

CREATING ENVIRONMENTS TO

Grow, Move, & Thrive

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ENVIRONMENTS TO

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FOR ALL CHILDREN

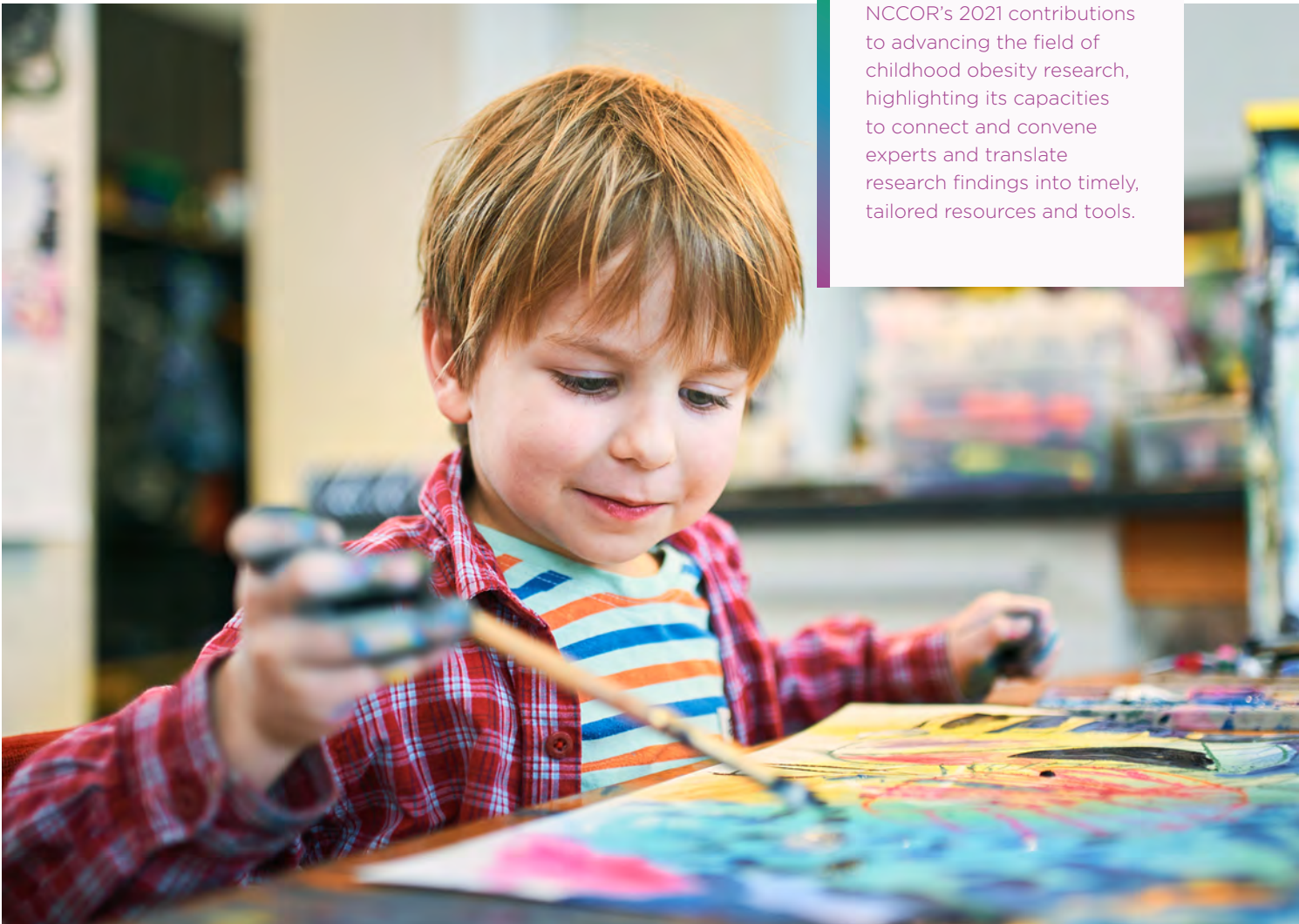


In 2008, four leading funders—the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), the Robert Wood Johnson Foundation (RWJF), and the U.S. Department of Agriculture (USDA)—collaborated to establish the National Collaborative on Childhood Obesity Research (NCCOR). Since then, these organizations have worked together to accelerate efforts to slow and reverse the epidemic of childhood obesity in the United States.

