SparkNH
Early Childhood Advisory Council

NEEDS ASSESSMENT

October 2014

A SMART INVESTMENT FOR ALL OUR FUTURES

Our future relies on the health and well-being of our children, their families, and the communities who nurture and support them. Since early experiences set the foundation for all of the development that follows, ensuring strong supports early in life is essential not only to children's health and well-being, but to the future health and well-being of our communities. In short, child development is community development. If we are to realize our children's and our community's full potential it is crucial that communities across our state provide the critical supports and resources young children and their families need to thrive.

There is a strong economic and social case to be made for such community-based support. When resources are grounded in research-based best practices and are provided at the appropriate time and for sufficient duration, they can have dramatic positive social and economic impacts on our communities. We know that investing in early childhood programs can yield up to a 10% annual rate of return that includes long-term individual benefits of increased income, as well as savings to society in reduced costs for special education, juvenile justice, welfare and unemployment.

Such investments provide an even greater rate of return for children and families living with multiple risk factors. We know from numerous studies that children from families with low incomes may benefit the most from comprehensive early childhood programs. Not only have these programs demonstrated improvements in cognitive-development, social-emotional development, approaches to learning, child health, and improvements in parenting, but research also suggests longer-term positive impacts on graduation rates, college attendance, reductions in criminal activity and teen parenthood, and improved health status.

CREATING A COMPREHENSIVE SYSTEM

The report below documents a number of systemic gaps for many of New Hampshire's children and their families - gaps in developmental screening, limited access to critical services, gaps in availability of services, geographic and racial disparities, and a potentially dangerous lack of information where we need it most. All of these factors, if left unaddressed, will limit the developmental potential of our children, and therefore New Hampshire's potential for growth and success.

Screening Gaps

As the first step to ensuring the healthy development of our children, having access to standardized research based screening practices is essential. As discussed in this report, national research suggests that clinical assessment alone, without the use of standardized screening tools, identifies fewer than 30% of children with developmental disabilities, while validated screening tools correctly identify such children at least 70% of the time. Unfortunately, this report also documents that fewer than 50% of children with a developmental disability or disabling behavioral problem are identified before they start school. Given that early identification can effectively reshape a child's developmental pathways, improving access to screening is a critical need for our state.

Access Gaps

Much like a traveler facing a ravine without a bridge, many families in the state face serious barriers that they have no or limited control over which limit the possibilities that are open to them.

For example, this report highlights:

- Barriers to Quality and Affordable Child Care: For a family of three at 200% of the Federal Poverty Level (FPL), the average cost of care for an infant in New Hampshire consumes more than one third of their household income, putting child care out of reach for many families whose incomes are low.
- Barriers to Early Education and School Readiness: While New Hampshire children enjoy almost statewide access to public kindergarten, most of this access is only to part-day programs. In 2012, only 37% of children enrolled in public kindergarten had access to a full day program.
- Barriers to Family Care: 52% of employed parents in NH did not have access to even a minimum of five paid sick days to care for a sick child.
- Barriers to Economic Sustainability: Even when all the adults in a family are working full time, 7% of their children continue to live in poverty in New Hampshire. One in four families with children under the age of 6 are sometimes or very often experiencing financial hardship covering basic needs, like food or housing.

Gaps in Availability of Services

New Hampshire supports a broad range of programs to aid families in need. As documented in this report however, such supports are limited in scope and do not meet the needs of all those who would otherwise be eligible.

Some of the most critical gaps include:

- Limited Access to Early Supports and Services. National estimates suggest that 13% of children ages 0-3 are at risk for developmental delays, and yet, due to state financial constraints, the Family Centered Early Supports and Services Program (FCESS) was only able to serve 4.4% for this age group in 2011-2012.
- Limited Access to Mental Health Professionals. As of a 2008 review, only 1 in 5 physicians reported having expertise in early childhood mental health issues and there were no child psychiatrists located in Carroll or Coos counties for physicians to refer to. As of 2012, about 1 of every 3 children ages 2 to 17 with problems requiring mental health counseling did not receive it.
- Limited Access to Appropriate Health Care. Three in ten children (30%) aged birth to 15 months in New Hampshire receiving Medicaid did not receive the recommended number of
- well-child visits and, similarly, one in four children (27%) ages 3-6 years with Medicaid did not receive recommended well-child visits.

- ❖ Limited Access to Before/After School Programs. According to the After-school Alliance, although there are over 43,000 children in NH who are eligible to participate in federally funded afterschool programs, due to limited funding, fewer than a quarter of those are enrolled.

Gaps Based on Geography and Race

Where a child grows up in New Hampshire can provide differential opportunities for their health and well-being. In addition to high risk pockets located through the state, specific geographic areas have demonstrated a far higher prevalence of critically negative factors that can impede child and family well being. For example, in Sullivan County, children are much more likely to be identified with a mental health disorder than other areas in the state and families are faced with a severe shortage of child care slots (only 64 slots available per 100 children) making it more difficult to maintain quality employment. In Coos County, emergency department visits for mental health reasons are significantly higher, children have the highest rate of tooth decay, have the highest asthma rates, as well as the highest rates of child maltreatment in the state (nearly three times the state average rate).

In addition to disparities arising from geography, New Hampshire is faced with growing racial disparities as well that are likely to continue to limit opportunities for growth and success among the populations impacted. For example, while about seven percent of White, non-Hispanic residents have incomes below the poverty line (7.3%), Hispanic residents of NH are more than twice as likely to be living below the poverty line (15.8%) and Black or African American residents are more than three times as likely to be living below the poverty line (24.2%). As a result of limited financial security, it is likely that these families will also experience a range of obstacles which will continue to negatively shape their futures, including: food insecurity, housing insecurity, and limited educational opportunities.

Gaps in Information for Decision Making

Further complicating the above issues is a lack of reliable data to document where demand exceeds supply, or in some cases, to accurately gauge what the demand is so we can better understand what needs are and are not being met. New Hampshire needs more integrated information systems not only to improve efficiency and knowledge of services provided, but also to eliminate gaps or duplication of services and to assist families in navigating the complexity of systems of care and support. As outlined in this report, this fragmentation occurs across a broad range of areas.

FILLING THE GAPS

If we were to provide a more coordinated and aligned system of services for New Hampshire children and families, it would have multiple, significant direct impacts on the future of our state. Addressing our state's gaps and challenges requires a multi-pronged approach emphasizing the importance of improved data systems, as well as implementing system wide and targeted programs with a history of demonstrated effectiveness.

Within this context, programs providing temporary financial or food assistance can be helpful, but they are frequently not sufficient to enable families to overcome their challenges and become fully self-sustaining. As discussed in this report, other programs and services such as job training and work supports, parent education, health care, home visiting and other family supports are critical to improving child health and developmental outcomes. Central to these efforts will be improved collaboration among agencies and programs with an eye towards decreasing duplication of services and efforts, providing greater access to services, and facilitating optimal use of scarce resources.

As the State of New Hampshire continues to work on these areas, Spark NH will look forward to continuing its efforts to support a coordinated, sustainable early childhood system that achieves positive outcomes for young children, their families, and their communities. By documenting where some of the critical gaps are in New Hampshire, this report reflects an important first step in understanding the needs of New Hampshire's children and families. By combining this effort with the multiple activities of the Spark NH Council and committees, we are one step closer to achieving our vision: that all New Hampshire children and their families are healthy, learning and thriving now and in the future. To learn about and join us in our efforts, please visit www.sparknh.org or contact me at lmilliken@sparknh.org.

Laura J. Milliken, Esq.
Director
Spark NH
Early Childhood Advisory Council

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INTRODUCTION

Developmental science shows that a child's earliest experiences lay the foundation for the brain's developing architecture, establishing a sturdy or fragile base for lifelong health, behavior, and learning. This needs assessment is intended to contribute to our understanding of the extent to which children in every New Hampshire community have access to the resources and experiences that promote their development – good health, strong families, positive early learning experiences. To the extent that there are limitations or gaps in our capacity to provide positive contexts for development, prospects for a healthy and prosperous future for individuals, families and communities in New Hampshire are jeopardized.

Background

This needs assessment document was developed by Spark NH, the governor-appointed Early Childhood Advisory Council. Spark NH is a public-private partnership charged with creating a comprehensive, coordinated system of programs and supports for young children and their families. The vision, mission, and focus of Spark NH are as follows.

> **Vision:** All New Hampshire children and their families are healthy, learning, and thriving now and in the future.
>
> **Mission:** To provide leadership that promotes a comprehensive, coordinated, sustainable early childhood system that achieves positive outcomes for young children and families, investing in a solid future for the Granite State.
>
> **Focus:** Expectant families and children from birth through grade three and their families

Overview of Early Childhood Demographics in New Hampshire

New Hampshire has approximately 280,000 children under the age of 18, representing about 21% of the total state population. About 144,000 of these children are young children aged 0-9 years.[1] While New Hampshire is a small state, it is important to note that there can be important disparities in resources and outcomes across geographic regions, different populations, socio-economic status, and a variety of other factors.

Map 1–1 shows the percent of the total population in each New Hampshire municipality who are young children aged 0-9. In general, communities with higher proportions of young children (orange and red shaded municipalities) are concentrated in southern New Hampshire, including the largest population centers of Manchester and Nashua. About 52% of children in New Hampshire are male and about 48% are female. New Hampshire's racial demographics are different than averages for the nation overall with the vast majority of children identified as white, non-Hispanic (90% of NH children compared with 56% in the United States overall). The racial/ethnic distribution of NH children is shown in Figure 1–1.

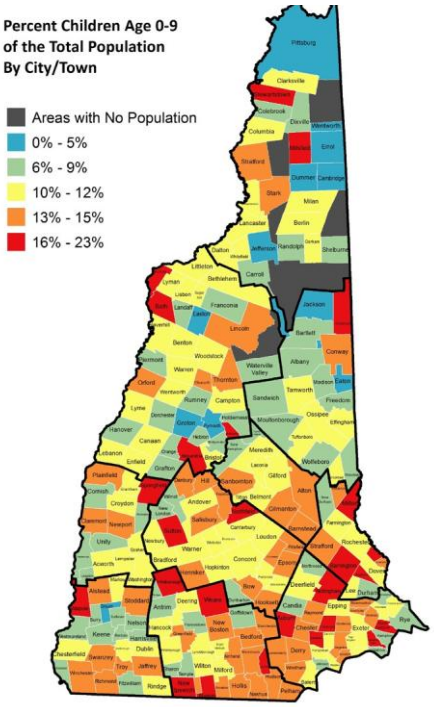
Report Structure

Spark NH, building on ZERO TO THREE's *Self-Assessment Checklist for States,* chose eleven priority statements within three overarching domains - *Good Health, Strong Families,* and *Positive Early Learning Experiences* - for assessing conditions for young children and their families in New Hampshire.

Good Health

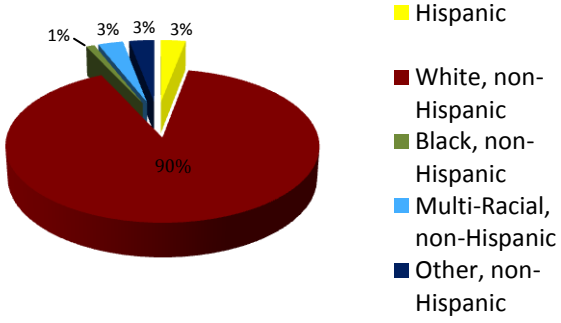
- All young children with social-emotional or behavioral issues and their families have access to trained professionals to assess, diagnose, and treat them.
- All families with young children have access to various public health and safety initiatives statewide such as oral health; nutrition; obesity prevention; protection from environmental

Map 1–1 | New Hampshire's Young Children Age 0 – 9 years By Municipality



Source: American Community Survey 5-Year Estimates 2007–20011

Figure 1–1 | Distribution of Children by Race/Ethnicity



Source: U.S. Census Bureau, 2009 - 2011

hazards; smoking cessation; car seat safety; safe sleep environments; and abusive head injury.

- All pregnant/postpartum women have access to maternal depression screenings and mental health services as needed.
- All young children receive immunizations appropriate to their age, development and medical status.

Strong Families

- All families with young children can access home visiting, family support and parent education.
- All families with young children who face multiple-risk factors (such as very low income, homelessness, and family violence) can access programs and services that work together to support them.
- All families with young children at risk of child maltreatment can access a network of respite care.
- All families with young children who need education, skill training, job opportunities, and work supports to move into stable work that generates a livable wage can access them.

Positive Early Learning Experiences

- All families in need of quality early learning programs and services for their young children can access such services.
- All children, birth through grade 3, are on track to succeed when they enter school and beyond.
- All young children at risk for developmental delay have access to screening, evaluation, and referral to appropriate supports and services.

This report is organized by the domains of Good Health, Strong Families, and Positive Early Learning Experiences. Through the lens of these domains and priorities, this assessment provides an overall assessment of the well-being of young children and their families in New Hampshire and the capacity of the early childhood system to support their healthy development. It focuses on describing the needs of young children and the capacity of elements of the early childhood system in New Hampshire as they relate to the eleven priority statements identified by Spark NH.

For each priority area, there is a brief discussion of the importance and context of the priority. This discussion is followed by information describing what we know about need and capacity. In some cases, data and measures are available to describe demographic differences by characteristics such as geography or income. In other cases, data are only available as statewide rates and estimates or are not available at all. With the latter circumstance in mind, each priority section includes a discussion of what would improve our ability to measure need and capacity. Sections conclude with sources and references supporting the findings in each priority area.

References

1 US Census Bureau, 2011.

GOOD HEALTH

What happens in early childhood provides the physical, cognitive, and social-emotional foundations of later health, learning, and well-being. That is why it is important to understand and address, as early as possible, those factors that produce problems in health and well-being. Although early childhood is typically a healthy age, children are at risk during this stage for a variety of health conditions including infectious disease, injury, asthma, malnutrition, dental caries, and developmental and behavioral disabilities or delays. It is also widely recognized that community and economic factors such as housing quality, safety and access to resources for healthy foods and physical activity are strongly associated with child health. Of further importance is the large body of evidence that shows strong links between early childhood experiences and a number of adult health outcomes including cardiovascular disease, diabetes, obesity, substance misuse, anxiety and depression.

> "Health in the earliest years— actually beginning with the future mother's health before she becomes pregnant—lays the groundwork for a lifetime of well-being . . . Sound health also provides a foundation for the construction of sturdy brain architecture and the associated achievement of a broad range of abilities and learning capacities."
>
> *Center on the Developing Child*
> *Harvard University*

Early assessment and diagnosis of biological, socio-economic and environmental factors that influence healthy child development is therefore critical for effectively targeting assistance to children and their parents. Research has also shown that effective intervention can help to mitigate disparities in health, education, prosperity and other determinants of well-being. Public health efforts to assure the family, community and environmental conditions in which all children can achieve their full health potential are essential not only for individuals, but also for a stable and prosperous society.

Recognizing the importance of these issues, Spark NH chose the following four priority statements to assess whether we are ensuring a healthy start for all New Hampshire children and families.

Spark NH Good Health Priority Statements

- All young children with social-emotional or behavioral issues and their families have access to trained professionals to assess, diagnose, and treat them.
- All families with young children have access to various public health and safety initiatives such as: oral health; nutrition; obesity prevention; protection from environmental hazards; smoking cessation; car seat safety; safe sleep environments; and prevention of abusive head injury.
- All pregnant/postpartum women have access to maternal depression screenings and mental health services as needed.
- All young children receive immunizations appropriate to their age, development and medical status.

All young children with social-emotional or behavioral issues and their families have access to trained professionals to assess, diagnose, and treat them

Why is this an Important Priority?

We know that early childhood is the most critical stage for the development of neurobiological systems that can affect health, learning and behavior throughout life. Early experiences shape the brain's developing architecture, essentially setting either a strong or fragile foundation for later development.[1]

Feelings of safety and security with a nurturing caregiver provide a critical foundation of social-emotional learning during infancy. Studies have shown that disruptions to healthy early development can impact health *(such as heart disease, diabetes, obesity, memory loss, mental health, substance abuse and premature death),* learning *(such as school achievement and likelihood of dropping out)* and behavior (*such as attention deficit hyperactivity disorder and antisocial behavior*) throughout the life cycle. [2] [3] Early assessment and diagnosis of biological, socio-economic and environmental factors that influence healthy child development is therefore critical for effective intervention and can help to modify disparities in health, education, prosperity and other determinants of well-being. [4] [5]

> "When children with significant problems are neither identified in a timely way nor given appropriate education and treatment, their problems tend to be long lasting, requiring more intensive services and resources over time."
>
> *Glen Dunlap, et al. in Prevention and Intervention with Young Children's Challenging Behavior: Perspectives Regarding Current Knowledge*

What is the Scope of the Issue?

According to the Zero to Three National Center for Infants, Toddlers, and Families, "approximately one out of every six children in the U.S. faces a developmental disability or a disabling behavioral problem before the age of 18. Yet fewer than 50% of these children are identified before they start school."[6]

In New Hampshire, about 21% of children ages 4 months to 5 years (or approximately 16,500 children) are determined to have moderate or high risk of developmental or behavioral problems based on parents' specific concerns.[7] [8] This estimate is consistent with other reports that approximately 10% - 20% of the population of preschool children nationally has experienced significant challenging behaviors.[9] However, only about 31% of children in New Hampshire ages 10 months to 5 years have received a standardized screening for developmental or behavioral problems.[10]

"Nearly 70% of New Hampshire children ages 10 months to 5 years have not received a standardized screening for developmental or behavioral problems according to parent reports."

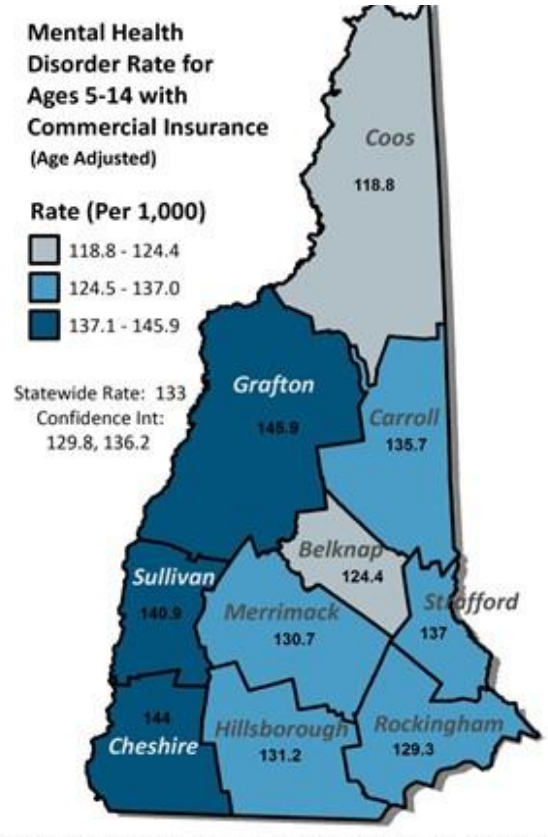
National Survey of Children's Health, CDC, 2011-2012

Among the school age population, it is similarly estimated that mental health disorders affect about 20% of New Hampshire children ages 5-19 years.[11] Examination of insurance claims data reveals some variation across New Hampshire in diagnoses of mental health conditions among children ages 5 to 14 with insurance (see Maps 2–1 and 2–2). In particular:

- Children ages 5 to 14 with Medicaid coverage (Map 2–2) are significantly more likely to have met the diagnostic criteria for a mental health disorder than those with commercial insurance (Map 2–1); (249.6 per 1,000 children with Medicaid coverage compared to 133.0 per 1,000 children with commercial insurance coverage aged 5-14)
- Children ages 5 to 14 in Sullivan County with Medicaid coverage (red shaded area on Map 2–2) are significantly more likely to have met the diagnostic criteria for a mental health disorder than children in New Hampshire overall with Medicaid coverage (394.0 per 1,000 children with Medicaid coverage in Sullivan County compared to 249.6 per 1,000 children with Medicaid coverage in NH).

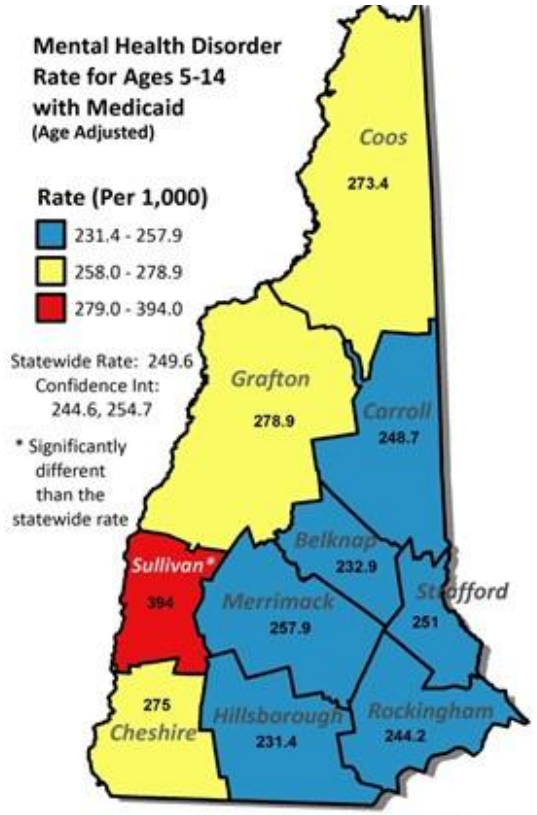
While differences in mental health diagnosis rates between insurance types or between geographic areas may reflect real differences in prevalence of mental health conditions, they may also reflect differences in comprehensiveness of screening and assessment practices and the related influence of reimbursement policies. For example, children with Medicaid coverage may benefit from more comprehensive or standardized screening for developmental and behavioral health issues as a result of Early and Periodic Screening, Diagnosis and Treatment (EPSDT) requirements. It is also important to note that these data describe the 5 to 14 age range. The prevalence of mental health disorders in infancy and early childhood (newborn to age 4) is difficult to discern accurately from medical claims or discharge data. Limitations of assessment and diagnostic tools and skills, and reimbursement policies, in conjunction with a very young patient population that naturally has limited language skills, results in underutilization of diagnostic codes for infant and early childhood mental health.[12]

MAP 2–1



Source: NH Department of Health and Human Services, HealthWRQS,2009

MAP 2–2



Source: NH Department of Health and Human Services, HealthWRQS, 2009

What Do We Know About Need and Capacity?

Access to Services

Access to insurance and a medical home[a] can substantially influence whether or not a young child receives early screening, assessment, diagnosis and treatment for social-emotional or behavioral issues. For example, uninsured children are less likely to receive developmental screenings and preventive health care than are children enrolled in public insurance programs such as Medicaid or the Children's Health Insurance Program (CHIP).[13]

> "Early diagnosis is critical and, for kids who are not yet in the school system, largely dependent on parents looking for services. Even if parents know to try to find services, it is hard for parents to know what is available. There is a lack of information about how to access services."
>
> *NH Early Childhood Professional*

In New Hampshire, about 4.4% of all children and 5% of those age 5 and under (or about 4,000 children) do not have health insurance. Map 2–3 on the next page shows the percent of uninsured children under the age of 18. Red areas show the cities and towns with the highest concentrations of uninsured children in the state. It is important to note that many of the communities with the highest rates of uninsured children are in more rural areas of the state that also correspond with mental health provider shortage areas (see next section on Public Health and Safety Initiatives).

Even when children do have insurance, there is no guarantee that they receive timely or adequate screening, assessment, diagnosis or treatment. As noted previously, a substantial proportion of children with behavioral or developmental disabilities are not identified early in life. However, such disabilities are more likely to be identified when there is continuity of care including ongoing monitoring and screening for developmental challenges and delays.[14] Some relevant measures of access and continuity of care include the proportion of children who receive regular preventive health care, provision of care in a medical home setting, and access to mental health care. Recent data from the National Survey of Children's Health[15] indicate the following results as reported by parents:

a. The American Academy of Pediatrics specifies seven qualities essential to medical home care: accessible, family-centered, continuous, comprehensive, coordinated, compassionate and culturally effective.

- While most New Hampshire children have had one or more preventive medical care visits during the past 12 months, about one of every 11 children (8.8%) has not.
- About 1 of every 3 children (33.5%) in New Hampshire does not receive health care within a setting classified as a medical home.
- About 1 of every 3 children (33.7% or about 7,800 children) in New Hampshire ages 2 to 17 with problems requiring mental health counseling does not receive counseling.

Another potential indicator of adequate access to mental health services is utilization of an emergency department (ED) for mental health care. Examination of ED records for children between ages 5 and 14 reveals some geographic variation across New Hampshire in utilization of the ED for mental health conditions. Specifically, children in Merrimack and Coos Counties have a significantly higher rate of mental health-related ED visits than the rest of the state (Figure 2–1). This variation in emergency department utilization may be the result of a number of factors in addition to inadequate access to community-based mental health providers, such as socio-cultural influences on care seeking behavior or differences in systems of care and practice patterns. Further study would be required to understand the causes of this observed variation.

