



Strategy Session: Analyzing causes and potential solutions to childhood obesity among girls

June 10th, 2015

Agenda

- 2:10pm Welcome and introductions
Bettyann Creighton
Director of Health, Safety and Physical Education, School District of Philadelphia
- 2:15pm Childhood obesity in Philadelphia: Presentation of data and analysis
Dr. Giridhar Mallya
Director of Policy and Planning, Philadelphia Department of Public Health
- 2:35pm Challenges and opportunities: Small-group discussions
- 3:10pm Engaging girls in physical activity: Research, ideas and discussion
Amanda Wager, Program Manager for Nutrition and Physical Activity
Mica Root, Program Associate
Get Healthy Philly, Philadelphia Department of Public Health
- 3:50pm Closing



Child obesity and severe obesity in Philadelphia, 2006/07 – 2012/13

Philadelphia Department of Public Health
June 2015



Background

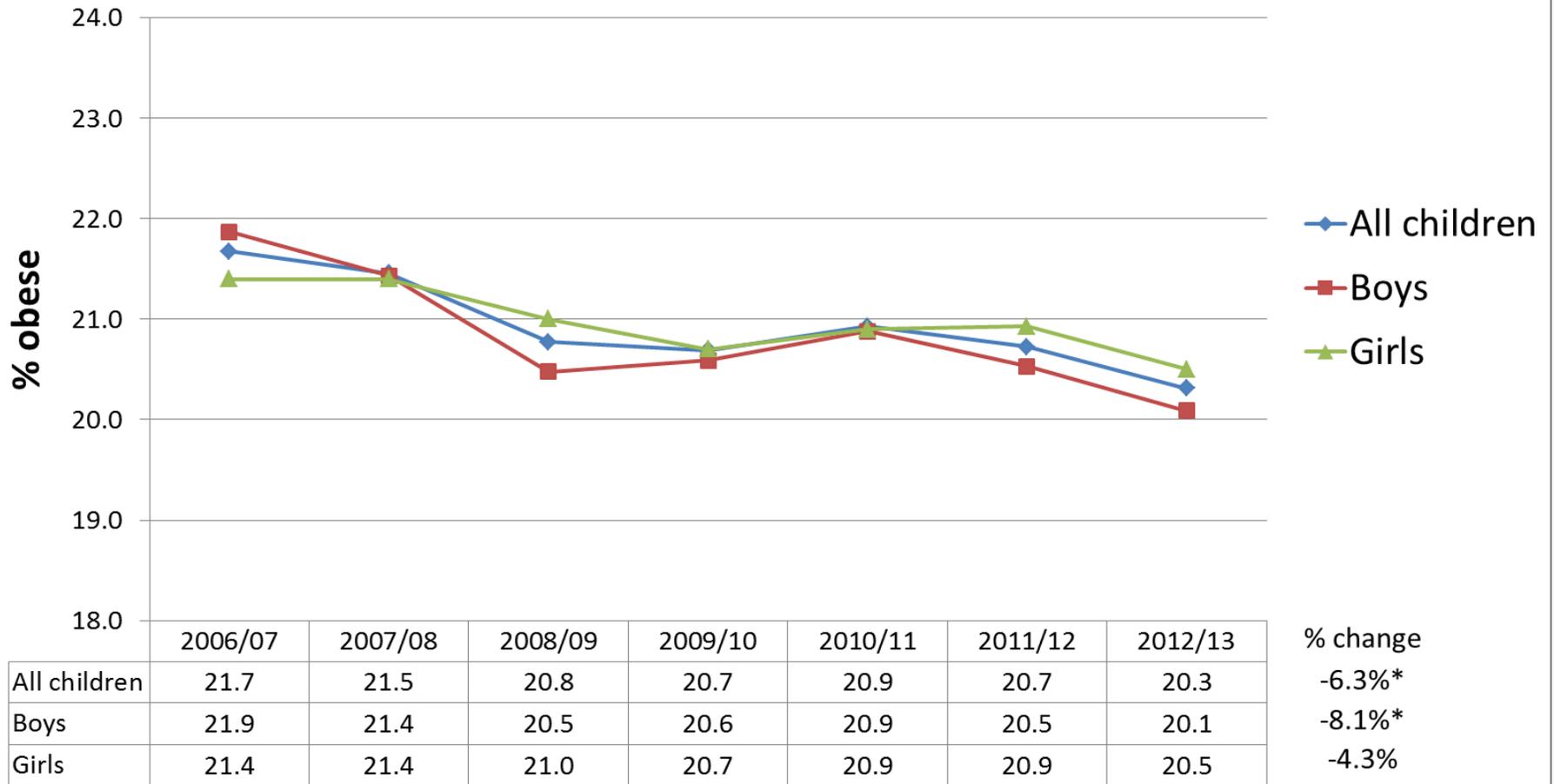
- Multiple U.S. communities have reported reductions in obesity among school-aged children, ranging from 1% to 13%
- In a 2012 paper, the Philadelphia Department of Public Health (PDPH) documented a 4.8% reduction in obesity among Philadelphia public school students between 2006/07 and 2009/10.
 - The largest reductions were seen among African American boys and Hispanic girls.
- With three additional years of data, we assessed trends in obesity and severe obesity among Philadelphia public school children between 2006/07 and 2012/13.