From its inception, NCCOR has prioritized the advancement of research to inform policy, systems, and environmental changes to improve population-level health behaviors related to childhood obesity, focusing primarily on nutrition and physical activity behaviors. The environments where children spend their time are key influences on these behaviors, and many of NCCOR’s 2021 efforts explored those environments and promoted changes to make them more positive influences on children’s health. With the goal of eliminating health disparities and recognizing the continued impacts of the COVID-19 crisis, NCCOR approached these issues with an equity lens, so all children have opportunities to grow, move, and thrive.



This report summarizes NCCOR’s 2021 contributions to advancing the field of childhood obesity research, highlighting its capacities to connect and convene experts and translate research findings into timely, tailored resources and tools.



New Resources for Exploring Connections Between Environments and Childhood Obesity

In 2021 NCCOR developed a variety of new resources that translate its research findings about connections between environments and behaviors related to childhood obesity.



Impact of COVID-19 on Child Care Programs, Potential Solutions, and Emerging Opportunities

REPORT

and American Rescue Plan (ARP) investments may affect the child care landscape and be maximized to integrate nutrition, physical activity, and healthy growth.

GSCN interviewed 17 key informants working in the early care and education space who identified as researchers, practitioners, and federal representatives. Findings from the interviews were documented in a report that described impacts of the COVID-19 pandemic on ECE settings, including high levels of stress for program staff; increased food insecurity among participating children, families, and ECE staff; greater attention to existing structural inequalities within the ECE workforce; reduced physical activity for program participants; and decreased nutritional quality of foods served. A positive theme that emerged was that the pandemic led to increased outdoor activities, which had a positive impact on outdoor learning opportunities and general mental health. The report also identified potential investments to prioritize in child care programming, research, and evaluation.

Efforts to address childhood obesity have included investing in settings where children spend much of their time, including early care and education (ECE) and after-school settings. COVID-19 resulted in increased national awareness of staffing and operational struggles in child care programs, food insecurity among child care staff and participating families, and the challenges faced by families due to the high cost of child care.

The Gretchen Swanson Center for Nutrition (GSCN) has partnered with an NCCOR workgroup that was formed to explore the impact of the COVID-19 pandemic and legislation on child care systems (and further downstream, on child well-being). Together, they conducted a study to explore how Coronavirus Aid, Relief, and Economic Security Act (CARES)



Surveillance of Youth Active Travel to School

WHITE PAPER



Trail Use to Promote Physical Activity and Health Among Underserved Youth

PROGRAM BRIEF

A white paper on improving surveillance of youth active travel (ATS) to school stemmed from two recent NCCOR activities: 1) a systematic review that found few ATS surveillance systems exist in North America, and that concurrent monitoring of other ATS-related features in these systems is limited or absent, and 2) a virtual workshop in October 2020 to explore key challenges related to surveillance and measurement of youth ATS. The white paper, which summarizes the workshop and synthesizes recommendations for ATS surveillance, will inform and advance ATS research and surveillance as a priority topic area within overall physical activity surveillance. Improved monitoring of youth engagement in ATS behaviors (including participation in ATS programs such as Safe Routes to School), and of built environment supports as well as policy and program supports for ATS, will help establish baseline data where needed and track implementation and evaluation of interventions, programs, and policies that aim to increase physical activity through ATS.

Recognizing that little research is available about the impact of trails on physical activity behaviors of youth from under-resourced communities, NCCOR developed a program brief that explores youth trail use as a health-enhancing behavior to engage in outdoor recreational physical activity. Gray literature sources were reviewed to identify nine programs promoting trail use among youth (e.g., walking, biking, or hiking on trails) that were accompanied by process or outcome evaluation data. The brief outlines the programs' reach and scalability, focus on under-resourced communities, and evaluation findings; it also includes considerations for improving programs and youth trail use. The brief is intended to help increase the health and physical activity of youth from under-resourced communities through trail programs.

Peer-Reviewed Journal Publications

→ Advancing Measurement to Address Childhood Obesity

NCCOR held a series of three workshops in 2019 and early 2020 to discuss measurement of individual behaviors, environmental influences, and policy influences related to diet, physical activity, sedentary behavior, and sleep, with a focus on populations and communities at highest risk for obesity. As a follow up to the workshop series, NCCOR members published a paper in the *American Journal of Preventive Medicine* (December 2021) that describes priorities and next steps for enhancing measurement tools and using high-quality measures in surveillance, epidemiology, and intervention research to address the childhood obesity epidemic.