> "Although some systems and tools for early identification of children with challenging behaviors are available, the actual identification of these children and provision of appropriate services are very low."
>
> *Dunlap, et al.*

Map 2–3

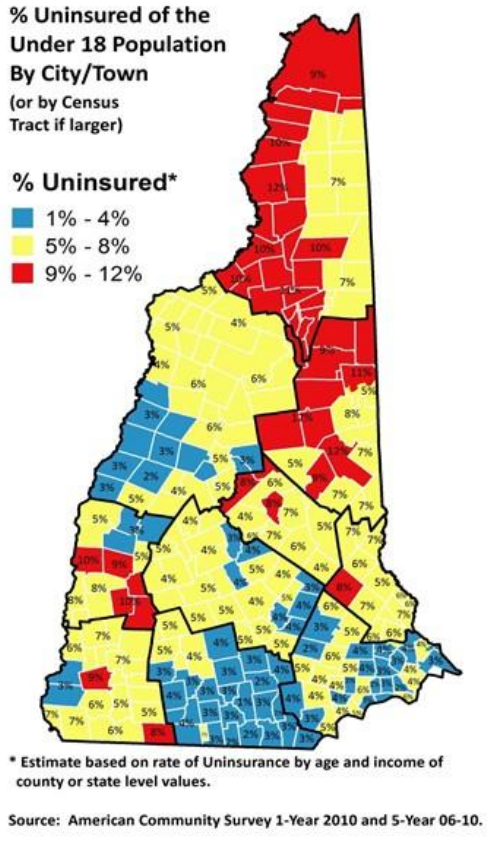
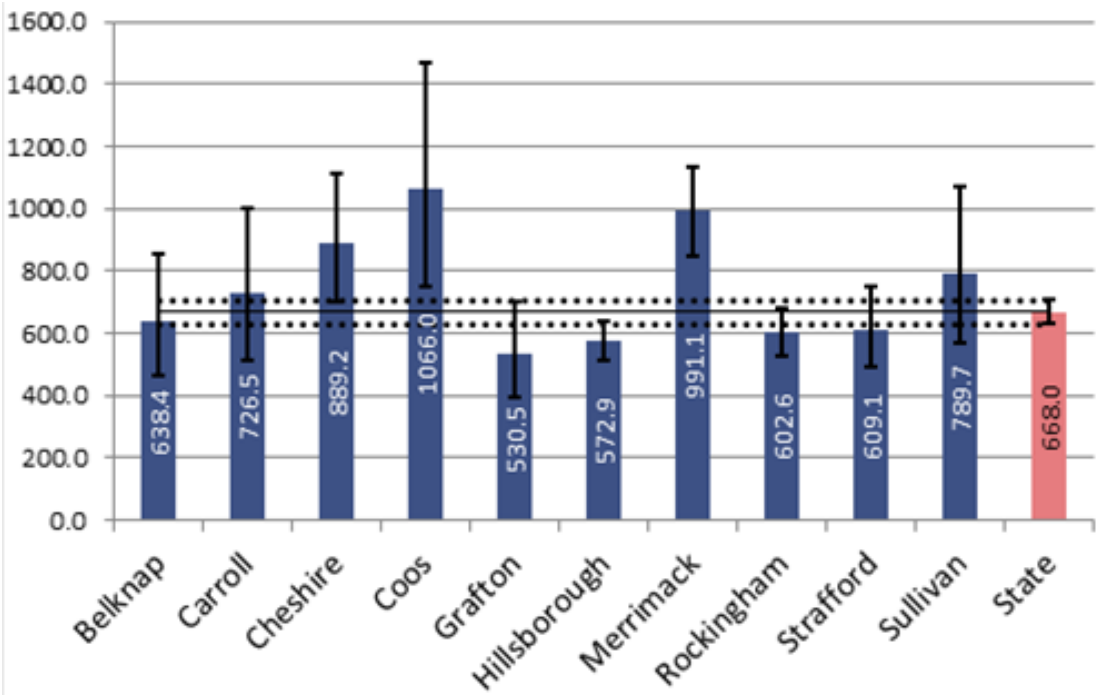


Figure 2–1 | Mental Health Condition Emergency Department Visits of Children 5-14 (rate per 100,000)



Workforce Availability and Capacity

New Hampshire parents report that they turn first to their child's health care provider for guidance on social and behavioral development concerns. However, a 2009 study from the New Hampshire Association for Infant Mental Health[16] found that less than 1 in 5 physicians reported having expertise in early childhood mental health issues. Additional findings from this study included:

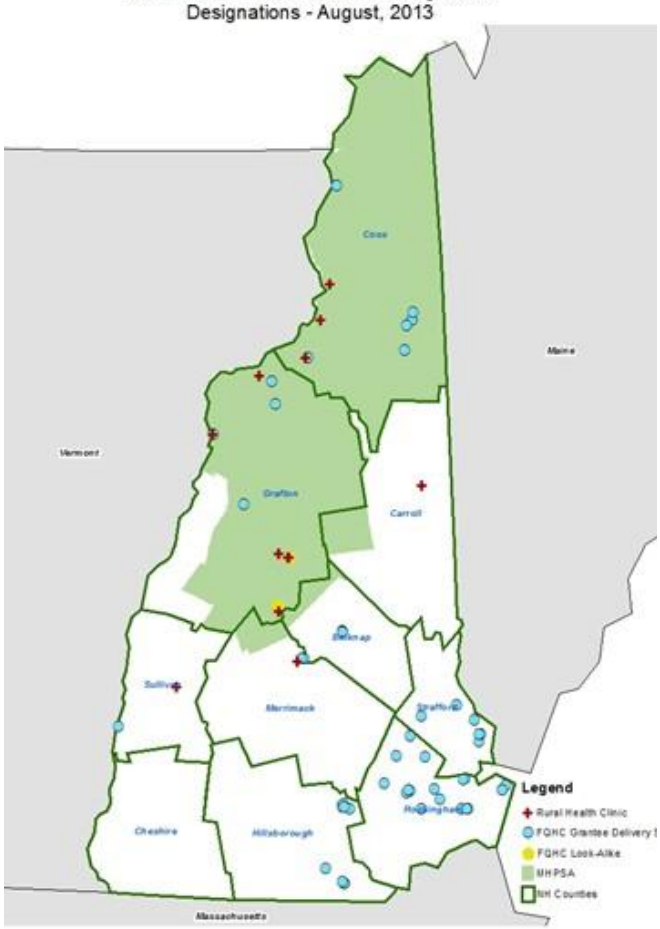
- Eight out of ten health care providers (81%) reported a need for additional information on challenging child behaviors;
- Seven out of ten health care providers (71%) expressed a need for additional information on early childhood mental health, screening and assessment;
- Seven out of ten health care providers (69%) use a formal social/emotional or behavioral health screening tool in their work with children, but;
- Six out ten health care providers (59%) only screen a child when a parent or the provider has a concern, while the other 41% routinely screen all children.

Comprehensive information describing the characteristics of the behavioral health workforce is not available.[17] This circumstance is partially due to the array of different professions with roles in the provision of behavioral health services. Because early childhood mental health services may be provided in a variety of settings and contexts, data describing this aspect of the workforce are even less complete. Currently, there is no formal certification program in New Hampshire for infant and early childhood mental health professionals. It is important to note, however, that a voluntary credential in "Early Childhood and Family Mental Health" for mental health providers, developed by a collaborative group convened by the NH Association for Infant Mental Health, will become available in the Fall of 2013.

It can be noted, as depicted by the Map 2–4 that all of Coos County and most of Grafton County are designated by the federal government as mental health professional shortage areas. In addition, there are currently no child psychiatrists located in Carroll or Coos counties. Application of telehealth and distance consultation between tertiary care centers and more rural practice settings is one promising strategy that has begun to be implemented in these areas.

Map 2-4

New Hampshire's
Mental Health Professional Shortage Area
Designations - August, 2013



What opportunities are there for improving assessment of this issue?

A comprehensive database of information describing the workforce for early childhood mental health care including training and capacity is needed to more clearly understand the availability and distribution of services and supports for New Hampshire children and families. Current information describing screening and assessment practices in primary care, early child care, and mental health settings, as well as consultation and professional support relationships, needs and gaps, would be similarly useful.

References

1. McCain, M. M. (2007). Early Years Study 2: Putting Science Into Action. Ontario, CA: Council for Early Child Development.

2. UNESCO, United Nations Educational, Scientific, and Cultural Organization. (2012). The Review of Care, Education and Child Development Indicators in Early Childhood.

3. Dunlap G, et al. Prevention and Intervention With Young Children's Challenging Behavior: Perspectives Regarding Current Knowledge. Behavioral Disorders, 32 (1), 29–45 November 2006.

4. World Health Organization (WHO). (2011). Social determinants approaches to public health: From concept to practice. Geneva: World Health Organization.

5. Same as note 2

6. ZERO TO THREE National Center for Infants, Toddlers and Families. Early Experiences Matter: A Guide to improved policies for Infants and Toddlers. (2009)

7. National Survey of Children's Health, CDC, 2011/12.

8. This statistic is reported by the National Survey of Children's Health, which includes a non-clinical survey version of the Parents' Evaluation of Developmental Status (PEDS). The PEDS is a standardized child development screening tool designed to identify young children who are at risk for developmental, behavioral or social delay.

9. Same as note 3

10. Same as note 6

11. NHDHHS, MCH Title V Needs Assessment, 2010.

12. Egger HL, Angold A. Common emotional and behavioral disorders in preschool children: presentation, nosology, and epidemiology. J Child Psychol Psychiatry. 2006 Mar-Apr;47(3–4):313–37.

13. Same as note 5

14. Same as note 6

15. Same as note 7

16. Abelman D, et al. Mental Health Services for New Hampshire's Young Children and Their Families: Planning to Improve Access and Outcomes. New Hampshire Association for Infant Mental Health, 2009.

17. Tappin, R. & Norton, S. Children's Mental Health in New Hampshire. New Hampshire Center for Public Policy Studies. 2007.

All families with young children have access to various public health and safety initiatives such as: oral health; nutrition; obesity prevention; protection from environmental hazards; smoking cessation; car seat safety; safe sleep environments; and prevention of abusive head injury

Why is this an Important Priority?

Public health efforts are credited with adding 25 years to average life expectancy over the last century.[1] Of the "Ten Great Public Health Achievements in the 20th Century"[2] many have focused on improved maternal and child health. These achievements include:

- immunization efforts that have led to the virtual eradication of vaccine preventable diseases such as diphtheria, polio, and smallpox;
- motor vehicle safety including infant and child car seats and seatbelts;
- safer and healthier foods;
- improved perinatal care contributing to healthier mothers and babies and declines in infant and maternal mortality;
- family planning;
- fluoridation of drinking water; and
- reduction of tobacco as a health hazard.

Newer, additional areas of public health emphasis include oral health, childhood obesity, nutrition and physical activity, environmental hazards such as lead exposure, and educational efforts focused on parents of infants, such as safe sleep environments to protect against sudden unexplained infant death, and prevention of abusive head trauma.

What is the Scope of the Issue?

All families in New Hampshire are affected every day, directly and indirectly, by public health and safety initiatives. From the moment a child wakes up and brushes their teeth with clean water and fluoridated toothpaste, to riding in a car seat on the way to a licensed, smoke free child care setting, to wearing a helmet while riding a bike in a public park after lunch, which was prepared according to established nutritional

standards, his or her life is being touched by public health work. Perhaps the child's day includes a visit to their primary care provider for a wellness visit that includes immunizations following established guidelines, after which they return to their home free of lead paint, where the parents prepare a dinner with food produced and inspected following federal food safety regulations.

According to the Robert Wood Johnson Foundation, every 10% increase in local public health spending decreases infant mortality by 6.9%, and increases in every dollar spent on community-based public health programs will return $5.60 in health care cost savings.[3] The importance of public health contributions to ensuring healthy and strong families and communities is considerable.

What Do We Know about Need and Capacity?

Table 2–1| 2012 NH Public Health Spending

Funding Source	$ Per	Rank
State Public Health Budget	$13.47	45
CDC	$21.69	22
HRSA	$23.41	27
Total	**$58.57**	

Source: Trust for America's Health

The breadth of public health initiatives affects all children and their families. It includes a wide range of governmental and nongovernmental programs and activities at many levels from individually targeted services to initiatives intended to create community and social environments that improve health. It is thus difficult to clearly define the capacity of the multitude of public health and safety initiatives that address the most pressing factors influencing the healthy development of children. One potential measure of governmental inputs is per capita public health spending. New Hampshire ranks 45th among states for state contribution to per capita spending on public health (Table 2–1).[4] For the approximately 70,000 children under age five in NH,[5] it can be estimated that the state and the federal government spent approximately 4.1 million dollars in 2012, or about $59 per child, in support of public health activities in such areas as oral health, nutrition, obesity prevention, environmental safety, smoking cessation, car seat safety, and other infant injury prevention efforts. This does not include the dollars spent on public health programming for the parents of these children who also benefit from family support and education programs, and other health and safety initiatives.

Oral Health

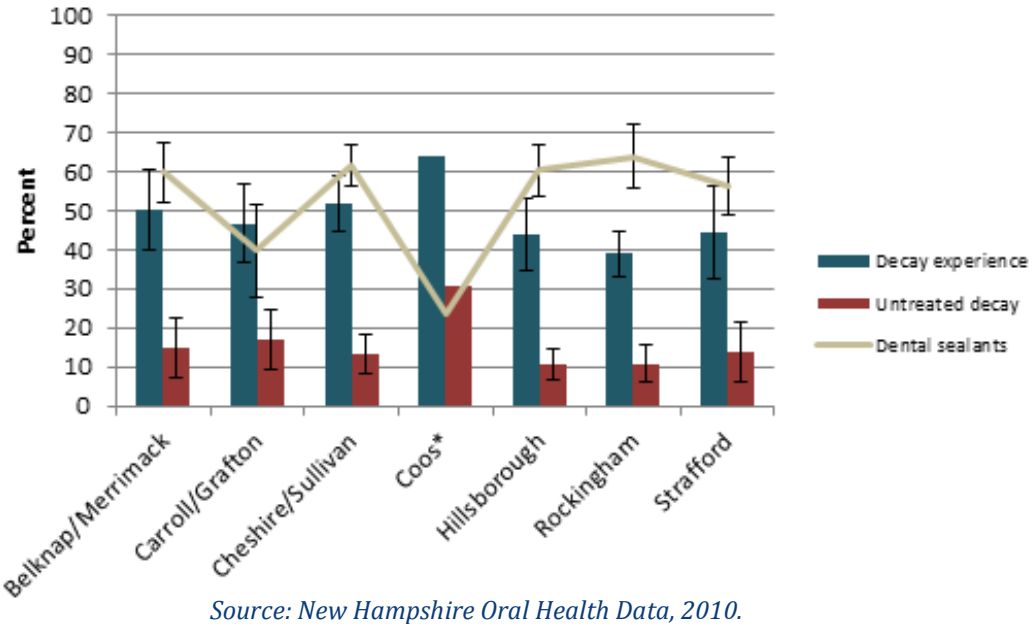
According to the American Academy of Pediatrics, early childhood caries (cavities) is the number 1 chronic disease affecting young children.[6] It is five times more common than asthma and seven times more common than hay fever. Pain from caries and dental issues can cause many children to miss school and is distracting from learning. Untreated tooth decay causes pain and infections that may also lead to problems with eating, speaking, and playing.

> "Early childhood caries are 5 times more common than asthma and 7 times more common than hay fever. Tooth pain keeps many children home from school or distracted from learning. Yet many children and their families have trouble accessing oral health care . . ."
>
> *American Academy of Pediatrics*

Recent data from the National Survey of Children's Health indicates that about 6% of New Hampshire children under the age of 6 and nearly 18% of children between the ages of 6 and 11 had one or more oral health problems in the past 12 months.[7] In a 2010 study conducted by the NH Oral Health Program among third graders in New Hampshire (Figure 2–2), Coos County had the highest rate of decay experience (64.0%) and Rockingham County had the lowest (38.9%). When looking at untreated decay, Coos County again had the highest rate (30.7%) while Hillsborough County had the lowest (10.6%).[8]

Sealants are known to help prevent decay. Rockingham County had the highest rate of sealants (63.8%) and Coos had the lowest (23.7%). Coos County also appears to have a lower prevalence of dental sealants as well as higher rates of decay experience and untreated decay. In general, regions with higher uses of sealants had the lowest rates of decay overall.

Figure 2–2 | Oral Health-Related Prevalence Rates Among Third Graders by Region



Source: New Hampshire Oral Health Data, 2010.

According to the NH Oral Health Program, there are twenty-one school-based dental programs and thirteen dental centers across the state that offer a range of oral health services for low-income residents in their region including children. Each program or dental center has its own eligibility rules to qualify for services. Generally speaking the client must live in the geographic area served by the program, fulfill financial eligibility requirements and fall within the patient population age criteria determined by the dental program.

Nutrition, Physical Activity & Obesity Prevention

Childhood obesity has become a serious health concern across the country and a significant focus of public health prevention and promotion efforts. Alarmingly, even very young children have seen large increases in obesity, whit one in every eight preschoolers now classified as obese. The rates of both adult and childhood obesity have been increasing in the US for the past thirty years, although recent statistics suggest that these trends may be leveling off.[9]

The health effects of obesity can be severe and long lasting. Children and adolescents who are obese are likely to be obese as adults and are therefore more at risk for adult health problems such as heart disease, type 2

diabetes, stroke, several types of cancer, and osteoarthritis. In addition, obese youth are also at higher risk for impaired psychological well-being (e.g., depression, self-esteem, and quality of life) compared to their non-overweight peers.[10]

The Pediatric Nutrition Surveillance System is a child-based public health surveillance system maintained by the Centers for Disease Control and Prevention that describes the nutritional status of low-income U.S. children who attend federally-funded maternal and child health and nutrition programs. Recent data from this system shows obesity among children between 2 and 5 years of age from families with a low income in New Hampshire has declined slightly – down from 16.3% in 2004 to 14.6% in 2011. Table 2–2 displays county-level obesity rates in children in families with low income participating in maternal and child health and nutrition programs (primarily WIC) over a 3 year time frame. Belknap County had the highest rate of obese children (18.0%), while Coos County had the lowest rate (10.3%).

Table 2–2 | Childhood Obesity by County (2009-2011)

Low-Income Children who Attend Federally-Funded Maternal and Child Health and Nutrition Programs

County	Overweight	Obese
Belknap	20.9%	18.0%
Grafton	18.8%	15.7%
Merrimack	17.2%	15.2%
Hillsborough	17.1%	15.0%
State Average	17.3%	14.4%
Carroll	16.7%	14.1%
Sullivan	17.9%	14.0%
Rockingham	18.9%	13.5%
Strafford	15.2%	13.3%
Cheshire	16.8%	11.4%
Coos	11.6%	10.3%

Source: 2011 Pediatric Nutrition Surveillance System, CDC
Note: Obese is defined as having a body mass index at or above the 95th percentile.
Overweight is defined as having a body mass index between the 85th and 95th percentile.

Among older children, the *NH Third Grade Healthy Smiles – Healthy Growth Survey* conducted in the 2008-2009 school year collected heights and weights on third grade students. Among the studies' findings were:

- 33.4% of third graders were overweight or obese;
- a larger proportion of boys (20.8%) were obese than girls (14.6%), though the gender difference was not statistically significant;
- children living in the Belknap/Merrimack region and Coos County had the highest prevalence of obesity among New Hampshire third-grade students, 23.9% and 22.2%, respectively.

Obesity prevention can begin at birth. Research has shown that breastfeeding not only improves the health of babies, but also of mothers who breastfeed. Breastfed babies are less likely to develop chronic diseases such as asthma, obesity, and type 2 diabetes, and breastfeeding mothers are less likely to experience postpartum depression, or develop ovarian and breast cancers, and type 2 diabetes.[11] In New Hampshire, the percentage of babies who started breastfeeding increased from 81% in 2000 to 89% in 2010.[12] Further, the percentage of babies being breastfed at six months of age increased from 34% in 2000 to 54% in 2010. The percentage of babies being breastfed at 12 months also increased from 19% to 26% during that same time period.

Table 2–3 | Children Age 5 or Younger who were Ever Breastfed or Fed Breast Milk

2013	Ever Breastfed	Breast feeding at 6 months	Breast feeding at 12 months	Exclusive breast feeding at 3 months	Exclusive breast feeding at 6 months
NH	88.5%	53.6%	25.5%	49.5%	24.9%
US	76.5%	49.0%	27.0%	37.7%	16.4%

Source: CDC Breastfeeding Report Card 2013, United States: Outcome Indicators
http://www.cdc.gov/breastfeeding/data/reportcard.htm

Regular physical activity in early childhood is a key factor influencing maintenance of a healthy weight and establishment of behavior patterns that carry into later childhood, adolescence and adulthood.[13] The 2011–2012 National Survey of Children's Health measures physical activity as the number of days in the past week a child "exercised, played a sport, or participated in physical activity for at least 20 minutes that made him or her sweat and breathe hard". The survey findings estimate that nearly 1 in every 10 children in New Hampshire did not engage in any vigorous physical activity on any days. Less than a third (28%) engaged in physical activity for at least 20 minutes every day.

Table 2–4| Number of Days During the Past Week Children Engaged in Vigorous Physical Activity (Percent of Children; Ages 6-17)

2011–2012	0 Days	1–3 days	4–6 days	Everyday
NH	8.8%	26.3%	36.8%	28.1%
US	9.1%	25.1%	37.8%	28.0%

Source: National Survey of Children's Health. NSCH 2011-2012.

Parents, schools and community programs can each have a significant, positive impact on lifelong physical activity habits. In the school setting, budget pressures and increased academic time demands have forced many schools to substantially reduce the number of hours of recess and physical education classes. Not only are these reductions contributing to increasing childhood obesity by replacing active time with sedentary work, but there is also evidence that decreasing physical activity during the school day has a negative impact on learning. New Hampshire mandates physical education in grades K-8, but it does not require daily recess at the elementary school level. The state has developed its own standards for physical education, although school districts are not required to comply. Local school districts are required to develop a local wellness policy and many have active wellness committees that address aspects of the school environment relating to nutrition education, nutrition standards, and physical activity. The NH Department of Education, Bureau of Nutrition Programs and Services provides support to local districts in this area by developing model policies, practices and a wellness toolkit.

The Obesity Prevention Program within the NH Division of Public Health Services also works with state and local community partners to enact change in policies regarding nutrition and physical activity. The program has worked with the NH Department of Education and the Child Care licensing bureau to promote policy changes in schools and child care centers. The program also partners with the Healthy Eating Active Living initiative to support pilot projects in communities across the state to encourage healthier eating in schools and more active school and community environments.

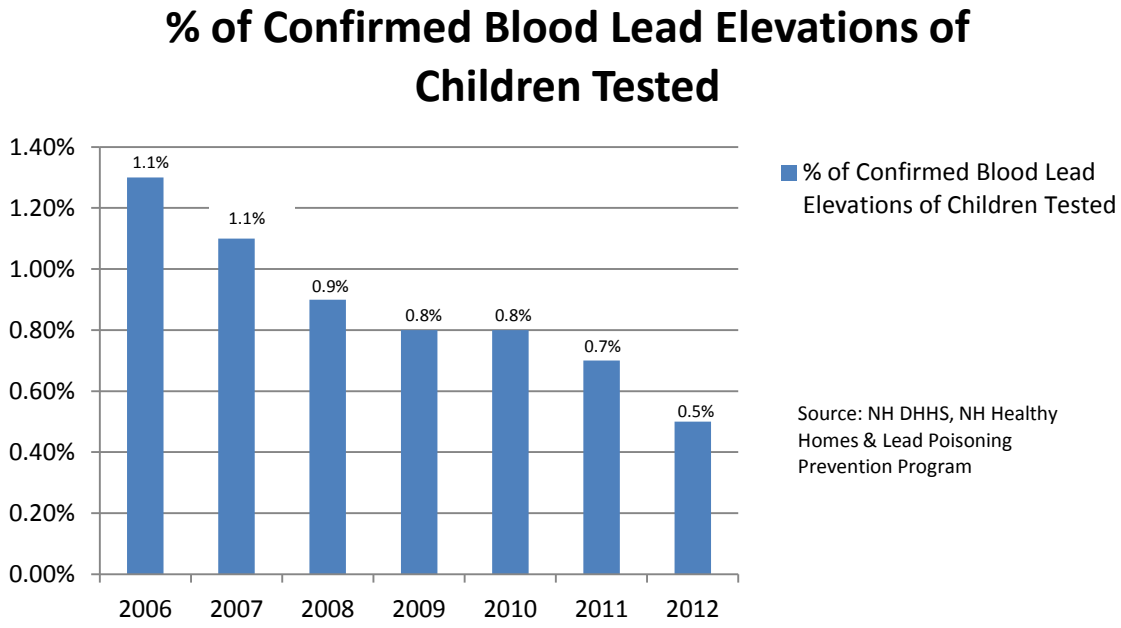
Environmental Hazards

Housing conditions can significantly affect childhood health by contributing to incidence of poisoning, injuries, respiratory diseases such as asthma, and quality of life issues. The Healthy Homes and Lead Poisoning Prevention Program of the NH Division of Public Health Services leads public health efforts to prevent health and safety hazards in the home. The program applies a comprehensive Healthy Homes approach to provide

housing, safety, and health professionals with the training and tools necessary to address the broad range of housing deficiencies and hazards associated with unhealthy and unsafe homes.

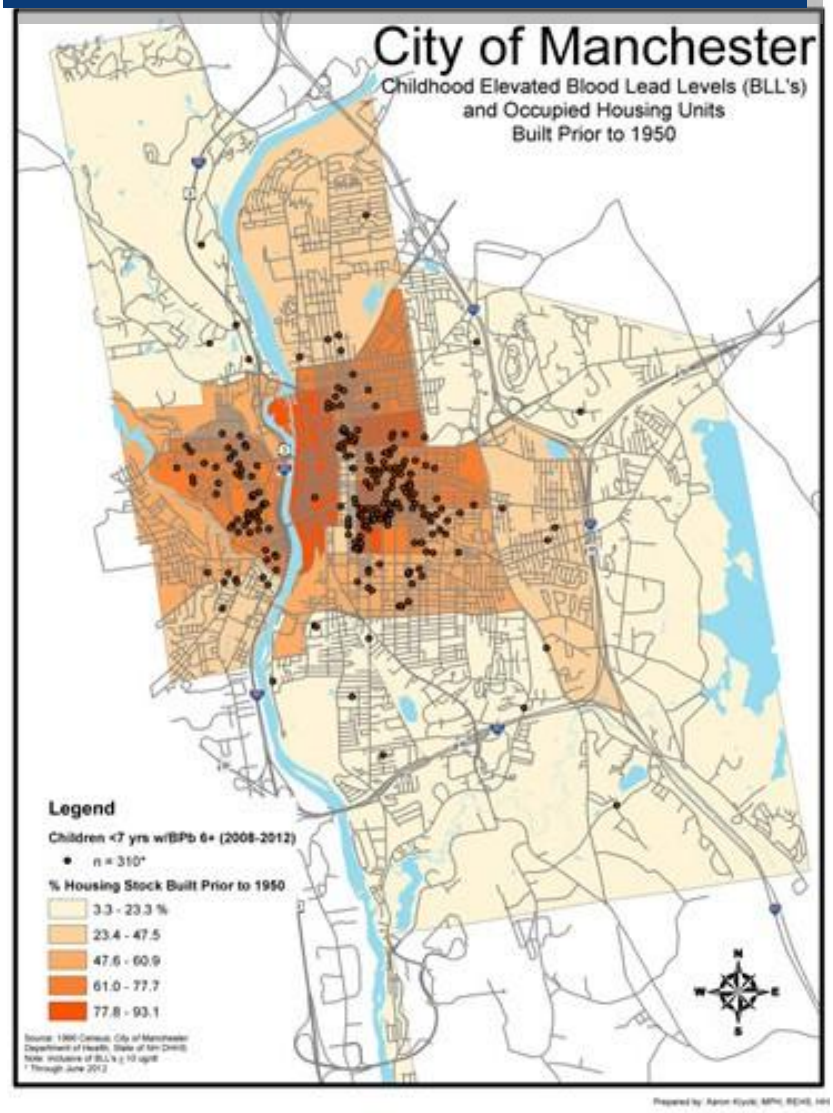
Childhood lead poisoning is of particular concern in NH because of the high proportion of older housing stock in the state. Cities and towns with 27% or more pre-1950 housing stock are considered high risk. Some communities have been determined to be at even higher risk for lead poisoning due to additional factors, such as the fraction of the population that is under the age of six; the fraction under the age of six living in poverty; the percentage of children under the age of six enrolled in Medicaid or other federal assistance programs; and special populations living in the communities. The communities of Berlin, Claremont, Newport, Franklin, Laconia, Manchester, Nashua and Rochester continue to be classified as the State's "higher risk" communities.