Declining childhood obesity rates—where are we seeing signs of progress? Robert Wood Johnson Foundation Issue Brief, July 2013.

http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf401163

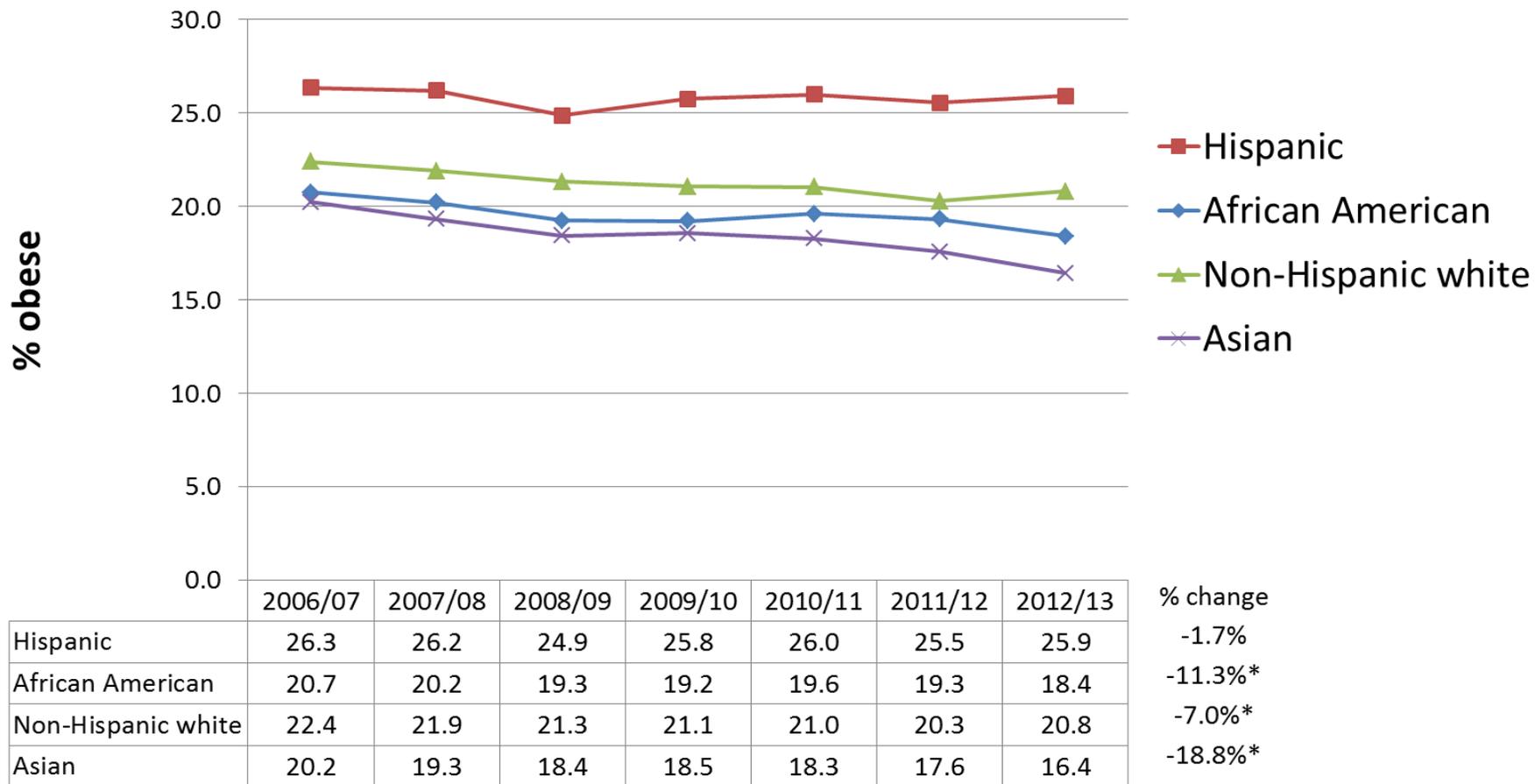
Robbins J, Mallya G, Polansky M, Schwarz D. Obesity and Severe Obesity among Students in the School District of Philadelphia: Prevalence, Disparities, and Trends, 2006-2010. Preventing Chronic Disease 2012;9:120118.

