Kids Perspectives

When we published our first health report over 15 years ago, we asked kids to tell us what “being healthy” meant to them.

Some of their words, and the words of some children we know today, are interspersed throughout this report.

Being healthy means that you are in a caring, loving home, that you have an equal chance in this world. Being healthy is living in this world with the safety, love and care you deserve.
The State of Our Children: KIDS COUNT in Vermont
Health Report

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Introduction

The State of Our Children: KIDS COUNT in Vermont Health Report is focused primarily on maternal and child health data. It offers an overview of the needs of Vermont’s young children and families, through data reported on the state level.

The health of children is a vital indicator of the health of a nation. Vermont’s commitment to children’s health is evident in our history of strong maternal and child policy and program initiatives. For a number of measures we are nearing the 2010 Healthy Vermonters goal. Today most Vermont children have health insurance, women have access to early prenatal care, and we have made and continue to make progress on environmental health concerns such as lead screening for young children.

Yet there are still threats to our children’s health and wellbeing. Immunization rates of young children are insufficient to protect us from diseases we had nearly eradicated, food insecurity and hunger—along with poverty—is on the rise, and there are still aspects of health care—like oral health care access—that haven’t yet been met with policies that can create needed improvements.

To address these and other health issues, it is critical that we support state policies and programs that address them and advocate for programs and services that help ensure all children have what they need to grow and thrive.

Healthy Vermonters Reports

The Healthy Vermonters reports are published by the Vermont Department of Health. The 2000, 2010, and 2020 reports compare current data about health in Vermont to goals that have been selected to describe and track health priorities for the state and guide public health efforts, decade by decade.

Throughout this report, we compare state health data to the Healthy Vermonters 2010 and 2020 goals. This helps us measure where we are today compared to where we want to be, as we move forward toward healthier people and communities in Vermont.
Early prenatal care in Vermont

Between 2000 and 2010, the rate of pregnant women in Vermont receiving early prenatal care ranged between 80 and 85 percent.\(^2\)\(^,3\) This was short of the goal set by Healthy Vermonters 2010 that at least 90 percent of Vermont women receive prenatal care in the first trimester of their pregnancy.\(^3\)

Pregnancy is a critical time for laying the groundwork for a healthy life. Ensuring that pregnant women access quality health care during the very first stages of pregnancy increases the chances for healthy births and must remain an important goal.

Early prenatal care is an essential practice for assessing the health of pregnant women and developing babies. Beginning in the first trimester of pregnancy, early prenatal care includes screening for possible medical risks such as high blood pressure, kidney disease, diabetes, and depression. Expectant mothers also receive basic parenting education, nutrition counseling, and information about health risks associated with smoking, substance abuse, and other threats to infant health.

Prenatal care matters. An important component of a healthy pregnancy, studies have shown that early prenatal care is linked to higher birth weight and a lower risk of pre-term birth. Early prenatal care helps detect and manage potential complications and correlates with lower rates of infant mortality.\(^1\)

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\(^{a}\) Data are three-year rolling averages, e.g., 2010 represents the average of data from 2008, 2009, and 2010. 2010 data are preliminary.
Teen Births

Teen mothers often have fewer resources than older parents to provide for a healthy baby and for themselves. Babies born to teen mothers are more likely than other infants to be born at a low birth weight and to experience health problems or developmental delays.4

The status of teen births in Vermont

The teen birth rate in Vermont was 22.6 percent lower in 2010 than it was at the beginning of the decade.5,6 The Vermont Department of Health also tracks the percentage of first births to women under 20 who have not completed high school, an indicator which can correlate with fewer resources available to the infant as well as impact the future educational prospects of the mother. The percentage for such births has also improved, dropping 34 percent between 2000 to 2010.5 Nonetheless, the overall teen birth rate currently remains above the 2005 low point, when there were 18 births per 1,000 young women between the ages of 15 and 19 years of age.