Figure 2–3



In 2012, there were 74 newly confirmed cases of elevated blood lead levels among children six years of age or younger. As displayed by Figure 2–3, the incidence of elevated blood lead levels appears to be declining over time across the state. However, it is important to note that 24 cases or about one-third of all newly confirmed cases in 2012 were in Manchester —an incidence rate more than 4 times greater than in the rest of the state. Map 2 – 5 demonstrates the concentration of childhood elevated blood lead levels since 2008 in the neighborhoods of Manchester with the highest proportions of older housing stock.

Map 2–5



Smoking and Asthma

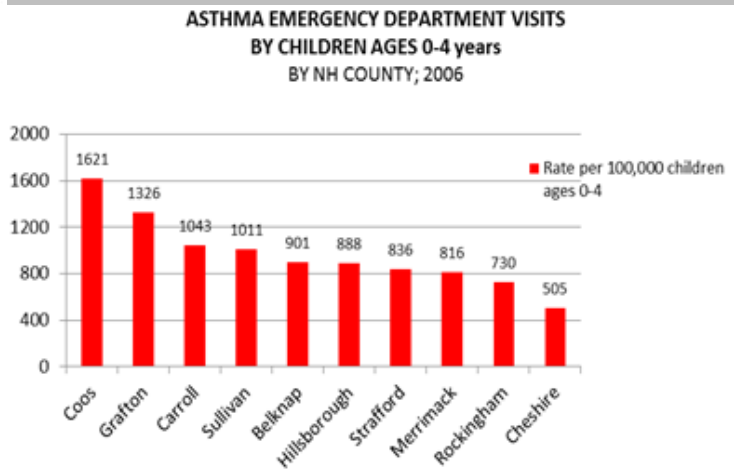
Smoking during pregnancy causes significant health problems, including premature birth, low birth weight, certain birth defects, and infant death.[14] In New Hampshire in 2011, 24.3% of women of childbearing age (18-44 years) reported smoking, compared to 22.5% of women overall in the U.S. The rate of births in New Hampshire to mothers who smoked during pregnancy (13.7%) is higher than for the US overall (10.3%). As displayed by Map 2–6, Sullivan, Coos and Belknap counties had the highest rates of maternal smoking in 2011, while rates in Hillsborough and Rockingham counties were significantly lower.

In addition to the effects of smoking during pregnancy, exposure to secondhand smoke in homes and cars can also be a significant health hazard for children. The 2007 Surgeon General's report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke*, concluded that "secondhand smoke causes premature death and disease in children."[15] Specifically, the report concluded that children who are exposed to secondhand smoke are at an increased risk for sudden infant death syndrome, slowed lung growth, lower respiratory infections, middle ear disease, and more severe asthma. Over a quarter (26.9%) of New Hampshire children are living in households in which someone uses cigarettes, cigars, or pipe tobacco and 9% of children are reported as having asthma problems. As displayed by Figure 2–6, Coos and Grafton counties had the highest rate of asthma-related emergency room visits for children 0 to 4 years of age while Rockingham and Cheshire counties had the lowest rates.

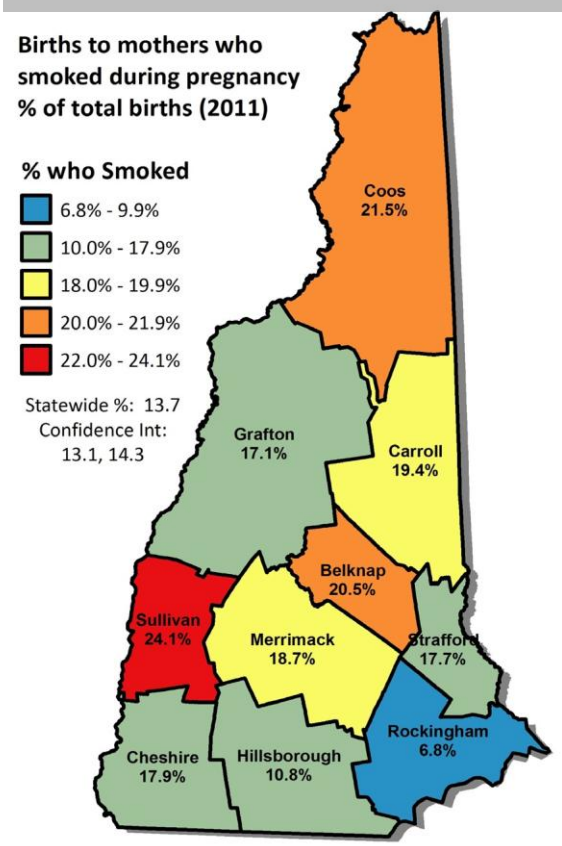
Car Seat Safety

For children ages one through 18, the highest cause of unintentional injury deaths is motor vehicle accidents.[16] For younger children, ages one through nine, motor vehicle accidents were the cause of 35% of all unintentional injury fatalities. The American Academy of Pediatrics recommends

Figure 2–4

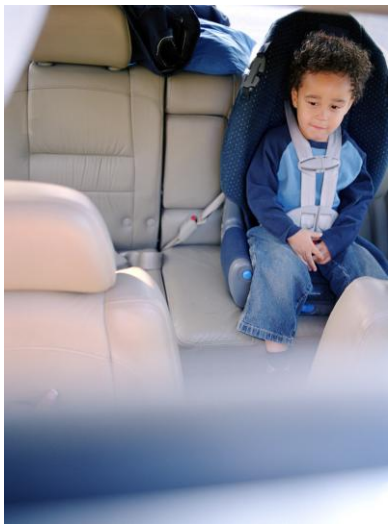


Map 2–6 | Births to Mothers Who Smoke During Pregnancy; 2011



Source: NH Department of Health and Human Services, HealthWRQS
Bureau of Public Health Statistics and Informatics

that parents "keep their toddlers in rear-facing car seats until age 2 or until they reach the maximum height and weight for their seat." Older children should "ride in a belt-positioning booster seat until they have reached 4 feet 9 inches tall and are between 8 and 12 years of age."



New Hampshire Rules of the Road Law (RSA 265:107-a) requiring child passengers to be restrained in cars, were strengthened January 1, 2014 when new requirements went into effect. The past law required child car seats for children up to age 6 or 55 inches tall. The recent changes require car seats for children up to age 7 or 57 inches tall.

The changes to the NH child passenger restraint law come close to the recommendations from the American Academy of Pediatrics. However, the NH law will not require child car seats for children age seven and over, even if they do not meet the minimum height requirement.

Safe Sleep Environments

The number one cause of infant deaths in New Hampshire in 2010 was Sudden Unexplained Infant Deaths (SUID) – accounting for 11 of 41 deaths of children under age 1 in that year.[17] A subset of SUIDS, Sudden Infant Death Syndrome (SIDS) is officially defined as "the sudden death of an infant less than 1 year of age that cannot be explained after a thorough investigation is conducted, including a complete autopsy, examination of the death scene, and review of the clinical history."[18] Nationally, SIDS is the leading cause of death in infants ages 1 to 12 months. There were 5 cases of SIDS in NH in 2010.

In its thirteenth annual report, the NH Child Fatality Review Committee noted, "although SIDS has declined, the rate of sudden and unexpected infant deaths, or SUID, has increased. This category includes those thought of as injury related including deaths from overlaying, suffocation, wedging, and other unsafe sleep situations."

The Maternal and Child Health section of the NH Department of Health and Human Services has launched a Safe Sleep Campaign aligned with the American Academy of Pediatrics' latest recommendations and messages on reducing the risk of SIDS and deaths from an unsafe sleep environment.[19] The campaign, formerly known as the Back-to-Sleep campaign, has developed messages which are focused on educating pregnant women, new parents, grandparents, babysitters, and child care providers on safe sleep practices for infants.

To determine which factors in the sleep environment contribute to SUID cases, the CDC has developed the Sudden Unexpected Infant Death (SUID) Case Registry pilot program with many public and private partners.[20] The program will document SUID cases and will provide information to help determine which factors in the sleep environment contribute to SUID cases. New Hampshire is one of nine states piloting the program, beginning data entry of SUID cases occurring as of January 1, 2011.

Abusive Head Injury

Shaken Baby Syndrome (SBS), a form of abusive head trauma (AHT) and inflicted traumatic brain injury (ITBI), is a preventable and severe form of physical child abuse.[21] SBS results from severe shaking of an infant by the shoulders, arms or legs. It can happen in as little as five seconds and cause death or permanent disability. SBS is a leading cause of child abuse deaths in the United States. Babies (newborn to 4 months) are at greatest risk of injury from shaking. Inconsolable crying is a primary trigger for shaking a baby.[22]

Campaigns such as *Periods of Purple Crying* can be effective public health initiatives geared to parent and caregiver education. The *Period of Purple Crying* is an educational program for parents focusing on a developmental phase of increased infant crying. New Hampshire Children's Trust leads the state's effort to bring information to parents on this developmental phase and effective coping strategies by providing technical assistance to hospitals who implement the program, supporting community-based providers who reinforce the program's message, and spreading public awareness.

What opportunities are there for improving assessment of this issue?

Assessment of child health status from a public health perspective would be improved by the availability of more current and more comprehensive data describing NH's population of young children. For example, hospital discharge data including description of emergency department utilization is currently five or more years out of date. Similarly, information describing oral health and childhood obesity is currently dependent on a survey conducted more than five years ago, although efforts are currently underway to repeat that survey. Other available information describing nutritional status is specific to children from families with low incomes and not representative of all children in the 0-9 age group. Efforts within the NH Division of Public Health Services are being made to produce data and reports on a more current and frequent basis, which will substantially enhance our state's capacity to more completely understand issues and trends affecting early childhood health.

An additional opportunity for improvement is in the area of evaluation of public health capacity and reach. Some public health interventions rely on strategies for education and communication of health information and healthy behaviors. The extent to which the population, and high priority segments of the population, is reached with this information can be difficult to discern without resources and methods for formal evaluation.

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All pregnant/postpartum women have access to maternal depression screenings and mental health services as needed

Why is this an important priority?

The incidence of postpartum depression is a concern not only for the health of women in New Hampshire, but their children, as well. Because postpartum depression disrupts the mother and child relationship at a critical period of child development, left untreated it can impact a child's well-being. Researchers estimate that between 20 and 40% of all mothers may experience some degree of postpartum depression.[1] Other studies have reported that the overall incidence of postpartum *major depression* is 5 to 7 percent in the first three months.[2] It is further observed that women with postpartum major depression, particularly those with no prior psychiatric history, may be reluctant to disclose symptoms or to seek help.

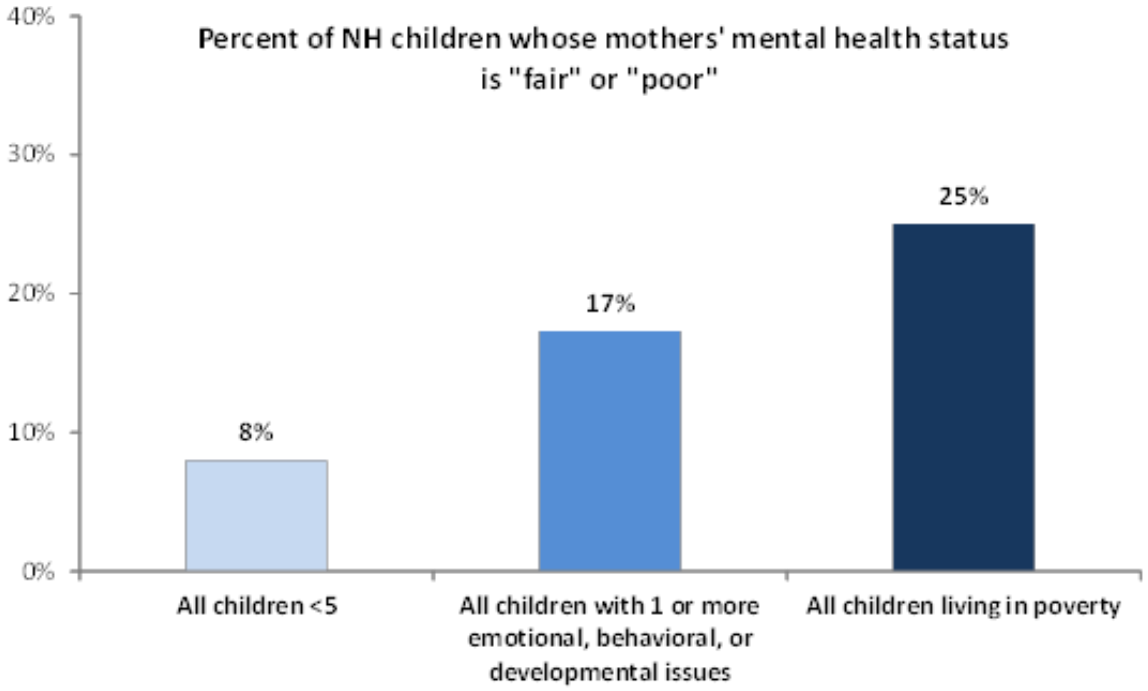
Given the prevalence and potential impact of maternal depression, access to routine screening for depression by health care and other service providers during the postpartum period is an essential aspect of care. Routine screening can help to identify at-risk families and assist them in receiving the mental health treatment necessary to minimize the consequences of maternal depression and its effects on long-term health and developmental outcomes.

What is the scope of the issue?

According to the 2011–2012 National Survey of Children's Health, 8% of all NH children under the age of 6 (about 6,000 children) have mothers whose mental health status is "fair" or "poor" (other response options are excellent, very good or good). Among children with one or more emotional, behavioral, or developmental issues, this statistic is substantially higher – with 17% having mothers whose mental health status is "fair" or "poor." For children living under the poverty level, the rate of mothers whose mental health status is not good is even higher at 25%, or 1 out of every 4 children living in poverty (see figure on next page).

> "In New Hampshire, 17% of children with one or more emotional, behavioral or developmental issues have a mother whose mental health status is less than "good"."
>
> *20112-2012 National Survey of Children's Health*

Figure 2–5



What do we know about need and capacity?

Approximately 12,700 women give birth in New Hampshire each year. Applying the previously cited statistics on the incidence of postpartum depression, it can be estimated that between 2,500 and 5,000 women may experience some degree of postpartum depression in NH each year. Nearly 1,000 of these women may experience postpartum major depression. The most common providers of depression screening in the perinatal period are obstetricians, pediatricians and other primary care providers, and perinatal home visiting programs.

At this time, there are no generalizable data sets available describing screening practices and services for postpartum depression in New Hampshire. However, in 2013 the New Hampshire Division of Public Health Service (DPHS) began participation in the federal Pregnancy Risk Assessment and Monitoring System (PRAMS). Analysis of the data collected through PRAMS will be generalizable to New Hampshire's entire population of women who deliver a live-born infant and will include information on screening for depression.

Maternal Depression Screening

In the absence of current information generalizable to the overall population, a brief key informant interview process was conducted for this needs assessment involving nine perinatal programs around the state including hospital-owned OB/GYN practices, home visiting agencies, and private group practices. These nine organizations collectively serve over 2,000 NH women for perinatal care annually. The nine agencies surveyed reported that they routinely screen for maternal depression and the most commonly reported depression screening tool was the Edinburgh Postnatal Depression Scale.[3] One agency also uses the Postpartum Depression Predictors Inventory. Two agencies reported using their own informal screening process.

> "Innovative practice models that integrate maternal mental health in primary care may protect infants from the negative consequences of untreated perinatal depression. New Hampshire needs development of support networks and coordinated systems of care to improve screening, identification, and referral to providers trained in perinatal mental health. Ultimately, this serves as a preventative approach to *children's* mental health, because if a mother is not well, her family is not well."
>
> *Alison Palmer*
>
> Maternal Newborn Clinical Nurse Specialist, Perinatal Mental Health Nurse Coordinator, NH State Coordinator for Postpartum Support International

Access to Postpartum Support Services

All nine agencies interviewed for this report stated that they are able to make referrals for advanced mental health care (beyond basic prescription needs) for postpartum depression. However, four of the nine programs reported that some of their patients can have trouble accessing that care. Primary challenges reported are a lack of mental health care providers accepting new patients, and a lack of providers who can prescribe medications.

In addition to OB/GYN and other primary health care providers who provide postpartum depression screening, the NH Maternal and Child Health (MCH) Section of DPHS administers the Prenatal Program, which provides funding to 12 community health agencies and one Community Action Program agency to provide prenatal and post-partum visits to low-income, uninsured pregnant women. Home Visiting NH-Healthy Families America, another MCH program, provides health education, support, and linkages to other community services to eligible, pregnant and recently delivered women and their families who are at risk for adverse early childhood experiences and promotes optimal long-term physical and mental health of parents and their children.[4]

What opportunities are there for improving assessment of this issue?

When the PRAMS data becomes available for 2013, NH decision-makers will, for the first time, have a more comprehensive picture of provider practices and the mental health needs of new mothers in New Hampshire. This will allow public health professionals and health care providers to better identify groups of women and infants at high risk for health problems; to monitor changes in health status; and to measure progress toward goals in improving the health of mothers and infants.

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All young children receive immunizations appropriate to their age, development and medical status

Why is this an important priority?

Thanks to advances in biomedical science and effective public health interventions, many diseases, such as diphtheria, measles and polio that have historically been primary causes of infant and child death, are now preventable through immunization. In addition to protecting children, their families and the community against severe illnesses, immunization leads to other positive outcomes, which contribute to overall well-being, including improved school attendance and reduced family stress.[1] In fact, increases in immunization rates are associated with improvements in population measures of cognitive development, educational attainment, and long term prosperity.[2] Low rates of immunization are a concern not only from the standpoint of specific disease prevention, but because low rates in a population can signal inadequate access to primary health care.

What is the Scope of the Issue?

Historically, the population of NH two-year-olds (about 13,500 children in any given year) has had relatively high rates of vaccination coverage compared to the national average.[3] In 2011, for example, NH achieved the national Healthy People 2020 goals of 90% immunization coverage for the following vaccines: polio, mump-measles- rubella (MMR), Haemophilus influenzae serotype b (Hib), and Hepatitis B.[4]

According to the NH Immunization Program (NHIP), a two-year-old is now considered *fully* vaccinated when they've received what is known as the "4:3:1:3:3:1:4" series, consisting of the following vaccines and dosages:

- four or more doses of diphtheria, tetanus, pertussis (DTaP) vaccine,
- three or more doses of polio virus vaccine,
- one or more doses of any measles-containing vaccine,
- three or more doses of the Hib vaccine,
- three or more doses of the hepatitis B vaccine,
- one or more doses of the varicella vaccine
- four or more doses of pneumococcal conjugate vaccine (PCV)

Table 2–5| Full Series Vaccination Coverage Among Children 19-35 Months

Year	US	NH
2010	70.2%	81.0%
2011	73.3%	72.4%

Source: CDC, National Immunization Survey

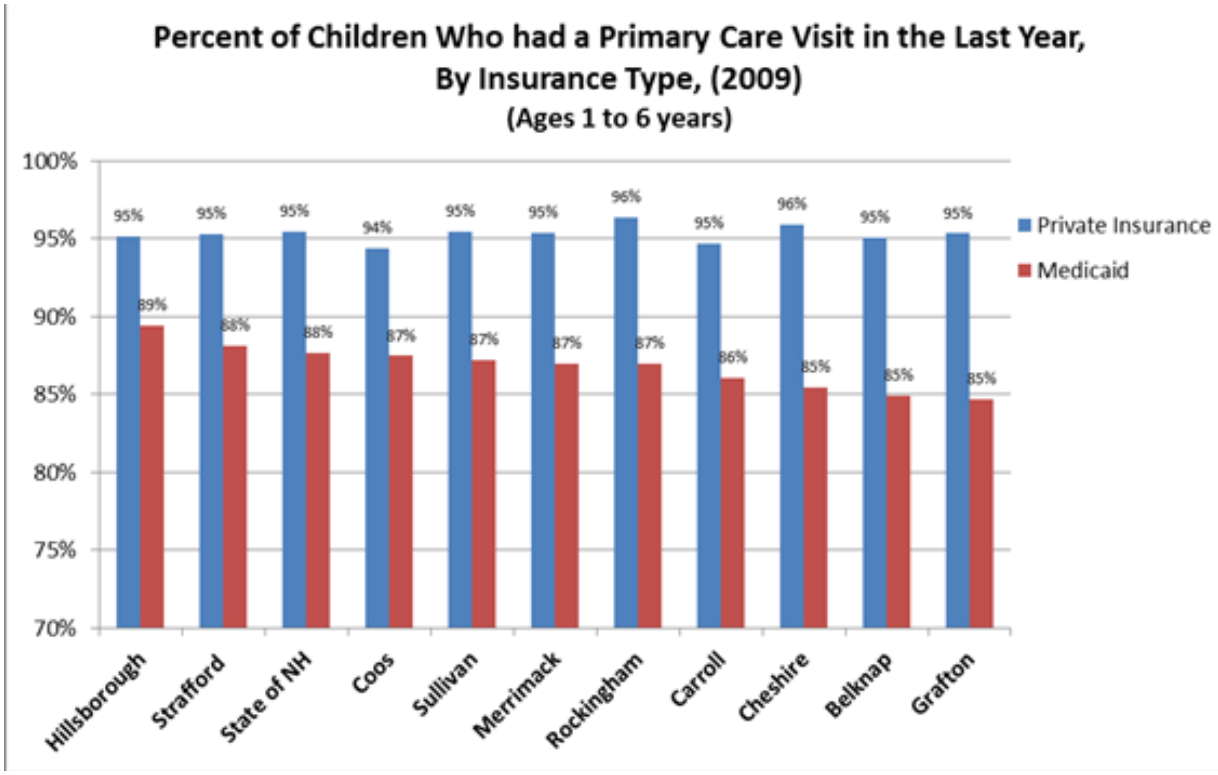
As shown by Table 2-5, the 2011 full immunization rate for two year olds in NH fell slightly below the national average. This comparison is notable given NH's historical pattern of consistently exceeding the national average on this measure. It is important to note that conclusions from year to year comparisons on this measure are confounded by changing definitions and recommendations as to what constitutes full immunization. In particular, changes in recent years in how complete Hib vaccination is defined, coupled with shortages in Hib vaccine, have complicated year to year trend comparisons according to the NH Immunization Program. Further, preliminary information for 2012 suggests that the full immunization rate for 2 year olds in NH is again exceeding the national average.[5] However, it is essential to continue monitoring these rates annually to identify potential needs for improving awareness, access and availability of immunization services.

Immunization coverage rates increase further by the time NH children enter kindergarten, largely in part due to the legal requirement for children to be fully vaccinated by the time they enter school. In the 2009-2010 School Vaccination Survey, 546 NH schools reported that 92% of kindergarteners were up-to-date for all required vaccines. The remaining children (about 8%) were either conditionally enrolled meaning they had a doctor's note indicating a later-scheduled vaccination appointment or had an exemption (about 1%) for religious or medical reasons.

What do we know about need and capacity?

Most childhood immunizations in New Hampshire are provided in a primary health care setting and are thus affected by factors influencing access to primary care. Children in New Hampshire are more likely to have had one or more visits for preventive medical care in the past 12 months (91.2%) than are children in the United States overall (84.0%).[6] However, the likelihood of a child having had at least one visit for primary care can be influenced by type of health insurance and geography. As shown by the figure below, children with private insurance are more likely to have had a primary care visit than are children with Medicaid coverage. The gap between Medicaid and private insurance for child primary care visit rates is smallest in Hillsborough County and greatest in Grafton County. Similar information is not available for uninsured children, although it can be well assumed that access to preventive health care is even more substantially diminished for this population, which is about 1 out of every 20 children in NH less than 6 years of age.

Figure 2–6



Minimizing Barriers

New Hampshire's high immunization rates can be largely attributed to its status as a "universal purchase state," which means that the state covers the cost of all vaccines for children through age 18 (except co-pays and/or administration fees) regardless of family income or insurance coverage. Vaccines are distributed to health care providers at no cost and there is no charge for the vaccines. This program is funded through the national Vaccines for Children program (VFC), NH general funds, and the NH Vaccine Association, a non-profit organization which was created for the sole purpose of collecting funds from insurance carriers to help cover the cost of vaccines. New Hampshire is one of only eight states with this status, which is recommended by the CDC's Advisory Committee on Immunization Practices.[7]

Children with private insurance are more likely to have had a primary care visit than are children with Medicaid coverage. The gap between Medicaid and private insurance for child primary care visit rates is smallest in Hillsborough County and greatest in Grafton County.

NH's universal purchase policy removes cost barriers to immunization. Therefore, variation in immunization rates are likely due to the general availability of primary care providers, challenges in completing the recommended schedule of vaccinations, and awareness of and attitudes toward vaccines. For example, completion of the recommended schedule for early childhood vaccination currently requires more than 20 vaccinations provided over the course of about 9 well child visits in the first two years of life. For many families, meeting this complex schedule can be challenging in the context of competing work hours and leave policies; limited transportation resources; lack of housing permanency, and misunderstandings around the importance of all immunizations.[8]

Strategies for addressing these barriers include efforts to improve continuity of care, such as through medical homes that have systems, procedures and staff trained to assure that consistent management and follow-up of all care occurs including immunizations. Medical homes coordinate with other providers such as home visiting programs and other medical specialists to coordinate information collection, communication and family follow-up. As described previously, only about two-thirds of children (66.5%) in New Hampshire currently receive health care within a setting classified as a medical home.[9]

Another strategy for improving access to immunizations, and for reducing fragmentation of child health services in general, would be to expand access to health consultation directly in early childhood program settings including licensed child care and nutrition support programs. Co-location of WIC and primary care organizations, such as community health centers, in some NH communities is one model currently successful at integrating services and coordinating information.

> "By two years of age, over 20% of children in the US typically have seen more than one health care provider, resulting in scattered paper medical records. Immunization information systems help providers and families by consolidating immunization information into one reliable source."
>
> *National Center for Immunization and Respiratory Diseases, CDC*

What opportunities are there for improving assessment of this issue?

At this time, the National Immunization Survey (NIS) through CDC provides the only comprehensive immunization dataset related to vaccination rates for young children. Because of the small sample of NH residents included in the survey, immunization data cannot be broken out at the sub-state level, such as county, or by other demographic characteristics such as income, insurance status, or race/ethnicity. An expanded survey sample administered periodically (i.e. less frequently than annually) could provide important insights into geographic and demographic variation in immunization coverage rates.

Another resource that could provide useful information at the point of direct care provision and also at the level of public health assessment is a statewide immunization information system or registry. New Hampshire is the only state remaining without a state immunization registry.[10] At the individual level, a registry would offer primary care providers a consolidated immunization history and help determine appropriate vaccines. At a population-level, a registry would provide sub-state geographic data to help target public health policies and interventions, and quality improvement initiatives with the goal of reducing the prevalence of vaccine-preventable disease.[11]

References

[1] Immunization. Child Trends Databank; September 2012 Update.

[2] Bloom DE, Canning D, and Weston M. The Value of Vaccination, World Economics, Vol. 6, No. 3, pp15-39; July–September 2005.

