Obesity
The past 30 years have seen an increase in overweight and obesity rates among adolescents in the U.S.\textsuperscript{1,2} The immediate and long term health effects of this increase are a cause for concern.

According to the Centers for Disease Control and Prevention (CDC), healthy lifestyle habits, including healthy eating and physical activity, can lower the risk of becoming obese and developing related diseases.

The Centers for Disease Control (CDC) defines child and adolescent obesity and overweight as:

- **Overweight** is defined as a BMI\textsuperscript{3} at or above the 85th percentile and lower than the 95th percentile for children of the same age and sex.
- **Obesity** is defined as a BMI at or above the 95th percentile for children of the same age and sex.

The Vermont Youth Risk Behavior Survey (YRBS) asks high school students to report their weight and height. From this information, estimates for BMI are derived. The graphics below summarize findings regarding BMI and violence, suicide and substance use measures from the 2013 YRBS survey. This is the third of three data briefs on this subject using 2013 data.

**Violence and Suicide and Obesity**
In 2013, high school students who were bullied, reported hurting themselves, were forced to have sex, made a suicide plan or attempted suicide, had a higher prevalence of obesity compared to the Vermont average.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{percent_obese_by_violence_suicide}
\caption{Percent of high school students who are obese by violence and suicide risk factors}
\end{figure}

*Significantly different from the Vermont average based on 95 percent confidence intervals

\begin{itemize}
\item Bullied 1+ times past 30 days: 15%*
\item Hurt self 1+ times past year: 15%*
\item Forced to have sex, ever: 15%*
\item Made suicide plan past year: 15%*
\item Attempted suicide 1+ times past year: 18%*
\end{itemize}

\begin{itemize}
\item \textsuperscript{2} National Center for Health Statistics. Health, United States, 2011: With Special Features on Socioeconomic Status and Health. Hyattsville, MD; U.S. Department of Health and Human Services; 2012.
\item \textsuperscript{3} Body mass index (BMI) = weight (kilograms)/height (meters\textsuperscript{2})
\end{itemize}
**Substance Abuse and Obesity**

In 2013, high school students who smoked cigarettes at least once in the past 30 days were more likely to be obese compared to their peers. Students who reported past month binge drinking and marijuana use were not significantly different from their peers in terms of obesity.

*Significantly different from the Vermont average based on 95 percent confidence intervals*

Students who reported using alcohol, smoking cigarettes or using marijuana before age 13 were more likely to be obese compared to their peers.

*Significantly different from the Vermont average based on 95 percent confidence intervals*

**Resources for Schools and Programs Working in Youth Obesity Prevention**

Resources are available at the Vermont Department of Health website, including school health and fit and healthy kids. Please visit the following site to learn more:

[http://healthvermont.gov/fitandhealthy.aspx](http://healthvermont.gov/fitandhealthy.aspx)

For more information, contact Shayla Livingston, MPH (shayla.livingston@state.vt.us; 802-863-6337). For the YRBS Data Brief Archive, visit: [http://www.healthvermont.gov/research/yrbs/data_briefs.aspx](http://www.healthvermont.gov/research/yrbs/data_briefs.aspx)