In 2006, Vermont—along with the rest of the nation—saw the first rise in the teen birth rate in over a decade. Researchers point to several key factors to explain the change, including a rise in teen sexual activity and a decline in teen contraceptive use as well as diminished employment and educational opportunities during the recession.7

Contraceptive Use

Higher rates of contraceptive use among adolescents will reduce teen pregnancies. In 2011, 86 percent of 9th through 12th graders reported using contraceptives the last time they had intercourse.8 This is well under the Healthy Vermonters 2020 target rate of 95 percent.

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Nutrition During Pregnancy

Nutrition during pregnancy is critical for the health of the mother and the developing baby. Women who have adequate nutrition during pregnancy are more likely to carry a pregnancy to full-term, and their babies are born healthier. Children born to healthy mothers continue to grow at healthy rates, have improved cognitive functions throughout their development, and are less likely to have low birth weight or neurological or developmental delays.9

WIC

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a critical anti-hunger and health education program that serves eligible pregnant women, new mothers, and children less than five-years-old. WIC delivers healthy food to participants’ homes and provides a small monthly cash benefit for fruits and vegetables to be purchased from participating grocers or farmers’ markets. It also provides nutrition education, breastfeeding support and education, referrals to health care and community services, and children’s health screenings.10

WIC improves nutrition during pregnancy and for infants and young children. More than half of Vermont women who give birth each year, as well as more than half of infants less than one-year-old, and approximately one-third of children between the ages of one-year-old and four-years-old are enrolled in WIC.11 These participation rates have been consistent between 2006 and 2010.

WIC Eligibility

In Vermont, women who are pregnant, postpartum or breastfeeding and infants and children up to age 5 are eligible for participation in WIC if the household income is below 185 percent of the federal poverty guidelines. Additionally, women and children living in a 3SquaresVT household or who receive Dr. Dynasaur/Medicaid health insurance benefits are automatically eligible for WIC, even if the household income doesn’t fall below 185 percent of the poverty guidelines. Mothers, infants and children in these age categories who have been determined by a health professional to be at certain types of nutrition risk can also apply, as can fathers, grandparents, and foster parents on behalf of eligible children who are in their care.12

Young Children Participate in WIC at a Lower Rate than Infants and Mothers

<table>
<thead>
<tr>
<th>Year</th>
<th>1 to 4-Year Old Children</th>
<th>Women Who Gave Birth</th>
<th>Infants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>35.9%</td>
<td>54.4%</td>
<td>62.6%</td>
</tr>
<tr>
<td>2007</td>
<td>36.5%</td>
<td>55.5%</td>
<td>59.7%</td>
</tr>
<tr>
<td>2008</td>
<td>38.6%</td>
<td>57.2%</td>
<td>61.4%</td>
</tr>
<tr>
<td>2009</td>
<td>38.3%</td>
<td>58.1%</td>
<td>58.8%</td>
</tr>
<tr>
<td>2010</td>
<td>38.0%</td>
<td>56.3%</td>
<td>60.5%</td>
</tr>
</tbody>
</table>

Healthy Infants, Healthy Children

Healthy infants and children are more likely to be healthy adults.
Birth Weight

In Vermont between 2000 and 2010, the rate of babies born with low birth weight—defined as less than 5.5 pounds—ranged between 5.9 and 6.7 percent. The *Healthy Vermonters* 2010 goal was that no more than 5 percent of babies be born with low birth weight.14

**What Birth Weight can Mean**

One of the many benefits of a healthy pregnancy—including access to early prenatal care—is that it decreases the chance of a baby being born with low birth weight.

Babies born weighing less than 5.5 pounds are at increased risk for respiratory conditions, infections, cognitive and developmental delays, and long-term health complications such as chronic lung disorders or cerebral palsy.15

Infant Mortality

Infant mortality is the death rate of infants under one year of age. Low birth weight babies, premature babies, and babies born with certain birth defects or complications are most at risk.16

**What is the status of infant mortality in Vermont?**

In 2010, the infant mortality rate in Vermont was 4.9 deaths per 1,000 births; a 21 percent decrease from the year 2000.17 The decline in infant mortality may in part be related to public awareness campaigns aimed at preventing Sudden Unexpected Infant Deaths. Many of these deaths are now understood to be attributable to causes such as infection, unsafe sleep environment, or rare diseases.18

