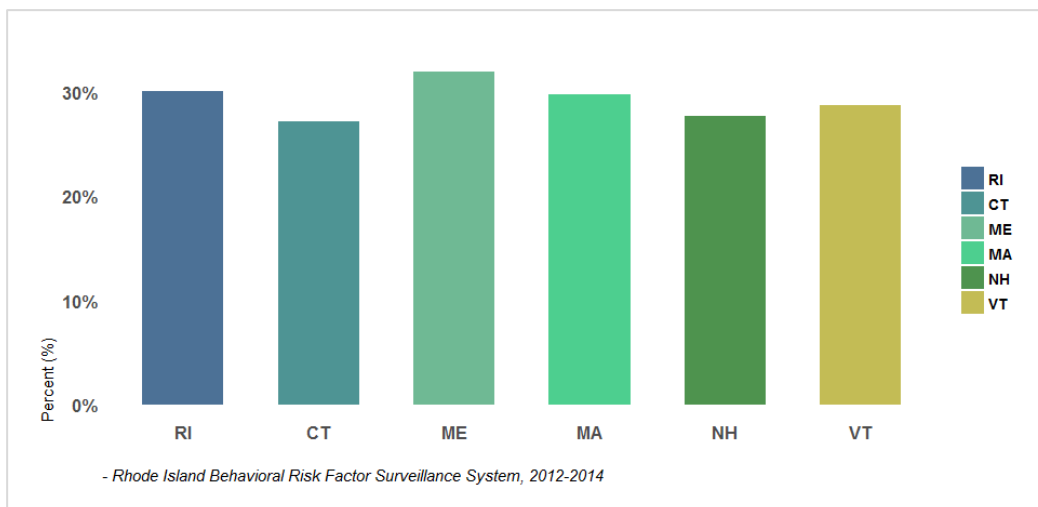


Older Adults

Isolation can lead to depression in older adults. Older adults in Rhode Island rank high in indicators of social isolation, which includes living alone, having few social network ties, and having infrequent social contact.¹⁶ Thirty percent of Rhode Islanders age 65 and older reported living alone, which is higher than the national average (25%). In addition, older adults in Rhode Island report having little or no leisure time/activity and little participation in physical activity, limiting their time spent with others.

The Rhode Island Healthy Aging Data Report 2016 reaffirmed the high rates of depression among older adults age 65 and older in Rhode Island. Of all New England states, only older adults in Maine experienced a higher rate of depression (31.9%) than older adults in Rhode Island (31.9% vs. 30.0%).¹⁷ (See Figure 4.)

Figure 4: Depression among Older Adults in New England, 2012-2014.



Access to Treatment

Children

According to analysis of data from the 2011-2012 National Survey on Children's Health, 34% of children in Rhode Island were not able to access mental health services when needed.¹⁸ There were significant disparities between populations of children who were not able to access mental health services: 75% of African American/Black and 74% of Hispanic children did not receive treatment when needed, as opposed to 17.2% of White children.

Adults

In 2014, of the 27,015 treatment admissions reported through the RI Behavioral Health On-Line Database (BHOLD) 3,623 (13.9%) admissions were for the treatment of major depression and 4,040 (15.5%) were for the treatment of another mood disorder, representing a total of 7,663 (28.4%) of all reported treatment admissions.¹⁹

Using the previously identified prevalence rates, an estimated 60,567 Rhode Island adults age 18–64 have a depressive disorder. BHOLD claims data shows that in 2014, 12.7% of adults age 18-64 with a major depressive or other mood disorder living in Rhode Island were receiving treatment for depression through the formal behavioral healthcare system. A recent study determined that across the United States, an estimated 28.7% of adults with depression receive treatment for the disorder.²⁰ The percent of adults age 18-64 receiving treatment for depression in Rhode Island's formal behavioral healthcare system is below the national estimate.

Older Adults

In SFY 2015, 1,699 Rhode Island adults (age 65 and older) with a diagnosis of major depressive disorder or other depressive disorder, had claims submitted for treatment captured in BHOLD.