[3] http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#nis

[4] Same as note 3

[5] Same as note 3

[6] National Survey of Children's Health, 2011–2012

[7] http://www.nhvaccine.org/nhvaccine.nsf/documents/NHVA10YearReview.html/$File/NHVA_10YearReview.pdf

[8] Kohli Thomas M, Kohli V, King D. Barriers to childhood immunization: findings from a needs assessment study. Home Health Care Services Quarterly. 2004;23(2):19-39.

[9] Same as note 6

[10] Progress in Immunization Information Systems — United States, 2011. Centers for Disease Control and Prevention, Morbidity Mortality Weekly Report, Vol. 62 / No. 3 January 25, 2013.

[11] http://www.cdc.gov/vaccines/programs/iis/about.html

STRONG FAMILIES

Because families form the core of a child's early environments of relationships and experiences that are foundational to healthy development, it is important to provide families with supports when they face challenges such as poverty, unemployment, or poor health.

The proportion of young children living in poverty is increasing more quickly than other age groups. Families with young children are also at higher risk of experiencing food insecurity, and children living in low-income families without housing subsidies are more likely to suffer from malnutrition and underdevelopment than the general population.[1]

Supporting families in New Hampshire includes providing adequate and stable employment and income sufficient to meet basic needs as well as providing children with safe and healthy environments marked by positive and consistent relationships with adults at home and in the community. Services such as home visiting and respite care programs, employment and educational support programs, and financial aid programs support families in providing more stable foundations for their young children.

Recognizing the importance of helping to build and support the strength of NH families, Spark NH chose the following four priority statements to assess the support for families with young children.

> "The quality and stability of a child's human relationships in the early years lay the foundation for a wide range of later developmental outcomes that really matter – self-confidence and sound mental health, motivation to learn, achievement in school and later in life, the ability to control aggressive impulses and resolve conflicts in non-violent ways, knowing the difference between right and wrong, having the capacity to develop and sustain casual friendships and intimate relation- ships, and ultimately to be a successful parent oneself."
>
> *The Center on the Developing Child at Harvard University - National Scientific Council on the Developing Child, 2004*

Spark NH Strong Families Priority Statements

- All families with young children can access home visiting, family support and parent education.
- All families with young children who face multiple-risk factors (such as very low income, homelessness, and family violence) can access programs and services that work together to support them.
- All families with young children at risk of child maltreatment can access a network of respite care.
- All families with young children who need education, skill training, job opportunities, and work supports to move into stable work that generates a livable wage can access them.

All families with young children can access home visiting, family support and parent education

Why is this an Important Priority?

In a child's early years, it is essential to support families who face significant challenges to ensuring their children's healthy development, such as serious health and mental health issues, poverty and job insecurity, and social isolation. Home visiting programs provide a wide spectrum of support to families in need, including parenting education, health care education, child abuse prevention, and early intervention and education services. Research shows that "evidence-based, voluntary home visiting programs improve child and family outcomes, and save money for states and taxpayers," by impacting some of the costliest social issues, like child maltreatment, low academic achievement, and poverty.[2] In addition to focusing on families with certain heightened risk factors, recent research suggests that voluntary home visiting programs, such as newborn home visits, that include parent education and family supports are also beneficial to all young families.[3]

> "Two-thirds of NH families with a child under age 6 with a special health care need live below 400% of the federal poverty level - a common income threshold for many NH family support programs."
>
> *2009-2010 National Survey of Children with Special Health Care Needs*

What is the Scope of the Issue?

Each year in New Hampshire there are approximately 13,000 newborns. Of this number:

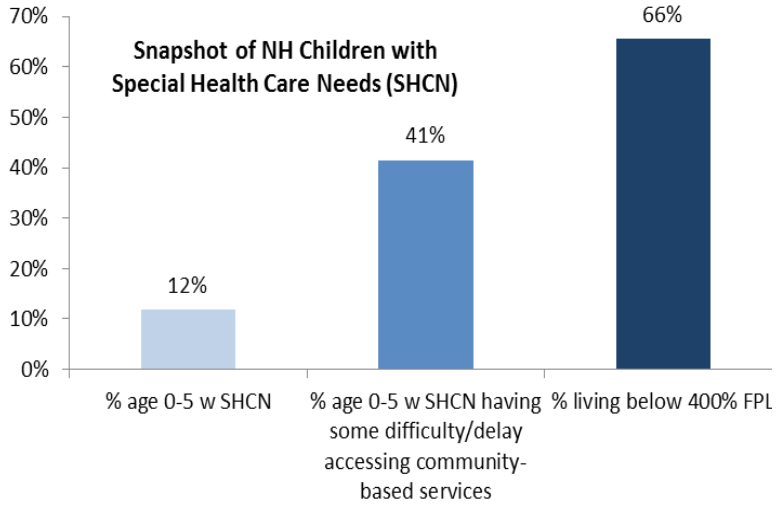
- 7% will be born with low birth weight;
- 12% will have or develop a special health care need early in life;[a] and
- 13% will be born into families with income below the poverty level, including 50% of those with single mothers.

These data suggest that several thousand NH families, at minimum, with newborns and infants could benefit from home visiting services annually. Many of these families, especially those with children with special health care needs, would continue to benefit from home visiting services through early childhood.

a. Children and youth with special health care needs (CYSHCN) are defined by the Department of Health and Human Services , Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB) as: "those who have or are at increased risk for a chronic physical, development, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."

Based on the 2009-2010 National Survey of Children with Special Health Care Needs,[4] approximately 54,500 NH children had at least one special health care need, including approximately 10,300 children under the age of 6 (about 12% of all children in this age group). Approximately 6,700 of these children are also in families with incomes less than 400% of the FPL,[5] a common income threshold for many NH home visiting or family support programs.[6] Low income is a substantial risk-factor for many adverse childhood developmental outcomes, and coupled with special health care needs, puts parents and their children at increased vulnerability of compromised long-term outcomes.

Figure 3–1



What do we know about need and capacity?

Because of varying eligibility requirements for each of the home visiting, family support, and parental education programs available to NH families - which can be based on income, insurance status, health and developmental risks, or other factors - the exact need and capacity within the state for these services is difficult to quantify. However, a 2010 national study of state-funded home visiting and family support programs conducted by the Pew Charitable Trusts found that no state has "sufficient funding or the infrastructure to reach all of its highest-risk families."[7] At $228 per child, New Hampshire ranks 15th among all states in home visiting/family resource center spending per low-income child. The top ranking state (Vermont) spends $1,042 per child.

> "Two of every 5 NH families (41%) with a child Under age 6 with a special health care need report experiencing difficulty or delays in accessing community-based services."
>
> *2009-2010 National Survey of Children with Special Health Care Needs*

As of 2013, there are 32 local agencies in NH contracted by various NH DHHS programs (Maternal and Child Health, Division of Children Youth and Families, Bureau of Developmental Services, and the Division of Family Assistance) to provide home visiting family support and education services.[8] These agencies provide a combination of some or all of the following family strengthening support models depending on funding: Child & Family Health Support and Services, Comprehensive Family Support Services, Early Head Start, Family Resource Center, Family Centered Early Supports and Services, Healthy Families America, and Home Visiting NH. Table 3-1 provides a snapshot of these programs including focus population and numbers served. Short descriptions of each program, including their geographic coverage are included in this section. Specific programs are also discussed in greater length in other sections of this report.

Services provided in combination through these contracts include:

- Parenting skills education
- Health education
- Direct medical/mental health care
- Service/care coordination
- Assistance accessing resources
- Respite care[b]
- Case management

Table 3–1 | NH DHHS-Sponsored Home Visiting Family Support and Education Services

Program	Coordinating Agency	Focus Population	# Families Served
Child & Family Health Supports and Services (CFHSS)	MCH	Children < 10, < 400% FPL	553
Comprehensive Family Support Services (CFSS)	DCYF	Children < 18 w DCYF involvement	951
Early Head Start (EHS)	One of 3 CAP agency Head Start Programs: Southern NH Services, Belknap-Merrimack, Strafford County	Prenatal > 3, ≤ 100% FPL	290
Family Centered Early Support and Services (ESS)	BDS	Birth > 3, based on 33% developmental delay, atypical behavior, established conditions, or at-risk for substantial delay	3,864
Family Resource Centers (FRC)	MCH	Varies by program	Approx. 25,000 people[9]
Healthy Families America (HFA)	MCH	1st time mothers < 21, with various risk factors	282
Home Visiting NH (HVNH)	DFA/TANF, MCH	Prenatal > 1, Medicaid-eligible	157

b. Note: Respite care is also a specific priority area discussed in more depth later in this section of the report.

Child & Family Health Supports and Services (CFHSS) provides families with support through home visiting, education relative to the child and family's needs, and assistance with case management and accessing resources.

Comprehensive Family Support Services (CFSS) serves families with children who have had some involvement with DCYF. CFSS provides home visiting, short-term child placement, child development education, parent education and support, quality early care and learning, health education, adult literacy and higher education, life skills training, child care resource and referral, family empowerment, and information and referrals to other community-based agencies.

Home-Based Early Head Start (EHS) and Head Start provide comprehensive services to enrolled children and their families. In the home-based program option, the home visitor facilitates the visit with a focus on enhancing the parent-child relationship. Services are individualized to meet family need. Eligibility requirements include age, area, and income. Families may enroll for EHS during the prenatal period and up to the third birthday. Prenatal services focus on reducing risk factors during pregnancy. Comprehensive services for children include screening and ongoing developmental assessment, individualized child development activities, health, nutrition, family support, and parent education. Varied opportunities for family engagement are offered in the program, the home, and through twice monthly planned socialization activities developed in conjunction with families. There are currently three Early Head Start Programs providing intense home visiting through the home-based program option.

Family Centered Early Supports and Services (FCESS) provides services for children with 33% developmental delay, atypical behavior, established conditions, or at risk for substantial delay. Services include direct care for vision and hearing issues, occupational, physical, and speech and language therapies, care coordination (including transportation services and accessing equipment), and other types of diagnostic and evaluation services. FCESS is not allowed to have a waiting list or cap on services.

> "Just when the need is increasing, there have been large cuts from the state and other funders. Programs are barely funded. We have had to drop services because it will cost us more to deliver them than we will receive."
>
> *FRC Professional*

Family Resource Centers (FRC) around NH provide a range of programs and services available to all families in the community, "many times helping families avoid costly involvement in the child welfare system."[10] Family Support NH is a statewide coalition of FRCs and family support programs that "seek to strengthen families by promoting health, well-being, self-sufficiency, and positive parenting through support and education."[11] There

are currently 18 Family Resource Center agencies or programs offering classes and other educational opportunities for families to learn the skills they need to best support their child's healthy development and school readiness. However, direct state funding support of these programs was eliminated in 2012. This loss of funding, in combination with other budgetary pressures and constraints, has led to service reductions and the consolidation or closure of several Family Resource Centers.

Healthy Families America (HFA) was first implemented in NH in 2011, initially targeting at-risk communities identified by the 2010 Maternal and Child Health Needs Assessment conducted by the state health department.[12] Recently, HFA has been expanded with additional resources to serve families across the state. The HFA program focuses on targeting families who may have histories of trauma, intimate partner violence, and mental health and/or substance abuse issues. By providing home-visiting support for families with children during a potentially stressful time (when most physical abuse and neglect occurs), HFA providers identify overburdened families and provide guidance and support to curb the potential for drastic outcomes related to child abuse. Parenting education provided through HFA promotes parent-child bonding, developing appropriate expectations for child development, and helps families access and navigate appropriate medical care to help improve overall health status.

Home Visiting New Hampshire (HVNH) is a state-funded program, "maintained as a 'match' to allow NH to use federal funds for the HFA home visiting program"[13] described above. HVNH provides health education, parent education to give parents the skills necessary to be their child's "first and best teacher", as well as linkages to other community services.

In NH, the contract and funding for Child & Family Health Supports and Services has been combined with the Home Visiting NH contract. The merger of these two contracts was also combined with decreased eligibility for pregnant women (now only available for those under 21) and the decreased ability to bill Medicaid for some services. For those agencies that have already had these two contracts, the merge resulted in a decrease in total contract funding,

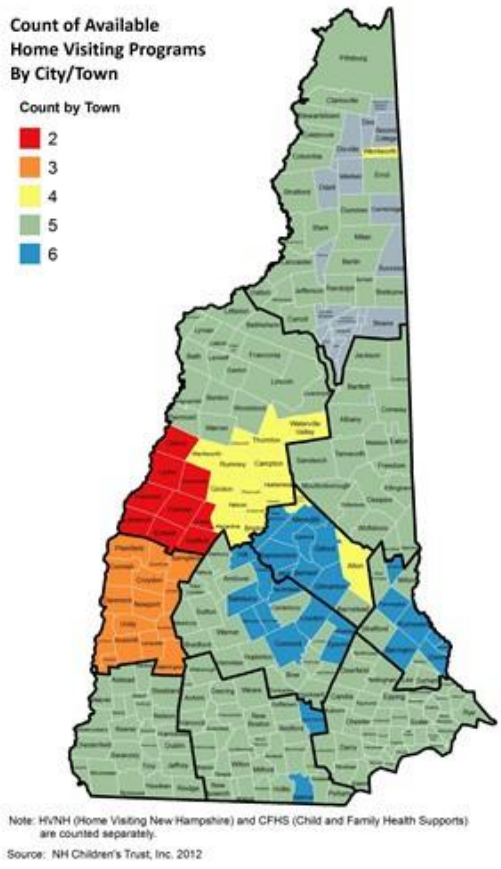
> "By combining the funding sources of these two programs, but not their ultimate functions and target populations, there were few synergies identified for agencies to do the same work for less funding."
>
> *Early Childhood Professional*

decrease in Medicaid payments and fewer eligible women. For those agencies that originally had one contract and added the other, the total contract value increased and the workload is still being evaluated. Although the scope of work is similar, the populations have different eligibility criteria and the funders still require separate reporting on each program.

Map 3–1 shows the number of home visiting programs available to each town in NH. While some communities appear to have multiple program types, more specific information describing population need and staff or program capacity is not available. Based on the Pew report findings previously cited and results of the National Survey of Children with Special Health Care Needs, we do know that it is likely that there is insufficient capacity throughout the state to adequately provide services and supports to all families in need.

The map shows that Sullivan and lower Grafton county families have access to relatively fewer programs than the rest of the state. Because of the inconsistency in eligibility requirements, program focuses and lack of information describing staff and program capacity or service delivery outputs for specific programs and localities, this information should be viewed with caution with respect to drawing conclusions regarding relative access to services by geography.

Map 3–1 | Count of Available Home Visiting Programs by City/Town



What opportunities are there for improving assessment of this issue?

Because of differences in eligibility for each particular program, and no central reporting system to collect data on the number of families served, it is difficult to specify the exact need and capacity for home visiting and family support in NH. A related issue is that some of these programs may have overlaps in children and families served such that a unique count of numbers served is not currently possible. The NH Children's Trust has undertaken an effort to aggregate utilization data for NH home visiting and family support programs.

At this time, the number of families served is available at the program level. Because program catchment areas are not consistent across programs, as well as differing eligibility requirements and similar audiences, it remains difficult to measure the number of unique families receiving services or the impact of programs without developing a common, integrated database.

> "Cutting these programs through combining their funding stream has resulted in lower payments for the same services. When these cuts are combined with changes in eligibility and changes in Medicaid billing, the impact can be very large for an individual agency. The impact is likely most felt by those individuals and families who may have been eligible for multiple services and are now feeling cuts on many fronts."
>
> *Early Childhood Professional*

References

1 ZERO TO THREE National Center for Infants, Toddlers and Families. Early Experiences Matter: A Guide to improved policies for Infants and Toddlers. (2009)

2 Solving Social Ills Through Early Childhood Home Visiting. The Pew Charitable Trusts, January 2013.

3 Expanding Home Visiting Research: New Measures of Success. The Pew Charitable Trusts, January 2013.

4 National Survey of Children with Special Health Care Needs. NS-CSHCN 2009/10. Data Resource Center for Child and Adolescent Health.

5 Same as note 3.

6 Same as note 3.

7 States and the New Federal Home Visiting Initiative: An Assessment from the Starting Line. The Pew Charitable Trusts, October 2010.

8 http://www.nhchildrenstrust.org/find-a-family-support-program-near-you

9 http://www.nhchildrenstrust.org/sites/default/files/images/family_support_nh_facts_jan_17_2013.pdf

10 Same as note 8.

11 Same as note 8.

12 NHDHHS, MCH Title V Needs Assessment, 2010.

13 http://www.nhchildrenstrust.org/program/home-visiting-new-hampshire

All families with young children who face multiple-risk factors, such as very low income, homelessness, and family violence, can access programs and services that work together to support them

Why is this an Important Priority?

Preventing or mitigating the effects of adverse childhood experiences is vitally important to the overall health and well-being of children and to the future prosperity of our state. While normal life stress can be important to development, some stress, which scientists refer to as "toxic stress,"[a] can damage developing brain architecture, leading to life-long problems in learning, behavior, and physical and mental health. "Toxic stress" responses occur when children experience severe and prolonged exposure to harmful experiences or environments without sufficient adult support. Stress is "toxic" from the chronic release of stress-related hormones, and "can disrupt the development of brain architecture and other organ systems, and increase the risk for stress-related disease and cognitive impairment, well into the adult years."[1]

> "In New Hampshire, 15% of all children under the age of six have experienced two or more adverse family experiences. Among children (under age 18) living in poverty, 56% have experienced two or more adverse family experiences."
>
> *2011–2012 National Survey of Children's Health*

From 1995 to 1997, Kaiser Permanente conducted the first phase of the groundbreaking Adverse Childhood Experiences (ACE) Study.[2] The study collected data on over 17,000 participants' family history including ACE and current health status. The study determined participants' ACE scores categorized in the areas of abuse, neglect, and household dysfunction. Prospective follow-up on health outcomes of this cohort is ongoing. However, published results have already shown that as ACE scores increase, the risk of developing serious health problems later in life - such as addiction to drugs and alcohol, chronic diseases, mental health issues and relationship difficulties - also increase in a nearly linear relationship. In other words, a higher number of adverse childhood experiences is strongly associated with higher risks of medical, mental and social problems as an adult.

a. Toxic stress is the strong, unrelieved activation of the body's stress management system in the absence of protective adult support. Harvard University, Center on the Developing Child

These findings emphasize the importance of assuring access to services and supports in early childhood, including effective screening, assessment and referral as addressed in earlier sections of this report. For children at significant risk, early intervention can serve as a protective buffer against the multiple adverse influences that may hinder the progress of their physical, social and behavioral development.[3]

What is the Scope of the Issue?

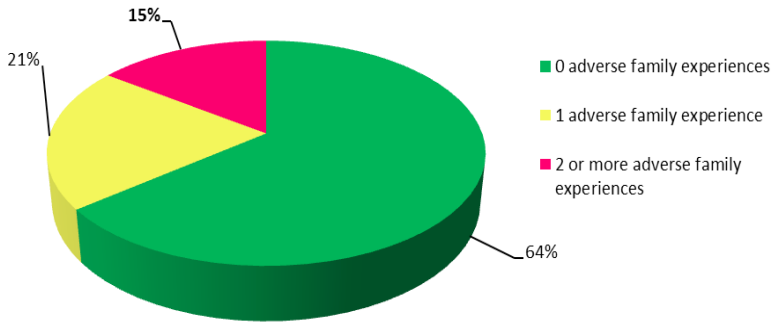
Generally defined, adverse childhood experiences can include a range of family and environmental issues such as very low income, homelessness, hunger, parental depression, neglect and family violence. These risk factors, in any combination, can put families and young children at an early disadvantage. When left unaddressed by service delivery and support systems, they can lead to substantially worse outcomes for children compared to families who have effective intervention and support or families who experience no risk factors at all.

The 2011-2012 National Survey of Children's Health included a set of questions modeled after the type of questions included in the ACE study described above.[4] As displayed by the chart on the right, it is estimated that more than 1 of every 3 children (36%) in New Hampshire have had at least one adverse family experience before their 6th birthday and about 15% of young children have had 2 or more adverse family experiences. The survey asked about nine different possible adverse family experiences. The chart below shows the proportion of children whose parents reported that they have had particular adverse family experiences. Twenty-five percent of families with children under the age of 6 reported that they somewhat or very often have experienced financial hardship covering basic needs, like food or housing. About 10% of young children in NH have lived with someone who was mentally ill or who had substance abuse problems and about 6% of children have witnessed family violence.

Figure 3–2

Proportion of Young Children (under age 6) with Risks from Adverse Family Experiences

New Hampshire; 2009/11



Survey asked about 9 possible adverse family experiences including family income difficulties, parental divorce/separation, parental death, parental incarceration witness to domestic violence, victim or witness of neighborhood violence, and living with someone with substance abuse or mental health issues.

Source: National Survey of Children's Health, 2011/12.

A different source of related information for estimating the proportion of children and families with multiple risk factors for adverse outcomes is the American Community Survey which gathers a variety of household demographic and socio-economic information. The National Center for Children in Poverty at Columbia University has estimated the number of children in each state experiencing family demographic and socio-economic risk factors associated with poor health, school, and developmental outcomes for young children.[5] As shown by chart 3–4, similar proportions of children experiencing risk-factors are identified by this method, with approximately 40% of NH children under the age of 6 experiencing at least one risk factor and about 10% of children under 6 experiencing 3 or more of these risk factors.

Figure 3–3

Selected Adverse Childhood Experiences; Percentage of NH Children under Age 6
National Survey of Children's Health, 2011/12

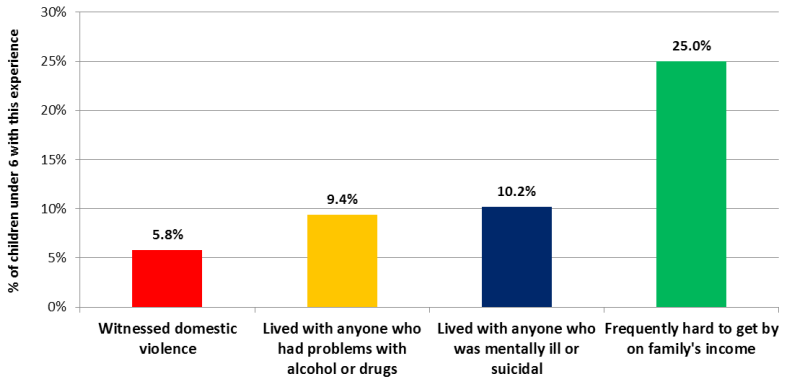
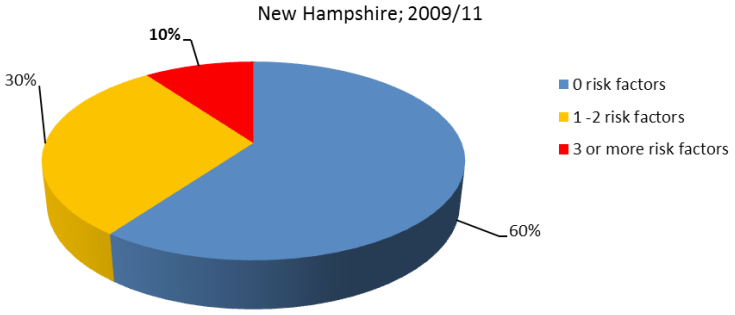


Figure 3–4

Proportion of Young Children (under age 6) with Risks from Family Demographics/Socio-Economics
New Hampshire; 2009/11



Possible family risk factors include low income, single parent, teen mother, low parental education, nonemployed parents, residential mobility, households without english speakers, and large family size.

Source: National Center for Children in Poverty, Columbia University; American Community Survey 2009-2011.

What do we know about need and capacity?

> "In New Hampshire, 10% of children under the age of six have 3 or more demographic or socio-economic risk factors. Children with three or more risks are exceptionally vulnerable."
>
> *National Center for Children in Poverty, Columbia University*

Children and families with multiple risk factors also tend to receive services and support from multiple sources, programs and public funding streams. This circumstance, and the fact that the patchwork of programs and services are not well integrated with respect to client level information, makes it difficult to gather complete and comprehensive information describing need, capacity and gaps in services for these families. However, by applying the research-based proportions of young children who experience multiple adverse child and family events, which range from 10%-15%, it can be estimated that approximately 8,000 to 12,000 children in NH under the age of 6 and their families are vulnerable and in need of services and supports. The remainder of this section addresses needs and services related to three key risk factors associated with poor child health and development outcomes – poverty, homelessness, and family violence.

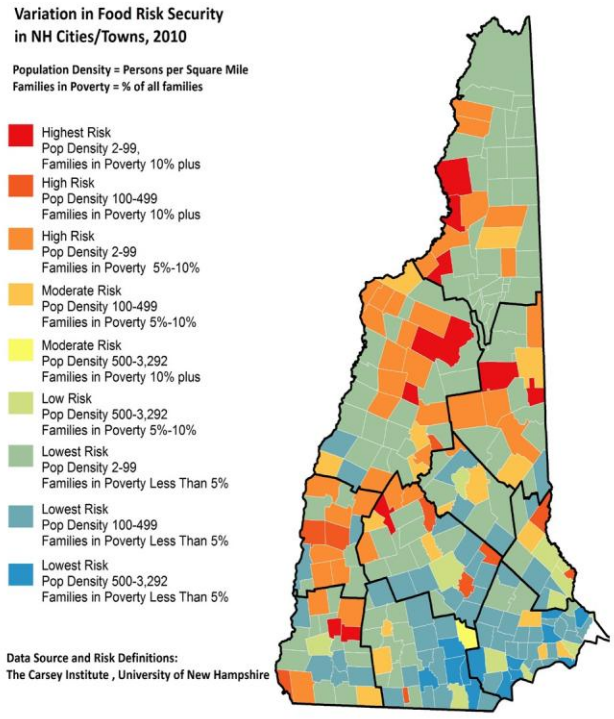
Poverty: Poverty is a risk factor in and of itself, and it can have a multiplying effect on numerous other risk factors for families with young children. Although many risk factors for poor outcomes can cut across socio- economic lines, poverty is a pervasive and persistent risk factor with the greatest overlap with other factors.[7][8] It is also important to note that there are racial and ethnic disparities in household income and poverty in NH. While about seven percent of White, non-Hispanic residents have incomes below the poverty line (7.3%), Hispanic residents of NH are more than twice as likely to be living below the poverty line (15.8%) and Black or African American residents are more than three times as likely to be living below the poverty line (24.2%).[9]

> "Economic hardship paired with any of the (other) risk factors may indicate a greater chance of poor outcomes. In NH, 44% of children under age 6 live in low-income households (less than 200% of FPL), 12% live in poverty, and 5% in extreme poverty (less than 50% FPL)."
>
> *National Center for Children in Poverty, Columbia University*

Food Security and Nutrition Support: Poverty has many consequences, including the inability to meet basic needs, such as food and shelter. According to the National Women, Infants & Children (WIC) Association and the Carsey Institute, 14% of NH children experience food insecurity.[10] Food insecurity results when access to food, particularly nutritious food, is limited by affordability and physical access, such as the need to travel long distances to grocery stores.[11]

Map 3–2 displays the NH towns at highest risk for food insecurity. For the purposes of this map, food insecurity risk was calculated based on population density and the percentage of families in poverty. Towns with the highest risk of food insecurity (red shade) are those that combine a large percentage of families below the poverty level with low population density.[12] By this measure, the areas with the highest concentration of communities at the higher risk end of the scale are in Sullivan, Northern Grafton, Coos and Carroll Counties.