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1 Data on birth weight and infant mortality are three-year rolling averages, e.g., 2010 represents the average of data from 2008, 2009, and 2010. 2010 data are preliminary.
Poverty undermines children’s healthy development and has lasting effects on children’s physical and social-emotional health. Children growing up in poverty are more likely to experience hunger, anxiety, behavioral problems, depression, and report lower levels of self-esteem and trust.\textsuperscript{19}

Children born into poverty are less likely to have received early prenatal care and are more likely to be born with low birth weight. These are factors correlated with worse health outcomes and long-term health complications. Poor and low-income children are at higher risk for undernutrition and malnutrition, which can lead to decreased growth, obesity, and a combination of cognitive, physical, behavioral, and developmental delays. Children growing up in poverty are also at an increased risk for lead poisoning and are more likely to have an increased blood lead level.

**Child Poverty in Vermont**

Child poverty is an issue of increasing concern in Vermont. In 2012, 15.5 percent of Vermont’s children were living in poverty.\textsuperscript{20, d} This is a 25 percent increase from 2007. The poverty rate for Vermont’s youngest children, those less than six-years-old, is significantly higher, and has risen 28 percent in the same time period.\textsuperscript{21}

\textbf{Rising Child Poverty in Vermont}

\begin{figure}
\includegraphics[width=\textwidth]{rising_poverty_graph.png}
\end{figure}

\textsuperscript{d} Data are three-year rolling averages, e.g., 2010 represents the average of data from 2008, 2009, and 2010.
Healthy Policies, Healthy Vermont

Good health policies make a difference.

Health Insurance

Children’s access to health insurance plays a key role in children’s healthy development and has a life-long impact on kids. Healthy children have the energy to participate in school and play, have more resistance to childhood illnesses, and are less at risk for chronic or serious ailments.

Dr. Dynasaur

The majority of children in Vermont have health insurance. Dr. Dynasaur is Vermont’s public insurance program for children and pregnant women, and an important piece of providing near-universal health coverage for children in the state. Dr. Dynasaur provides comprehensive coverage for prevention and treatment to children up to age 19 as well as to pregnant women.

Dr. Dynasaur provides health insurance for children in families with incomes up to 300 percent of the federal poverty guidelines, more than twice federal cutoffs for Medicaid. This expanded eligibility provides affordable health insurance options for low- and middle-income families, increasing access to insurance and health care.

A National Example

The 2013 Annie E. Casey KIDS COUNT Data Book ranks Vermont and Massachusetts first in the nation for children’s health insurance, with 98 percent of Vermont’s children insured. Local data shows that 46.2 percent of Vermont’s children received public health insurance in 2011.

Percent of Vermont Children Enrolled in Dr. Dynasaur

Federal eligibility for Medicaid is set at 133 percent of the poverty level.
Immunization provides critical protection against multiple disabling and life threatening diseases. Due to generations of vaccinations, the United States has low levels of vaccine-preventable childhood diseases. However, the Center for Disease Control warns that, “Without vaccines, epidemics of many preventable diseases could return, resulting in increased—and unnecessary—illness, disability, and death among children.”

It is recommended that children receive the majority of their immunizations before the age of two years. Some boosters and additional vaccinations are recommended between four and fourteen years.

Some children cannot be vaccinated. These children rely on “herd immunity” to keep them safe. Herd immunity is the protection provided when significant portions of the population are immunized, minimizing avenues for diseases to exist and spread, and lowering the risk of contraction for non-immunizable children. Maintaining this protection depends on as many children as possible receiving the recommended immunizations.

Pregnant women can be covered by Dr. Dynasaur.

Dr. Dynasaur also provides coverage for pregnant women and new mothers up to 60 days past delivery and with incomes up to 200 percent of the poverty guidelines, expanding access to an important aspect of pre- and postnatal care.