→ Surveillance of Active Travel to School

NCCOR published a systematic review in the *Journal of Healthy Eating and Active Living* (September 2021) that describes existing surveillance of youth active travel to school (ATS) and identifies measures used to assess ATS. The review found that few youth ATS surveillance systems exist in North America, and that concurrent monitoring of other ATS-related features (e.g., environmental supports such as sidewalk presence, and program and policy supports, such as Safe Routes to School programs) in these surveillance systems is limited at best. It also recommends strategies for using existing surveillance systems to improve monitoring of trends related to active travel to school.

→ Economic Impact of Built Environment Improvements

NCCOR published a paper in the *Journal of Physical Activity and Health* (July 2021) that identifies key indicators to characterize the economic value of promoting physical activity through environmental improvements. The paper, an outgrowth of a series of expert panel discussions hosted in 2020 by an NCCOR workgroup, can help communities and public health practitioners make a business case for built environment and land use improvements that will also promote physical activity.





New Tool to Promote Intervention Effectiveness

In 2021, NCCOR added a new toolkit to its array of tools that support researchers and practitioners in building capacity for research, evaluation, and surveillance.

A Toolkit for Evaluating Childhood Healthy Weight Programs

For public health practitioners and researchers conducting healthy weight programs, program evaluation is vital for improving program effectiveness and sustainability. To make it easier for these audiences to assess the impact of programs, NCCOR developed an online Toolkit for Evaluating Childhood Healthy Weight Programs. The toolkit offers an overview of program evaluation and provides guidance on evaluation readiness, process measures, outcome measures, contextual factors, program sustainability, and remote evaluation of childhood healthy weight programs. Additional toolkit features include a resource library with links to guides, databases, research articles, and other toolkits to support evaluation plans.



DID YOU KNOW?

Using a novel approach of surveying electronic medical records, a 2021 study published in the MMWR reported that the rate of increase in children's BMI nearly doubled between March and November 2020 compared to the previous year. While this research does not replace NHANES data, it does offer an important early insight into the pandemic's impact on children's weight.



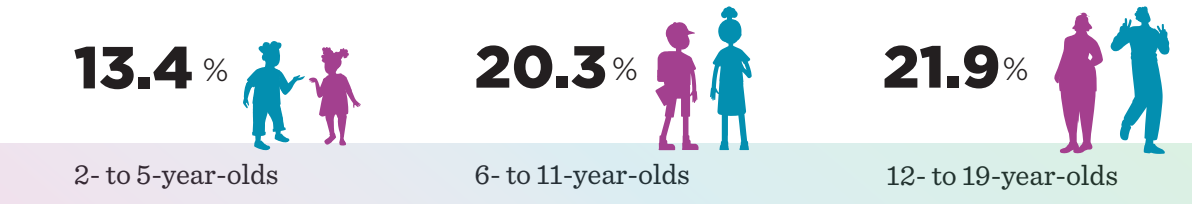
Childhood Obesity

STATISTICS

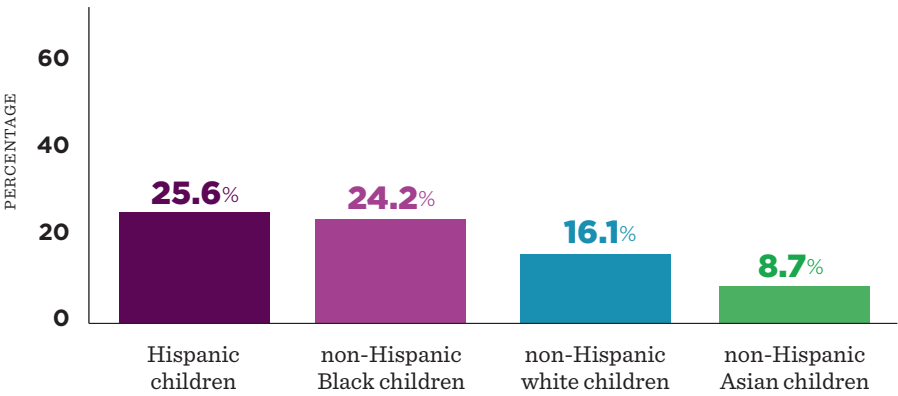
According to the National Health and Nutrition Examination Survey 2017-2018

19.3 %

of U.S. children and adolescents (aged 2-19 years)



Childhood obesity occurs more commonly among certain populations:



OPPORTUNITIES TO ENGAGE ACROSS THE VIRTUAL ENVIRONMENT

NCCOR plays a valuable role as a central conduit for information and a venue for convening stakeholders in the field of childhood obesity research.