Map 3–2| Food Insecurity Risk in New Hampshire Cities and Towns, 2010



There are a number of federal and state programs in place to provide supports for low-income families. For example, the Supplemental Nutrition Assistance Program (SNAP) provided food stamps and benefits to approximately 120,000 NH individuals (as of January 2013), equivalent to about 9% of the total NH population. In the fall of 2013, most families in NH saw a decrease in available benefits due to ARRA funds expiring and ongoing funding levels for SNAP are in continuous jeopardy in the context of unresolved federal budget negotiations.

> "An estimated 18% of individuals eligible for SNAP do not receive benefits."
>
> *Center on Budget and Policy Priorities, 2013*

Another source of nutrition support for families comes from the National School Lunch and Breakfast Programs, available to children in families whose incomes fall below 185% of the federal poverty level. Map 3–3 shows the areas in NH that have the highest eligibility for the free and reduced lunch (FRL) program. School districts shaded in red are those where more than half of the students in a school district are eligible.

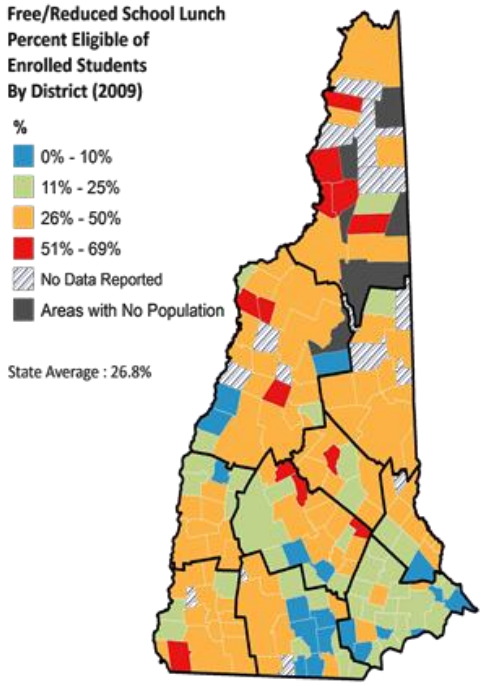
The United States Department of Agriculture (USDA) provides nutrition education and nutritious foods to assist pregnant women, new mothers, infants and preschool children from lower income households through the NH WIC Nutrition Program. In NH, over 17,000 women and children participated in the program in FY 2011.[13]

In December 2012, there were 6,177 households in NH that received Financial Assistance to Needy Families (FANF)[b] through the Division of Family Assistance (DFA) within NH DHHS.[14] This program provided cash assistance to 3,867 families with low incomes, as well as Nutritional Supplement for Working Families assistance through food stamps to 2,310 families who did not meet the income requirements for cash assistance. The maximum FANF grant for a family of four in NH is $738 per month, which is equivalent to about 44% of the federal poverty level in 2011 dollars.

In 2012, the DFA determined that the average standard of need for a household of four is $4,536 per month, whereas the maximum benefit that DFA provides for that same household living in unsubsidized housing is $738 per month. Figure 3–5 displays this substantial gap between living wage and FANF benefits in NH by county. A study comparing FANF benefits in 1996 to 2011 shows further that the actual buying power when inflation is considered has been reduced by 13.8% from the 1996 levels.[16]

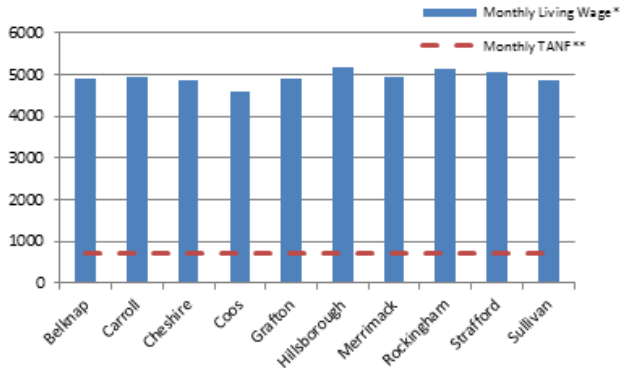
[b] Note: The federal Temporary Assistance for Needy Families (TANF) is termed Financial Assistance to Needy Families in NH.

Map 3–3| Free and Reduced School Meal Eligibility in New Hampshire, 2009



Source: New Hampshire Department of Education

Figure 3–5 | Monthly Living Wage by County to Monthly TANF payment for a Family of 4



*Source: *Living Wage Calculator http://livingwage.mit.edu/*

DFA has reduced barriers to applying for FANF by accepting applications and redeterminations electronically and by telephone. The program implemented an electronic signature process in 2009 and began accepting telephone signatures for FANF applications in 2011.

SNAP, FANF and similar anti-poverty programs are essential for many NH families. However, they are not sufficient alone to pull families out of poverty and are not the only necessary response to the stresses that face families. Other services and supports, such as the job training and work supports, parent education, health care, home visiting and other family supports described in other sections of this document, are critical to addressing the multiple risk factors associated with child health and development outcomes including poverty.

> "Combined, SNAP and TANF benefits are equal to only 76% of the Federal Poverty Level."
>
> *Center on Budget and Policy Priorities, 2013*

Homelessness: "Homelessness…inhibits the physical, emotional, cognitive, social, and behavioral development of children."[17] Cognitive delays developed during early childhood, as well as lack of access to early interventions can follow a homeless child through their entire life and have an extreme effect on their educational success. The NH Department of Education (DOE) defines homelessness as "lacking a fixed, regular, and adequate nighttime residence". This definition includes sharing a home due to loss of housing or economic hardship, living in a motel, hotel or camping ground due to the lack of better housing, living in emergency or transitional shelters, abandoned in hospitals, or awaiting foster care placement.

The recent report from the NH Coalition to End Homelessness—*The State of Homelessness in NH Report: 2012* — reported that 45% of the overall homeless population is families with children (based on the Official Point-In-Time Count).[18] In the state fiscal year 2012, 847 children were provided shelter by state-funded programs around the state.[19] State-funded homeless shelters through the NH Bureau of Homeless and Housing Services include Continuum of Care programs (outreach, prevention, transitional assistance) offered in Manchester and Greater Nashua, the NH Homeless Hotline, and other special needs shelters for persons with chronic disease, addiction, and other disabilities, and are run by Community Action Agencies across NH and other non-profits. The numbers reported here do not include families and individuals served by private shelter programs, such as churches, charities, local welfare, and friends and family, nor do they capture the ages of the children being served.

> "The number of homeless children enrolled in school rose 28% between 2009-2010 and 2011–2012."
>
> *NH DOE*

The two NH Continuum of Care programs are currently participating in implementation of the Homeless Management Information System, a federally-mandated program for all Housing and Urban Development grantees, to help collect information about people accessing these services, and to assist in future decision-making. This data will be integral to understanding homelessness in NH, and for developing action plans to address the causes and needs of the homeless community.

The NH DOE reports information on the total number of children without homes enrolled in schools, although not broken out by age. In 2012, a total of 3,306 students without homes were enrolled in public schools. The number of children without homes enrolled in school rose28% between 2009-2010 and 2011–2012. While the percentage of students without homes remains less than 2% of total students, it isn't clear if this increase means that more students without homes are able to remain enrolled in school, if there are more students without homes, or some combination of these conditions.

> "NH's homeless 3rd graders scored 29 percentage points lower on standardized reading tests than all other students."
>
> *NH DOE*

This does not give a complete picture of the total number of NH children without homes, as it is impossible, with currently available data, to quantify the number of young children without homes not yet enrolled in schools, or currently not attending.

According to the National Research Council's (NRC) Preventing Reading Difficulties in Young Children, 3rd grade reading levels (as measured by the NAEP tests administered at the beginning of 4th grade) are indicators of future academic performance. DOE reports that test scores are consistently lower for students without homes than for all students combined.[20] The effect that homelessness has on educational performance highlights the importance of early intervention for children without homes to mitigate the negative impact homelessness has on academic achievement, and further, to lift families out of homelessness.

Family Violence: "Child maltreatment is influenced by a number of factors, including poor knowledge of child development, substance abuse, other forms of domestic violence, and mental illness, including depression. Although maltreatment occurs in families at all economic levels, abuse and, especially, neglect are more common in poor and extremely poor families than in families with higher incomes."[21]

> "In 2011, almost 1 in 5 maltreatment victims in NH were under the age of 2, and 83% of the perpetrators (of all cases) were their parents."
>
> NH DCYF

Children who experience maltreatment in the home are also more likely to witness domestic violence between parents or caregivers, and infants who hear or see domestic violence have sharp spikes in toxic stress hormones; they can neither fight the problem nor flee from it.

"From the prenatal period through the first years of life, the brain undergoes its most rapid development, and early experiences determine whether its architecture is sturdy or fragile."[22] Given that this is such an important developmental stage of their lives, it is important to provide prevention and early intervention to families with new babies. Several home visiting programs described in other sections serve families at risk of family violence, but funding cuts have significantly reduced eligibility and capacity.

Historically, the NH Division of Children, Youth & Families (DCYF) has offered several programs to help alleviate some of the external stressors that increase the likelihood of violence in the home, but budget cuts at the federal and state level have significantly hampered these programs' abilities to offer services to NH families most at risk. DCYF has focused on a taking a "family strengthening" approach, which is based on research demonstrating that outreach and education is most successful when the focus is on "promoting protective factors, rather than reducing risk factors alone."[23]

The *Comprehensive Family Support Services program (CFSS)* provides services to assist children and families by promoting family wellness, decreasing family stressors and preventing child abuse and neglect. In order to make this program as accessible as possible, no abuse or neglect claim needs to have been filed in order for families to access services. DCYF tracks program graduates for 3 years beyond completion, and promising outcome data shows that 91% of the 2010 cohort has had no future involvement with DCYF.[24]

An important component of preventing family violence and other risk factors is the availability of respite care for parents and other caregivers who may experience extreme stressors that interfere with their ability to provide the best possible care for their children. Respite care, and its importance in supporting healthy child development is discussed in more detail as a specific priority in the next section of this report.

What opportunities are there for improving assessment of this issue?

In order to protect children and families from risk-factors, such as low income, homelessness, and family violence, NH is striving to take a public health, family-strengthening approach through community-wide efforts to support families to earn a livable wage, ensure stable, safe housing, and to prevent domestic abuse and child maltreatment. To help decision-makers guide public health policy around protecting children from multiple risk factors impacting their health and development, more integrated and comprehensive data is needed for target interventions to the populations and geographic areas with the most vulnerable families. Efforts are underway to collect better homelessness data through NH's Homeless Management Information System (HMIS). However, because many families with multiple risk factors are also potentially multi-system involved, more integrated information systems are needed both to improve efficiency and knowledge of services provided, but also to eliminate fragmentation and assist families to navigate the complexity of systems of care and support.

> "It's easier to raise a healthy child than it is to fix a broken adult."
>
> *Early Childhood Advocate*

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All families with young children at risk of child maltreatment can access a network of respite care

Why is this an Important Priority?

In early childhood, respite care can be especially beneficial to "families experiencing challenges parenting children with special needs, as well as new parents, young parents, or parents without a reliable support system."[1] Respite care is short term, temporary relief to caregivers, which allows them time to conduct personal business, to rest, or take personal time away from the stress of caring for children with special health care needs[a] (as is also the case for family caregivers of adults with disabilities or age-related illness). Respite care can also have a beneficial impact on families with children who are at risk of abuse and neglect by providing a safe, alternative resource for temporary child care either in a planned or crisis situation. Respite services can enhance the treatment and care of children in foster care and prevent unnecessary placement disruptions due to foster parent exhaustion and burnout. It can also ease the transition for both children and parents in adoptive families.

What is the Scope of the Issue?

As discussed in the Multiple-Risk Factors section, there is a large body of evidence that risk factors such as poverty, developmental delays and associated parental stress can lead to increased rates of child maltreatment. Nearly 6 of every 10 NH children under age 6 living in poverty have had two or more adverse childhood experiences.[2] These experiences are associated with high levels of stress for children and for their parents. Figure 3–6 shows that about 5% of all parents of children under age 6 report experiencing stress "usually or always" from parenting. However, parents who live under 200% of the Federal Poverty Level (FPL) are nearly three times as likely to report usually or

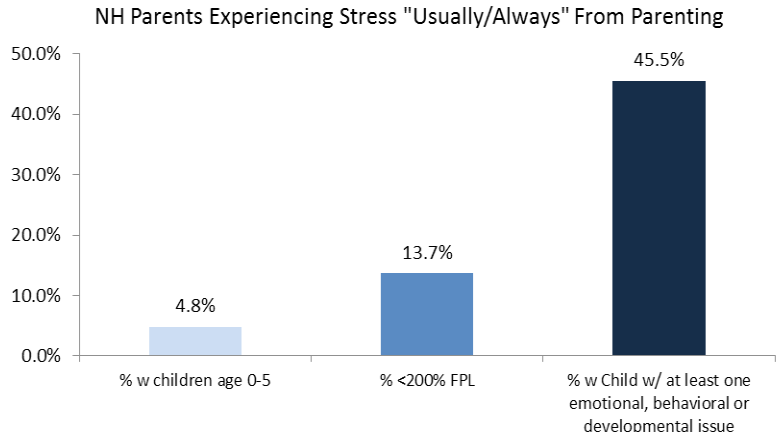
> "Parents in NH with low income (i.e. less than 200% FPL) are 3 times more likely than all parents to 'usually or always feel stress from parenting'. Parents of a child with at least one emotional, behavioral or developmental issue are 9 times more likely to 'usually or always feel stress from parenting'."
>
> *National Survey of Children's Health, 2011-2012*

[a] Children and youth with special health care needs (CYSHCN) are defined by the Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB) as: "those who have or are at increased risk for a chronic physical, development, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."

always feeling stressed from parenting (13.7%) and parents of a child with at least one emotional, behavioral or developmental issue are nine times more likely to report this frequency of stress from parenting (45.5%).[3] In 2012, there were 901 substantiated cases of child maltreatment in New Hampshire and 19.6% of the victims were under the age of 2— the most important developmental stage of their lives. [4]

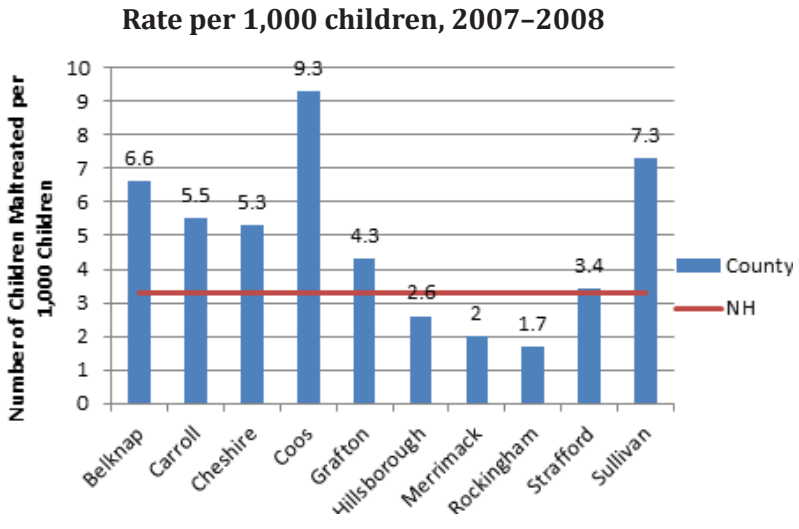
As displayed by figure 3–7, of data from 2007-2008, there is notable geographic variation in the rate of child maltreatment. In general, higher rates of child maltreatment occurred in those parts of NH with less population and higher proportions of low income households. Coos County had the highest rate of child maltreatment during this time frame at 9.3 cases per 1,000 children; nearly 3 times the state rate (3.3 cases per 1,000 children). Sullivan County had the second highest rate with 7.3 cases per 1,000 children. This type of information could be useful for targeting services such as respite care to those areas with the most significant problems. It is important to note, however, that families in stress and cases of child maltreatment exist in all regions of the state.

Figure 3–6 | NH Parents Experiencing Stress "Usually/Always" from Parenting



Source: National Survey of Children's Health. Data Resources Center for Child and Adolescent Health, 2011-2012

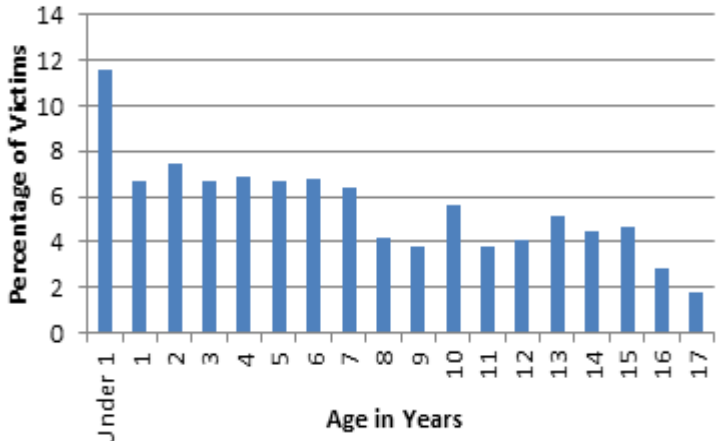
Figure 3–7 | Maltreatment of Children by NH County



Source: NH Kids Count Data Book 2010-2011

Figure 3–8 shows that the largest proportion of children vulnerable to maltreatment is those under the age of one. Further, about 83% of all maltreatment cases are perpetrated by a parent. Thus, child maltreatment most commonly occurs during the most stressful time for new parents as they adjust to their new role and, for the child, during their infancy and early childhood - the most critical period for brain development. This confluence makes access to respite care for new parents especially important.

Percentage of Victims by Age

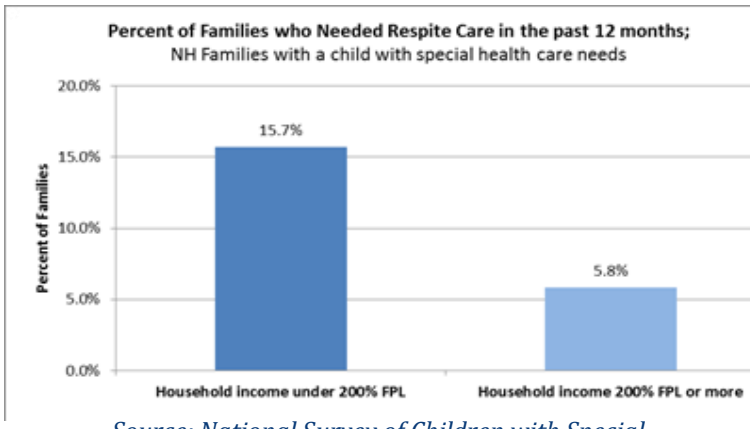


Source: National Child Abuse and Neglect Data System (NCANDS), 2011

What do we know about need and capacity?

There are nearly 55,000 children estimated to have at least one special health care need in New Hampshire including more than 10,000 children under the age of 6.[5] On the recent National Survey of Children with Special Health Care Needs, about 10% of NH parents with a child with a special health care need indicated that either they or another family member needed respite care in the past 12 months. As shown by Figure 3–9, families with lower income and a child with a special health care need were more likely to report a need for respite care than those with higher incomes. The survey also found that more than half of NH parents reporting a need for respite care in the past 12 months also stated that their needs were unmet (52% of those families expressing the need for respite care or 5.4% of all parents with a child with special health care needs had unmet respite

Figure 3-9



Source: National Survey of Children with Special Health Care Needs. NS-CSHCN 3009-2010

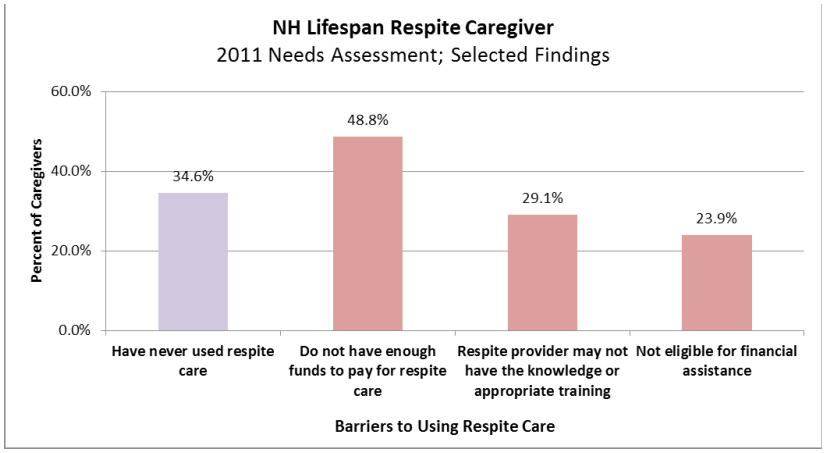
care needs; income breakdown not available).

> "52% of NH families with a child with special health care needs who indicated a need for respite care had those needs unmet – equivalent to about 3,000 families."
>
> *NS-CSHCN 2009-2010*

Special Medical Services, the New Hampshire Title V Program for Children with Special Health Care Needs within the NH DHHS Bureau of Developmental Services, is an important resource for families with respite care needs. In 2009, Special Medical Services was selected to be a Lifespan Respite Grantee to build the foundation for a statewide coalition of respite care providers. A Coalition Work-group was created, and included members from other state agencies and private groups, such as the NH Aging and Disability Resource Center, various mental health agencies, and condition-specific advocacy groups. The Work-group developed a framework for a statewide Needs Assessment, with the goal of creating a work-plan to recruit and train qualified respite care providers, and create a registry for consumers to access such providers.[6] This project produced a comprehensive training curriculum, a registry of trained Lifespan Respite Caregiver (LRC) providers (searchable for statewide providers through a website at www.rewardingwork.org), and a completed pilot project which focused on providing respite care to children.

In 2011, the project implemented the NH LRC Needs Assessment targeted to caregivers for people of all ages. The assessment included a survey of 407 family or friend caregivers across the state. Results show that 55% of the survey respondents cared for children under age 18, with 14% of survey respondents caring for children under the age of six. Types of stressors that affected caregivers regularly included loss of free time (79%), feeling overwhelmed (72%) and exhaustion (60%). About 35% of respondents indicated that they had never accessed respite care, and among all respondents, nearly half reported not having enough funds as a barrier to utilizing respite care.

Figure 3-10



Through key informant interviews and a review of available respite services advertised in NH for this document, respite services appear to be available[b], with some limitations or restrictions, for families with a member with mental illness, developmental delay, disabilities, autism, head injuries or chronic health conditions. For example, participation in Partners in Health, a statewide community-based program that provides support to families of children with special health care needs including respite opportunities, is limited to those with chronic physical health conditions.

> "Even when payment is not an issue for respite care, caregivers usually have to find the respite services themselves. This can be a daunting task for people who are already at their wit's end."
>
> *Early Childhood Professional*

The Family Support Services program, run by the NH Bureau of Developmental Services, offers respite services to families with members eligible for "developmental services or acquired brain disorder services."[8] Services are provided through 10 area agencies, which are advised by local Regional Family Support Councils comprised of family members receiving services from the area agency. The Bureau of Developmental Services has included respite services for children with developmental disabilities and adults with developmental disabilities or acquired brain disorders into their NH Medicaid Waiver Services. Information describing how many families specifically received respite care services and locations of service provision is not currently available. While there are respite care services in NH available to families with children with qualifying special health care needs, it appears that respite care for other high- stress, high-risk families with young children – such as the homeless mother, or the victim of domestic violence, or the parent of a child with challenging behavior - is not easily accessible.

What opportunities are there for improving assessment of this issue?

There are currently no comprehensive, NH-specific statistics available on respite care across the early child health and social system. Data reported from the New Hampshire Lifespan Respite Caregiver Need Assessment in 2011, although very useful, is across all age groups of care recipients, and caregiver needs are not reported by age group. It would be useful to repeat this type of needs assessment periodically to continue measuring the needs of NH families, and how those needs are being met with the resources available.

In addition, while the ARCH website is helpful in locating services, descriptions of the training and credentials of providers would offer additional information and assurance to consumers of respite care.

[b] Families can find these programs through the ARCH (Access to Respite Care and Health) National Respite Network and Resource Center website. The ARCH website maintains a list of agencies providing respite services, which can be filtered by ages served, provider features, health conditions, and geographic location.7

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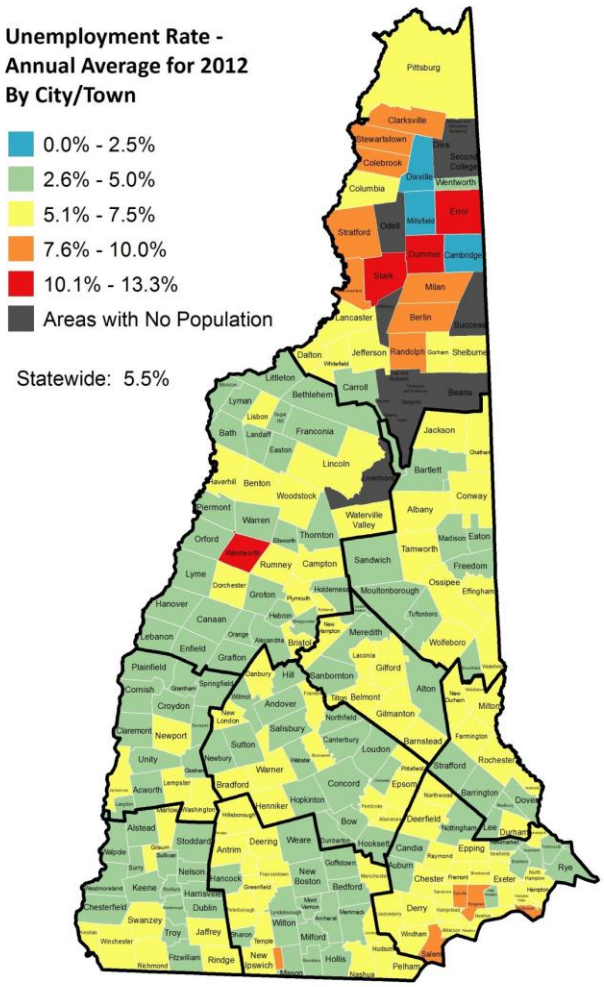
All families with young children who need education, skill training, job opportunities, and work supports to move into stable work that generates a livable wage can access them

Why is this an Important Priority?

Livable wages typically result in greater opportunities for families to enjoy a higher quality of life including supporting the healthy development of their children through access to high quality education, adequate housing in safe neighborhoods and health care services. While there are a number of situations that any of us might find ourselves in which would prevent full employment – e.g., poor health status, or caring for a child with health, learning or emotional problems – even families who are working can face barriers to a secure income.[1] Access to affordable child care and transportation can often be the difference between financial security and insecurity for families with young children.

