CORNERSTONES:
STRENGTHENING THE FOUNDATION OF HEALTH AND SAFETY IN EARLY EDUCATION AND CARE

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EXECUTIVE SUMMARY

Over the past few years, leaders in the early education and care field in Massachusetts and across the country have focused their efforts on strengthening the educational components of early childhood programs. While significant early education reforms are beginning to be enacted, Massachusetts early educators and state policy makers are also refocusing attention on strengthening health and safety of young children in early childhood settings outside the home. We need to create a platform of prevention to ensure that our children are protected, healthy, and safe as they grow in their early childhood programs.

For many years, early childhood leaders have been concerned about the quality of health practices and safety issues in some early childhood programs. Many professionals at the national level have responded with several important initiatives, including *Caring for Our Children*, various programs at the Maternal and Child Health Bureau, Healthy Child Care America, Head Start, and national accreditation standards. At the state level, health and safety initiatives have included detailed licensing regulations, health and safety training through the resource and referral agencies, various programs at the Department of Public Health, and a few Community Partnerships for Children programs. While impressive and representative of the efforts of many hardworking and skilled professionals, these initiatives have not yet resulted in the deep and broad systemic improvements needed for health and safety practices to be the cornerstone of high quality early education and care in Massachusetts.

With generous support from the Charles H. Hood Foundation and an anonymous donor, the Schott Fellowship in Early Care and Education and the Bessie Tartt Wilson Children's Foundation co-sponsored a project and worked with a distinguished advisory committee to:

- Prepare an extensive literature review;
- Convene over 50 early childhood professionals, health care experts, higher education and government officials, and funders in a one-day forum to review successful practices in other states and to summarize data about the status of health practices and health consultants in Massachusetts; and
- Recommend ways to strengthen health and safety practices in Massachusetts

After reviewing the research and considering input from experts and informants from across the state, the Advisory Committee on Health and Safety Practices agreed on **five major findings**:

1. While there are few reported incidents of health and safety problems, Massachusetts programs sometimes place children in unsafe environments and/or unnecessarily expose them to infection.
2. More children with special medical and developmental problems are enrolling in early childhood programs, and some program staff are not sufficiently equipped to serve them properly.
3. Massachusetts early childhood providers and child health consultants are not working together as effectively as they should.
4. There are a variety of communication problems among those concerned about health and safety practices and policies.

5. There is a serious need for ongoing training and change in health care practices.

The Advisory Committee came to the following **conclusions** on major issues that need to be addressed to build better health and safety practices in Massachusetts.

1. Improved statewide planning would enhance effectiveness.
2. Public education is essential.
3. Communications must be clearer.
4. Hand hygiene must be better understood and more consistently practiced.
5. There must be more focus on staff training.
6. The Massachusetts "system" of child care health consultants must be strengthened.
7. Investing in facilities and equipment must not be deferred.

Recognizing that we are operating in a world of limited resources and that there are many other possible areas for attention, the Advisory Committee on Health and Safety Practices make **four priority recommendations** to achieve significant positive change in health practices in Massachusetts early childhood programs:

1. Create a statewide coordinating council to develop, implement, and advocate for improvements in health and safety practices and policies.
2. Implement more effective hand hygiene procedures and oversight mechanisms to prevent infections and spread of infectious diseases.
3. Ensure that all early education and care providers have access to a qualified and well-trained child care health consultant on a regular basis.
4. Create and implement a uniform health assessment form for all children in early education and care programs statewide, use individual health plans for children with special medical needs, and train child care health care consultants, parents, and provider staff on how to develop and use these forms/plans.

This project identified the need to improve health and safety practices as the cornerstone of high quality early education and care in Massachusetts. There are problems such as lack of communication between health care professionals, early childhood staff, and parents, or lack of training for staff in such areas as how to keep children safe on playgrounds or how to serve children with disabilities. There is also a significant commitment from some health care experts, government officials, early childhood professionals, and higher education representatives to make changes necessary to ensure Massachusetts children are safe and healthy. The Advisory Committee on Health and Safety Practices has agreed upon four basic recommendations which, if implemented, will go a long way towards a coordinated approach to planning for children's health and safety, reducing the spread of infection in early childhood programs, and providing safe environments for children with special medical needs. While implementation of these reforms will require strong leadership and commitment of some additional resources, the resulting improvements will truly form the foundation of high quality early education and care in the Commonwealth.

I. INTRODUCTION

Health and Safety as a Basic Building Block of High Quality Early Education and Care

Over the past few years, leaders in the early education and care field in the Commonwealth of Massachusetts and across the country have focused their efforts on strengthening the educational components of early childhood programs. Impetus for their actions has come from research showing that children's brains develop more rapidly in the first few years of life than at any other time.[1] They have also been motivated by research documenting the effectiveness of high quality early childhood programs in benefiting children in both the short- and long-term and in preventing or reducing the achievement gap between low-income and minority children and their peers in school.

With growing support from business and community leaders, Massachusetts has embarked on an exciting campaign to provide high quality preschool programs for all children. In 2003, new early childhood program standards emphasizing curriculum, assessment, and instructional standards were promulgated by the state Department of Education. In 2005, the Commonwealth implemented a new Department of Early Education and Care (EEC) to consolidate and strengthen early childhood services. The Early Education for All Campaign is generating tremendous support from constituents all across the state for universal prekindergarten programs. EEC just awarded contracts in two major new areas: universal prekindergarten and assessment. These initiatives are designed to strengthen early educational components of center-based, school, and family child care programs for young children.

At the same time that all these significant early education reforms are beginning to be enacted, Massachusetts early educators and state policy makers are also starting to refocus attention on strengthening health and safety of young children in child care settings outside the home. As is clearly shown by the data and collective wisdom, too many staff in early education and care programs lack sufficient or appropriate training or expertise to provide positive and sufficient supervision, administer medications, or handle special medical equipment needed by children enrolled in their programs. We need to create a platform of prevention to ensure that our children are protected, healthy, and safe as they grow in their early childhood programs. Unfortunately, the reduced potential for injury or for the spread of infection and disease depends on this platform----a platform which is too often taken for granted in the absence of disaster. State regulations are in the process of being updated and hopefully will incorporate new national standards to strengthen the health and safety components of early childhood programs.

The following report provides:

1. Important background information on national and state health and safety standards for early education and care,
2. A picture of current health and safety practices in Massachusetts,
3. A summary of issues that need to be addressed to ensure that our children are protected and healthy in their early childhood programs, and

4. A set of conclusions and recommendations to ensure that sound and thorough health and safety practices become the cornerstone of high quality early education programming in all types of settings in Massachusetts – from small family child care homes to large center-based programs, Head Start, or public school settings.

II. BACKGROUND

Who is in Early Education and Care Programs and Why?