Figure 1: Obesity among Philadelphia public school children, 2006/07 - 2012/13



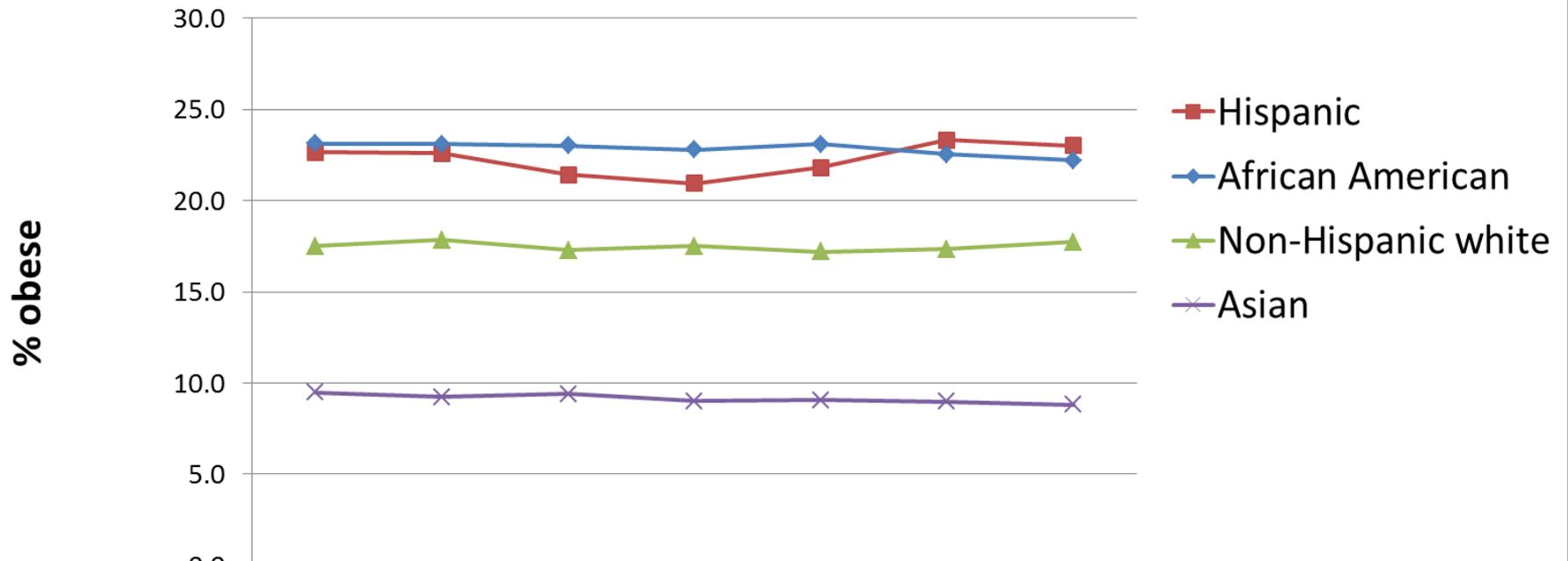
*p<0.05

Figure 3: Obesity among male Philadelphia public school children, by race/ethnicity, 2006/07 - 2012/13