Having access to adult education, skill training, job opportunities, and work supports can help provide greater family stability for young children and improve family financial stability. It is thus not only beneficial for families, but also in the interest of the community and society overall to offer assistance to parents with young children who need additional education, employment skills and training, work supports and opportunities to obtain jobs that support a livable wage.

Map 3–4| Unemployment by City/Town

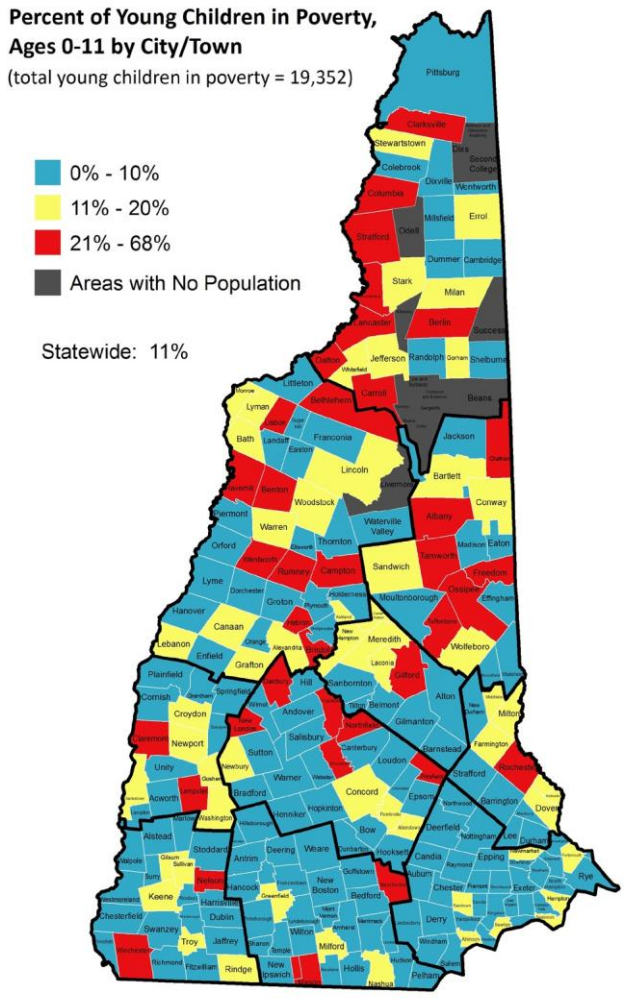


Source: Economic and Labor Market Information Bureau, New Hampshire Employment Security

What is the Scope of the Issue?

The statewide average unemployment rate in all of 2012 was 5.5%. In May 2013, the unemployment rate for New Hampshire was 5.3%. While this rate is generally lower than unemployment nationally, there is a large variation in unemployment at the local level. Unemployment rates for NH towns range from under 3% in some towns to over 10% in several towns in the northern part of the state (Map 3–4). Without skills training and work support available to help families to earn a livable wage, a family is more likely to have low-income or live in poverty even with direct financial support from state and federal programs. Map 3–5 displays the distribution of children in New Hampshire who are living in poverty. Areas in red have the highest percentages of children living in poverty – exceeding 20% of children in those municipalities - while the blue areas show the lowest percentages of children living in poverty. While many of the red and yellow areas, the latter indicating moderately high levels of childhood poverty, are in the middle and northern parts of the state, there are pockets of high poverty in every county except Rockingham County. Overall, nearly 20,000 children under the age of 12 in New Hampshire were living in poverty during the time period of 2007 to 2011.

Map 3–5 | NH Children under 11 Poverty by Town



Source: American Community Survey 5-Year Estimates 2007-2011

Alarmingly, the state of New Hampshire experienced the largest increase in child poverty of any state in the country from 2011 to 2012 when the estimated poverty rate among all children under the age of 18 jumped from 12.0% to 15.6%.[2]

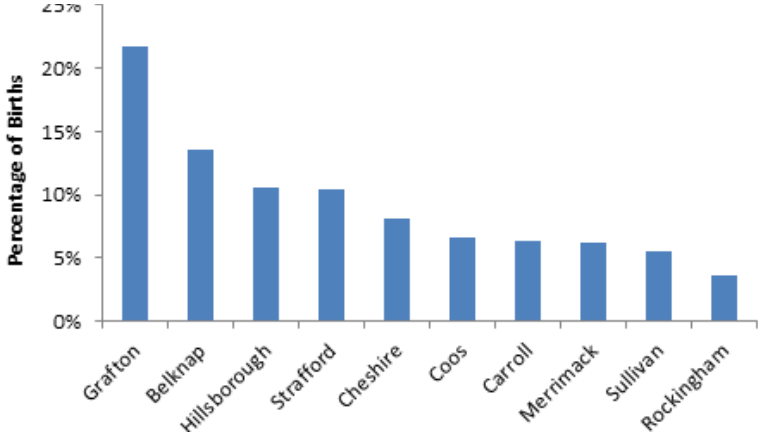
Approximately 5,900 children under the age of five — or 7.2% of all children in this age range — are living in poverty even though their parents work full-time.[3] The relationship between educational status and poverty can be further illustrated by the findings from the 2011-2012 National Health Survey, which reported that approximately 6,600 children (under age 18) in NH living in poverty had parents who worked full-time, but whose highest level of education was a high-school diploma or less.[4]

> "After having the lowest child poverty in the nation for more than a decade, New Hampshire no longer holds this distinction with a 2012 child poverty rate of 15.6 percent, an increase of 3.6 percentage points from 2011 when the child poverty rate was 12 percent. This represents a more than a 30 percent increase in just one year and more than a 75 percent increase between 2007 and 2012."
>
> *University of New Hampshire, Carsey Institute*

What Do We Know About Need and Capacity?

Education and Skills Training: Higher educational achievement by parents is a protective factor for healthy child development and well-being. For example, there is a large body of research showing the correlation between a mother's level of education and higher levels of academic achievement among children. In 2010, about 9% of all NH births were to mothers with less than 12 years of education. Figure 3–11 shows county level data from 2009 for educational attainment of mothers. Of the 814 births in Grafton County, 22% were to mothers with less than 12 years of education. Belknap County had the second highest rate, at 14%, of mothers with less than 12 years of education.

Figure 3–11 | Births to Mothers with Less than 12 Years of Education by County, 2009



Source: NH Resident Births by County and Town/City, 2000–2009; NH Vital Records Administration, 2009

State-run employment support and training services are available to NH families receiving financial assistance through FANF who are required to participate in the New Hampshire Employment (NHEP) program. Specific to skills and training, the following services are available through NHEP:[5]

- Employment-related activities such as job preparation classes;
- GED-High School Equivalency Diploma;
- Life skills training classes to address balancing work and family issues and barriers to getting and keeping employment;
- On-the-job or vocational skills training;
- Work placements in the community to provide job skills, workplace knowledge and career experience; and
- Job search assistance.

The Workforce Investment Act (WIA) also provides training and education resources for low income and displaced workers through training and On-the-Job contracts. WIA is administered by Southern New Hampshire Services out of the NH Works Offices. The Community College System of New Hampshire also frequently administers employment training programs resulting from federal grants. Each of these programs typically requires application and carry eligibility criteria, but do serve a number of income and skill levels.

Work Supports: Many key informants reported that transportation and high quality child care are two of the biggest barriers NH families living on low incomes face. Two percent (2%) of NH children under age 18 live in households without a vehicle. Additionally, among families living on low incomes that do have access to personal vehicles, these vehicles are often not reliable as families with limited incomes may be unable to afford maintaining them in good repair. Without strong credit ratings, car loans are not readily available. In addition, there are very limited public transportation options in most regions of NH. Even when transportation benefits may be offered for individual programs, it is usually in the form of reimbursement. Reimbursement requires families to pay up front for transportation and then wait to be reimbursed. This becomes problematic for many families living on low incomes with no cash flow and does little to relieve the transportation barrier as intended.

Another critical work support for many parents, especially parents in lower wage occupational settings, is family and medical leave benefits. In the 2012 Issue Brief: *Who Cares for the Sick Kids?*,[6] the Carsey Institute found "in 2008, more than one-half – 52% - of employed [NH] parents lacked access to at least five paid sick days to care for a sick child." Further, lower levels of education and lower paying jobs result in generally fewer paid sick days available to care for children.

Figure 3–12

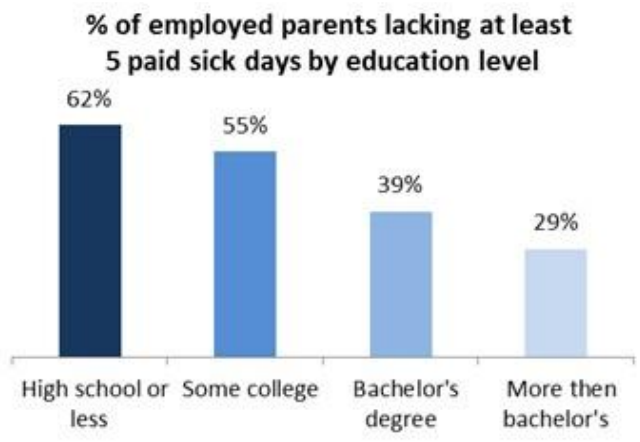
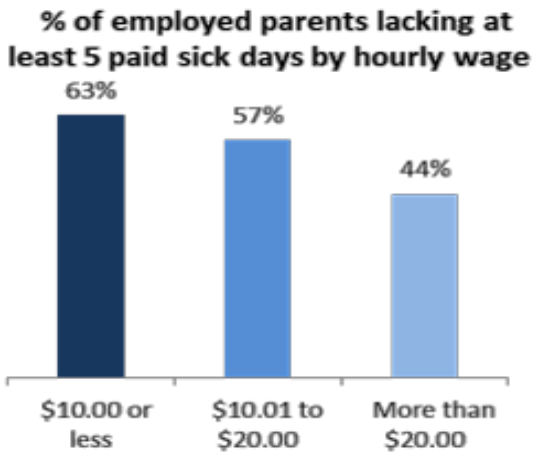


Figure 3–13

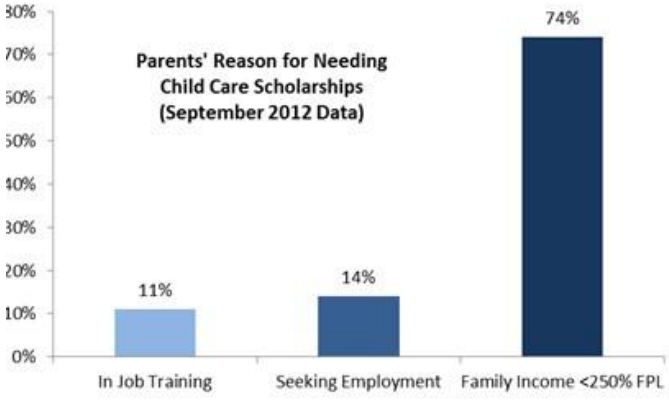


Note: Includes all wage and salaried workers 18 years and older with children under 18.
Source: The 2008 National Study of the Changing Workforce (NSCW) data.

The high cost of child care in NH can make working out of the home financially untenable for families with limited income. The NH Child Development Bureau funds a child care scholarship program to assist low-income families. Scholarships are available for children through age 13 in families with income under 250% of the FPL, whose families are involved in work, job search or training and education for employment.[7]

On average, 5,000 children across NH were supported each month by this program in 2012.[8]

Figure 3–14



Several other small but critical programs exist in NH to help alleviate these barriers to obtaining and maintaining employment. In addition to the skills and educational support provided by NHEP described above, NHEP participants may be eligible for various forms of assistance including: child care assistance; mileage reimbursement; car repairs; tools, fees and uniforms needed for work; tuition for approved training programs; and payments to remove obstacles to employment, such as help with cosmetic dental care, car insurance, car registration, clothing for work or driver's license fees. After obtaining employment and transitioning off financial assistance, participants may be eligible for extended medical assistance for themselves and children up to age 12 months; help with child care costs; employment counseling; and Extended Food Stamp (EFS) benefits through Financial Assistance to Needy Families.[9]

The *NH Housing Finance Authority* (NHHFA) has a program focused on families participating in the Section 8 Choice Voucher Program. Federal funding from the US Department of Housing and Urban Development supports the GOAL Family Self-Sufficiency program to "promote the development of local strategies to coordinate the use of rental assistance … with public and private resources.[10] Components of this program include:[11]

- Employment coaching
- Financial coaching, including an Individual Development Account which matches every $1 saved with $3 for homeownership, education, small business and/or a new car.
- Homeownership coaching

These programs are focused on helping families to be financially independent of FANF and Section 8 support. They are available to a limited number of families with children with very low incomes that meet federal and state limits for income and resources.

What opportunities are there for improving assessment of this issue?

Key informants have remarked that there are opportunities to improve coordination of services, including improved information sharing regarding families being served across multiple programs. Collaboration among agencies and programs would help to decrease duplication of services and efforts, provide greater access to services, and could facilitate more optimal use of scarce resources. It could also help to provide a clearer picture of who is being served and the full scope of family and community needs.

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[4] Same as note 2.

[5] NH Employment Program, 2011

[6] Smith, K. Who Cares for the Sick Kids? Parents' Access to Paid Time to Care for a Sick Child. University of New Hampshire, Carsey Institute, 2012.

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POSITIVE EARLY LEARNING EXPERIENCES

Quality early childhood programs provide developmental experiences that optimize children's capacities for physical, cognitive and social-emotional skills, and engage families and communities as partners in the well-being of our next generation.[1] Further, children's readiness for school is advanced when communities provide quality early learning experiences that are designed to promote children's healthy development.[2] Unfortunately, children who lag behind their peers in key developmental areas when they enter school tend to stay behind throughout their entire school experience.[3]

Providing young children with positive early environments in which to learn and grow is not only good for their personal development, but accrues benefits to society, as well. Investing in early childhood programs can yield up to a 10% annual rate of return that includes long-term individual benefits of increased income, as well as savings to society in reduced costs for special education, juvenile justice, welfare and unemployment.[4 5] Recognizing these issues, Spark NH chose the following three priority statements to try to understand the state of quality of early learning experiences for NH's children.

Spark NH Early Learning Priority Statements

- All families in need of quality early learning programs and services for their young children can access such services.
- All children, birth through grade 3, are on track to succeed when they enter school and beyond
- All young children at risk for developmental delay have access to screening, evaluation, and referral to appropriate supports and services.

All families in need of quality early learning programs and services for their young children can access such services

Why is this an Important Priority?

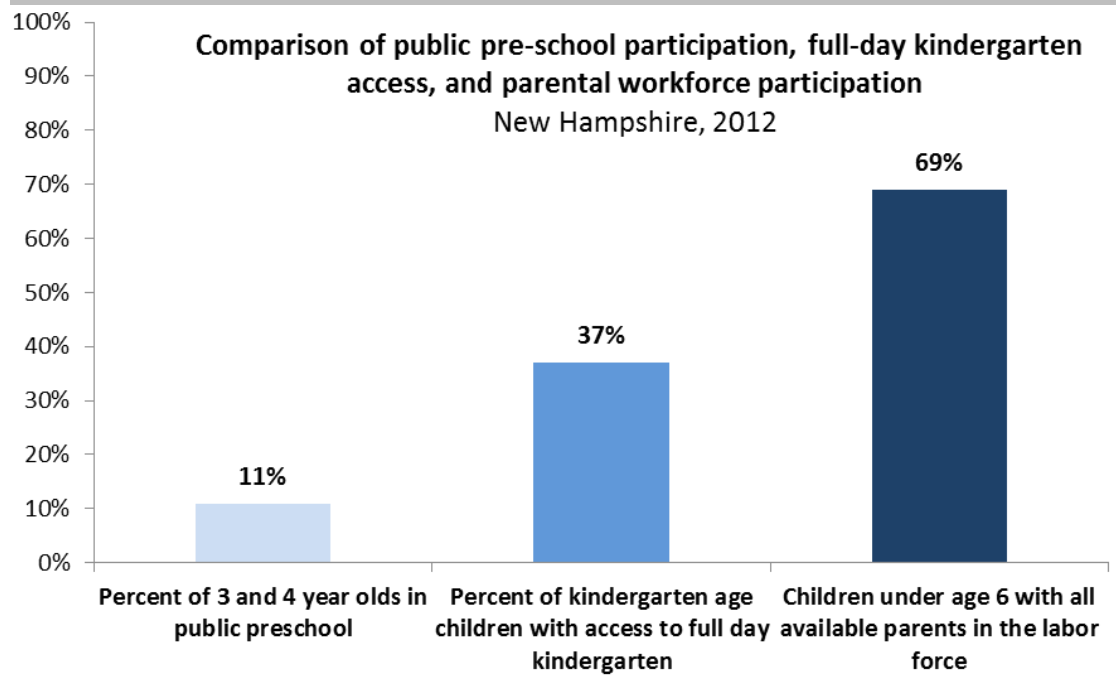
Because early experiences create the foundation for the brain's architecture, assuring access to quality early learning programs for children and families is critical not only to a child's academic readiness, but to overall child well-being. Further, because an estimated six million children under age 3 in the United States receive care during the day outside of the home, child care programs are an essential environment for efforts to improve cognitive, social and behavioral outcomes in children. Improving access to high-quality pre-kindergarten and preschool programs continues to serve as one of the most effective ways to narrow early learning disparities among all children. Studies show that children from low-income families may receive the greatest benefits from enrollment in early learning programs.[6] Programs such as Head Start and Early Head Start have demonstrated positive impacts on school readiness including improvement on cognitive-academic development, social-emotional development, approaches to learning, child health, and improvements in parenting.[7] Research also suggests longer-term positive impacts on graduation rates, college attendance, reductions in criminal activity and teen parenthood, and improved health status.[8]

> "Quality early childhood programs provide experiences that optimize child development and learning, engage families and communities as partners and result in lifelong learners and productive members of society."
>
> *NH Quality Rating and Improvement System Task Force (2013)*

What is the Scope of the Issue?

There are approximately 82,000 children in New Hampshire under the age of 6. More than two-thirds of these children (about 55,000) live in households where all available parents participate in the labor force.[9] As displayed by Figure 4-1, about 11% of the 3 and 4–year old population in New Hampshire attended public pre-school[a] (about 3,200 children) in the 2012–2013 school year; and while about 12,000 of the children under age 6 were enrolled in a public kindergarten, only 37% of these children had access to a full-day program.[10] Employed parents with children attending half-day kindergarten programs can face costs and logistical issues with respect to arranging mid-day transportation. More broadly, it is clear from these statistics that there are many thousands of working families in NH who require child care options. Most importantly, it is clear from the research previously cited that nearly all children in NH under the age of 6 can realize social and educational benefits from participation in quality early learning programs and services at some level, regardless of the employment status of their parents.

Figure 4–1



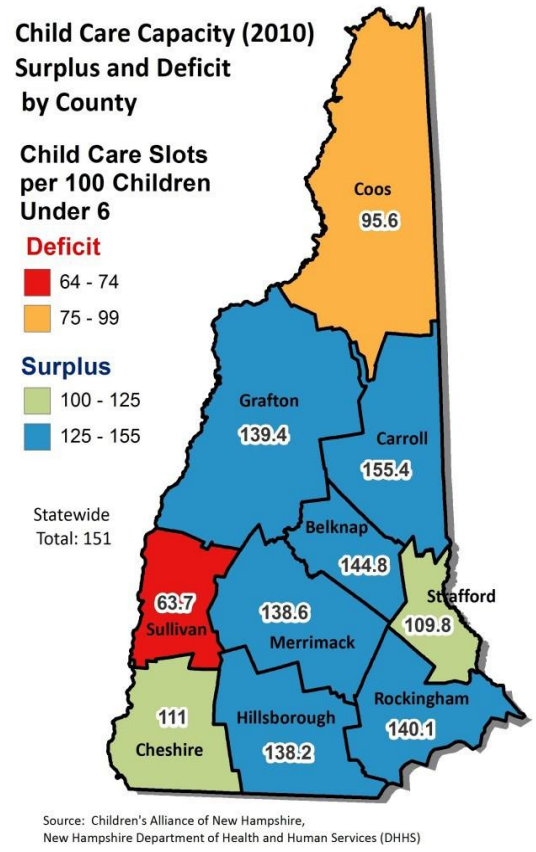
[a] Public preschool is provided through the Department of Education for children who are identified as eligible for special education services. http://www.education.nh.gov/instruction/curriculum/early_learning.htm

What Do We Know About Need and Capacity?

Availability and Cost of Child Care Services – Not all children in NH are able to take advantage of early learning opportunities prior to school enrollment. This circumstance can lead to lower school readiness at the time of school entry. The 2010–2011 NH Kids Count report includes an analysis of child care capacity by county.[11] The analysis found that child care capacity was sufficient in most areas of the state in 2010, but inadequate to meet the need in Coos and Sullivan Counties.[12] As shown by Map 4-1, the Kids Count report estimates that for every 100 children in Coos County who need non-relative care, there are only about 96 slots. In Sullivan County, the gap between need and supply is most substantial with only about 64 child care slots available for every 100 children under the age of six who need non-relative child care. This gap is equivalent to about 1,000 children and families in Sullivan County who are in need of child care options.

During 2011–2012, 85 child care programs with capacity for 2,000 children closed. Over the same time frame, new child care programs and expansions resulted in an increase of about 1800 new child care slots – resulting in a net capacity loss over the period of 200 child care slots.[13] Furthermore, the number of center- and family home-based programs in NH has decreased from 1126 in 2012[14] to 900 in 2013.[15] These data illustrate the volatility of the child care market, which presents a challenge to the continuity and accessibility of child care services.

Map 4–1



Source: Children's Alliance of New Hampshire,
New Hampshire Department of Health and Human Services (DHHS)

"The gap between estimated need and supply for non-relative child care in Sullivan County is equivalent to about 1,000 children and families who are in need of child care options."

2010-2011 NH Kids Count Report

Limited program capacity is not the only barrier faced by families needing child care. The cost of child care in New Hampshire is high for most families and prohibitive for some. According to a 2012 report by Child Care Aware of America, for a family of three at 200% of the Federal Poverty Level (FPL), the average cost of care for an infant in New Hampshire consumes more than one third of their household income (see Table 4–1 below). For a similar family with a 4–year old, the average cost of care, while lower, is still equivalent to more than one quarter of their household income. For a family whose income is at the poverty line (100% FPL), the average costs of infant care would consume about 65% of their household income.

> "For a family whose income is at the poverty line (100% FPL), the average costs of infant care would consume about 65% of all their household income."
>
> *Child Care Aware of America, 2012*

Table 4–1 |Cost of Center-Based Care as a percentage of income in New Hampshire, 2011

	Infant Care	4–year-old Care
Average Annual Cost in	$11,995	$9,541
Average Annual Cost as a Percent of Family		
Family of Three at 200 Percent of Poverty	33.9%	25.7%
Family of Three at 150 Poverty Level	45.2%	34.3%
Family of Three at the Poverty Level	64.7%	51.5%

Source: Child Care Aware of America, 2012

A family of four at the state's median income level with an infant and a 4–year-old in child care could expect to spend an average of $21,536 per year.[16] This total is about the same as the average NH mortgage costs per year ($22,668) or about double the average yearly rental housing costs ($11,256). A comparison of child care costs across the country found that New Hampshire ranks as the 15th least affordable state for center-based child care for a 4–year-old.[17] Of children living in single parent households, 70% live with single mothers.[18] New Hampshire ranks as the 18th least affordable state for single mothers needing child care.[19] The median income for a single mother family in New Hampshire is $30,507.[20] A single mother at this income level with an infant and young child would expend 71% of her annual income for center-based care without other assistance such as scholarships or reduced fees. A single father with an infant and young child in a similar situation would expend 46% of the median annual salary for a single father ($47,076).[21]

The NH Child Development Bureau offers a Child Care Scholarship Program that can assist families earning up to 250% of FPL (i.e. 2.5 times the Federal Poverty Level) with the costs of child care. In order to be eligible, the child's parent(s) must be working, looking for work, or in an approved training program. Scholarship ceilings are pegged at the median cost of licensed NH child care programs and payments are on a sliding fee scale based on family income as shown by the table below. The program serves about 3,800 families (5,200 children) monthly on average and approximately 60% of these families have incomes at or below 100% of the federal poverty guidelines.[22] However, many eligible families cannot afford to take advantage of the scholarship because the remaining gap is still too costly.[23]

> "New Hampshire ranks as the 15th least affordable state for child care for a 4–year-old child in a center and the 18th least affordable state for single mothers needing child care."
>
> Child Care Aware of America, 2012

Table 4–2| Child Care Scholarship Program: Family Eligibility and Average Family Portion for a Family of 3 as of July 1, 2013

Federal Poverty Guidelines	At or below 100	100%-120%	121%-140%	141%-160%	161%-190%	191%-220%	221%-250%
Weekly income limits	$376	$451	$526	$601	$714	$827	$939
Percent of Family Income Required for Cost Share	4.75%	7.5%	10%	12.5%	14%	17%	20%
Average cost share amount per	$7.78	$30.98	$48.80	$70.38	$91.98	$130.90	$176.60

Quality of Child Care and Early Learning Services – While capacity for enrollment and affordability are fundamental factors affecting access to child care programs, the quality and characteristics of early learning experiences provided in these programs also contribute to a child's school readiness and overall well-being. Factors that determine quality in child care and early learning settings include health and safety, relationships with providers, children's program experiences, and continuity of care.[24] [25]

Child Care Aware of New Hampshire is a resource available to support identification of high quality early learning programs and services. Child Care Aware of New Hampshire is made up of 10 community based Child Care Resource and Referral (CCR&R) programs and is part of a larger national technical assistance and advocacy network that provides services to families and child care providers by helping families find child care, increasing the supply and improving the quality of child care services, bridging child care and education, and documenting needs and trends related to child care. Between July 2011 and July 2012 CCR&R staff provided services or information to 3,848 families, provided additional referral information or wait list consultation to over 1,500 families, and responded to nearly 1,000 technical assistance requests by programs that addressed issues related to new business start-ups, licensing, contracts and policies, and rate information. In addition, CCR&R staff provided 332 child care trainings that were attended by 5,776 early childhood educators.[26]

> "High-quality care includes close teacher–child relationships, frequent sensitive interactions between the child and the teacher, well-designed instruction, respectful and effective behavior management, and a rich physical environment."
>
> *Society for Research in Child Development (2012)*

According to Child Care Aware of America, New Hampshire ranked 27th among all states for child care center quality in 2012 and 20th in family child care quality (non-relative child care provided in a family home setting).[27] [28]

New Hampshire has a Quality Rating and Improvement System (QRIS) that currently consists of three levels: Licensed, Licensed-Plus and National Accreditation. Of NH's 700 child care centers, only 8% were nationally accredited, while none of NH's 200 family child care homes were nationally accredited.[29] The Child Development Bureau indicates that 132 (or 15%) of NH's licensed group child care centers, family child care homes, and family group child care homes have achieved "Licensed-Plus" status, meaning that they maintain a level of quality above the standard set by NH's licensing requirements.[30]

According to Child Care Aware of America, areas of "quality" weakness for NH child care centers included the level of provider training requirements, class group size, and licensing oversight caseload.[31]For example:

- child care licensing staff has an average caseload of 116 programs (compared with the recommended 50);
- program providers over 21 years old are not required to have completed high school, and are not required to address specific early childhood development domains in the toys or materials offered; and
- small family child care homes in NH, which are not required to be licensed by the state, are lacking in several national standards recommended by Child Care Aware of America.

