A Decade of Transforming Childhood Obesity Research

NCCOR 2018 Annual Report
LOOKING BACK:
A Decade of Partnership and Progress
NCCOR launched 10 years ago with a clear vision in mind: coordination and collaboration among leading health research funders to address the problem of childhood obesity in America.

Between 1980 and 2008, the obesity prevalence rate had more than doubled among children ages 2 to 5 years, nearly tripled among children ages 6 to 11 years, and more than tripled among adolescents ages 12 to 19 years. This young generation of Americans could be the first to have poorer health and lower life expectancy than their parents. That’s why NCCOR set out to accelerate progress in reducing childhood obesity through collaboration and joint action to improve the efficiency and effectiveness of research in this vital public health issue.

NCCOR brings together the nation’s leading health research funders: The Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), Robert Wood Johnson Foundation (RWJF), and the U.S. Department of Agriculture (USDA). By building on each other’s strengths and perspectives, this unique public-private partnership has demonstrated that it is possible to get more done, more quickly—and have a greater impact—by working together than by working alone. NCCOR has substantially advanced the field of childhood obesity research. Together, the collaborative has:

- Supported researchers and practitioners with tools to support research and surveillance,
- Used innovation to generate fresh ideas for partners, and
- Built knowledge to find solutions by promoting new research.

NCCOR has made major strides over the past decade that laid the foundation for our accomplishments in 2018. Join us in celebrating who we are, what we’ve accomplished together, and what we’ll accomplish next.

Sincerely,

The Steering Committee for the National Collaborative on Childhood Obesity Research

Rachel Ballard, NIH
Jamie Bussel, RWJF
Donna Johnson-Bailey, USDA
Tina Kauh, RWJF
Laura Kettel Khan, CDC

Jasmine Hall Ratliff, RWJF
Jay Variyam, USDA
Kathleen Watson, CDC
Deborah Young-Hyman, NIH
A Holistic Approach

NCCOR partners recognize that making an impact on childhood obesity research requires a well-rounded strategic approach. In practice, that means pursuing a variety of independent, yet complementary, types of activities:

Creating tools for researchers and practitioners

Building knowledge on key research topics

Engaging with leading experts on new science

Ensuring robust communications and dissemination
In March 2018, the *American Journal of Preventive Medicine*, one of the leading scientific journals in the health field, published a special theme issue on NCCOR, its accomplishments, and its potential.

The first paper highlights the formation, structure, and operations of NCCOR and discusses the benefits of using a collaborative model to address health problems.

**Developing a Partnership for Change: The National Collaborative on Childhood Obesity Research**

*AUTHORS: Rachel M. Ballard, MD, MPH; Anne B. Rodgers; Laura Kettel Khan, PhD, MIM; C. Tracy Orleans, PhD; Elaine Arkin; Todd M. Phillips, MS*

The companion paper details several principles for successful partnerships and how NCCOR has used these principles to make significant contributions to build the fields of research, evaluation, and surveillance for childhood obesity prevention and management.

**A National Collaborative for Building the Field of Childhood Obesity Research**

*AUTHORS: Rachel M. Ballard, MD, MPH; Anne B. Rodgers; Laura Kettel Khan, PhD, MIM; C. Tracy Orleans, PhD; Elaine Arkin; Todd M. Phillips, MS*

The supplements include commentary by senior leaders of NCCOR’s member organizations and an editorial by Dr. James F. Sallis, a member of the NCCOR External Scientific Panel.

**Research on Childhood Obesity: Building the Foundation for a Healthier Future**

*AUTHORS: Griffin P. Rodgers, MD, MBA, MACP; William Dietz, MD, PhD; Risa Lavizzo-Mourey, MD, MBA*

**The Value of the National Collaborative on Childhood Obesity Research: Past, Present, and Future**

*AUTHOR: James F. Sallis, PhD*
CREATING TOOLS AND RESOURCES FOR

Researchers, Practitioners, and Students
Measures Registry and User Guides

The Measures Registry, launched in 2011, is one of NCCOR’s most popular tools. This valuable resource is a free, online database of diet and physical activity measures. This year, NCCOR added 188 new measures to the Registry. Currently, it includes more than 1,300 articles on diverse tools and methodologies that can be used to assess diet and physical activity at the individual and environmental levels.

To help researchers select the most appropriate measures for their work, NCCOR also developed four Measures Registry User Guides, funded through a strategic alliance with The JPB Foundation. These guides provide an overview of measurement, describe general principles of measure selection, and share additional resources.

