



## Diabetes Fact Sheet for Rhode Island, 2014

Diabetes is a group of diseases marked by high levels of blood sugar resulting from defects in insulin production, insulin action, or both. Serious complications and even premature death can result from diabetes, but people with diabetes can take steps to control the disease and lower the risk of complications.<sup>1</sup>

Diabetes is **common, serious, costly, controllable,** and **preventable.**

### Common

- About 10.2% (79,800) of Rhode Island adults over the age of 20 have been diagnosed with diabetes.<sup>2</sup> RI rates are historically consistent with U.S. rates.<sup>3</sup>
- An estimated additional 29,500 RI adults have diabetes but do not know it, bringing the total number of diabetic adults in the state to over 109,000.<sup>4</sup>
- The prevalence of diagnosed diabetes is highest (19.1%) among people who are over 65 years old, lower among those 45-64 years old (12.6%) and lowest among those 20-44 years old (3.8%).
- People of lower educational attainment are at higher risk: 14.2% of those with less than a 12<sup>th</sup>-grade education have been diagnosed with diabetes, compared to 8.5% of those with at least some college.<sup>5</sup>
- Although children have historically been subject only to Type 1 diabetes, both Type 1 and Type 2 (adult-onset) diabetes are becoming more common among children.<sup>6</sup>

### Serious

- People with diabetes may develop many diabetes-related complications or conditions including blindness, lower extremity amputations, end-stage renal disease, and cardiovascular disease.
- In 2012 there were 29,350 diabetes-related hospitalizations in Rhode Island.<sup>7</sup> Diabetes was the cause of 191 deaths and an underlying cause of an additional 675 deaths.<sup>8</sup>

### Costly

- The total estimated health care expenditure in RI for insured adults with diabetes in 2014 was \$617 million. The projected total for 2020 is \$819 million.<sup>9</sup>

### Controllable

- Education and self-management skills can help people with diabetes to control the disease and minimize the risks of health complications.<sup>10</sup>
- Screening is a crucial first step in controlling diabetes. 42.7% of Rhode Island adults who have not been diagnosed with diabetes have not been tested within the past three years.<sup>11</sup>
- People who have been diagnosed with diabetes should receive certain annual medical assessments to be sure their diabetes is under control. 71% of diagnosed diabetics in Rhode Island receive the recommended annual eye exam, which already exceeds Healthy People 2020 goals. Rhode Island is still some distance from Healthy People 2020 goals for other annual medical assessments: 66.8% of diabetics receive the recommended foot exam, and 68.8% had the two A1C tests as recommended.<sup>12,13</sup>

### Preventable (Type 2)

- Pre-diabetes is a condition denoting blood glucose levels higher than normal but not high enough to be classified as diabetes. People with pre-diabetes have an increased risk of progressing to Type 2 diabetes, heart disease, and stroke, but appropriate changes in lifestyle and treatment can reduce these risks.<sup>14</sup>

- About 6.7% of adult Rhode Islanders (about 47,200 people) have been diagnosed with prediabetes. However, national estimates indicate 35% of all people aged 20 or older have prediabetes and many do not know of their condition.
- Weight and physical inactivity are highly associated with risk of prediabetes and diabetes. Among Rhode Island adults who are not overweight (BMI $\leq$ 25.0), 3.9% have been diagnosed with diabetes. Among obese Rhode Islanders (BMI $\geq$ 30.0), the rate of diagnosed diabetes is 20.6%. Physical activity and diet modification can prevent or delay diabetes among people with pre-diabetes.
- Gestational diabetes (GDM) usually resolves itself following pregnancy, but about 50% of women with GDM develop Type 2 diabetes later. Women with GDM can reduce their chances of developing Type 2 diabetes by following CDC recommendations for post-pregnancy healthy living.<sup>15</sup> In Rhode Island, 12.2% of women who gave birth in 2009-10 were diagnosed with GDM, compared to a national average of 9%.<sup>16</sup>

The RI Diabetes Prevention and Control Program works to improve the health care delivery system and to develop the clinical-community linkages to increase access to diabetes prevention and control programs.