The QRIS Task Force, under the direction of the NH Child Development Bureau, is currently engaged in a process for enhancing NH's existing QRIS system, with an emphasis on developing capacity for data-driven, system-wide continuous quality improvement. The Task Force has drafted standards and is currently engaged in raising awareness about QRIS and gathering feedback about the proposed standards from the community of early childhood education providers in New Hampshire.[32]

> "Some child care centers are exempt from licensing and no one is keeping tabs on them. There need to be quality ratings and improvement systems for all child care, not just licensed facilities."
>
> *NH Child Care Expert*

Higher quality child care programs are often distinguished by the amount of intellectual and social stimulation incorporated into the program and the respect, responsiveness and reciprocity of staff – child relationships. These characteristics have been shown to promote social and emotional development as well as later success in school. Small improvements in staff ratios and training, as well as small improvements in staff compensation can yield meaningful results in terms of observed quality of care.[33]

The benefits of high quality child care services can accrue to children and families with lower incomes in particular. Research from the Harvard University Graduate School of Education has found a significant mediating influence of higher quality child care on the effects of low family income (expressed as a proportion of FPL) with respect to three outcome variables: School Readiness, Receptive Language, and Expressive Language.[34] The study authors conclude that higher quality child care can buffer young children from the negative effects of low income.

> "Higher quality child care can buffer young children from the negative effects of low income."
>
> *Research findings from the Harvard University Graduate School of Education*

In the 2005 Getting Ready: National School Readiness Initiative,[35] *NH selected the percentage of educators with early childhood credentials serving children birth to school entry* as a key indicator contributing to school readiness in children. The New Hampshire Early Childhood Professional Development System (NHECPDS) aims to support the ongoing professional development of early childhood teachers, administrators, workshop trainers, college faculty, mentors, program consultants, and allied professionals, through a voluntary credentialing system.[36]

The NHECPDS provides guidance for incorporating education and coursework, work experience, ongoing professional training and other professional activities into a personalized professional development plan, and provides certificates from the NH Child Development Bureau for levels of professional achievement. Voluntary credentialing includes both early childhood and infant and toddler tracks. Between July 2011 and 2012, over 200 new early childhood educators were credentialed, and another 220 early childhood educators renewed or advanced their credential. According to the NH Child Development Bureau, there are 719 early childhood educators credentialed through New Hampshire's Early Childhood Professional Development System as an Early Childhood Teacher or Master Teacher.[37] A percentage of credentialed teachers, however, cannot be calculated, as reliable data representing the total number of child care workers in New Hampshire are not available.[b]

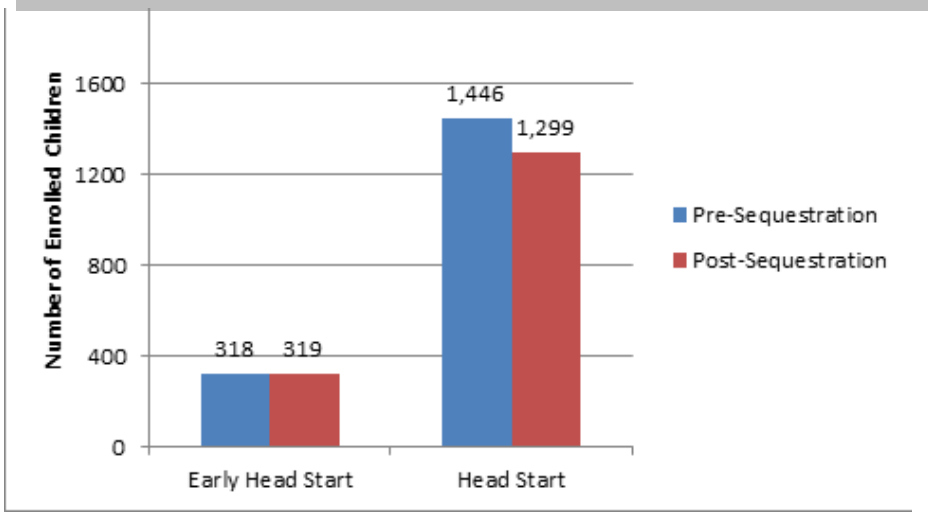
The high cost of child care relative to income for many families constrains the degree to which more qualified providers can be compensated. Child care is expensive for families, but it is also expensive to providers. The balance between limited resources and the need to maintain affordability for parents makes it difficult for individual child care programs to reward or encourage teacher education through salaries,[38] and child care workers are generally poorly paid.[39 40 41] In fact, the average child care worker earns $21,140[42] — less than half of NH's average per capita annual income of $49,129.[43] Low pay is thus a barrier to attracting and retaining high quality child care providers. Furthermore, a shortage of child care sites with credentialed provider staff places limitations on the number of settings available to students in early childhood higher education programs for practice placements during their training programs.[44] High turnover rates are associated with low wage jobs, and child care workers are no exception.[45 46 47] High staff turnover directly impacts the quality of relationships children have with their providers and interrupts continuity of care, while indirect costs of staff turnover to child care programs include the resources required to hire and train new workers. Without outside supports— public and private— children will not receive the quality care they need to get them ready for success.

[b] The most recent figures available on child care workers in New Hampshire reflect 2009 data. Inclusion criteria (e.g., child care worker, early childhood educator, center-based, home- and/or family-based, etc.) are unclear, resulting in a variable range, depending upon data source: between 10% (based on 7,045 paid employees in child care establishments and self-employed providers, as reported by DHHS, Administration of Children and Families, Office of Child care- http://childcare.gov/sites/default/files/StateProfiles/NH.pdf) and 30% (based on 2,370 child care workers reported by Child Care Aware in its 2012 Child Care in the State of New Hampshire report, available at http://www.naccrra.org/sites/default/files/default_site_pages/2012/new_hampshire_060612–3.pdf). Furthermore, more than 200 licensed programs (including centers and home- and family-based programs) have closed since 2009 (decreasing in number from 1114 in 2009 to 910 in 2013). In addition, these data do not include childhood educators working at license-exempt programs, such as those based at recreation centers, or those operated by NH Department of Education-certified public or private schools.

Head Start and Other Family Supports –Programs such as Head Start and Early Head Start are important resources in assuring that all families have access to high quality early learning experiences, health care and family support. To be eligible for Head Start and Early Head Start programs, a family's income must be at or below the Federal Poverty Level (FPL). There are an estimated 7,465 families with at least one child under age 6 living at or below the FPL in NH.[48] In 2012– 2013 prior to sequestration of federal funds, New Hampshire's Early Head Start and Head Start Programs were funded to provide services to 1,764 children (318 children in Early Head Start and 1,446 children in Head Start) from eligible families at 44 grantee sites. Post-sequestration, funded enrollment for the 2012-2013 program year decreased by approximately 8% to 1,618 children (319 in Early Head Start and 1,299 in Head Start), as shown in Figure 4-2. Funded enrollment is equivalent to only about 22% of eligible families in New Hampshire.[49] However, due to turnover and other factors, the actual number of families served over the course of the year (cumulative enrollment) is higher: 2,206 in 2012-2013, or approximately 29.5% of eligible families in the state. In addition to fewer children and families served, sequestration also resulted in 21 fewer staff positions and the closing of multiple Head Start classrooms and centers. [50] Finally, in recent years Head Start programs in New Hampshire and nationally have been forced to cut transportation services due to high costs. This too limits access to services by the most at-risk populations.

> "Due to lack of funding, Head Start has stopped providing transportation. Now there is a whole subset of children from the most at risk families who cannot go…"
>
> *Child Care Expert*

Figure 4–2| Change in Head Start and Early Head Start Funded Enrollment after Sequestration for 2012-2013



What opportunities are there for improving assessment of this issue?

There are a number of initiatives focused on improving access and quality of early childhood education in New Hampshire. A better understanding of how these initiatives are coordinated, and how they impact the level of school readiness of NH's children would be helpful. For example, to what extent does the QRIS and Licensed-Plus status of a provider impact school readiness for the children served? What impact has the New Hampshire Early Childhood Professional Development System had on school readiness? The foundation has been established through the development and adoption of statewide school readiness indicators. Commitment to measurement over time can provide the information needed to determine the extent to which these efforts result in positive change.

The value placed on credentialing New Hampshire's early childhood providers is evidenced by the establishment of the New Hampshire Early Childhood Professional Development System, and the inclusion of "percentage of early educators with early childhood credentials servicing children birth to school entry" in the NH School Readiness indicators. However, while we know the number of credentialed early learning educators, we do not know the total number of educators. Establishing a comprehensive list of educators is a current challenge. For example, existing sources report inconsistent data, which may be a function of the category of workers included in their counts, and no required reporting mechanism exists for license-exempt programs.

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[12] The Children's Alliance's analysis baseline of need was based on a recent survey that found an average of 53% of working parents with young children relied on non-relative child care (Smith, 2010) The authors note that "(1) the data do not include all child care available in the state, only licensed centers for which the state collects data; (2) just because a center is licensed for a particular number of slots does not mean that the center has staffing in place in order to fill those slots; and (3) some slots are in "school age child care centers" which accept children age 5 and older, and which are likely to be primarily filled by children over age 5, though our county estimates likely overstate the availability of child care for young children." (Wauchope, 2010-2011)

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All children, birth through grade 3, are on track to succeed when they enter school and beyond

Why is this an Important Priority?

School readiness is a major predictor of academic and lifelong success. Studies have shown that children who enter school "ready to learn" are more likely to stay in school, less likely to engage in negative behaviors such as substance misuse and crime, and more likely to be employed and achieve economic self-sufficiency as adults.[1] "School readiness", which encompasses a variety of factors including health status, ability to use gross and fine motor skills, ability to regulate one's emotions and behaviors and understand the feelings of others, and ability to communicate and problem solve, greatly influences a child's ability to succeed in school and in life.[2]

Consistent with research and findings presented in earlier sections of this report, a child's readiness for success in school does not develop in isolation from their experiences and relationships. To the contrary, research indicates that school readiness is heightened when communities put in place early learning experiences that support children's social, emotional, cognitive and physical development.

SCHOOL READINESS IS MORE THAN ACADEMICS:

Practices that also consider children's physical, social, and emotional progress will be most effective in supporting school readiness

READINESS DEPENDS ON SUPPORTIVE FAMILIES, SCHOOLS, AND COMMUNITIES:

High-quality comprehensive services are equally critical for at-risk children's overall well-being and academic success.

Child Trends: Early Childhood Highlights (2010)

What is the Scope of the Issue?

The *New Hampshire Kindergarten Readiness Indicators*[3] established in 2012 set important guideposts for assessing school readiness for individual children. However, NH still lacks a systematic capability to assess in aggregate the extent to which children across NH are "school ready" when they enter school. Nonetheless, existing data sources allow us to examine variations in some short term and intermediate term outcomes that are associated with school readiness.

Perhaps the most proximate measure of these outcomes is early academic performance measured through standardized testing programs. Data from the New England Common Assessment Program (NECAP), which is the standardized testing program that has been universally administered in NH school districts in recent years, show that slightly more than three-quarters (76.4%) of NH's third graders test at proficient or higher in mathematics, with 81% scoring proficient or higher in reading (2010 results).

The NECAP data also allow a district-by-district snapshot of performance. The maps on the next page display a *vulnerable district footprint* by depicting the association between testing proficiency and household income (at the community/district level) as measured by eligibility for the free and reduced lunch (FRL) program. School districts shaded in blue (high proficiency/ low FRL) are those where the proportion of 3rd grade students testing proficient in reading or math is 75% or more *and* the proportion of students eligible for FRL is 25% or less. School districts shaded in red are the most vulnerable (low proficiency/high FRL) and are those areas where the proportion of 3rd grade students testing proficient in reading or math is less than 75% of students *and* the proportion of students eligible for FRL is more than 25%. Moderately vulnerable districts, shaded in yellow, are those where one or the other of these thresholds is met, but not both (i.e. either low proficiency or high FRL). As shown by Map 4–2, districts characterized by high reading proficiency and lower FRL eligibility (blue shade) tend to be concentrated in the southeastern region towards the coast, along the Merrimack Valley except for Concord and Manchester

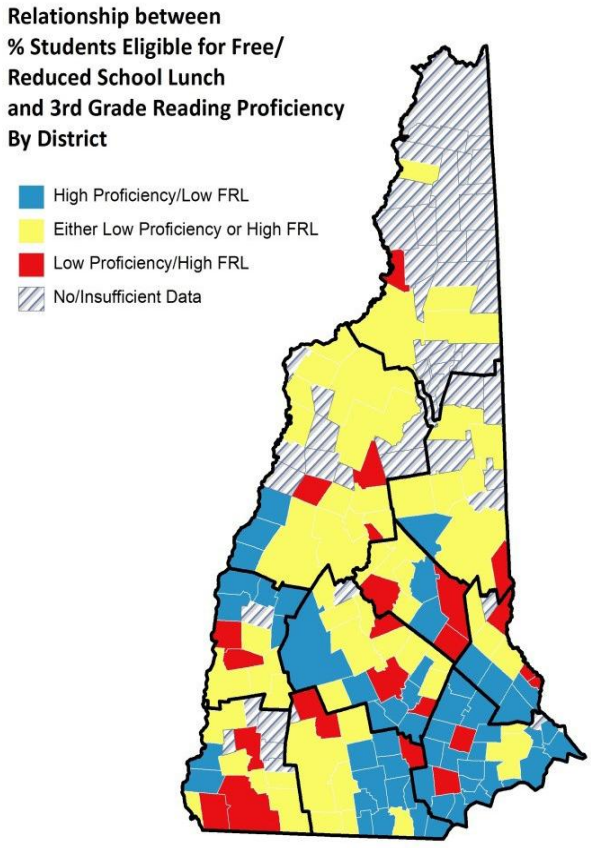
Elements of Children's School Readiness

- Physical Well-Being and Motor Development such as health status, and physical abilities
- Social and Emotional Development such as ability to interact with others, capacity for self-regulation, self-perception ability to interpret and express feelings and understand the feelings of others
- Approaches to learning such as enthusiasm, curiosity, and persistence.
- Language Development such as listening, speaking, and vocabulary skills, and emergency literacy.
- Cognition and General Knowledge including thinking and problem-solving as well as knowledge about particular objects and the way the world works.

Getting Ready: Findings from the National School Readiness Indicators Initiative

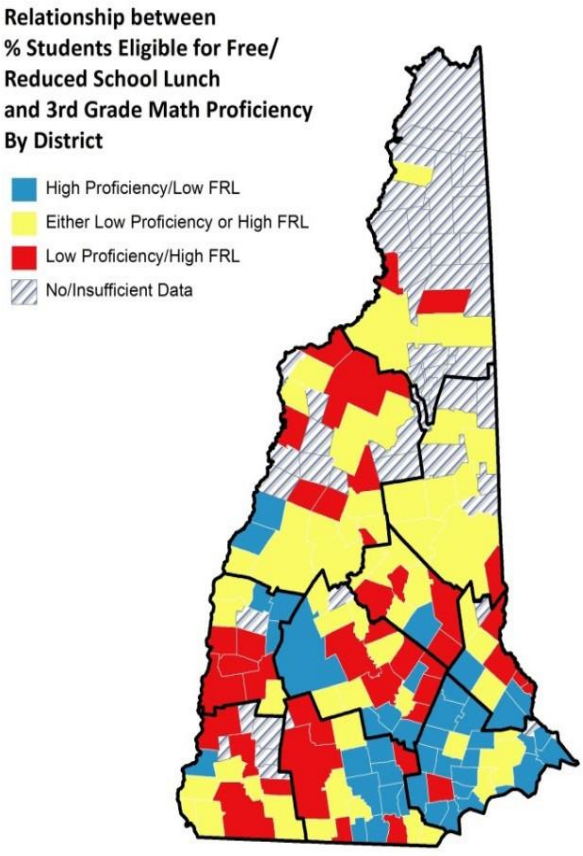
(which are shaded red), and in the Lake Sunapee and Upper Valley regions of NH. Map 4–3 shows an even greater number of vulnerable districts (red shade) with respect to the association between math proficiency and the proportion of FRL eligibility. In addition to most of the same districts that show vulnerability on Map 4–2, much of Northern Grafton County, Sullivan County, Cheshire County, western Hillsborough County and the cities of Berlin, Laconia and Nashua also appear as vulnerable districts due to the combination of relatively low percentages of students achieving math proficiency and high percentages of households with a low income.

Map 4–2 | Reading Proficiency and FRL



Source: New Hampshire Department of Education, Free/Reduced lunch data 2009, Proficiency scores from New England Common Assessment Program (NECAP)

Map 4–3| Math Proficiency and FRL



Source: New Hampshire Department of Education, Free/Reduced lunch data 2009, Proficiency scores from New England Common Assessment Program (NECAP)

What do we know about need and capacity?

In 2005, New Hampshire participated in *Getting Ready: A National School Readiness Initiative*.[4] As part of this initiative, the New Hampshire School Readiness Team selected a set of 12 population or system level indicators that describe *Ready Children, Ready Early Learning Systems, Ready Families, and Ready Communities*. Many of the indicators, which are shown in Table 4–3 on the next page, are discussed in detail in other sections of this report. Identifying this set of measurable indicators, which are amenable to change through effective policies and programs, was an important step toward improving New Hampshire's preparedness to address the issue of school readiness. Table 4–3 provides an update on many of these indicators compared with baseline information that was available when the indicators were established in 2005, and provides national comparison as possible.

Progress on the NH School Readiness Indicators is mixed. New Hampshire has made some gains in these indicators since they were established:

- public kindergarten is now available in all school districts;
- the percentage of child care centers that are accredited has increased slightly; and
- reading proficiency among 3rd grade students has improved.

However, we have also slipped on some of the indicators:

- fewer women are receiving adequate prenatal care;
- math proficiency among 3rd grade students has decreased;
- there are more young children in New Hampshire living in poverty; and
- substantiated cases of child abuse or neglect involving children 0-7 years of age increased by 6% (from 442 children in 2005 to 469 children in 2012). [5]

New Hampshire has seen no improvement in the rate of uninsured children. It is also important to note that we still lack any statewide basis for measurement or assessment for three of the indicators.

Table 4–3 NH School Readiness Indicators[6]

	Outcome	Importance of Indicator	NH Data Available in 2005[7]	NH Data Available in 2013	US Data 2013
Ready Children	% births to women who received late or no prenatal care	Strong predictor of physical health and well-being. Timely and comprehensive prenatal care results in fewer complications at birth	1.7%[a]	3%[b]	6%[c]
	Immunization rates at age 2	Age- appropriate immunizations protect the health of developing infants	76.2% +/- 7.7 (2005)	78.3%+/-5.9[d] (2012)	68%+/-1.4 (2012)[e]
Ready Early Learning Systems	% of child care centers accredited by National Association for the Education of Young Children	High quality child care programs provide safe, nurturing, and effective early learning environments for infants and children	6.2%[f]	7%[g] (2012)	10%[h]
	% of family child care homes accredited by National Association for Family child care		<1%[i]	0%[j] (2012)	1%[k]
	% of early educators with early childhood credentials serving children birth to school entry	Educators with early childhood credentials have training in the most effective methods, curricula and child development	4%[l]	No Statewide Data Available[m]	Data Unavailable[m]
	% of school districts offering public kindergarten	Children who attend quality kindergarten programs demonstrate improved achievement on a range of educational and social outcomes	Public kinder-garten was not available in 19 districts in 2003-2004	100%- at least half day[n] 34% of kindergartens are full-day[n]	44 states at least half day 10 states full day[n]
	% of school districts screening for phonological awareness in kindergarten or 1st grade	Phonological awareness is a key indication of a child's readiness to read	No statewide baseline data available	No Statewide Data Available	Data Unavailable
	% of children at or above basic level in reading and math by end of 3rd grade	Achievement at or above grade level reflects the success of early childhood and school supports. Achievement below grade level is a frequent predictor of subsequent academic challenge	Math=73% Reading=77% (2007)[o]	Math=76% Reading=80% (2010)[o]	Mean regional scores Math=66.8% Reading=73% (2010)[p]

a,b,c. Annie E. Casey Foundation. (2013). Kids Count Data Center: Births to Women Receiving Late or No Prenatal Care. Available at http://datacenter.kidscount.org/data/Line/11-births-to-women-receiving-late-or-no-prenatal care?loc=1&loct=1#1/any/false/133,38,17,16,15,14/asc/any/266

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e. Fully vaccinated = 4 or more doses DTP/DT, 3 or more doses polio vaccine, 1 or more doses measles antigen-containing vaccine including MMR, full series Hib, 3 or more doses HepB, 1 or more doses varicella. Available at http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#nis

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l. National Survey of Early Care and Education Project Team. (2013). Number and Characteristics of Early Care and Education Teachers and Caregivers: Initial Findings from the National Survey of Early Care and Education. OPRE Report #2013-38, Washington DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

m. The NH Department of Education reports that there are 719 childcare professionals with early childhood credentials. No employment listing is available for many preschool settings, so a rate cannot be calculated.

n. Children's Defense Fund. (2013). Full-Day Kindergarten in New Hampshire. Available at http://www.childrensdefense.org/child-research-data-publications/data/state-data-repository/full-day-k/2013-new-hampshire-full-day-k.pdf

o. N.H. Department of Education. (2013). New England Common Assessment Program. Available at http://www.education.nh.gov/instruction/assessment/necap/index.htm

p. Mean New England Common Assessment Program (NECAP) Scores for NH, RI, ME and VT.

Table 4–3 NH School Readiness Indicators[6]

	Outcome	Importance of Indicator	NH Data Available in 2005[7]	NH Data Available in 2013	US Data 2013
Ready	Rate of substantiated child abuse or neglect (ages 0 to 17)[s]	Abuse and/or neglect harm children's social, emotional, cognitive, and physical development. Abuse has been linked to increases in dropout rates, emotional disturbance, substance abuse, teenage pregnancy, running away, criminal behavior, and suicide	10% (662/6583) of assessments were substantiated (2005)[r] 28% <3 years	7.3% (663/9089) of assessments were substantiated (2012)[r] 33% <3 years	35% <3 years old[q]
Ready Communities	% of school districts offering before- and after- school programs **Figure 3–8 | Child Maltreatment in New Hampshire, 2011**	Students who spend time in extracurricular activities are less likely to drop out of school, be arrested, and/or smoke cigarettes or use drugs. They are more likely to earn higher grades, have more positive relationships with peers, and have higher self-esteem.	No statewide data currently available[r]	No statewide baseline currently available	Data unavailable
	% of children under age 6 without health insurance	Children who do not have insurance coverage are less likely to receive preventative medical care or timely sick care	5% of children <18	5% of children <6 years old[u] (2010)	9% of children <6 years old[u] (2010)
	% of children under age 6 below the federal poverty level	Children growing up in poverty are more likely to experience physical, social and emotional problems, as well as academic difficulties	9.1%	14%[v] (2012)	25%[v] (2012)

q. Rates of substantiated neglect are calculated by comparing the number of substantiated cases out of the number of assessments performed. In NH, assessments may be conducted in cases that include more than one child (e.g., a 2 year old and a 10 year old). Therefore, data attributing substantiated assessments by age are not available.

r,s. National Child Abuse and Neglect Data System (NCANDS) data from the NH Division for Children, Youth and Families provides a comparison of assessments in 2005 and 2012 reveal that while the numbers of assessments increased, the numbers of substantiated assessments was the same, therefore the rate decreased. The percentage of children 0-3 years of age increased from 28% in 2005 to 33% in 2012; percentage of children 4 to 7 years old decreased from 22% to 19% during this time period. These figures indicate that children under 7 years old represent half of all substantiated cases of abuse or neglect.

t. National Center for Injury Prevention and Control, Division of Violence Prevention. (2013). Child Maltreatment: Facts at a Glance. Available at http://www.cdc.gov/violenceprevention/pdf/cm-data- sheet--2013.pdf

u. The 21st Century Community Learning Centers Program is a federally-funded initiative supporting before-school, afterschool and summer learning programs. This program currently serves nearly 10,000 children in 70 community learning centers across 22 NH communities, but is at risk of being defunded. http://nhafterschool.org/news.html

v, w. Annie E. Casey Foundation. (2012). Kids Count Data Center: Children without Health Insurance by Age Group. Available at http://datacenter.kidscount.org/data/tables/32-children-without-health-insur- ance-by-agegroup?loc=31&loct=2#detailed/2/31/false/133,38,35,18,17/17,18,19/303,304

x, y. National Center for Children in Poverty. (2013). State Profiles. Available at http://www.nccp.org/profiles/state_profile.php?state=NH&id=9

Before- and after-school programs: Before- and after-school programs can provide youth important developmental experiences that promote positive academic and social outcomes. Research has demonstrated that youth who participate in after-school programs show significant improvement in feelings and attitudes, indicators of behavioral adjustment, and school performance.[8]

There is a range of formal before- and after-school programs in New Hampshire that have varying forms of organization and funding support from public and private sources. Local resources are the keystone of support for most after-school programs. Parent fees, local school and recreation budgets, as well as charitable donations provide the majority of support for after-school programming throughout the state.[9] Because of this diversity in funding and sponsorship, there is currently no comprehensive information describing the number, capacity or services of before- and after-school programs in New Hampshire. However, information about programs supported by federal funding is available.

The 21st Century Community Learning Centers (21st CCLC) Program is a federally-funded initiative supporting before-school, after-school and summer learning programs serving over 10,000 NH children in 70 community learning centers. 10 The goal of the 21st CCLC Program is to raise student academic achievement for at-risk students through the creation and expansion of community learning centers that provide academic enrichment and other opportunities to support student learning and development.

A recent evaluation of 21st CCLC[11] programs in NH found that school principals with students engaged in the program reported that the program 1) enhanced the overall effectiveness of the school, 2) reinforced the school day curriculum 3) increased the motivation of participating students to do well in school, and 4) improved capacity in 21st century skills such as computer literacy, goal setting and financial awareness. Students reported that the 21st CCLC program provided a safe and respectful environment as well as academic supports to help them with homework.[12] However, according to the Afterschool Alliance, although there are over 43,000 children in NH who are eligible to participate in the 21st CCLC programs,[13] fewer than a quarter of eligible NH children are enrolled due to limited funding.[14] In addition, as a federal program, the 21st CCLC is currently at risk for funding being diverted to other federal education priorities.[15] Another source of support for some children and families to participate in after-school programs is through the New Hampshire Division for Children, Youth and Families, Child Development Bureau. The Bureau provides federally-funded scholarships for 950 children during the

school year and 1200 during the summer through the Child Care Scholarship Program. These funds are provided for at risk children whose parents are working or engaged in job training or educational programs, and children at risk of being involved in child protective services.

