

PHILADELPHIA, PA: Childcare Policies Can Build a Healthier Future



In June 2017, Philadelphia's Board of Health passed a resolution recommending that ECE (early childhood education) providers limit screen time and sweet drinks, including juice, for the children in their care.¹

If all Philadelphia ECE providers implemented these voluntary recommendations, hundreds of children would see improved health outcomes, and \$2.82 million could be saved over the next 10 years.

Analysis

The Philadelphia Department of Public Health (PDPH) collaborated with a team of researchers at the Harvard T.H. Chan School of Public Health² to perform a cost-effectiveness analysis of policies to limit screen time and eliminate sweet drinks in early childhood settings. A cost-effectiveness analysis compares the health impact and health care cost savings resulting from implementing an initiative with maintaining the status quo. The analysis predicts how much would be spent or saved by implementing a policy or program.

PDPH and the Harvard Chan School called on local and national data and the expertise of partners³ to project costs and outcomes specific to Philadelphia's ECE landscape. Projected costs, including training and technical assistance for ECE providers, would total \$638,000 over 10 years. Projected savings, primarily from serving water instead of sweet drinks, would be \$3.28 million.⁴ Over the same 10 year period, these changes would reach 114,000 children and prevent 279 cases of childhood obesity.

ECE Provider Savings

There are 1,661 licensed ECE providers in Philadelphia. Based on data PDPH collected from a sample of these providers, the Harvard researchers estimated the current frequency of serving sugary drinks and 100% juice in Philadelphia child care programs, average serving sizes, and average ounces served per day. They then multiplied the average ounces served per day by the price per ounce of each drink (from the USDA's CNPP food price database). Finally, they adjusted for the fact that, since 100% juice can be reimbursed as "fruit" for the Child and Adult Care Food Program (CACFP), programs that participate in CACFP would incur costs to replace juice with whole fruit at breakfast or lunch and whole grains at snack; this analysis assumes that programs that do not participate in CACFP make the same substitutions.

These calculations yielded an average cost saving per child per day of about \$0.013 for eliminating sugary drinks and \$0.05 per child per day for eliminating 100% juice (that's about \$674 saved per year for the average center).

Many ECE providers in Philadelphia (including nearly 84% of centers) have already eliminated sugary drinks. Some (including nearly 18% of centers) have already eliminated 100% juice.⁴ Even so, if all licensed ECE providers in Philadelphia eliminated sugary drinks and 100% juice entirely, they (and their food vendors and CACFP sponsors) would save \$3.28 million over ten years. If centers that do not participate in CACFP replaced that juice with free water, these savings would increase to \$4.89 million over 10 years.



114,000 CHILDREN REACHED

over 10 years.



\$2.82 MILLION NET COSTS SAVED



AVERAGE COST SAVED PER PROGRAM

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Conclusions and Implications

Every child deserves a healthy start in life. Alarming, an estimated 33% of children born in 2000 and up to 50% of African American and Hispanic children will develop diabetes in their lifetimes.⁵ For many of these children, good nutrition (including fewer sweet drinks and less exposure to unhealthy food and beverage marketing online and on TV) can prevent or delay diabetes and other chronic conditions that are the leading causes of death and disability in our city.

Philadelphia's licensed ECE providers serve around 40,000 children ages 2-5 each year. The Board of Health recommendations aim to support more providers in making small changes that will support healthier environments for all of these children and set them up for long, healthy lives.

The results of this cost-effectiveness analysis demonstrate the fiscal sense of the Board of Health's recommendations to limit screen time and eliminate sweet drinks, including juice. The results reinforce the importance of investing in prevention efforts. Shortchanging prevention efforts can lead to more costly and complicated treatment options in the future, whereas teaching small changes to young children can help them develop healthy habits for life.



1. City of Philadelphia Department of Public Health, Board of Health, Resolution on Childhood Obesity Prevention in Early Childhood Care, Approved June 8, 2017; <http://www.phila.gov/health/pdfs/boardofhealth/Board%20of%20Health%20ECE%20Resolution%20Approved%20June%208%202017.pdf>

The full recommendations state:

- No sweetened drinks in early childhood settings
- No fruit juice (including 100% juice) in early childhood settings
- Water should be available, easily accessible to children throughout the day and offered with meals
- Screen time for children aged 2 years and older limited to 30 minutes per week
- No screen time for children under age 2 in early childhood settings

2. The Childhood Obesity Intervention Cost-Effectiveness Study (CHOICES) at the Harvard T.H. Chan School of Public Health is working to help reverse the US obesity epidemic by identifying the most cost-effective childhood obesity interventions.
3. Thank you especially to the Delaware Valley Association of Young Children, Mayor's Office of Education, Public Health Management Corporation, and School District of Philadelphia.
4. Full calculations are available from PDPH; contact Shannon Dryden at Shannon.Dryden@Phila.gov.
5. Gregg EW et al Trends in lifetime risk and years of life lost due to diabetes in the USA, 1985-2011: a modeling study. *The Lancet Diabetes and Endocrinology* 2(11) 867-874 downloaded from: <http://www.thelancet.com/action/showFullTextImages?pii=S2213-8587%2814%2970161-5>

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