*p<0.05

Figure 4: Obesity among female Philadelphia public school children, by race/ethnicity, 2006/07 - 2012/13



	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Hispanic	22.7	22.6	21.4	20.9	21.8	23.3	23.0
African American	23.1	23.1	23.0	22.8	23.1	22.5	22.2
Non-Hispanic white	17.5	17.8	17.3	17.5	17.2	17.3	17.7
Asian	9.5	9.2	9.4	9.0	9.1	9.0	8.8

% change

+1.5%

-3.8%

+1.0%

-7.1%

*p<0.05

Childhood Obesity in Philadelphia

2012 - 2013 school year. Citywide childhood obesity = 20.3%

Obesity was defined as a body mass index (BMI) percentile ≥ 95 . BMI and BMI percentiles were calculated using age- and sex-specific growth charts from the Centers for Disease Control and Prevention. *Zip codes with <100 sampled children were excluded.

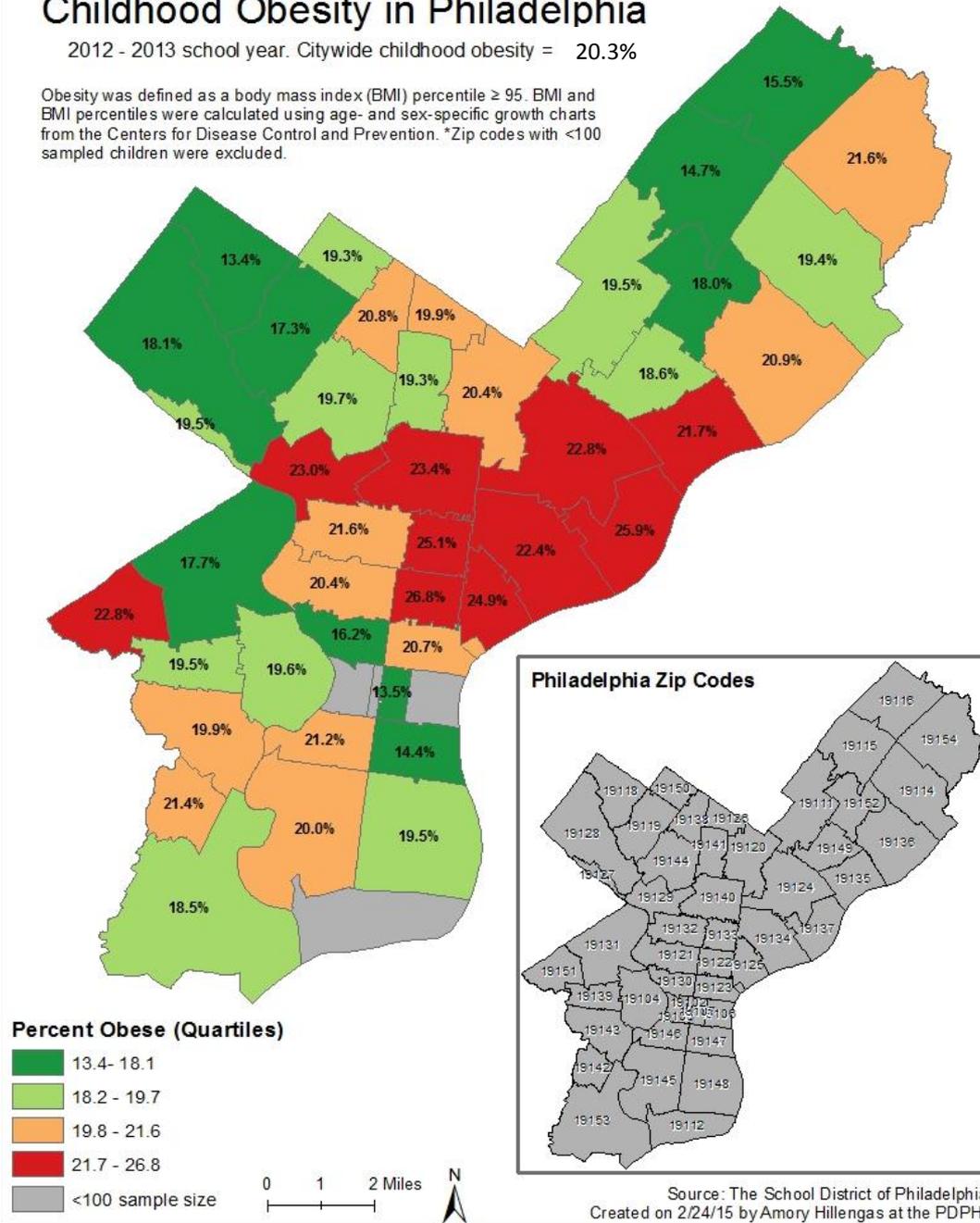
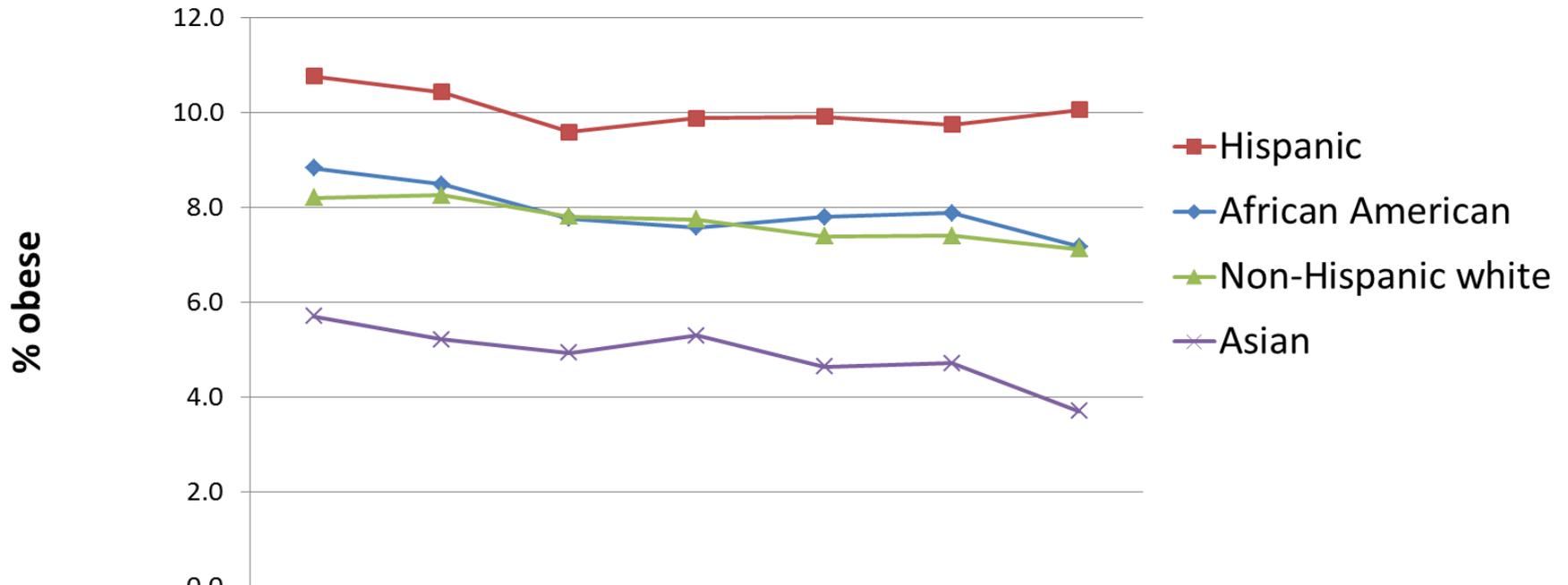


Figure 5: Severe obesity among male Philadelphia public school children, by race/ethnicity, 2006/07 - 2012/13