Two-thirds of children in the United States under the age of six spend at least 10 hours per week in an early education and care setting outside their home.[2] According to the 2005 American Community Survey conducted by the U.S. Census Bureau, there are 395,070 children under the age of five in Massachusetts. Currently, there is licensed child care capacity for about 44.9% or 177,441 of these children in early education and care centers and family child care homes in Massachusetts.[3] Children participate in early education and care programs on a full-day or part-day basis for a variety of reasons, among them, the fact that their parents work, are in school or training programs, and that their parents want them to be well prepared for school.

Recently, there has been a great deal of research on the benefits of high quality early education and care. During their first five years, children grow substantially in their social-emotional, physical, and cognitive development.[4] In *Rethinking the Brain: New Insights into Early Development,* Rima Shore summarizes recent research on brain development in the first three years of life and the implications for early childhood practice and policy.[5] In a seminal study of the benefits of early education and care, Lynn A. Karoly et al. emphasize "research findings that the great majority of physical brain development occurs by the age of three."[6] The authors examined nine programs serving children in the first few years of life and found that "carefully targeted early childhood interventions *can* yield measurable benefits in the short run and that some of those benefits persist long after the program has ended."[7] Other researchers have found that "children who participate in high-quality early childhood education develop better language skills, score higher in school-readiness tests and have better social skills and fewer behavioral problems once they enter school…(they are) 40% less likely to need special education or be held back a grade….Adults who participated in high-quality early childhood education programs during their preschool years are more likely to be literate and enrolled in post-secondary education and are less likely to be school dropouts, dependent on welfare or arrested for criminal activity."[8]

It is important to note that most of the research cited above is focused on children from low income families and/or from high risk groups. There is a great need for more research on the benefits of early education and care for middle income children. Schulman and Barnett have reviewed the limited research available and concluded that middle class children also often lack access to high quality early childhood programs, and some do not have the skills needed to succeed in school when they enter. The authors also found that "high-quality prekindergarten has been effective in addressing these problems by enabling middle-income children to be better prepared for school."[9]

What Has Been Done to Protect Our Children's Health and Safety?

For many years, early childhood directors, parents, health practitioners, and public policy leaders have been concerned about the quality of health practices and safety issues in some early childhood programs. Health practitioners, government agencies, and the early childhood community have responded to these health and safety issues with several important initiatives at the national and state levels.

At the National Level…

There have been many efforts at the national level, including those by the American Academy of Pediatrics, the Maternal and Child Health Bureau, Healthy Child Care America, Head Start, and professional associations such as the National Association for the Education of Young Children and the National Association for Family Child Care. For example:

- **The American Academy of Pediatrics, American Public Health Association, and National Resource Center for Health and Safety in Child Care** collaborated to create the second edition of *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs* in 2002. This document has become the textbook for public policy, regulatory, technical assistance, and training initiatives at the national, state, and local levels.

- **The Maternal and Child Health Bureau** (MCHB) in the U.S. Department of Health and Human Services is focused on the comprehensive physical, psychological, and social needs of maternal and child health programs. It has provided funding for a variety of early childhood health initiatives at the state and local levels. Through its Title V Block Grant program, states have implemented many programs to ensure the health of mothers, children, and children with special needs. In addition, the MCHB oversees the Women, Infants, and Children program, child health and safety programs, and programs for children with special health care needs.

    - The MCHB has also created two national projects to support state improvement efforts. The National Training Institute for Child Care Health Consultants at the University of North Carolina at Chapel Hill uses the train-the-trainer approach to prepare health consultant trainers. The National Resource Center for Health and Safety in Child Care at the University of Colorado Health Sciences Center provides technical assistance and resources to those interested in health and safety and early education and care.

    - Since 1990, the MCHB has also funded the Bright Futures program that offers a vision, philosophy, expert guidelines, and practical approaches for health supervision for children and youth from birth to 21 years of age. "Bright Futures is dedicated to the principle that every child deserves to be healthy and that optimal health involves a trusting relationship between the health professional, the child, the family, and the community as partners in health practice."[10] Working with interdisciplinary panels of experts in infant, child, and adolescent health, Bright Futures has published and disseminated *Bright Futures: Guidelines for Health Supervision of Infants, Children,*

and Adolescents. Bright Futures provides materials and practical tools for health professionals, families, and communities, and also trains people from those three areas to work on children's health issues. One example of its work is *Bright Futures Family Pocket Guide,* published by Family Voices at the Federation for Children with Special Needs. This guide provides a helpful reference for parents on children's developmental stages and topics to address in well-child visits.[11] Bright Futures emphasizes the concept of a medical home, defined as: "primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective. In a medical home, a pediatric clinician works in partnership with the family/patient to assure that all of the medical and nonmedical needs of the patient are met."[12]

- Another government initiative was **Healthy Child Care America (HCCA),** created in 1995 as a ten-year program. The American Academy for Pediatrics joined the campaign as a partner with the Maternal and Child Health Bureau and the Administration for Children and Family's Child Care Bureau. HCCA emphasized that families, child care providers, and health professionals can work together to "promote the healthy development of young children in child care and increase access to preventive health services, safe physical environments, and a medical home for all children."[13] One of the first projects was to develop the "Blueprint for Action," which provided local communities with five goals and ten suggested action steps to address the goals. The goals included: safe, healthy child care environments; up-to-date and easily accessible immunizations; access to high quality health, dental and developmental screenings and follow-up; health and mental health consultation, support, and education; and health, nutrition, and safety education.[14] States received grants to strengthen licensing regulations, improve programs, strengthen health consultant networks, and create access to medical homes for children.

- The national **Head Start** program offers an instructive philosophy of providing comprehensive services to young children and their families. Head Start states that the focus of its health services is to prevent health problems whenever possible by carefully addressing the needs of enrolled children and that successful partnerships are the key to the success of this approach. Head Start Performance Standards require that providers work with families to:

    - Establish a medical home for all children,
    - Ensure that children have a schedule of well-child care visits,
    - Track health care progress and treatment services and follow-up,
    - Screen all children when they enter the program and ensure that screening procedures are sensitive to children's cultural, linguistic, and developmental backgrounds,
    - Encourage parents to take primary responsibility for their children's health through education programs, assistance in how to enroll and participate in ongoing family health care and to apply for Medicaid,
    - Promote "positive, culturally relevant health behaviors that enhance lifelong well-being,"
    - Develop and implement health and safety policies and procedures,
    - Provide child nutrition and child mental health services,

- Cultivate ongoing collaborative relationships with health care, mental health, and nutrition service organizations, and
- Create a local health services advisory committee whose members represent the racial and ethnic groups served by the Head Start Program. The committee members help develop health policies and procedures and support the program's goal to provide health care for children and families. Members can provide assistance in many ways, e.g., access health services, serve children with asthma, schedule tests, immunizations or dental visits, develop preventative measures for community health problems.[15]

- The other major efforts to set national standards related to health and safety have come from **professional associations of early educators**: the National Association for the Education of Young Children (NAEYC) and the National Association for Family Child Care (NAFCC) through their system of accreditation standards and criteria. Both of these organizations set accreditation standards to define high quality center-based and family child care programs, and each includes standards and criteria specifically devoted to protecting children's health and controlling infectious diseases, ensuring children's nutritional well-being, maintaining a healthful environment, and promoting the development of healthy habits. According to NAEYC and NAFCC, 1,472 Massachusetts center-based programs, or 46% of the total number of centers in the state, and 52, or less than 1% of the total number of family child care providers in Massachusetts, have met the national NAEYC and NAFCC accreditation standards.[16] When other accreditations in addition to NAEYC are considered, 53% of Massachusetts centers are accredited, according to the National Association of Child Care Resource and Referral Agencies.[17] Barriers to achieving accreditation might be that the process is expensive and time consuming; the criteria are very difficult to meet; the standards require provider educational credentials that are hard to attain; and, in some states, other standards of quality are available.