To maximize the usefulness and accessibility of the Measures Registry and User Guides, NCCOR also created a Q&A to help guide students interested in finding tools relevant to their research or practicum.

Catalogue of Surveillance

The Catalogue of Surveillance Systems, also launched in 2011, is a free, online tool that provides one-stop access to publicly available data sources relevant to childhood obesity research. The Catalogue allows childhood obesity researchers to easily identify data resources related to childhood obesity, compare attributes across systems, and link to other resources.

In 2018, NCCOR updated more than 70 systems in the Catalogue and added five new systems including NCI’s Family Life, Activity, Sun, Health, and Eating (FLASHE) study and USDA’s National Household Food Acquisition and Purchase Survey (FoodAPS).

Youth Compendium of Physical Activities

The Youth Compendium of Physical Activities was released in October 2017. This easy-to-search tool provides measures of energy expenditure for 196 activities in which youth commonly engage, from games to walking and running. It is designed for a variety of users and purposes, including research, policy making, education, design, and implementation of new physical activity programs in schools. The Youth Compendium represents the first compendium in the field based entirely on youth data. In 2018, NCCOR developed complementary resources to help physical education teachers and public health practitioners use the Compendium.

LOOKING BACK

Before NCCOR was founded, locating publicly available data resources for analysis was often challenging for researchers, who ended up using the same few systems they or colleagues already knew. That’s why one of NCCOR’s major goals was to encourage the use of high-quality measures through improved access, to help build knowledge for the childhood obesity research community.

- The Measures Registry has been visited more than 47,500 times since it launched in 2011.
- The Catalogue of Surveillance Systems has been visited more than 84,000 times since it was launched in 2011.
- The Youth Compendium of Physical Activities has been visited more than 20,000 times from 71 countries since its launch in 2017.
BUILDING KNOWLEDGE ON

Key Research Topics
Obesity results from the interaction of multi-faceted and complex influences on children, their families, and communities. Advancing childhood obesity research therefore requires many stakeholders to be engaged in developing long-lasting solutions. NCCOR actively seeks, in a variety of ways, to promote robust conversations among the diverse communities that have a stake in reducing childhood obesity. Through strategic collaboration on key research topics, this diversity is a strength that has been leveraged to advance the field and build knowledge.

**Studying Childhood Obesity Declines**

Over the past decade, public and private funders have provided resources to states and communities to implement strategies to reduce and prevent childhood obesity. Following this, modest declines in childhood obesity rates were reported in several jurisdictions across the United States. NCCOR established a workgroup to better understand the possible drivers and contributors influencing the reported declines and to explore how these may be related to other health promotion efforts. NCCOR conducted a formal research study, convened experts, and interviewed key stakeholders to explore new strategies used in different settings.

In 2016, NCCOR released community summary reports from four sites across the country, including Anchorage, AK; Granville County, NC; New York City, NY; and Philadelphia, PA. A special supplement was published in *Childhood Obesity* in 2018, based on the following key findings from the project:

- All four communities enacted similar policies at the state and/or local level that improved the nutrition environment and increased opportunities for physical activity.
- Simultaneous public health messaging and multi-layered strategies, supported by cross-sector partnerships and high-level champions, may have a synergistic impact in addressing childhood obesity.
- Traditional research and evaluation methods need to be modified to address the complexities of community-based initiatives and policy implementation.
The Impact of Behavioral Design on Healthy Eating and Physical Activity

Environmental design can influence children’s social norms and physical activity behaviors. However, the actual effects of specific aspects of the built environment on health-related behaviors are less clear. In 2015 and 2016, NCCOR convened a series of meetings with experts representing a wide range of fields to discuss evidence and methods that inform behavioral design and to develop guiding principles that can encourage healthy eating and active living.

These discussions led to a white paper, released in 2017, that provided an overview of behavioral design and potential applications to promote better health among children. This year, the white paper was turned into a chapter called “Behavioral Design as an Emerging Theory for Dietary Behavior Change” for Food and Public Health, a book published by Oxford University Press. This chapter reviews core theories of health behavior for dietary change and advances new ideas about how the interaction between the individual and environment affects behavior.

Engaging Health Care Providers and Systems

This year, NCCOR’s Engaging Health Care Providers and Systems Workgroup convened community-based healthy weight program (HWP) representatives for a kick-off meeting to launch its Collaborative Learning Project. The meeting brought together experts from medical, academic, and community-based organizations and helped finalize the project’s online learning platform. This platform will be used as a learning exchange to inform the development of an evaluation framework for community-based HWPs.