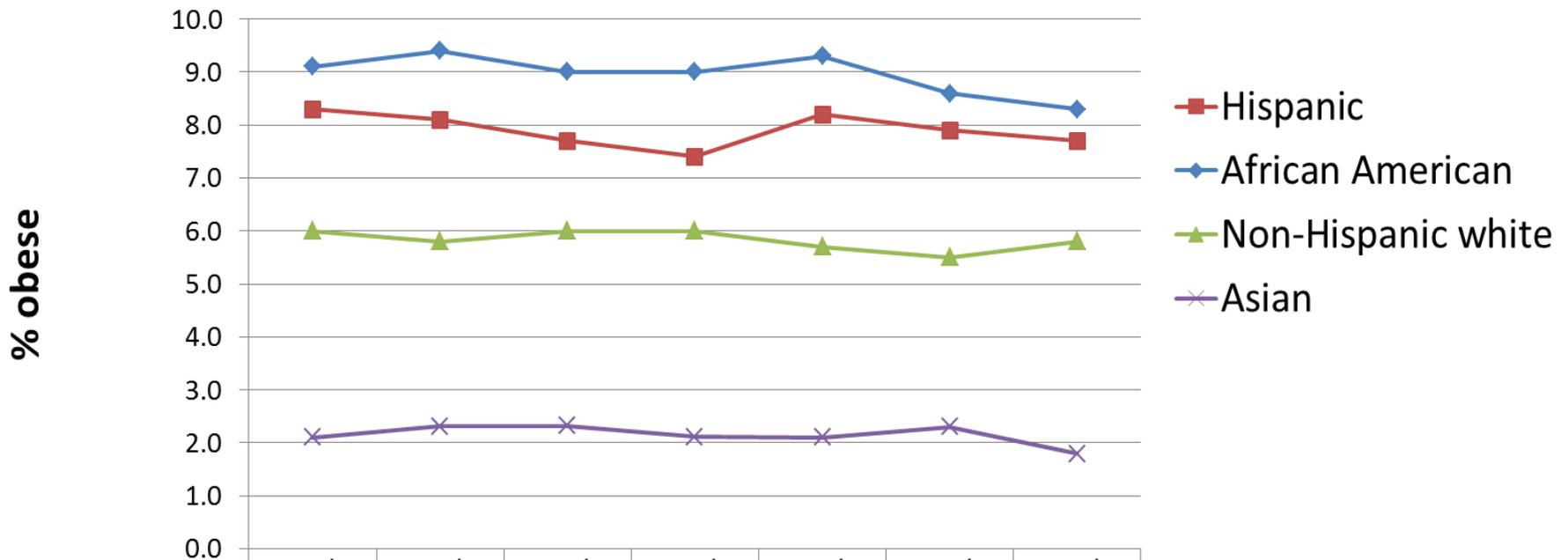


	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Hispanic	10.8	10.4	9.6	9.9	9.9	9.8	10.1
African American	8.8	8.5	7.8	7.6	7.8	7.9	7.2
Non-Hispanic white	8.2	8.3	7.8	7.7	7.4	7.4	7.1
Asian	5.7	5.2	4.9	5.3	4.6	4.7	3.7

% change
-6.5%
-18.8%*
-13.4%*
-35.0%*

*p<0.05

Figure 6: Severe obesity among female Philadelphia public school children, by race/ethnicity, 2006/07 - 2012/13



	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	% change
Hispanic	8.3	8.1	7.7	7.4	8.2	7.9	7.7	-7.5%
African American	9.1	9.4	9.0	9.0	9.3	8.6	8.3	-8.8%
Non-Hispanic white	6.0	5.8	6.0	6.0	5.7	5.5	5.8	-3.2%
Asian	2.1	2.3	2.3	2.1	2.1	2.3	1.8	-16.1%

*p<0.05

Conclusions

- Obesity and severe obesity have continued to decline among many children in Philadelphia, particularly boys, African Americans, and Asians, but obesity has increased among Hispanic girls and girls in grades K-5 after initial reductions.
- Declines in obesity may be due to local initiatives—such as [*Get Healthy Philly*](#)—focusing on environmental change interventions in schools, after-school programs, communities, and the media; and state and federal efforts.
- Hispanic children and girls may face bigger and/or different challenges related to certain mediators of good nutrition and physical activity than other racial/ethnic groups and boys, respectively.
 - Interventions also may not have reached these groups equally.
- Broader and more effective social, environmental, and clinical interventions are needed to sustain and advance reductions in childhood obesity in Philadelphia and across the U.S.