At the State Level…

Massachusetts has always seen itself as a leader in promoting high quality early education and care for young children in this state. Early childhood professionals are concerned that our state ranked only 18th in the 2007 National Association of Child Care Resource and Referral Agencies (NACCRRA) report *We Can Do Better: NACCRRA'S Ranking of State Child Care Center Standards and Oversight.* Based on review of recent research in the field and standards set by other groups such as NAEYC, NACCRRA set fifteen standards for basic health, safety, and program quality and then reviewed each state's and the Department of Defense's child care licensing regulations against the standards. NACCRRA emphasized the following strengths in Massachusetts: requirements on parental involvement and communication, meeting NAEYC ratio requirements for five of the seven age groups, requiring program activities to address four of the six developmental areas, and health and safety requirements addressing eight of the ten basic standards. Some weaknesses were educational requirements for center directors and teachers and infrequency of licensing inspection visits.[18]

- **State Regulations.** Massachusetts has had detailed regulations regarding health practices and safety in place for group care and family child care programs for many years. The family child care regulations were last updated in 2003; the group care/school age regulations were updated in 1997, and early childhood standards were adopted in 2003. The Department of

Early Education and Care currently is revising all these regulations and expects to release new draft regulations for public comment in spring 2007. It is important to note that early childhood programs operated by the public schools are exempt from these regulations.

The current Massachusetts child care regulations include detailed health and safety sections on facility and equipment standards, playgrounds, general cleanliness, administration of medications, and specific components required in the health care policy.[19] Providers are required to have regular training in CPR and first aid. Massachusetts was one of the first states in the country to include regulations for health consultants, but to this day the regulations do not require the consultants to make on-site visits. In practice, providers are cited for some problems related to the health and safety regulations, and injuries do occur. While the EEC regulations currently do not have detailed requirements for training in universal precautions, the U.S. Occupational Safety and Health Administration regulations do require annual training, but the regulations are unmonitored and consequently have little enforcement. It has been suggested that very few centers know about this requirement or obtain the universal precautions training.

EEC staff told this project that some programs have excellent health policies and procedures in this area, and other programs have some problems. Moreover, early childhood staff would benefit from more required training and opportunities to observe best practices in cleaning procedures and handwashing and how to supervise children closely. Family child care staff would benefit from training on administration of medications. More care given to individual health plans for children would help center-based and family child care staff. Program staff would also benefit from more regular state licensing oversight. Supervision is a very effective method of injury prevention. Supervisors need to guide staff performance in this area carefully. Classroom setup affects staff's ability to supervise children adequately. If they can't see the children, staff can't intervene successfully to avoid injury.[20] Again, research emphasizes that access to sinks in all classrooms is critical for proper handwashing, that safe classroom and playground environments are needed to protect children, and that more staff training on health and safety procedures would be very helpful.

- **Inspectional Visits.** At the present time, Massachusetts licensers from the Department of Early Education and Care generally only make inspectional visits to centers and family child care at the time of license renewal, which is every two years for centers and every three years for family child care. This practice is significantly less than the NACCRRA recommendation of four inspectional visits per year to centers. In a working paper published by the National Bureau of Economic Research, Janet Curie and V. Joseph Hotz state that "having more than one mandatory inspection annually is associated with lower rates of accidents requiring medical attention."[21]

- **Head Start and Public Schools.** While all but two Massachusetts Head Start programs fall within the EEC regulations, programs operated by the public schools are exempt. Programs operated in public schools are required to meet the Massachusetts Department of Education facility standards and local building, fire, occupancy, and health standards. The Massachusetts Department of Education promulgated *Early Childhood Program Standards*

for Three and Four Year Olds in 2003, but no enforcement mechanisms have been attached to these standards.

- **Resource and Referral Agencies.** The Department of Early Education and Care also oversees the Child Care Resource and Referral Agencies. Some of the Resource and Referral Agencies have made strong efforts to provide training and support around health and safety issues. An example is a partnership between Child Care Connections and the Department of Public Health's Regional Consultation Program to train child care providers in inclusion of children with chronic illnesses.

- **The Massachusetts Department of Public Health (DPH).** DPH also has been involved in strengthening early childhood health and safety practices. DPH staff train health consultants. They are also working with their regional consultation programs and EEC to bring health care providers to the table with early education and care professionals on training and other topics. DPH staff and others have identified the need to address the inconsistency between DPH's and the Board of Registration and Nursing's regulations on medication administration with the requirements of the Americans With Disabilities Act and issues being raised at the Department of Early Education and Care. Also, DPH is completing a study of health consultants in the state and expects to publish the findings soon.

- **Community Partnerships for Children (CPC).** The CPC Program, originally part of the Massachusetts Department of Education and now located within the Massachusetts Department of Early Education and Care, emphasizes the need for providers to become accredited through NAEYC or NAFCC, or to obtain the Child Development Associates credential, and supports local communities in providing technical assistance and funding for providers to become accredited. A few local CPCs also have chosen to fund health consultants in their communities.

While impressive and representative of the efforts of many hardworking and skilled professionals, these national and state initiatives to set standards have not yet resulted in the deep and broad systemic improvements needed for health and safety practices to become the cornerstone of high quality early education and care in Massachusetts.

III. CORNERSTONES: OUR NEW STUDY TO STRENGTHEN THE INTEGRATION OF HEALTH AND SAFETY INTO EARLY EDUCATION AND CARE PROGRAMS IN MASSACHUSETTS

With generous support from the Hood Foundation and an anonymous donor, the Schott Fellowship in Early Care and Education and the Bessie Tartt Wilson Children's Foundation co-sponsored a project and worked with a distinguished advisory committee to answer several questions:

- What are the health practices in early childhood programs in Massachusetts?
- What policy, training and support recommendations would make a difference?
- Are there two to three factors which, if prioritized, would indicate significant positive change in health practices in early education and care programs?