Looking Back

Here are just a few of NCCOR’s many former workgroups:

- Food Patterns Equivalents Database: Allowed researchers to translate foods and beverages reported in surveys and other studies into quantities of foods and nutrients that are relevant to dietary guidance. NCCOR provided support to revise this USDA tool so that updates could be more timely, the process could be more self-sustaining, and new food groups could be included.

- Healthy Food Incentives: Explored various concepts from behavioral economic studies to better understand consumer food purchasing behavior, practice-based examples of purchasing patterns and economic incentives, and program evaluations.

- Lessons Learned from Global Efforts: Aimed to provide national leadership to accelerate implementation of evidence-informed practice and policy.

Building Knowledge Across NCCOR Partner Organizations

A longstanding NCCOR priority has been to create a space in which experts from partner organizations can discover shared interests and to provide support for them to work on projects together. NCCOR’s workgroups and member meetings demonstrate the advantages of bringing this diversity of interests together to build knowledge and accelerate progress.

Current Active Workgroups

- Additional Benefits of Walkability
- Advancing Measurement of Diet and Physical Activity for Childhood Obesity Research and Evaluation
- Catalogue of Surveillance Systems
- Childhood Obesity Evidence Base
- Engaging Health Care Providers and Systems
- Food Systems
- SNAP-Ed Toolkit
- Increasing Opportunities for Trail Use to Promote Physical Activity and Health Among Underserved Youth
- Youth Active School Transportation Surveillance Initiative
- Youth Energy Expenditure
Engaging Leading National Experts

NCCOR recognizes the wealth of knowledge, expertise, and experience about childhood obesity that thrives in many arenas, from academic research institutions to local community groups, to its own partner organizations. That's why, over the past decade, NCCOR has actively sought out and invited experts from across these arenas to join in the conversation about how to reduce the impact of this epidemic. NCCOR has convened different types of forums to engage more than 300 experts in collaborating on ways to advance childhood obesity research.
The NCCOR External Scientific Panel (NESP) advises NCCOR on its future direction and provides guidance on specific projects and emerging work. NESP serves as a valuable liaison between NCCOR and the extramural community, informing the Collaborative on new science and ideas and on connections to outside research, practice, and policy.

2018 NESP members:
Linda Barbour, MD, MSPH
Ross C. Brownson, PhD
John Cawley, PhD
Frank J. Chaloupka, PhD
Terry Huang, PhD, MPH, MBA
Shiriki Kumanyika, PhD, MPH
Amelie G. Ramirez, DrPH
Thomas N. Robinson, MD, MPH
James F. Sallis, PhD
Mary Story, PhD, RD
Elsie M. Taveras, MD, MPH

2018 Connect & Explore Webinars
- Preventing Childhood Obesity in Latin America: An Agenda for Regional Research and Strategic Partnerships
  EXPERTS: Juan Rivera, PhD; Camila Corvalan, MD, PhD, MPH; Rafael Perez-Escamilla, PhD; Michael Pratt, MD, MSPE, MPH
- Collaborating for Impact: Lessons Learned from NCCOR
  EXPERTS: C. Tracy Orleans, PhD; Laura Ketel Khan, PhD, MIM; Rachel Ballard, MD, MPH; Jay Varyam, PhD; Jasmine N. Hall Ratliff, MHA
- Examining Declines in Childhood Obesity in Four Communities: Highlights from Six Papers Published in Childhood Obesity
  EXPERTS: Tina Kauh, PhD, MS; Nicola Dawkins-Lyn, PhD, MPH; Laura Ketel Khan, PhD, MIM; Deborah Young-Hyman, PhD
- The Healthy Communities Study: How Community Programs and Policies are Related to Children’s Health
  EXPERTS: S. Sonia Arteaga, PhD; Stephen Fawcett, PhD, MA; Russell Pate, PhD; Lorrene Ritchie, PhD, RD
- Innovations in Behavioral Design to Enhance Active Living and Healthy Eating
  EXPERTS: Jeri Brittin, PhD; Joel Kimmons, PhD; Kim Rollings, PhD
- America’s Eating Habits: Food Away from Home
  EXPERT: Michelle Saksena, PhD

LOOKING BACK
- Our list of experts has grown to more than 300 over the past 10 years. Experts join us from universities, organizations, medical centers, and more.
- Based on recommendations from NCCOR’s External Scientific Panel, NCCOR launched two workgroups: “Get Research Used”—to make sure findings were reaching the individuals and institutions that can drive change, and “Economics and Obesity”—to establish a platform for economics research and examine which interventions are most cost-effective.
- NCCOR launched the Connect & Explore webinar series in 2014 and has hosted 27 webinars since.
Spreading the Word

Developing tools, building knowledge, and engaging experts are important, but their impact is muted without a strong communications strategy to spread the word about these activities and their findings and accomplishments. That’s why NCCOR has developed a communication effort that covers all the bases—attending conferences, developing publications and other informational materials, and communicating through social media, to name just a few.