In 2021 NCCOR engaged thought leaders and experts from diverse disciplines in virtual member meetings, workgroups, and listening sessions. NCCOR experts also participated in webinars and conferences to share NCCOR resources and developments in childhood obesity research with researchers and practitioners working in the field.



Workgroups

NCCOR workgroups provide a structure for members to collaborate on both emerging and established issues of shared interest. Some workgroups continue for extended periods and encompass multiple projects; others focus on one project and disband when the work is complete. The following workgroups and projects were active during 2021:

- Adding a Sleep Variable to the Catalogue of Surveillance Systems
- Additional Benefits of Walkability
- Advancing Measurement of Dietary Assessment for Infants and Young Children
- Childhood Obesity & COVID-19
- Economic Impact of Built Environment Improvements for Physical Activity
- Engaging Health Care Providers and Systems
- Increasing Opportunities for Trail Use to Promote Physical Activity and Health Among Underserved Youth
- Measurement
- Youth Active Travel to School Surveillance Initiative



Workshops

NCCOR held two sessions in June 2021 to gather feedback on a draft action guide that it developed to support decision-makers in building an economic case for investments in built environment improvements. The draft action guide is a product of NCCOR's Economic Impact of Built Environment Improvements workgroup, which hosted discussion groups and an expert panel session in 2020 to identify common economic indicators and methods to help public health practitioners make the business case for built environment and land use improvements to increase physical activity.

Both one-hour listening sessions engaged seven different individuals with expertise in areas such as local government administration, urban planning, transportation, housing, and economics. These participants shared helpful inputs for revising the action guide to make it more user-friendly, inclusive, and effective for decision-makers and to broaden its applicability to a wider group of potential users. They also suggested additional resources that could be developed to help practitioners and decision-makers convey the economic rationale for built environment improvements. The final action guide will be available in 2022.



DID YOU KNOW?

NCCOR supports time-sensitive research by promoting new funding mechanisms. Its website includes a page that compiles obesity-related funding opportunities, including rapid response mechanisms that help investigators study policy and environmental changes in real time.

CONNECT & EXPLORE
WEBINARS

Improving Research on Children at High Risk for Obesity: Whether to Apply, Adapt, or Develop a Measure

EXPERTS: Latetia Moore, PhD, MSPH; Teresia O'Connor, MD, MPH; Melicia C. Whitt-Glover, PhD, FACSM; Stella Yi, PhD, MPH

NCCOR Showcase: Highlighting New Projects, Tools, and Resources

EXPERTS: David Berrigan, PhD, MPH; Andrew Bremer, MD, PhD; Heather Devlin, MA; Laura Kettel Khan, PhD, MIM; Deborah Young-Hyman, PhD,

Childhood Obesity Evidence Base: Using NCCOR's Newest Dataset to Examine Childhood Obesity Interventions

EXPERTS: Heather King, PhD; Mackenzie Magnus, MPH, MBA; Lori Scott-Sheldon, PhD; Deborah Young-Hyman, PhD

Effective Programs to Improve Access and Use of Trails for Youth from Under-Resourced Communities (in partnership with American Trails)

EXPERTS: David Brown, PhD; Van Do, MPH; Mike Hill, ASLA; Julian Reed, EdD, MPH

Childhood Obesity Research Across Borders: Social Determinants of Health

EXPERTS: Guadalupe X. Ayala, PhD; Rafael Perez-Escamilla, PhD; Mireya Vilar-Compte, PhD

Childhood Obesity Research Across Borders: The Physical Environment

EXPERTS: Olga Lucia Sarmiento Dueñas, MD, MPH, PhD; Ana Clara Duran, PhD, MS; Abby King, PhD; Maria Alejandra Rubio, MSP; Lindsey Smith-Taillie, PhD

Introducing: A Toolkit for Evaluating Childhood Healthy Weight Programs

EXPERTS: Brook Belay, MD; Ihuoma Eneli, MD, MS, FAAP; Sandra Hassink, MD, MSc, FAAP; Matthew Levy, MD, MPH; Nancy Sherwood, PhD

Assessing the Public Health Impacts of the Children's Food and Beverage Advertising Initiative

EXPERTS: Frances Fleming-Milici, PhD; Jennifer Harris, PhD, MBA; Mary Muth, PhD

CONFERENCES

Active Living Conference

VIRTUAL | APRIL 6-9, 2021

This conference brings together active researchers and champions from more than 30 disciplines to advance knowledge and action around physical activity and active communities.