Adults age 65 and older comprise 14.4% of Rhode Island's population (151,881). Using prevalence rates for depression cited above, an estimated 45,564 adults age 65 and older have a depressive disorder. Based on the BHOLD claims data and applying 2010 United States Census data as the denominator, 3.7% of adults age 65 and older with a major depressive or other depressive disorder living in Rhode Island are receiving treatment for depression through the formal behavioral healthcare system. This rate of treatment for older adults within the formal behavioral health system is consistent with findings from across the country. Mental Health America reports that more than 55% of older individuals treated for mental health services receive care from primary care physicians and less than 3% age 65 and older receive treatment from mental health professionals.²¹

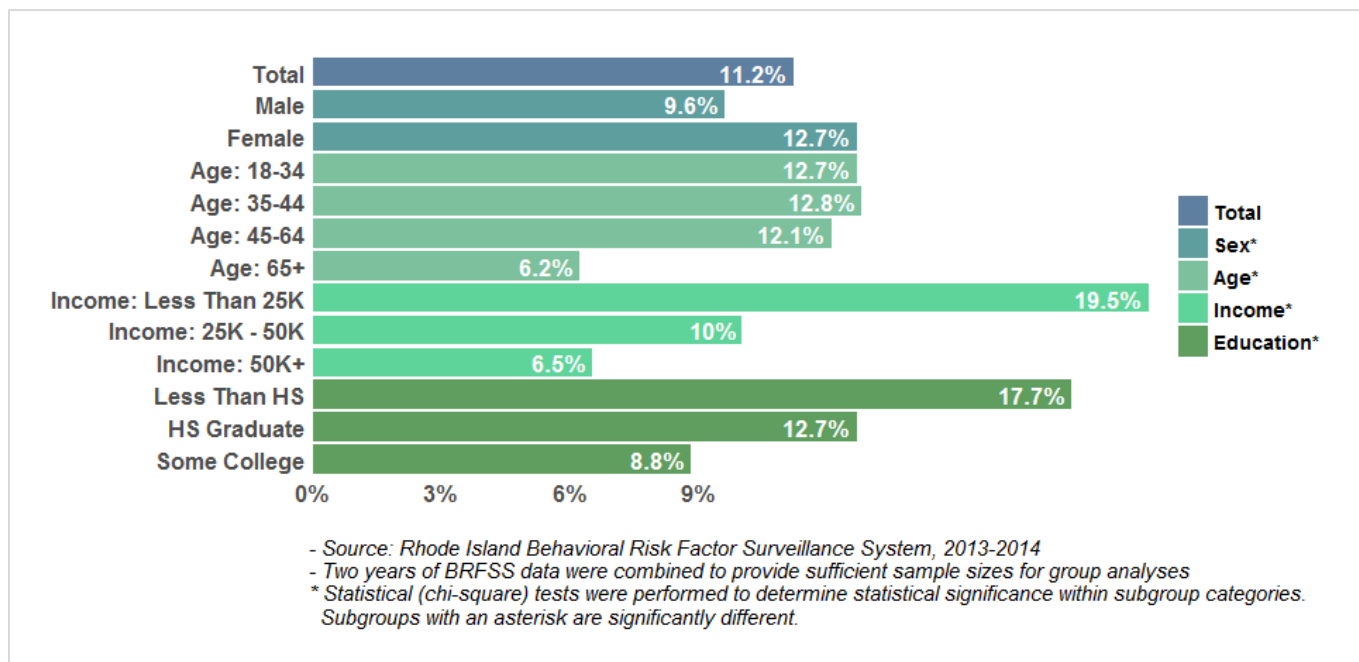
At-Risk Populations and Disparities

According to 2013-2014 BRFSS data:

- Adult females were more likely to report being diagnosed with depression than adult males (24.8% vs. 16.0%).
- At 22.1%, non-Hispanic, Black Rhode Islanders reported slightly higher rates of being diagnosed with depression than non-Hispanic, White (20.3%) and Hispanic (20.3%) residents.²²
- According to the Rhode Island PRAMS data, mothers who were unmarried (11.9%), had less than 12 years of education (14.5%), had public health insurance (12.8%), and participated in the WIC program (12.9%) had a higher prevalence of being diagnosed with depression during pregnancy, compared with their counterparts.²³
- Similarly, mothers who were Hispanic (14.5%), unmarried (15.1%), had 12 years of education (15.0%), had public health insurance (13.1%), and participated in the WIC program (13.7%) had a higher prevalence of postpartum depressive symptoms compared with their counterparts.²⁴

As seen in Figure 5, in 2013-2014, 11.2% of Rhode Islanders age 18 or older reported experiencing 14 or more days of poor mental health during the last month. Statistical analyses reveal significant differences across gender, age, income, and education groups in those experiencing 14 or more poor mental health days during the last month. For instance, 19.5% of individuals reporting household incomes less than \$25,000 a year report having 14 or more poor mental health days during the last month, significantly higher than those with higher household incomes (6.5%-10.0%). Similarly, 17.7% of individuals without a high school degree report 14 or more poor mental health days during the last month. Female respondents are significantly more likely than males to report 14 or more poor mental health days during the last month.

