Cardiovascular Disease in Children

Heart disease and stroke are the principal components of cardiovascular disease (CVD). Although CVD is rare in children, many youth experience the risk factors for the development of CVD later in life.

Behavior patterns such as being physically active, eating a well-balanced diet, maintaining a healthy weight and abstaining from tobacco use are developed during the adolescent years and have lifelong significance.

Risk Factors

The prevalence of risk factors among children is measured by the Youth Risk Behavior Survey (YRBS), a survey conducted every other year in a sample of middle and senior high schools statewide.

According to data from the 2003 YRBS, many children are living with one or more of the following risk factors: frequent cigarette smoker (smoked cigarettes on 20 or more of the past 30 days), overweight or obese, lack moderate physical activity, consume fewer than five fruits and vegetables per day and spend two or more hours daily watching TV or playing video games.

To reduce the risk of developing CVD later in life, it is recommended that children and youth work to eliminate these risk factors through increasing physical activity, improving dietary habits, maintaining a healthy weight and avoiding cigarette smoking.

### Risk Factors for Cardiovascular Disease

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Grades 7-8 (%)</th>
<th>Grades 9-12 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch TV &amp; play video games more than two hours per day</td>
<td>66.8%</td>
<td>57.3%</td>
</tr>
<tr>
<td>Fewer than five fruits &amp; vegetables per day</td>
<td>82.7%</td>
<td>76.5%</td>
</tr>
<tr>
<td>Lack of moderate physical activity</td>
<td>31.4%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Overweight</td>
<td>9.3%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Frequent cigarette smoker</td>
<td>16.0%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

2005 Fact Sheet
Snack foods and beverages that can be purchased at school by students in grades six through 12

- Fruits or vegetables: 16%
- Low-fat cookies, cakes, pastries or other baked goods: 38%
- Salty snacks, low in fat (pretzels, baked chips, other low-fat chips): 51%
- Salty snacks not low in fat, such as regular potato chips: 53%
- Chocolate candy: 60%
- Other kinds of candy: 63%
- 100% fruit juice: 84%
- Soft drinks, sports drinks or fruit drinks that are not 100% juice: 95%
- Bottled water: 95%

Source: School Health Education Profile (SHEP) 2002

Preventable risk factors that can cause obesity, physical inactivity and poor nutrition also can cause other chronic diseases, including cardiovascular disease (CVD), diabetes and some cancers. By developing and implementing nutrition and physical activity policy in schools, after-school programs and the community setting, the Cardiovascular Health Program can help ensure the offering of healthy food choices and the opportunity for youth to develop healthy lifestyles.

The Cardiovascular Health Program seeks to improve cardiovascular health of North Dakotans by facilitating partnerships and coordination among concerned parties, monitoring critical aspects of cardiovascular disease (CVD) and developing effective strategies to reduce CVD and related risk factors with an overarching emphasis on heart-healthy policies and environmental changes.

The Cardiovascular Health Program is progressing on the development of a comprehensive plan to address CVD, including primary and secondary prevention and its accompanying risk factors such as high blood pressure, high blood cholesterol, diabetes, tobacco use, physical inactivity, nutrition and overweight and/or obesity.

Primary prevention of cardiovascular disease focuses on the areas of physical activity, nutrition, weight control and abstinence from tobacco through lifestyle changes.

Secondary prevention focuses on developing effective strategies to reduce the burden of cardiovascular disease and improving the quality of care provided by the health-care system.