School-based policy and program changes

- 1990s Universal feeding “pilot”
- 1999 Nutrition education for all SNAP- eligible children
- 2004 Comprehensive school nutrition policy
- 2009 1% milk and no fryers in school kitchens
- 2011 170 schools created Wellness Councils made up of teachers, principals, students, and parents
- 2012/13 Shifting schools back to full-service cafeterias, new federal school meal standards



Other policy and program changes

- 2004 Fresh Food Financing Initiative
- 2007 Trans fat ban
- 2008 Menu labeling law (implemented 2010)
- 2009 Complete Streets executive order
- 2010 Healthy corner store initiative, Philly Food Bucks
Recreation center physical activity programming

- 2011 Sugary drinks media campaign
Afterschool nutrition and physical activity standards
New comprehensive plan and zoning code
Healthy beverage vending standards
Breastfeeding promotion in hospitals

- 2012 Window sign restrictions
Low cost safety improvements to intersections/corridors

- 2013 Healthy snack vending standards
Citywide trail master plan
Healthy Chinese take-out initiative

Hispanic children

- Increases for Hispanic girls are in younger age groups
- No data available on acculturation or nationality of origin
 - Acculturation associated with fast food and sugary drink consumption
- Many *Get Healthy Philly* interventions have focused on African Americans
- For Hispanics, particular challenges may include:
 - Unhealthy food availability in school stores and cafeterias
 - Advertising of unhealthy foods and beverages on Spanish-language media
 - Sugary drink intake
 - In Philadelphia, Latina teens have the highest soda consumption among teens
 - Limited moderate to vigorous exercise
 - In Philadelphia, Hispanic middle-schoolers are less likely than African Americans and whites to get 60 minutes of moderate-vigorous activity per day

Finkelstein DM, Hill EL, Whitaker RC. School food environments and policies in US public schools. *Pediatrics* 2008;122(1):e251-9. DOI i: 10.1542/peds.2007-2814.

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Unger J, Reynolds K, Shakib S et al. Acculturation, physical activity, and fast-food consumption among Asian-American and Hispanic adolescents. *J Community Health* 2004; 29(6): 467-81.

Cullen KW, Ask DM, Warneke C, de Moor C. Intake of soft drinks, fruit-flavored beverages, and fruits and vegetables by children in grades 4 through 6. *Am J Public Health* 2002;92(9): 1475-77.

Girls

- In Philadelphia, middle school girls are 5 times less likely than boys to get 60 minutes of moderate-vigorous activity daily
 - For Philly teens, no big differences in fruit, vegetable, or soda consumption, or screen time by gender
 - Nationally, boys' physical activity increases from ages 5-10; girls' activity starts decreasing at age 6
- For girls, particular challenges may include:
 - Parental/familial, community, societal/media norms about body size, body image, nutritional choices, dieting
 - Physical activity
 - Sports vs. play or non-competitive but structured activities
 - Concerns about appearance, norms, teasing; benefits of girls-only activity
 - Familial pressures: schoolwork, caring for family, etc.
 - Stricter parental rules (also for food), concerns for safety
 - Lack of role models

Sweeting HN. Gendered dimensions of obesity in childhood and adolescence. *Nutr J.* 2008; 7: 1.

Trost SG, McCoy TA, Vander Veur SS, Mallya G, Duffy ML, Foster GD. Physical activity patterns of inner-city elementary schoolchildren. *Med Sci Sports Exerc.* 2013 Mar;45(3):470-4.

Girls' Participation in Physical Activities and Sports: Benefits, Patterns, Influences and Ways Forward. World Health Organization.

Identifying Barriers to Physical Activity for Latina Teens. January 2014. Robert Wood Johnson Foundation.

Discussion

- What challenges to being physically active do girls face – especially Latina, African American, and younger girls?
- What other factors may have contributed to the rise in obesity rates among Latina girls and girls K-5?
- What physical activity and other healthy opportunities already exist for girls in our city, and what can we learn from their successes and challenges?
- What else needs to happen to ensure that all Philadelphia children reap the benefits of physical activity and other healthy opportunities?