To do this work, we engaged in three approaches:

- First, we prepared an extensive literature review, which provided an overview of significant national and state standard setting efforts, and summarized current research in four important areas of health and safety: child care health consultants, general cleanliness/overall safety/playgrounds, administration of medications, and individual health plans for children with medical needs.
- Second, over 50 people participated in a one-day forum that provided an overview of successful health practices in Connecticut and other states, summarized data about the status of health practices in Massachusetts, and presented preliminary findings from a new survey of health consultants in Massachusetts.
- Third, a distinguished advisory panel comprised of 28 experts and other key child health care informants from the academic, government, and provider communities in Massachusetts met several times to review current issues and research findings related to health and safety and to prioritize several key areas for reform. The group achieved consensus on the recommendations found at the end of this report.

During this process, we studied current health and safety practices in center-based and family child care homes in Massachusetts and reviewed significant research findings from across the country (please note that this report includes only a few research studies on Head Start and no data on public school programs). We wanted to see how well our children are protected in their early childhood programs and to determine what steps should be taken to prevent injuries or infections in the future as more and more children enter early childhood programs.

IV. WHAT ARE THE HEALTH PRACTICES IN EARLY CHILDHOOD PROGRAMS IN MASSACHUSETTS?

After reviewing the research and considering the input from experts and informants from across the state, the Advisory Committee on Health Practices agreed upon five major findings.

1. While there are few reported incidents of health and safety problems, Massachusetts programs sometimes place children in unsafe environments and/or expose them to infection unnecessarily.

While Massachusetts center-based and family child care programs do meet the basic state licensing standards, significant numbers fail to meet higher quality national standards for health and safety, according to a new report commissioned by the Schott Fellowship in Early Education and Care and conducted by Nancy L. Marshall, Senior Research Scientist and Associate Director, Wellesley Centers for Women.

The *Massachusetts Early Care and Education Health Report* draws on data from a series of studies known as *The Massachusetts Cost and Quality Studies*, which were conducted between 1999 and 2003, and includes data from random samples of 90 center-based preschool classrooms, 102 center-based infant classrooms, 104 center-based toddler classrooms, and 203 family child care homes. For each of these samples, data is available on observed health and

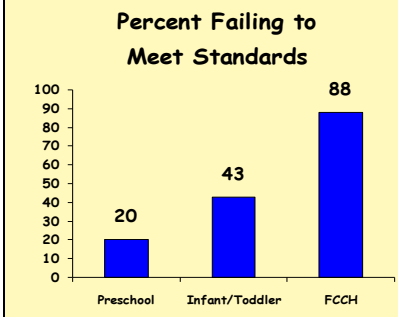
safety practices. The report includes data from centers from all regions of the state, from not-for-profit and for-profit centers, and from programs serving a variety of children and their families. Head Start and programs operated in the public and private schools were not included in the study, but some of the general findings may also be relevant to them. Centers and family child care homes were drawn from across the state in direct proportion to each region's market share; that is, their likelihood reflected the number of children they served, relative to the number of children served by other centers in their region of the state.

Observations were conducted to measure the quality of care in centers and family child care homes. In centers with more than one classroom serving the age group of interest, a single classroom was randomly selected in each of the centers in the samples. Specially-trained data collectors observed classrooms and family child care homes (FCCH) for three to four hours, working with center staff and FCCH providers to select a time that was convenient for the programs and that was typical of the usual care environment for that setting. Data was collected by trained observers. In preschool classrooms, they used the Early Childhood Environment Rating Scale – Revised Edition (ECERS-R). In infant and toddler classrooms, the observers used the Infant/Toddler Environment Rating Scale (ITERS), and in family child care, they used the Family Day Care Rating Scale (FDCRS).

The observers were master's-level professionals, with experience in early childhood education or related fields. The observers participated in 20 hours of classroom training, followed by a minimum of four practice visits with the trainer (about five hours each), for a total of at least 40 hours of training.

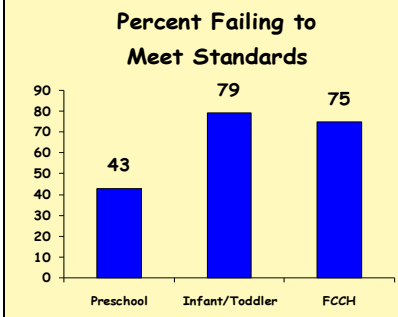
The charts below summarize the findings regarding general health and safety practices. Please note that these charts do not include data from Head Start or public or private school programs. In addition, the EEC licensing regulations for family child care were revised and the new preschool standards were implemented after the data was gathered for this report, so that higher quality health and safety practices in family child care and centers might be more widespread.

Safety Practices



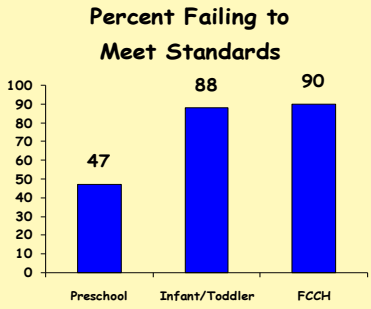
- General safety practices include:
  - removing potential hazards,
  - adequate pro-active supervision to protect children's safety and prevent problems,
  - availability of essentials needed to handle emergencies (telephone and emergency phone numbers on site, first aid kit, written emergency materials posted, at least one staff person trained in pediatric first aid).

Health Practices



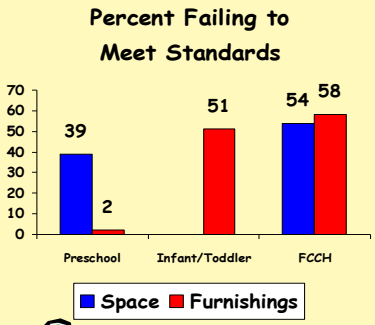
- General health practices include:
  - hand-washing,
  - washing mouthed toys daily,
  - individual washcloths/ towels/combs for children,
  - wet or soiled clothes and diapers changed.