SESSIONS: Scientific and Practice-based Findings from Reviews Related to the Importance of Trails for Physical Activity among Under-resourced Communities; Measures for Children at High Risk for Obesity: Choosing Whether to Apply, Adapt, or Develop a Measure for My Research Population

EXPERTS: David Brown, PhD; David Berrigan, PhD, MPH; Michael Hill, ASLA; Julian Reed, PhD; S. Sonia Arteaga, PhD; Latetia V. Moore, PhD; Amanda Sharfman, MS, MPH

International Society of Behavioral Nutrition and Physical Activity (ISBNPA)

VIRTUAL | JUNE 8-10, 2021

The mission of ISBNPA is to stimulate, promote, and advocate innovative research and policy in the area of behavioral nutrition and physical activity toward the betterment of human health worldwide.

SESSION: Measures for Children at High Risk for Obesity: Choosing Whether to Apply, Adapt, or Develop a Measure for My Research Population

EXPERTS: S. Sonia Arteaga, PhD; David Berrigan, PhD, MPH; Latetia V. Moore, PhD; Amanda Sharfman, MS, MPH

National Recreation and Park Association Annual Conference

VIRTUAL | SEPTEMBER 21-23, 2021

This conference brings together people who are passionate about parks and recreations and making their communities great places for inspirational education sessions and energetic discussions.

SESSION: Effective Programs to Improve Access and Use of Trails for Youth from Under-Resourced Communities

EXPERTS: David Brown, PhD; Van Do, MPH; Michael Hill, ASLA; Julian Reed, EdD, MPH

ObesityWeek Interactive

VIRTUAL | NOVEMBER 1-5, 2021

Each year at ObesityWeek, world-renowned experts in obesity explore leading-edge science, clinical interventions, and policy approaches to combat the obesity epidemic.

SESSION: From Womb to Tomb – A Life-Course Approach to Obesity Prevention and Management