Percent of early educators with early childhood credentials serving children birth to school entry: As discussed in the previous section, there are 719 early childhood educators credentialed through New Hampshire's Early Childhood Professional Development System. This represents between 10%[16] and 15%[17] of all early childhood educators in the state (estimates for total number of early childhood educators vary). Additionally, since the state only tracks the number of credentialed educators, the total number of early educators is unknown for the majority of preschool settings,[18] nor is information available describing capacity of services provided in family home-based programs serving three or fewer children, as licensing is not required for these settings. Without the total number of early educators, the percentage who are credentialed cannot be calculated.

Regulations for the Federal Child Care and Development Fund, the source of NH's Child Care Scholarship Fund previously described, are currently being reviewed for updates for the first time since 1996. Proposed changes are intended to improve health and safety protections for children receiving this assistance by applying more stringent safety, training and site review requirements.[19] The possible implications for these proposed changes on access to services remains to be seen.

Percent of school districts screening for phonological awareness in kindergarten or 1st grade: Phonological awareness is a stronger predictor of long-term reading and spelling success than intelligence, vocabulary knowledge, or socioeconomic status.[20] It begins with consistent exposure to language from parents and caregivers in infancy and develops through direct training and further exposure through the late preschool period. The *New Hampshire Kindergarten Readiness Indicators*[21] document referred to at the beginning of the section was developed in 2012 through a collaborative effort of early education leaders in NH and endorsed by the NH Department of Education, NH Collaboration Office and NH Head Start Directors Association. Language arts and literacy is identified as the first indicator.

New Hampshire adopted the Common Core State Standards in 2010 for Literacy and Mathematics, in which Phonological Awareness Standards are embedded. New Hampshire Minimum Standards for Public School Approval requires that districts provide instructional programs that include English/language arts, which include phonologic awareness screening. Competency to conduct this type of screening is part of the standard curriculum for all approved Professional Educator Preparation Programs in NH for early childhood and elementary education. Further, kindergarten and 1st grade teachers are certified to provide this screening. However, while phonological awareness screening occurs as part of standard practice, a specific record of school districts screening for phonological awareness that would address this indicator is not available at this time.

ELEMENTS OF PHONOLOGICAL AWARENESS

- Awareness of sounds in a language
- Awareness of rhymes
- Awareness that sentences can be broken down into words, syllables, and sounds
- Ability to talk about, reflect upon, and manipulate sounds
- Understanding the relationship between written and spoken language

-http://www.phonologicalawareness.org

What opportunities are there for improving assessment of this issue?

The NH School Readiness Indicators described in this section address a broad set of health, social and program quality factors that cut across several systems. However, data gaps affect our ability to track the complete set of identified indicators (i.e. no baseline data were available for some measures; data were currently unavailable for others). Decisions to revise any indicators would require a collaborative approach across the network of stakeholders including local, district, and state early childhood providers, as well as advocacy and other not-for-profit community and statewide organizations.

The NH Afterschool Network has undertaken the task of gathering data regarding the variety of after-school programs throughout the state, including organizational sponsor, capacity, and funding structures. These data are not yet available, but will provide insight into the availability, opportunities, and supports for after-school programming throughout the state.

While all indications suggest that phonologic awareness screening occurs as part of standard practice, districts do not report this information to the Department of Education. It would be helpful if these data were routinely reported. In addition, it may be more meaningful as an indicator if the measurement specified that screenings were conducted at a standard time using a reliable, standard tool.

Within the area of family readiness, the measure for rates of substantiated child abuse or neglect is also problematic. Rates of substantiated abuse or neglect are calculated by comparing the number of substantiated cases out of the number of assessments performed, and these data include all children under 18 years old. In NH, assessments may be conducted in cases that include more than one child (e.g., a 2 year old and a 10 year old). Therefore, a specific measure of substantiated assessments by age is not currently available.

A complete and comprehensive database of the early childhood educator workforce is necessary to assess workforce quality, and identify areas for strengthening the workforce in New Hampshire. At the very least, knowledge of the total workforce is essential to tracking the percentage of credentialed workers, which is identified as one of the NH School Readiness Indicators.

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All young children at risk for developmental delay have access to screening, evaluation, and referral to appropriate supports and services

Why is this an Important Priority?

The early childhood years have a direct and enduring impact on children's future learning, behavior and health.[1] In fact, early experiences actually shape the brain's developing architecture and form the foundation for later development.[2] With such high stakes, it is essential to (a) ensure that all young children, particularly those who are at risk for developmental delay, are developing as expected and on track to succeed in school and beyond, and (b) close the gap in school readiness between young children at risk and their peers, which may begin to emerge as early as 9 months of age.[3]

Many children enter school behind in key developmental areas, such as language, literacy, pre-math and social-emotional skills. However, high quality early learning experiences and early interventions for young children at risk can positively impact development for all young children and help close the achievement gap, especially for those from families with low incomes. [4,5] When young children at risk and their families are not identified early and connected to needed supports and services, developmental delays may not be recognized until a child enters school, resulting in missed opportunities for intervention and potentially further compounding delays.[6]

> …"…students who begin school behind have a tendency to remain behind throughout their academic careers…early interventions for young children at risk promote school retention, improve the quality of the workforce…, raise earnings, strengthen social attachments and reduce crime, teenage pregnancy, and welfare dependency."
>
> *Institute for a Competitive Workforce (2010)*

One strategy underway in New Hampshire to help ensure that all young children are on the path to school success was to (a) embed a coordinated system of developmental screening, referral and follow up services within the state's early childhood system, and (b) establish linkages between developmental screening activities, developmental evaluation and intervention services. New Hampshire's Watch Me Grow system relies on cross-sector public/private partnerships at the state and local levels to promote and implement universal developmental screening and referral for young children and their families.[7]

What are Developmental Screening and Evaluation?

Developmental screening is a process used to determine whether a child's developmental skills are progressing as expected, or if there is concern about developmental functioning. Screening provides a snapshot of a child's development at one point in time, when the child is not ill, and works best when a standardized tool is administered at regular intervals by parents[8] or by a trained individual who knows the child and family.[9] Developmental screening is typically brief, designed to provide just enough information to determine that development is on track or that a concern requires further evaluation.[10] When the results of developmental screening indicate that a closer look at one or more areas of development is warranted, the next step is developmental evaluation.

Developmental evaluation is a process of collecting information about a child's strengths and needs through individual tests, observations and discussions with parents and others such as early childhood professionals who have knowledge about the child. Evaluation is often conducted to determine a child's eligibility for services such as early intervention and preschool special education. According to the American Academy of Pediatrics, "developmental diagnostic evaluations may involve multidisciplinary evaluations, such as gross motor, fine motor, speech and other evaluations; while medical diagnostic evaluation includes vision and hearing testing, review of newborn metabolic screens and growth charts, updated histories (medical, environmental, family, and social) and tests that may include imaging studies, genetic and/or metabolic testing."[11]

What is the Scope of the Issue?

Risk Factors and Developmental Delay

A developmental delay is any significant lag in a child's achievement in expected milestones for physical, cognitive, behavioral, emotional, or social development in comparison to established normal ranges for his or her age.[12] In addition to established conditions that have a known high probability of resulting in a developmental delay, there are biological and environmental factors that place children at risk. Table 4-4 provides examples of each of these risk categories. Many of these factors have been discussed in other sections of this report.

Table 4–4: Risk Factors for Developmental Delay[13]	
Types of Risk Factor	**Description/Example**
Established Risk	Established physical or mental condition with a high probability of resulting in a developmental delay, such as genetic or congenital disorders, severe sensory impairments (e.g. hearing and vision), nervous system disorders, congenital infections, severe attachment disorders, and disorders due to exposure to toxic substances (e.g. fetal alcohol syndrome)
Biological/Medical	Low birth weight, failure to thrive, chronic lung disease
Environmental	Care-giving circumstances (e.g. poverty, parental substance abuse, homelessness, parental age, parental developmental disability, child abuse or neglect, low parental educational attainment), lead exposure

Risk factors may have a cumulative impact on development, where the number of risk factors increases a child's risk for developmental delay. While developmental delay may not be permanent, it can be an indicator for identifying children who may experience a disability, which can have long- term effects. For example, a child with poor motor skills might later be diagnosed with cerebral palsy or muscular dystrophy, or a child not reaching his or her cognitive or social milestones might later be diagnosed with intellectual disability, learning disability, or autism. In some children, developmental delays resolve, and in some children the causes for developmental delay (such as hearing loss from chronic ear infections) can be easily reversed if caught early enough, thus emphasizing the importance of early identification and timely interventions.[14] Early childhood intervention programs have been shown to yield positive benefits in academic achievement, behavior, educational progression and attainment, and labor market success, as well as in reducing delinquency and crime.

Under-detection of Developmental Concerns

Approximately 1 out of every 6 children in the U.S. faces a developmental disability or a significant challenging behavior before the age of 18, yet fewer than 50% of these children are identified before they start school.[15, 16] Although most of these children receive routine pediatric care or attend early learning programs, their developmental concerns often do not come to the attention

of health and early learning program professionals. Under-detection may be due in part to a number of factors, including:

- The subtle and emerging nature of children's developmental challenges;
- The possibility that families with certain environmental risk factors – domestic violence, substance abuse, homelessness—may be reticent to share such personal information; and
- Other challenges associated with the implementation of developmental screening in primary care and early learning settings.

In primary care, health care professionals may routinely use non-standardized developmental screening tools or rely solely on clinical judgment. Research suggests that clinical assessment alone, without the use of standardized screening tools, identifies fewer than 30% of children with developmental disabilities, while validated screening tools correctly identify such children at least 70% of the time.[17] Additionally, the American Academy of Pediatrics strongly endorses developmental screening at routine intervals for children under two and a half years old, yet more than half of physicians report challenges in meeting this recommendation, including a lack of time, a lack of staff, or a lack of confidence in their ability to screen.[18]

> "Although the American Academy of Pediatrics strongly endorses developmental screening at routine intervals for children under two and one half years old, more than half of physicians report a lack of time, a lack of staff or a lack of confidence in their ability to screen."
>
> *University Center for Excellence on Disability at the University of New Hampshire (2012)*

Early learning programs such as child care may encounter similar challenges. They may not include developmental screening as part of their typical child growth and development activities, or if they do, they may use non-standardized tools. Programs may also lack the time, the staff, the confidence in their ability to screen, or the necessary training to engage in developmental screening activities. These trainings could include either administering a standardized screening tool or assisting families with a parent-completed developmental screening tool, talking to parents about results and concerns, and offering families appropriate resources and referrals.

Finally, limited public awareness of services, lack of access to services or constraints such as funding may impact the effectiveness of both developmental screening and intervention programs and services. With appropriate and timely supports and services, most children with developmental challenges progress in their development. Some children may "catch up" to peers over time, while others may need continued supports and services to address their developmental needs.

What do we know about need and capacity?

Prevalence of Risk in Young New Hampshire Children

It is estimated that 44% of infants and toddlers in New Hampshire have at least one risk factor known to increase the chance of poor developmental outcomes [19] and, as previously noted in the section on Good Health, about 21% of New Hampshire's children 4 months to 5 years are thought to have moderate or high risk of developmental or behavioral challenges.[20] Among New Hampshire children under the age of 6 years, 11.8% or about 10,300 children, are estimated to have special health care needs, a proportion which exceeds the national average of 9.3% for this age group.[21] It is also estimated that the number of children identified with Autism Spectrum Disorders (ASD) receiving special education services has increased fivefold since 2000.[22] More than one out of every three new ASD diagnoses is among children under the age of 3 years.[23] Although these statistics indicate high prevalence of developmental or behavioral challenges and concerns among young New Hampshire children, the state does not yet have the capacity to meet the demand for developmental screening, evaluation, referral and services, as described next.

> "It is estimated that the chances of an infant or toddler in New Hampshire having at least one risk factor known to increase the likelihood of poor developmental outcomes is more than 4 out of every 10. Yet 7 of every 10 children do not receive a standardized screening for these risks, according to parent report."
>
> *National Survey of Children's Health (2011-2012)*

Existing Infrastructure

New Hampshire's infrastructure supporting screening, evaluation and service delivery for children at risk for developmental delay has several components that cross governmental agencies, funding sources, and settings, with multiple paths to access these services.

Access to Developmental Screening

Developmental screening occurs in clinical as well as community-based agency settings, and a referral could be initiated through either path, or a parent could self-refer. Screenings conducted in clinical settings include (a)newborn screenings for inherited medical disorders, which are administered by the NH Maternal and Child Health Early Hearing Detection and Intervention (EHDI) Program unless a family opts out of newborn screening, (b) routine well-child visits with a primary care provider office or clinic, and (c)encounters with other providers, such as those providing mental health services.

Screenings in community-based agencies such as Family Resource Centers, early learning programs (e.g., child care, Head Start, preschool), home visiting and others occur as part of the Watch Me Grow system. Watch Me Grow, which is NH's collaborative screening and referral system for families of all young children aged birth to six years, was established over the past three years and is still under development. Existing state and community resources are coordinated to form this system that provides all families with access to developmental screening for their young children, information about child development, and referrals to appropriate state and local resources. Watch Me Grow uses standardized, parent-completed developmental screening tools (Ages & Stages Questionnaires, Third Edition; ASQ-3™ and ASQ: Social-Emotional; ASQ:SE).[24] If the screening raises a question or concern, the agency provides families with appropriate information and referrals.

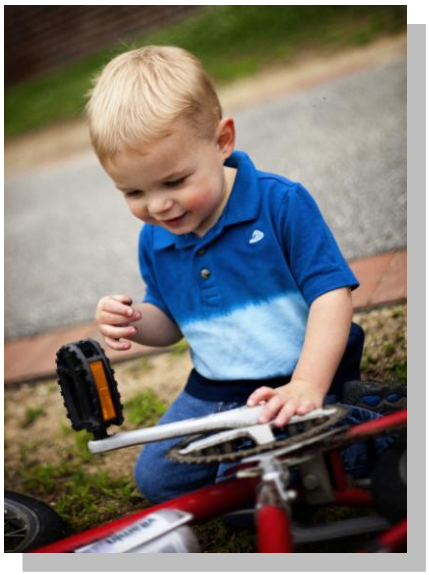
Watch Me Grow also assists multiple New Hampshire programs and initiatives in meeting their federal mandates to identify children with developmental delays or disabilities who may qualify for services. This includes Part C (early intervention, known as Family Centered Early Supports and Services or FCESS in NH), Part B/619 (preschool special education), Head Start/Early Head Start, Home Visiting, Special Medical Services, and participating healthcare providers.

Despite the above- described efforts, access to developmental screening is insufficient to meet New Hampshire's needs:

- Only about 31% of the 19,643 New Hampshire children ages 10 months to 5 years received a parent report standardized screening for developmental or behavioral conditions.[25]
- Only about half of mental health service providers routinely screen all children; and, when they do conduct screenings, there is a lack of consistency in the screening tools used.[26]
- About one-third (30%) of children birth to 15 months of age in New Hampshire receiving Medicaid had not received the recommended number of well-child visits and, similarly, about 27% of children ages 3-6 years with Medicaid coverage did not receive recommended well-child visits.[27]

During well-child visits, providers have opportunities to 1) develop relationships with children and families that enable conversations about a child's development and parents' concerns, 2) monitor and document a child's development, 3) make informed observations, 4) identify the presence of risk and protective factors,[28] and 5) provide the family with timely and appropriate linkages to resources.

- Watch Me Grow can account for only a portion of developmental screening in the state. From January 1 through December 31, 2013, 12 Watch Me Grow sites conducted 1,946 screenings on 1,306 children, of whom about 8% were referred for further evaluation and 14% were scheduled for rechecks.[29] There are approximately 95,000 children aged birth through six years living in NH. Additionally, available data only provide a partial picture. Information is not yet available to indicate the number of children who are screened and referred for further evaluation, support or intervention who actually get connected to services. Funding cuts over the past two years experienced by Family Resource Centers serving as Watch Me Grow sites presented additional challenges to the provision of services and the consistency of referral follow up for vulnerable families.



Access to Developmental Evaluation

Developmental evaluation may be conducted to determine eligibility for services or to determine a diagnosis. Like developmental screening, developmental evaluation occurs in both clinical and community-based agency settings, including Family-Centered Early Supports and Services (FCESS), preschool special education, and multidisciplinary child development clinics (including autism clinics).

FCESS is administered by the Bureau of Developmental Services through 10 regions of the state. Each region has a designated Area Agency under contract to provide required services to individuals of any age with developmental disabilities. Area Agencies may provide these services through their own programs, or may sub-contract with independent vendors to deliver them. A child aged birth to three suspected of having a developmental delay in New Hampshire, regardless of who suspects it, may be eligible for FCESS for further evaluation and services if the child: 1) has a diagnosed established condition that has a high probability of resulting in a developmental delay; 2) demonstrates atypical

development; 3) is experiencing delays of 33% in one or more area of development; or 4) is at risk for substantial delays.

FCESS evaluation is conducted by an interdisciplinary team of at least two professionals that may include a developmental pediatrician, speech therapist, occupational therapist, audiologist, neurologist or other professional, depending upon the specific needs of the child. In addition to standardized developmental assessment tools, FCESS evaluation includes health and medical records, conversations with parents and/or caregivers, and structured observations. If the evaluation indicates that a medical issue may be contributing to the delay, FCESS collaborates with the child's primary care physician to refer to medical services to address the child's needs. These medical services may include referral to the Child Development Clinic or the Autism Clinic (if an autism spectrum disorder is suspected). A primary care provider may also refer a child to the Child Development Clinic or the Autism Clinic for evaluation.[30]

Preschool special education is administered by the New Hampshire Department of Education and local public schools. By federal and state law, local school districts must work with families and community partners to find, identify and serve children who are eligible for special education and related services so that services can begin by the child's third birthday.

A child's initial evaluation must be *full and individual*, focused on that child and only that child, and use a variety of assessment tools and strategies to gather relevant functional, developmental, and academic information about the child, including information provided by the parent. When conducting an initial evaluation, all areas of a child's functioning are examined to determine not only if the child is a child with a disability, but also determine the child's educational needs. This evaluation includes the child's:

- Health;
- Vision and hearing;
- Social and emotional status;
- General intelligence;
- Academic performance;
- Communicative status; and
- Motor abilities[31]

Multidisciplinary Child Development Clinics. The six Multidisciplinary Child Development Clinics in New Hampshire prioritize evaluation appointments for children under two years old. Five are part of the Bureau of Developmental Services, Special Medical Services Child Development Clinic Program, and are located in Keene, Manchester, Lebanon, Laconia and Lancaster. These clinics, funded through a combination of funds from a DHHS Title V Maternal and Child Health Services Block Grant and the NH General Fund, provide comprehensive diagnostic evaluations. A sixth, the Seacoast Child Development Clinic located in Durham, is a clinical component of Dartmouth Hitchcock Medical Center, in partnership with the Institute on Disability at the University of New Hampshire, with funding by a US Department of Health and Human Services Maternal and Child Health Bureau DHHS training grant.

Autism Clinics. There are three multidisciplinary autism clinics in the state, all of which are affiliated with FCESS. These clinics generally offer diagnostic evaluation for autism, as well as resources and referrals.

Timeliness of developmental evaluations. Although state regulations require FCESS and preschool special education to provide developmental evaluations within 45 days of referral (FCESS) or receipt of parental consent (preschool special education), there is no such timeliness requirement for Multidisciplinary Child Development Clinics. Information provided by key informant interviews indicates that some *families may wait up to six months* for a developmental evaluation.

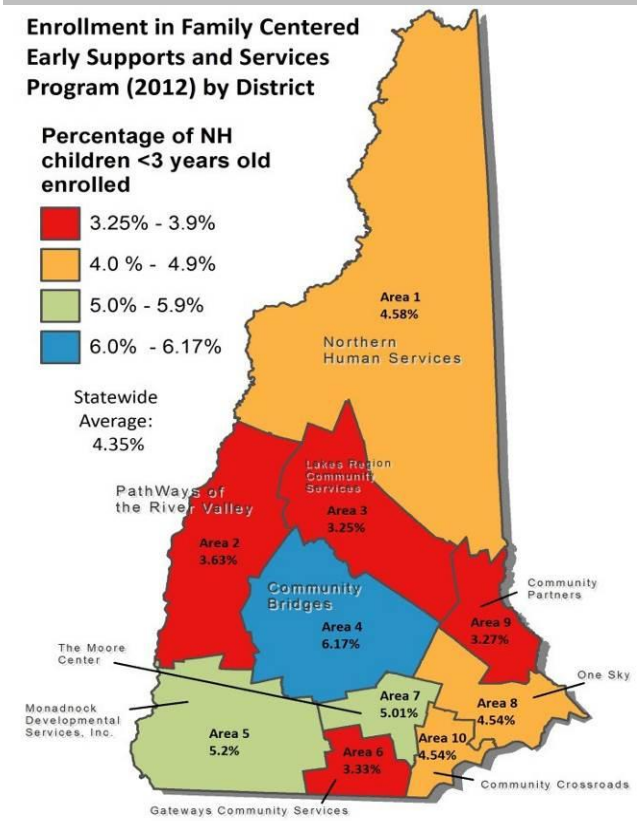
Access to Services

Children who are eligible for services because of developmental delay are referred to a variety of early learning programs and services, including FCESS for infants and toddlers and preschool special education for children between the ages of three and five years. Children may also be referred to Head Start, Early Head Start and/or child care programs enrolled in the DHHS DCYF Child Development Bureau Child Care Scholarship Program (described elsewhere in this report), which receive additional funding to serve children with disabilities. New Hampshire does not offer state-funded public prekindergarten programs.

FCESS includes a wide range of activities and assistance, based on peer-reviewed research to the extent practicable, that develops and maximizes the family's and other caregivers' ability to care for their child and to meet his or her needs in a flexible manner. For each child enrolled in FCESS, an Individual Family Support Plan (IFSP) is developed that includes the child and family's strengths, identified goals, and guidance for meeting those goals, including a process of continuous developmental assessment. Most children enrolled in FCESS (about 94%) receive services in their home setting.[32]

From July 2011 through June 2012, 2,287 NH children were referred to FCESS and 1,818 (79%) of these children were eligible for services. Thus, FCESS served about 4.4% of NH children less than three years of age.[33] Based on estimates that 13% of children 0-3 nationally are at risk for developmental delays that make them eligible for FCESS, which is the IDEA Part C Program in NH,[34] this FCESS enrollment figure of 4.4% suggests that there are potentially a significant number of children eligible for early intervention services who are not enrolled. The percentage of children enrolled in FCESS also varies by region as displayed by Map 4-4, with highest rate of enrollment per capita in the region around Concord.[35]

Map 4–4



Source: Family Centered Early Supports and Services. (2013). New Hampshire Family Centered Early Supports and Services:Public Report for Period 7/1/11-6/30/12. Retrieved Aug 19, 2013, from http://www.dhhs.nh.gov/dcbcs/bds/earlysupport/documents/publicreport.pdf

Preschool Special Education. For each child eligible for preschool special education services an Individualized Education Program is developed based on that child's strengths and needs. Placements may include the child's home, local private or public preschool/kindergartens, or Head Start programs. Sometimes, the placement is in a special education program or even in a separate approved special education program or residential facility. In October 2013 there were 3,227 New Hampshire children enrolled in preschool programs under IDEA Part

B Section 619,[36] which is approximately 7.7% of children aged three to five. Based on estimates that the prevalence of any disability in children is 15.04%[37], the preschool special enrollment figure of about 7.7% suggests that there are potentially a significant number of children eligible for preschool special education services who are not enrolled.

Head Start/ Early Head Start.

Another resource for some families with low incomes is the federally funded Head Start/Early Head Start program. The National Head Start Association describes Head Start as "the most successful, longest-running national school readiness program in the United States."[38] Funded by the US Department of Health and Human Services, the program serves income-eligible children and their families. Early Head Start enrolls children from 6 weeks to 3 years and their families, as well as pregnant women, while Head Start serves preschoolers aged 3 to 5 years and their families. Both Head Start and Early Head Start can provide home- and center-based services that include appropriate infant-toddler or preschool activities, comprehensive health care, nutrition, education, and social services for young children and their families. However, this program is very limited in its ability to reach income-eligible populations. Only three organizations (Southern NH Services, Belknap-Merrimack Community Action Program, and Strafford Community Action Program) currently provide Early Head Start services and in a limited number of NH municipalities. In 2012, about 500 infants and toddlers in NH participated in Early Head Start Programs.[39] Head Start services are available throughout the state, with five grantees serving 1,632 preschoolers and their families in 2012 (cumulative enrollment). In 2011 it was estimated that less than 3% of eligible infants and toddlers and less than 45% of eligible preschoolers and their families were served in Early Head Start and Head Start, respectively.[39]

Honing in on the Gap: Needs vs. Capacity in Developmental Screening, Evaluation, and Access to Services in New Hampshire

As reflected in the following summary, New Hampshire clearly faces a capacity issue regarding universal developmental screening, and developmental evaluation and prevention/intervention services for young children at risk:

- Only a fraction of New Hampshire's young children from birth to six years of age and their families have accessed developmental screening activities for which data are available (i.e., Watch Me Grow system, primary health care and mental health services).
- Estimates on the prevalence of disability in children suggest that FCESS and preschool special education are serving fewer children than may be eligible.

- The capacity for Head Start/Early Head Start programs to serve eligible young children is limited by federal funding allocations, which, in 2011, provided support to less than 45% of eligible preschoolers and less than 3% of eligible infants and toddlers and their families. New Hampshire provides no general funds for Head Start/Early Head Start.
- Some families may wait up to six months for a developmental evaluation at the Child Development Clinics.

What opportunities are there for improving assessment of this issue?

Need for Additional Data

Additional data are needed to improve understanding of the contributing factors to the apparent gap between the observed and expected rates of screening for developmental delays or disabilities in young children in primary and behavioral health care and community settings. Given the potential complexity of the system for accessing services and supports - at least from a family's perspective - it would also be useful to have more complete information comparing the ratio of referrals made to referrals completed. This type of information could be useful for assessing system characteristics and resource considerations such as progress toward development of medical homes or constraints experienced by Family Resource Centers and the Watch Me Grow system with respect to capacity for screening and adequate referral follow-up. Finally, and very importantly, additional information is needed to investigate the causes and potential remedies of reports that families wait up to six months after a referral for developmental evaluations of their young children.

Capacity to Collect, Integrate and Share Data Across Entities

Currently there is little capacity to collect and integrate data across all entities engaged in developmental screening in the state, making it difficult to gain a clear understanding of the number of young children and families who have participated in screening activities. At the local level, sharing screening, evaluation and referral information among agencies, which is essential for service coordination and reducing redundancy, is impacted by various interpretations of HIPAA (Health Insurance Portability and Accountability Act).

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