Meals and Snacks

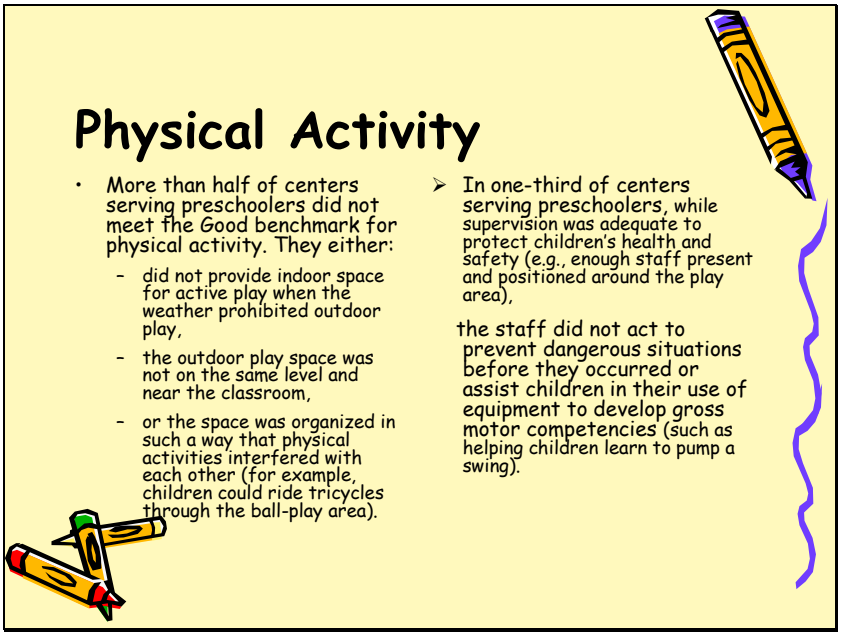


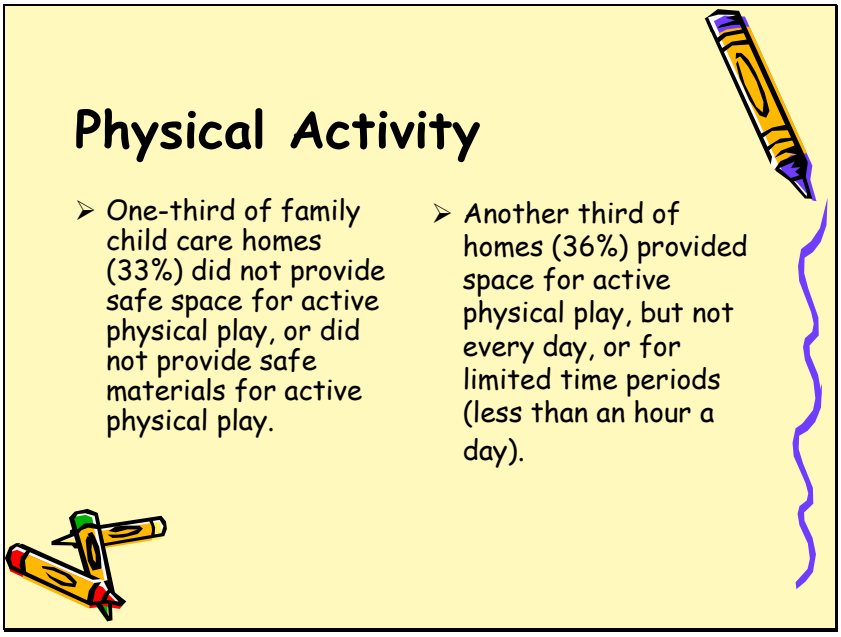
- Standards include:
  - meals and snacks meet USDA nutritional guidelines and are well-balanced,
  - children's food allergies and dietary restrictions are accommodated,
  - adult and child hand-washing before meals/snacks,
  - clean and sanitary food surfaces,
  - atmosphere is non-punitive (e.g., staff do not force children to eat),
  - in centers, most staff sit with the children at mealtimes,
  - there is a pleasant social atmosphere at mealtimes.

Space & Furnishings



- Standards include:
  - Ample indoor space for children and adults,
  - Good ventilation and lighting,
  - Space and furnishings maintained and in good repair,
  - Room arrangement facilitates safe use of space.
  - For infants and toddlers, age-appropriate furnishings, and furnishings available for individual care.





Problems were more acute in infant and toddler programs and family child care than in preschool programs. Significant areas of concern were related to: adult and child handwashing, adequate supervision of children, setup of program space to allow for adequate supervision of children at all times, space and furnishings maintained and in good repair, inadequate or unsafe indoor or outdoor space for physical activity, nonpunitive atmosphere, and pleasant interactions between staff and children.

Other research provides a picture of health practices across the country. While the research was primarily focused on center-based and family child care programs, the issues raised may also be relevant for Head Start and programs operated by the public schools.

Overall, research findings show that:

- Children in child care settings do pick up infections, but most of the infections are mild and diminish the longer the child is in a program.[22] It should be noted, however, that children with chronic conditions can be adversely affected by minor infections. Colds can become serious medical problems for children with asthma or HIV. Other recent studies show that children who participated in early childhood programs had fewer respiratory illnesses, common colds, and asthma in early school years than children who were not in child care programs.[23] These studies and others have documented that handwashing, use of hand sanitizers, training of staff in infection control mechanisms, aseptic nose-wiping, using an alcohol-based oily disinfectant, keeping the child care centers clean, and washing toys regularly reduce the spread of infection in child care programs.[24]

- All existing evidence suggests that children are as safe, on average, while in child care settings as they are while being cared for in their home."[25] Injuries still happen to young children in child care settings, although "children are less likely to be injured in licensed child care than at home."[26] Other research has found that injuries occur in all environments and that children's social-emotional status, staff supervision, faulty equipment and poor classroom layout contribute to the injury rate. Staff/child ratios, staff stability, and staff educational levels also have measurable effects on injury rates.[27]

- Well-maintained equipment and high quality facilities also help prevent injuries and illness. The Local Initiative Support Corporation offers many helpful publications in this area. *Equipping and Furnishing Early Childhood Facilities* provides useful guidance in planning a classroom; developing activity areas and learning centers, including planning for children with disabilities; identifying furnishings and equipment needed; and guidelines for purchasing furnishings.[28] The *Early Childhood Physical Environment Checklist* provides standards for high quality facilities that promote children's health and safety, offer a good working environment for staff, and provide family-friendly space for parents. The *Checklist* provides standards, criteria, and a rating scale for the building exterior and entry, program support space, children's spaces, and outdoor play areas.[29]

- The National Program for Playground Safety, the American Academy of Pediatrics national child care illness exclusion guidelines, and the national Back to Sleep campaign to decrease sudden infant death syndrome all offer specific recommendations to enhance our children's health and safety.

- Massachusetts can learn from model programs in other states such as the following:

    - *North Carolina* – Their new playground regulations have been shown to be effective in reducing injuries.[30]

- *California* – The Child Care Health Advocate Program trains early childhood teachers to become health advocates and spend several hours per week outside of the regular classroom in early childhood programs to focus on improving health policies and practices. They have helped programs improve health and safety practices, keep up-to-date health records, and provide training to program staff on ways to improve child health and safety.

2. More children with special medical and developmental problems are enrolling in early childhood programs and some program staff are not sufficiently equipped to serve them properly.

More and more child care providers are faced with issues related to serving children with special medical or developmental problems. According to the National Survey of Children with Special Health Care Needs, there are 221,840 self reported children in Massachusetts with special health care needs.[31] A 2001 National Health Interview Survey found that almost 7% of children ages 0-4 have a medical issue requiring regular use of prescription medicine for at least 3 months.[32] Increasing numbers of children are being diagnosed with and receiving medications for Attention Deficit Disorder, Attention Deficit Hyperactivity Disorder, diabetes, and asthma, and increasing numbers of children need special medical equipment.