Uninsured Children in Vermont

According to the Vermont Household Health Insurance Survey of 2012, 2.5 percent of children (2,770 kids) lacked health insurance in 2012. Geographically, the largest concentrations of uninsured children were in Windsor, Franklin, and Chittenden counties. Without health insurance to cover the cost of care, uninsured children are less likely than insured children to receive regular medical care, mental health services, dental care, diagnostic tests, and prescription medicines.
Immunization in Vermont

The universal immunization policy in Vermont alleviates the largest barrier to immunization—cost—and enables all children less than 18 years of age to receive all recommended vaccines at no charge. Vaccines are distributed to health care provider sites located in traditional medical clinics, Federal Qualified Health Centers, Rural Health Centers, and community health centers. The 4:3:1:4:3:1:4 vaccination series is a universally accepted series to immunize children against diphtheria, tetanus, pertussis, polio, measles, mumps, rubella, Hib disease, hepatitis B, varicella, and pneumococcal disease.

Data from the Vermont Immunization Registry (VIMR) and the National Immunization Survey (NIS) show that, as of 2012, between 56 and 64 percent of 19 to 35-month-old Vermonters were fully immunized with the series.\textsuperscript{32, 33, g}

![Bar chart showing immunization rates from 2009 to 2012 for VIMR and NIS.]

According to the 2012 National Immunization Survey, only 63.2 percent of 19-35 month old children in Vermont had been fully immunized.\textsuperscript{34} The \textit{Healthy Vermonters 2020} goal is for at least 90 percent of children in this age range to receive all recommended vaccines.\textsuperscript{35}

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\textsuperscript{g} 4:3:1:4:3:1:4 data is collected for Vermont by the Vermont Immunization Registry (VIMR) and the National Immunization Survey (NIS). There are limitations to both methods, so it is recommended that VIMR and NIS data are considered simultaneously when viewing child immunization data. NIS is a random telephone survey conducted at the state level each year. VIMR began in 2004 and is a database of immunization records from pediatric and family practices throughout the state. While most practices joined the VIMR in 2009, participation in the registry is not mandatory and thus data from every practice is not included. Windsor and Rutland counties have particularly low provider participation rates in the registry so the low numbers in these counties are not considered an accurate assessment of vaccination coverage.
Childhood Lead Exposure

No level of lead exposure is safe for children; it only takes a very small amount to cause harm. Lead exposure poses serious health risks, particularly from the prenatal period through age six. The greatest harm from neurotoxins like lead occurs during early pregnancy to age three. Even during the first few weeks of pregnancy, lead exposure can impact the brain. Unlike mature brains, during embryo and fetal development, the brain has no protective cell barrier to help it resist lead in the bloodstream. Exposures that may be insignificant for adults are greatly magnified in children and infants. According to the Agency for Toxic Substances & Disease Registry, adults will absorb only a few percent of the lead that they may swallow, while children absorb about 50 percent of ingested lead. The earlier a child is exposed, the more the effects are compounded because growth is occurring rapidly. Developing organs are permeable to lead in the bloodstream. The immature body does not yet have the ability to metabolize, detoxify and excrete toxins.

Lead paint is the primary source of childhood lead exposure. Renovations, everyday use of windows and doors, and flaking paint elsewhere in and around the home can release lead particles. When ingested, lead is rapidly absorbed. In 2007 Get the Lead Out of Vermont reported that “Vermont’s housing stock is saturated with lead-based paint” and that 70 percent of Vermont’s housing units were built prior to the 1978 lead paint ban. The 35 percent of Vermont homes built before 1950 have even more toxicity. Prior to that time, white house paint was 50 percent lead.

Lead also finds its way into homes through a wide array of consumer items. Lead bans do not exist in China and other developing nations that manufacture the bulk of U.S. consumer products. Toys containing lead pose a particular risk to children.

Vermont childhood lead poisoning prevention policy focuses on the period when the developing body is most vulnerable to environmental toxins. It targets testing of children at ages one and two, or by age six if not previously tested. Lead Screening is free for children enrolled in Medicaid and Dr. Dynasaur. Age two is considered the peak developmental period for lead exposure, because children are involved in crawling and walking, and putting their fingers, toys and other objects in their mouths.