Figure 5: Rhode Island Adults, Age 18 or Older, Reporting 14 or More Days of Poor Mental Health During the Last Month, 2013-2014.



In addition to statewide information, the *Rhode Island Healthy Aging Report* provides community-specific data on depression among Rhode Island’s older adults. Data from the cities of Providence, Pawtucket, Central Falls, Woonsocket, Warwick, East Providence, and Cranston (focusing on 20 city ZIP codes) were analyzed across multiple health indicators. Rates of depression and having multiple co-morbidities²⁵ were higher than the state average for 12 out of 20 communities in the study.

RI BRFSS data confirms that the rate of depression is higher for adults age 65 and older who have chronic health conditions such as obesity, diabetes, and chronic heart disease. In addition, half of these communities mentioned above had a higher-than-state-average rate for the use of Medicaid-financed, long-term support services. Physician office visits were also lower than the state average in 10 of the 20 communities.²⁶ This finding is especially concerning given the higher rates of depression among older adults in these neighborhoods; older adults are more likely to seek treatment initially from a physician than from a specialty mental health provider. Table 3 identifies the communities with the lowest and highest rates of Medicare beneficiaries aged 65 and older with a diagnosis of depression.

Table 3: Percent of Medicare Beneficiaries Age 65 and Older Ever Diagnosed with Depression²⁷

Lowest Rates of Depression		Highest Rates of Depression	
Town	%	Town	%
Exeter	19.7%	Central Falls	38.5%
New Shoreham	20.5%	Providence	34.0%
Jamestown	20.8%	Providence Other*	34.0%

Source: Centers for Medicare & Medicaid Services (CMS) Medicare Master Beneficiary Summary File

*Providence was further divided into two neighborhoods, the northeast and the rest of Providence referred to as 'Providence Other.'

According to the *Rhode Island Healthy Aging Report*, lower rates of community engagement indicators are common among the communities with the most indicators of worse than average health, while high rates of good mental health and community engagement are found among communities with the most indicators of better-than-average health.²⁸

Co-Morbidities

Individuals with untreated depression are at greater risk of developing serious chronic health conditions. People with depression have an increased risk of cardiovascular disease, diabetes, stroke, and Alzheimer's disease. Patients who are depressed when hospitalized for a heart condition are two to five times more likely to have severe chest pain, heart attack, or stroke in the next year. This recurrence is linked more closely to depression than to smoking, diabetes, high blood pressure, or high cholesterol. Untreated, depression increases the risk of dying after a heart attack.²⁹

Depression in older adults also can increase the risk of developing various physical disorders, including heart attacks, and can complicate recovery from physical disorders when left untreated.³⁰ People with depression are at higher risk for osteoporosis than the general population,³¹ which places older adults, particularly females, at higher risk for bone fractures.

The co-occurrence of alcohol use disorders and depression is well-established.³² Alcohol use among adolescents has been associated with considering, planning, attempting, and completing suicide.³³ In one study cited by the National Institutes of Health (NIH), 37% of eighth-grade females who drank heavily reported attempting suicide, compared to 11% who did not drink alcohol.³⁴ Prevention efforts supported by the Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals (BHDDH) are having positive results that may impact this disturbing relationship between drinking and attempting suicide: the rates of Rhode Island high school students reporting past-month alcohol use, which was once highest within the Northeast region, is now below national averages.³⁵ Alcohol was the most commonly identified substance in postmortem toxicological analysis, present in 31.9% of Rhode Islanders who committed suicide.³⁶

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- ¹⁴ Rhode Island behavioral health project: Demand report (2015a).
- ¹⁵ Information on statistical significance cannot be addressed here because raw data were not available from the source (the Truven Report).
- ¹⁶ 2016 Senior Report (2017).
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