The Americans with Disabilities Act requires child care providers to make accommodations to integrate children with special medical needs into their programs. Most providers will attempt to serve these children, but lack the skills and/or number of staff to do so in a safe manner. Children with developmental delays, seizure disorders, atopic diseases, asthma, diabetes, or many other medical problems may require medication or help with specific medical equipment in the child care setting. Families are seeking early childhood programs where staff are equipped to address the special health care needs of children with G-tubes, colostomies, or those in need of suctioning, using nebulizers, etc. It is critical that relevant state officials, health care consultants, parents, and early childhood staff work closely together to serve the needs of these children. EEC has made flex pool funding available to increase staffing for programs serving children with *significant* health and special needs, and DPH has the regional support programs mentioned above to help develop plans for children transitioning to preschools and schools.

Many Massachusetts providers, however, have had little or no training in medication procedures or serving children with G-tubes, nebulizers or other special medical equipment. While child care providers who are not medical or health care personnel are giving medications to and serving young children with special medical needs in their programs on a regular basis, EEC does not have any licensing requirements requiring specific training in this area. Researchers in other parts of the country have found that some providers have given the wrong dosages, no dosage, or late dosages of both over-the-counter and prescription medications.[33] Sometimes, families of children with food allergies do not give child care providers any medicine to use in emergencies and, while providers may be familiar with EpiPens, many do not know how to use them correctly.[34] Staff do not always know symptoms and triggers of asthma. In Massachusetts, there are several different sets of regulations governing the administration of medications and issues related to the delegation of responsibility to child care staff to administer medications.

Connecticut offers two promising practices that might be relevant for Massachusetts policy makers seeking to strengthen early childhood staff expertise in this area. Connecticut has developed uniform standards in administration of medications and a mandatory requirement that one staff person in each center-based program successfully participate in a training program on administration of medications. At least one of the training programs offered in Connecticut includes sections on serving children with nebulizers, but that program does not cover the use of other medical equipment. Connecticut regulations do require that children with special health care needs have an individual plan of care that includes information on how staff are to care for them. The individual plan of care would cover the use of special medical equipment. Of course, any mandated training program would have to address the problem of staff turnover. In addition, Connecticut has implemented a uniform statewide health assessment for all children entering early childhood programs. There are sections for the parent, child care provider, and health care provider to complete, so that all parties share essential information on the child's health with each other.[35]

Other models and resources that might be helpful for Massachusetts are Head Start individual health plans applicable for all young children, asthma action plans developed by the Asthma and Allergy Foundation of America for children with asthma or allergies, and materials provided by the American Diabetes Association for children with diabetes and the Food Allergy and Anaphylaxis Network for children with food allergies.

3. Massachusetts early childhood providers and child care health consultants are not working together as effectively as they could.

Child Care Health Care Consultants (CCHCs) offer a variety of benefits to early childhood providers. As part of a 2006 literature search published by the Healthy Child Care Consultant Network Support Center at the Education Development Center, the authors concluded:

> CCHCs can support ECE (early education and care) programs with best practices for teaching good health behaviors and creating safe environments; ECE providers can assist health professionals with early identification of children's health and social-emotional needs…. (p. 2)[36]

They found positive outcomes in many studies in several general areas:

- "Policy – Child care health consultation appears to have a positive impact on the development and use of standards-based health and safety policies in ECE programs…" (p. 31)
- "Practice: Child care health consultation appears to be effective in promoting specific health practices in ECE programs including nutrition and safe food handling, infection control (handwashing, diapering, and toileting procedures), infant sleep position, and safe and active play." (p. 31)
- "Regular Sources of Care: ECE programs that receive health consultation had improvements in the percentage of enrolled children with up-to-date immunizations, as well as children with a medical home, dental home, and a well-child physical exam on file." (p. 3)

- Consultation: "'Lessons learned' from multiple consultation sites suggest that a trusting, mutually respectful relationship between a consultant and the ECE program director is a critical element in effective consultation practice." (p. 3)

Massachusetts needs to do more in order to achieve the outcomes from CCHCs as listed above. While our licensing regulations require that center-based programs have a child care health consultant, there is no such requirement for family child care providers or systems. Moreover, our regulations do not require CCHCs to make site visits. The only current requirements are for CCHCs to approve the program's health care policy and review changes, be available for consultation as needed, and approve first aid training for staff.

In 2006, the Massachusetts Child Care Health Consultant Study was conducted by Glenwood Research, under the direction of DPH and EEC. [Note: data from this study has not been finalized, so it should be regarded as very PRELIMINARY.][37] Over half of Massachusetts child care health consultants who responded to the survey were registered nurses (52%), followed by physicians (38%), and nurse practitioners (9%), and physicians assistants (1%). Preliminary results from the study are as follows:

- Seventy-two percent of CCHCs surveyed reported visiting programs once a year or more. However, a visit was not necessarily defined as health and safety related. For example, less than 40% reported assessing hygiene practices, environmental safety and hazards, and/or contents of the first aid kit. Only 34% reported supporting inclusion of children with special health care needs.
- Seventy-six percent of consultants were uncompensated.
- Review/approving and development of health policies and approving first aid policies were the most frequent consultant roles.
- Consultants provided training to programs in a number of areas including infectious diseases, CPR/first aid, nutrition, safety, and allergies/asthma.
- Consultants identified the most important health and safety areas to be addressed as: infection control, safety and injury prevention, and staff education/training/experience about health and safety issues.
- As illustrated in the table below, consultants who were compensated provided significantly more assistance to programs than those who were not compensated.

Type of Assistance Provided by the CCHC	Not Compensated	Compensated
Assist in the development of the program's health care policy	64%	77%
Review and approve the health care policy	93%	96%
Approve any changes made to the health care policy	85%	96%
Approve first aid training curriculum for staff	53%	77%
Provide training for the program	22%	64%
Identify needed resources	48%	77%
Review of health records/immunizations of individual children	15%	61%
Distribute information on specific health topics	36%	80%
Provide support for inclusion of a child with special needs	24%	68%
Provide in-person assessment of environmental safety and hazards	30%	66%
Provide in-person assessment of hygiene practices	31%	61%
Communicate with parents about individual child issues	13%	64%
Provide in-person approval of first aid kit	32%	58%

CCHCs have identified four possible ways to address their concerns: more staff training, enhanced guidelines and clearer definition of the role and responsibilities of CCHCs, parent education, and more on-site supports, both in terms of consulting and concrete resources, e.g. sinks in the classrooms. Other supports needed by CCHCs are compensation, training, clear regulations, and additional resources.