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Data represent a single year in time

The blood lead level of concern, as established by the Vermont Commissioner of Health in 2007, is 5 µg/dL.
Considerable progress has been made in reducing childhood exposure to lead since last decade, when in 2000, over 45 percent of Vermont children ages 1-5 had blood lead levels above 5µg/dL. The Healthy Vermonters 2020 goal is to reduce the rate of children with levels above 10 µg/dL to 0 percent.

Oral Health

Any comprehensive health picture must include oral health. Good oral health is integral to overall health and quality of life. Regular oral health care can also be an effective tool for prevention and early treatment of illness. Many health problems—including those not limited to the mouth—can be detected through regular dental care.

Yet many children in Vermont suffer from lack of access to dental care. Pew reports that 39.6% of children covered by Dr. Dynasaur did not receive care in 2011. Healthy Vermonters 2020 reports that 35% of all children in grades K-12 did not receive dental care in 2009-10, suggesting that regardless of type of coverage, access to dental services for children remains too low.

Ignoring oral health can have serious consequences. Children who suffer with easily preventable and easily treatable dental problems can face pain, difficulty at school, and can end up in the emergency room. Periodontal disease during pregnancy can provide an entry point for bacteria that threaten a healthy, full-term pregnancy. The economic and health costs to society, families and individuals when preventative and early intervention opportunities are missed are significant. We must ensure that children do not miss this critical piece of their overall health, now or in their future.

Childhood Hunger

Hunger can be a severe health problem, yet it often goes undetected. Children experience hunger when they lack regular, nutritious food with enough calories, protein, and nutrients to meet the needs of their growing bodies. Children living in food insecure homes—households that experience disruptions to the quantity or quality of food because of economic insecurity—are at risk for hunger and the detrimental health effects that come with it.

Hunger is associated with a range of health concerns including developmental delays, weakened immune systems, more frequent hospitalizations, and higher rates of chronic illness. Children who are hungry experience disruptions to their success at school and to social connections. They do not have what they need to support physical or cognitive growth and development. The effects of hunger are insidious and can touch all aspects of a child's life.
The health of our children today predicts our collective health for a generation to come. Children who are raised in economically secure families by healthy parents have a much greater chance of growing into healthy adults. In Vermont, we can make sure that all of our children have a chance to thrive by improving access to health care and immunizations, working to minimize exposure to environmental toxins, and increasing the availability of nutritious food. We can direct resources towards lowering the child poverty rate and providing extra supports to those who need them, because we know that supporting each and every child’s healthy development promotes their healthy future.

Children Benefit

Over the past five years, children’s participation in 3SquaresVT & School Meals programs has risen significantly.

% of Vermont children who benefit

<table>
<thead>
<tr>
<th>Year</th>
<th>3Squares</th>
<th>School Meals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>13.5</td>
<td>29.8</td>
</tr>
<tr>
<td>2008</td>
<td>14.7</td>
<td>31.4</td>
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<td>2009</td>
<td>17.4</td>
<td>36.3</td>
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<tr>
<td>2010</td>
<td>20.7</td>
<td>38.6</td>
</tr>
<tr>
<td>2011</td>
<td>23.9</td>
<td>41.0</td>
</tr>
</tbody>
</table>

Recent legislation in Vermont has ensured that schools can now offer breakfast and lunch for free for all students in households with incomes below 185% of the poverty threshold. However, out-of-school time continues to be a time when hunger risk increases for many children.

Along with WIC, which provides nutritional and other health supports to pregnant women and young children, Vermont also provides access to supplemental food assistance through 3SquaresVT program (SNAP).

Food should never be a place where families are forced to cut corners.

Conclusion

The health of our children today predicts our collective health for a generation to come. Children who are raised in economically secure families by healthy parents have a much greater chance of growing into healthy adults. In Vermont, we can make sure that all of our children have a chance to thrive by improving access to health care and immunizations, working to minimize exposure to environmental toxins, and increasing the availability of nutritious food. We can direct resources towards lowering the child poverty rate and providing extra supports to those who need them, because we know that supporting each and every child’s healthy development promotes their healthy future.
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