<b>Intervention</b>	<b>Target Audience</b>	<b>Purpose</b>
Rhode Island Chronic Care Collaborative (RICCC)	Physician practices	<ul style="list-style-type: none"> <li>• Improve the quality of care provided to patients with chronic illness in order to improve health outcomes.</li> <li>• Decrease the health expenditure required to provide quality care to patients with chronic illness.</li> <li>• Strengthen the provider-patient partnership in managing health.</li> </ul>
Living Well Rhode Island (LWRI)	Adults diagnosed with diabetes	<ul style="list-style-type: none"> <li>• Provide evidence-based chronic disease self-management education statewide.</li> <li>• Develop a chronic disease self-management workforce for English and Spanish education.</li> </ul>
TEAMWorks	Physician practices	<ul style="list-style-type: none"> <li>• Promote American Diabetes Association standards of care</li> <li>• Help patients lower HbA1c, lower blood pressure, lower LDL, and increase insulin compliance</li> <li>• Teach patients how to manage their diabetes in order to delay or prevent complications and improve their quality of life.</li> <li>• Uses multidiscipline approach by “teaming up” with the provider, patients and a team of CDOEs consisting of a registered nurse, dietician, and pharmacist in a group visit.</li> <li>• Introduce adults with diabetes to formal diabetes education.</li> </ul>
Certified Diabetes Outpatient Educators (CDOE)	Nurses, dietitians, and pharmacists who provide education to people diagnosed with diabetes or pre-diabetes	<ul style="list-style-type: none"> <li>• Support and certify a workforce of nurses, dietitians and pharmacists who provide diabetes education so that patients can better manage their diabetes.</li> </ul>
RI Diabetes Council	Professionals interested in diabetes control and prevention	<ul style="list-style-type: none"> <li>• Meet quarterly to discuss best practices and further interventions to promote public education and improve the care of people with diabetes.</li> </ul>
Surveillance	Stakeholders and policy makers	<ul style="list-style-type: none"> <li>• Support evidence-based diabetes programs.</li> </ul>

**Need more information?**

RI Diabetes Prevention and Control Program Website: <http://www.health.ri.gov/topics/diabetes.htm>

## References

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- <sup>1</sup> Centers for Disease Control and Prevention. National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta, GA. Available at [http://www.cdc.gov/diabetes/pubs/pdf/ndfs\\_2011.pdf](http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf).
  - <sup>2</sup> 2012 Rhode Island Behavioral Risk Factor Surveillance System (BRFSS) data.
  - <sup>3</sup> CDC Behavioral Risk Factor Surveillance System (BRFSS). Available at <http://apps.nccd.cdc.gov/brfss/display.asp?cat=DB&yr=2008&qkey=1363&state=UB>.
  - <sup>4</sup> Extrapolated from national estimates: CDC, National Diabetes Fact Sheet, 2011. Available at [http://www.cdc.gov/diabetes/pubs/pdf/ndfs\\_2011.pdf](http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf).
  - <sup>5</sup> 2012 Rhode Island Behavioral Risk Factor Surveillance System (BRFSS) data.
  - <sup>6</sup> Centers for Disease Control and Prevention. Diabetes and Children. Available at [http://www.cdc.gov/diabetes/projects/diab\\_children.htm](http://www.cdc.gov/diabetes/projects/diab_children.htm).
  - <sup>7</sup> 2012 Rhode Island Hospital Discharge data.
  - <sup>8</sup> 2012 Rhode Island Vital Statistics data.
  - <sup>9</sup> Centers for Disease Control and Prevention. Chronic Disease Cost Calculator, version 2.
  - <sup>10</sup> Centers for Disease Control and Prevention. Take Charge of Your Diabetes. 4th edition. Atlanta: U.S. Department of Health and Human Services, 2007. Available at <http://www.cdc.gov/diabetes/pubs/tcyd/index.htm>.
  - <sup>11</sup> 2012 Rhode Island Behavioral Risk Factor Surveillance System (BRFSS) data.
  - <sup>12</sup> U.S. Department of Health and Human Services. Healthy People 2010. Available at <http://healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=8>.
  - <sup>13</sup> 2012 Rhode Island Behavioral Risk Factor Surveillance System (BRFSS) data.
  - <sup>14</sup> Centers for Disease Control and Prevention. National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2011. Atlanta, GA. Available at [http://www.cdc.gov/diabetes/pubs/pdf/ndfs\\_2011.pdf](http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf).
  - <sup>15</sup> Centers for Disease Control and Prevention, Gestational diabetes. Available at <http://www.cdc.gov/diabetes/pubs/pdf/gestationaldiabetes.pdf>.
  - <sup>16</sup> 2009-2010 Pregnancy Risk Factor Surveillance System (PRAMS) data.