Engaging Girls in Physical Activity: Research and Ideas

Philadelphia Department of Public Health

June 2015



Sources

- Surveys and focus groups with:
 - School District of Philadelphia Health and P.E. Teachers
 - Philadelphia Parks and Recreation Leaders
 - Out of school time providers affiliated with Alliance for a Healthier Generation
- Additional conversations with:
 - Boys and Girls Clubs of Philadelphia
 - Catholic Social Services
 - Drexel University Academy of Natural Sciences
 - El Concilio of Philadelphia
 - Food Fit Philly Coalition
 - Health Promotion Council
 - Latinas in Motion
 - Norris Square Neighborhood Project
 - Philadelphia Youth Sports Collaborative
 - Taller Puertorriqueño
 - And other local organizations and funders
- Review of relevant literature



Engaging girls in physical activity: Best practices

- Prioritizing involving and engaging girls in physical activities. Asking about and listening to their interests and needs. Being conscious of the gendered physical activity gap.
- Focusing on noncompetitive fitness activities (in addition to or instead of team sports), fun and enjoyment. Varying activities and offering choice, including:
 - Dance (Zumba, Wii Dance, etc.)*
 - Walking
 - Yoga/Pilates and similar
 - Hula hoops , jump ropes
- Role modeling, including:
 - Having well-trained and well-prepared leaders/teachers/coaches, including at least some who are women, who provide structure and encouragement.
 - Involving families/getting family buy-in.*
- Ensuring girls have and wear sneakers, sports bras, hygiene products, and other basic gear that supports being active.
- Separating boys and girls for (some) physical activity.
- Engaging girls in smaller/existing friend groups for physical activity.

**May be especially relevant with Latina girls.*



Engaging girls in physical activity: Existing local work and resources

- Physical activity in the School District includes:
 - Physical education (SDP Policy 145 - Student and Staff Wellness: “All students will have access to a sequential, comprehensive, standards-based physical education program taught by a certified health and physical education teacher.”)
 - Movement breaks (“Elementary students will be given “Movement Breaks” every 90 minutes of seat time.” Promoting movement breaks is also a common HYPE council activity in middle and high schools.)
 - Recess (“Time will be devoted, in the elementary schedule, for supervised and safe recess.”)
 - Active transport/Safe Routes to School
- Out of School Time (OST) physical activity includes:
 - All City-funded OST programs in Philadelphia have guidelines that call for at least 30 minutes/day or 150 minutes/week of physical activity in after-school programs, and double to triple that amount in summer programs.
 - Philadelphia has a thriving cohort of Sports-Based Youth Development programs and other OST programs grounded in sports as a means of developing skills and character, as well as a handful of important organizations that provide technical assistance around physical activity to OST providers.
 - Dance programs, community gardens and soccer leagues play important roles in some communities.
- Built environment initiatives that improve physical activity opportunities for youth include:
 - Greening open space and increasing access to green open space (including a growing number of initiatives around schoolyards).
 - Pedestrian and bicycle infrastructure enhancements.



Engaging girls in physical activity: Get Healthy Philly plans

- Researching minute-based P.E. requirements in schools.
- Exploring childcare and pre-school nutrition and physical activity standards and certification.
- Developing physical activity media campaign.
- Sponsoring “Art of Active Play” active design project.
- Asking our partners and contractors to do more to engage girls and Latino communities in their work; ensuring initiatives, particularly media strategies, include Spanish-language materials.
- Sharing data with funders; trying to help link partners to funding to identify, implement and scale effective physical activity initiatives.
- Continuing support of many of the initiatives mentioned on the previous slide.
- Convening this and related conversations to understand the landscape.

What else might be possible?

- District teachers suggest:
 - Considering ways to address kids' (and their families') health fears – around hearts beating fast, being out of breath, sweating
 - Increasing collaboration between School District and Parks and Recreation/other OST physical activity providers
- Ideas from relevant literature include:
 - Promoting Walking School Buses (and the community involvement needed to make them possible)
 - Developing joint-use agreements for open spaces
- **What do you think?**

Next steps

- What is one thing you could do now to further promote physical activity among girls in Philadelphia?
- What is one thing you would like to see happen on a coalition level?
- Do you have a recommendation for an individual or organization to profile in our physical activity media campaign as a good role model for youth and families?



Thank you!

www.phila.gov/gethealthyphilly

www.foodfitphilly.org

www.facebook.com/foodfitphilly

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