4. There are a variety of communication problems among those concerned about health and safety practices and policies.

Physicians and early childhood providers alike express concern about the lack of communication both between themselves and with parents regarding the specific health needs of young children. Misunderstanding and misinformation about the federal Health Insurance Portability and Accountability Act and other privacy requirements present barriers to the flow of information to those who need it. The current system requires that parents sign separate informed consent forms both at the doctor's office and at the child care program in order to allow health care and early childhood staff to share information. Since CCHCs do not visit programs on a regular basis, early childhood staff often do not have the opportunity to develop strong working relationships with the health care providers and thus are hesitant to call them when they have a situation needing expert medical advice. Health care and early childhood providers report that they often do not reach out to parents enough to ask for information about their child's health, or to share information that the providers have in their possession. The three groups do not get together for training or discussion on topics of concern to all of them, i.e., standards for exclusion of ill children or proper handwashing and cleaning procedures.

In addition, information is not widely or effectively distributed about national standards in various health practices and ways to implement them in doctors' offices, in early childhood programs, and at home. For example, the National Academy of Pediatrics published national child care illness exclusion guidelines in 1992 and revised them in 2002, but use of these guidelines does not seem to be widespread. In a 2005 study of the knowledge and beliefs of these guidelines held by parents, pediatricians, and center based providers, Copeland, et. al. found that all three groups were not familiar with recommendations on at least four of 10 common illnesses or conditions. In fact, more than half of the pediatricians had not seen the guidelines; most parents and providers had seen their program's policies, but information was not available on whether they had seen the national guidelines. All three groups "overestimated the effectiveness of exclusion to prevent disease.[38] Moreover, as Nancy Marshall pointed out in her research cited above, trained observers noted poor handwashing and cleaning techniques in programs, in spite of the fact that the national accreditation standards are very clear in these areas.

Finally, policy makers in Massachusetts do not communicate with each other as well as they might regarding health and safety practices. For example, DPH, EEC, and the Board of Registration in Nursing need to work together to clarify discrepancies and strengthen their regulations related to administration of medications in child care programs. DPH and EEC have a common agenda in addressing issues related to playground safety, CCHCs, and other early childhood matters. The Department of Education and EEC should collaborate on uniform health assessment forms, which could provide useful data for both agencies in future health care planning for the children in their care. All agencies listed above should join together to develop better mechanisms to share information about children's health care needs.

Again, lessons may be learned from other states. Connecticut offers a useful lesson in planning at the state level. A Healthy Child Care Connecticut Coordinating Committee was formed and includes over 50 representatives from health care, early education and care, state agencies, higher education, private for-profit and non-profit agencies, professional organizations, advocates, and families. The collaboration and systems thinking of this group have provided the groundwork for systems development and systems change in the areas of health care consultation to early childhood programs, medication administration, and the new state health assessment form.

5. There is a serious need for ongoing training and change in health care practices.

Members of the Advisory Group and participants at our one-day forum talked about the significant gaps in health and safety training opportunities in the state and expressed the need for new training programs for center-based and family child care providers and public school staff. Parents should be included as much as possible so that home practices are consistent with those in early childhood programs. The following training topics have been identified as priority needs:

- Positive supervision
- Effective procedures for hand hygiene
- Proper cleaning procedures
- Planning the environment and arranging space
- How to select and maintain your equipment
- How to recognize and eliminate hazards in the early education and care environment

- How to address behavior issues
- Nutrition
- Administration of medication and use of special medical equipment

Early childhood leaders emphasize that child care providers are already stretched to the limit in terms of requirements on their time. Any training initiatives must be provided at or near program sites and must be offered in such a way as to not be an additional burden for program staff. Emphasis must also placed on the need to address concerns of families of children with disabilities, language barriers, and cultural differences and in the ways families address health and safety issues in any training initiatives. Finally, Massachusetts early childhood leaders have noted that family child care systems and resource and referral agencies are excellent resources to use in providing training for individual family child care providers.

V. WHAT POLICY, TRAINING, AND SUPPORT RECOMMENDATIONS WOULD MAKE A DIFFERENCE?

After a review of the literature and additional information and recommendations provided by other experts, our Advisory Committee agreed on the following ***general principles*** to guide future work to improve health and safety policies and practices:

- All improvements in health and safety practices and policies should be designed to strengthen communications between parents, health care providers, and early education programs and to encourage each group to respect each other's views.

- All health and safety practices and policies should ensure accessibility for all children, address the needs of children with disabilities, and address the special health needs of children.

- All health and safety practices and policies should respect the ethnic and cultural practices of families served in early childhood programs.

- All improvements in health and safety should be based on sound research.

After reviewing the general findings described above, the members of the Advisory Committee on Health and Safety Practices came to the following **conclusions** on major issues that need to be addressed to build better health and safety practices in Massachusetts.

1. **Improved statewide planning would enhance effectiveness.** Massachusetts lags behind other states, such as Connecticut, in developing the capacity for statewide early childhood health and safety planning across disciplines. We need to find a mechanism to invite all important stakeholders, including parents, government officials, representatives from the higher education community, public school officials, early childhood providers, the health care community, private funders, and others to come together to conduct joint planning. Issues to be addressed include: setting priorities among many significant needs and problems

of conflicting, outdated, or inadequate regulations and laws; developing new statewide programs; identifying funding sources; and advocating for and obtaining the money needed to make the changes needed to protect our young children. There is a significant need for parents who have direct experience in early childhood programs and representatives from the diverse linguistic, ethnic, and cultural communities served by the early childhood field to have major roles in any new statewide planning council.

2. **Public education is essential.** Key decision makers and stakeholders are uninformed about the extent of problems related to health and safety practices in early childhood programs and are unfamiliar with the standards for high quality health and safety practices. Leaders in the early childhood education and care, health, higher education, and government are very familiar with the narrow issues related to their particular area, but do not have an overview of the general problems and what to do to address them. Early childhood directors and staff may be familiar with the accreditation standards, but they do not always understand why it is so important for them or the children in their care to wash their hands at all the times as suggested in the standards. Some teachers and family child care providers question why it is so important to emphasize handwashing, cleaning, and sanitizing over the many other responsibilities they are asked to assume. Many national experts have spent a great deal of time, money, and effort in creating quality standards in such areas as exclusion of ill children or playground safety, but their message is not reaching the people who would actually implement these standards.

3. **Communications must be clearer.** There is a critical need to strengthen communication among health care providers, early childhood providers, and parents. Each group can provide significant insights regarding the health and safety of children in their care. Parents are the primary caregivers, and all methods of communication must recognize and respect this fact. Programs should offer ways for families to be engaged in the development of health and safety practices and should reach out to families to learn about their cultures and practices at home in order for everyone to be consistent with young children. Effort must be made to overcome the intricacies of the myriad laws and regulations governing privacy and the sharing of information. A goal of effective communication is to create a system where a health care provider can e-mail a child's health record or instructions for a new medication to the parent and to the early childhood provider.