EXPERT: Deborah Young-Hyman, PhD

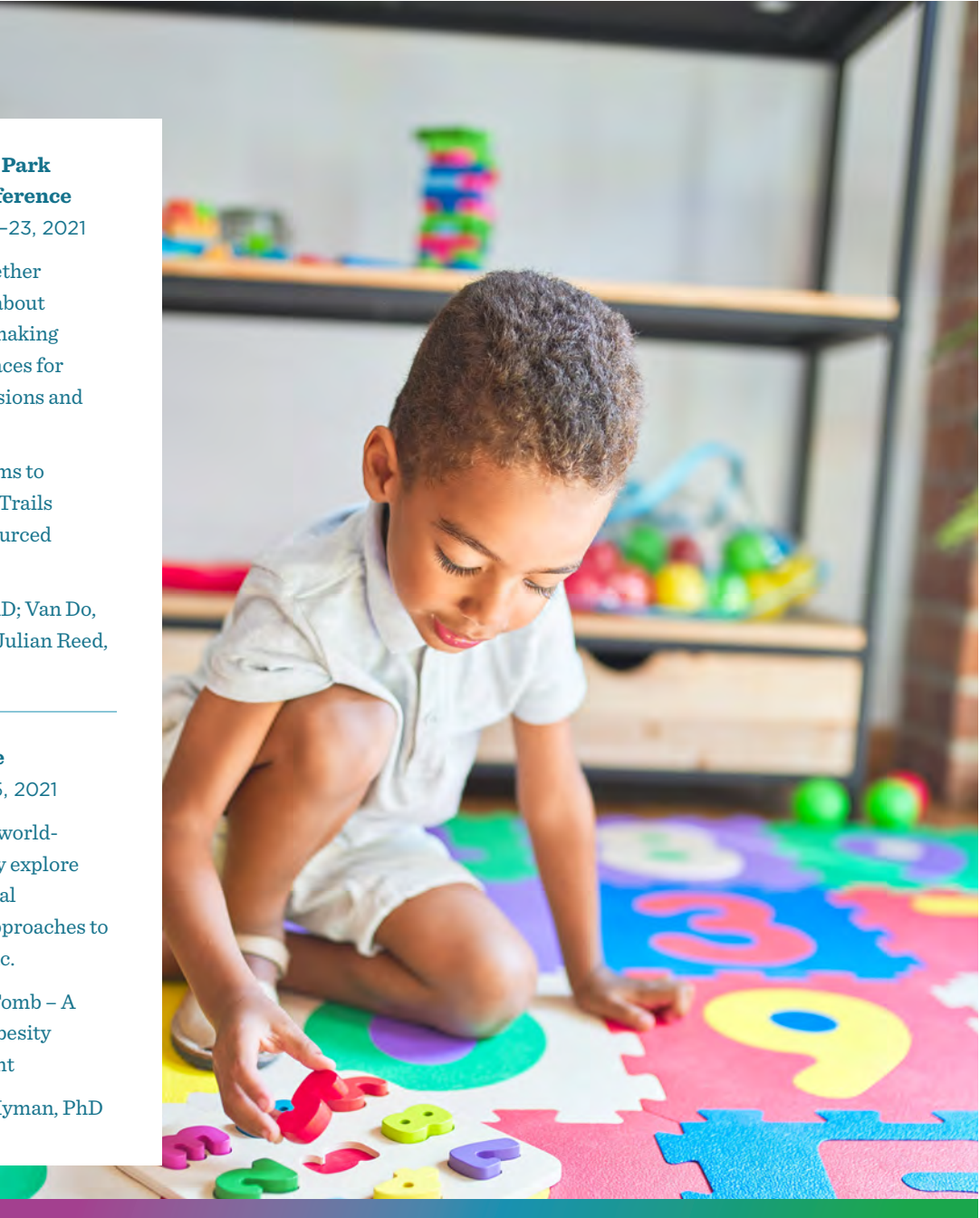


EXHIBIT
BOOTH

American Public Health Association

VIRTUAL | OCTOBER 24-27, 2021

This annual conference is the largest in the field of public health, bringing together more than 13,000 public health practitioners.



ON THE HORIZON FOR 2022

In 2021 NCCOR made important contributions to advancing childhood obesity prevention efforts by examining how to improve the physical environments where children spend much of their time, but the work is far from done.

As the country recovers from the COVID-19 pandemic and its impact on children's eating and activity behaviors, NCCOR will leverage its expertise and convening power to facilitate research and interventions that help reduce childhood obesity. Here are a few activities that NCCOR will undertake in 2022:

- **UPDATE** the Catalogue of Surveillance Systems (CSS) to add "sleep" as a key search term and variable name (as is currently done in the CSS for "diet" and "physical activity") and add sleep datasets to the CSS.
- **ENGAGE** a new workgroup to assess the lessons learned about measurement, tools, and validation from NCCOR's ten years of experience providing the Measures Registry and CSS, and develop a plan to maintain the relevance of these resources in their second decade.
- **CONVENE** its workgroup on dietary assessment methods to respond to research recommendations outlined by the 2020 Dietary Guidelines Advisory Committee. The workgroup will identify existing measurement tools and methods for assessing the diets of children aged birth to 24 months and promote innovation to develop new tools and methods where gaps exist.

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2021 NCCOR BY THE NUMBERS

CONFERENCES



8

Presentations



5

Posters

E-NEWSLETTERS

5,620

NCCOR general
e-Newsletter subscribers

736

NCCOR Student
e-Newsletter subscribers



WEBSITE

788,265

NCCOR.org total page views

208,347

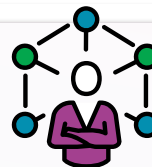
Page views for
A Toolkit on Evaluating
Childhood Healthy Weight
Programs, launched in
September 2021



EXPERTS

60

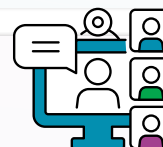
Outside experts engaged through
workgroups, Connect & Explore webinars,
workshops, and meetings



WEBINARS

7

Connect & Explore webinars



39

Countries where
attendees joined
a live-webinar,
including from
6 continents

2,731

Registered
attendees