4. **Hand hygiene must be better understood and more consistently practiced.** Proper handwashing offers the best opportunity to reduce the spread of infection in child care programs. However staff and children are not washing their hands adequately or at all the right times. Sinks are not generally available in classrooms. Current early childhood regulations do not allow the use of hand sanitizers, which have been proven to be effective in reducing the spread of germs in certain settings.

5. **There must be more focus on staff training.** Changes must be made to address specific weaknesses in health and safety practices across the state. Inadequate staff supervision on playgrounds, lack of positive staff guidance for young children, or lack of knowledge on how to serve a child with a G-tube can be addressed by more effective training or by incorporating information on specific health and safety practices into higher education curricula. The

problem of untrained early childhood teachers and family child care providers being asked to administer medication or use special medical equipment to address the needs of children with special health care needs requires a more significant response in terms of needed changes in regulations and development of a new statewide curriculum.

6. **The Massachusetts "system" of child care health consultants must be strengthened.** Our system of child care health consultants is not providing the kinds of results seen in other states. Child care health consultants are not available for family child care providers and, for centers, they are not meeting the needs identified by both the health care providers and the early childhood staff. Although CCHCs are performing the tasks required by EEC regulations, they are often not visiting the programs enough to obtain a full understanding of program needs or developing strong enough relationships with early childhood staff for the directors or teachers to feel comfortable calling them with health care questions. A new research report described above shows that, in many cases, Massachusetts center-based and family child care providers have not incorporated the use of standards-based health and safety practices. CCHCs could do much more to address infection control, promote proper handwashing and safe food handling, prevent injuries through safe and active play, provide training, and provide information on special medical problems such as asthma to help programs include children with special medical needs. Lack of funding for compensation is a significant issue, as is the lack of requirements for CCHCs to visit programs. CCHCs need more training in the goals and practices of early childhood programs. Early education and care providers need more training on how to use CCHCs and more on-site support.

7. **Investing in facilities and equipment must not be deferred.** There are capital needs in early education and care programs. The research is clear. Having sinks in classrooms encourages proper handwashing procedures, which, in turn, reduce spread of infections in programs. Having classrooms laid out so that staff can see children wherever they are in the room is critical for adequate staff supervision. In a significant number of programs, classroom or playground equipment is broken and in need of replacement or repair.

Recognizing limited funds and resources

It will be expensive to address all the areas listed above. Experts are forecasting a slowdown in the national economy. The war in Iraq and the American intervention in Afghanistan, homeland security, and interest on the national debt are draining the national budget for domestic programs. Our elected officials are working to address a significant deficit in the state budget. There are many competing demands for limited state and federal dollars. In the past few years, community, government, and business leaders have recognized the importance of and placed increased emphasis on early education and care. However, there are competing demands for the limited resources available for early childhood programming. Reducing the wait list, full-day kindergarten, universal Pre-K, rate increases to cover inflation and needed quality improvements, workforce development, assessment – these are just some of the important areas that advocates are seeking to address.

VI. WHAT TWO OR THREE FACTORS WOULD, IF PRIORITIZED, INDICATE SIGNIFICANT POSITIVE CHANGE IN HEALTH PRACTICES IN EARLY EDUCATION AND CARE PROGRAMS?

Recognizing that we are operating in a world of limited resources and that there are many other possible areas for attention, we, the Advisory Committee on Health and Safety Practices, make the following ***recommendations*** ***in four high priority areas*** *to strengthen health and safety policies and procedures in all Massachusetts early childhood settings. We see these health and safety efforts as the cornerstone of a high quality early education and care program.*

1. Create a **STATEWIDE COORDINATING COUNCIL** to develop, implement, and advocate for improvements in health and safety practices and policies. Encourage the Massachusetts Secretary of Health and Human Services, the Department of Public Health, and the Department of Early Education and Care to take the lead in such a council. The proposed council may decide that a public education campaign is needed to educate early education and care providers, policy makers, parents, and the health care community about health and safety issues in early education and care programs. Council members will be responsible for identifying operational and capital funding needs for health and safety improvements, identifying potential public and private funding sources, and advocating for the allocation of needed funds. In order to keep all stakeholders fully informed of progress, it is recommended that the council submit an annual report to the Legislature.

2. Implement more effective **HAND HYGIENE PROCEDURES** and oversight mechanisms to prevent infections and spread of infectious diseases. Initiate a public education campaign on what is effective hand hygiene and why it is important. Train all early childhood staff and children on effective handwashing procedures and implement these procedures in all programs. Install hand sanitizers in all early childhood program settings for all adults to use, and train all adults in the use of the sanitizers. Installation of sinks in all classrooms for use by adults and children should be a priority for capital funding.

3. Ensure that all early education and care providers have access to a qualified and well trained **CHILD CARE HEALTH CONSULTANT** on a regular basis. CCHCs should be on-site at least twice per year, train program staff on ways to improve child health and safety, help programs to improve health and safety practices, review and approve programs' health care policies, keep up-to-date health records, and provide specific guidance on meeting the individual needs of children with disabilities and special medical problems.

4. Create and implement a **UNIFORM HEALTH ASSESSMENT FORM** for all children in early education and care programs statewide; use individual health plans for children with special medical needs, and train CCHCs, parents, and provider staff on how to develop and use these forms/plans. Enhanced communications between parents, early education and care providers, and health care professionals will be essential for successful implementation and use of the health assessment forms.

All of these recommendations will require additional funding, including capital funds, and it is critical that the new coordinating council assume major responsibility for obtaining resources from public and private sources. Strong leadership will be needed from pubic officials and early childhood professionals to work out the details and implement these recommendations. Efforts to implement health and safety improvements should also be coordinated with initiatives to support children's social and emotional development. Advisory members also emphasize that the new draft EEC regulations offer a significant opportunity to improve health and safety practices in many areas, including but not limited to the recommendation areas above.

VII. CONCLUSION

This project has identified the need to improve health and safety practices as the cornerstone of high quality early education and care in Massachusetts. There are challenges such as the lack of communication among health care professionals, early childhood staff, and parents, or the lack of training for staff in such areas as how to supervise children on playgrounds or how to serve children with disabilities. There is also a significant commitment from some health care experts, government officials, early childhood professionals, and higher education representatives to make changes in the foundation of early childhood programming to make sure that Massachusetts children are safe and healthy. The Advisory Committee on Health and Safety Practices has agreed upon four basic recommendations which, if implemented will go a long way towards establishing a coordinated approach to planning for children's health and safety, reducing the spread of infection in early childhood programs, and providing safe environments for children with special medical needs. While implementation of these reforms will require strong leadership and commitment of some additional resources, the resulting improvements will truly form the foundation of high quality early education and care in the Commonwealth.

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