Conferences

Conferences provide necessary spaces for researchers and practitioners to connect and learn about the work happening in the field at large. This year, NCCOR attended several annual conferences relating to physical activity and childhood obesity to engage with the field and highlight new tools through presentations and at NCCOR conference exhibit booths.

- **Active Living Research Annual Conference**
  *February 11-14, Banff, Alberta, Canada*
  Each year, professionals from around the world come together to share their latest research and innovations related to physical activity and active communities.
  **WORKSHOP:** Enhancing Measures Selection using the National Collaborative on Childhood Obesity Research (NCCOR) Measures Registry and User Guides
  **EXPERTS:** Rachel Ballard, MD, MPH, NIH; David Berrigan, PhD, MPH, NIH; James F. Sallis, PhD, University of California San Diego; Gregory Welk, PhD, Iowa State University

- **Society of Health and Physical Educators (SHAPE) America National Convention**
  *March 20-24, Nashville, TN*
  SHAPE America Convention brings together 5,000 professionals to share the latest research and innovations related to health and physical education.
  **PRESENTATION:** C.H. McCloy Research Lecture: The Utility of the Youth Compendium of Physical Activities
  **EXPERT:** Barbara Ainsworth, PhD, MPH, Arizona State University

- **Society of Behavioral Medicine (SBM) Annual Meeting**
  *April 11-14, New Orleans, LA*
  The SBM Annual Meeting brings together approximately 2,400 multidisciplinary researchers and clinicians to examine the role of behavior in improving health.
  **PRESENTATION:** Enhancing Measures Selection using the National Collaborative on Childhood Obesity Research (NCCOR) Measures Registry and User Guides
  **EXPERTS:** Leslie Lytle, PhD, University of North Carolina-Chapel Hill; Sharon Kirkpatrick, PhD, RD, University of Waterloo; James F. Sallis, PhD, University of California San Diego

NCCOR has developed a strong communications strategy to disseminate and amplify the impact of research findings and accomplishments in addressing the obesity epidemic.
Society for Prevention Research (SPR) Annual Meeting
May 29–June 1, Washington, DC
Each year, SPR holds a meeting for professionals to gather and exchange ideas and the latest research on evidence-based programs and policies related to prevention medicine.

TECHNOLOGY DEMONSTRATION: Measures Registry, User Guides, and Youth Compendium of Physical Activities: Tools for Childhood Obesity Prevention Research and Evaluation
EXPERT: David Berrigan, PhD, MPH, NIH

American College of Sports Medicine (ACSM) Annual Meeting
May 29–June 2, Minneapolis, MN
This annual conference brings together leading experts and professionals to share the latest research on exercise science and benefits of physical activity. NCCOR presented a poster at ACSM on the Measures Registry and User Guides.

POSTER SESSION: NCCOR Measures Registry and User Guides: Highlights and Reach
EXPERT: David Brown, PhD, CDC

American Public Health Association Annual Meeting
Nov. 10–14, San Diego, CA
More than 12,000 public health professionals gathered for this year’s theme, Creating the Healthiest Nation: Health Equity Now.

PRESENTATION: Tools of the Trade: NCCOR Resources for Evidence-Based Practice in Diet and Physical Activity
EXPERTS: Laura Kettel Khan, PhD, MIM, CDC; James F. Sallis, PhD, University of California San Diego; Jamie Chriqui, PhD, University of Illinois-Chicago; Barbara Ainsworth, PhD, MPH, Arizona State University

The Obesity Society Annual Scientific Meeting
Nov. 11–15, Nashville, TN
This yearly conference is one of the largest gatherings for obesity professionals.

PRESENTATION: Childhood Obesity Declines: Successful Community-Based Efforts Reducing Childhood Obesity
EXPERT: Deborah Young-Hyman, PhD, NIH

New Materials
This year, NCCOR developed the following new materials to translate information and disseminate it to reach new audiences:

Measures Registry Q&A for students
This helps students determine which Measures Registry tools are best for their research.

Steps for building a public health collaborative
This information helps others learn from NCCOR’s success in building a public health collaborative.

Youth Compendium of Physical Activities for public health practitioners and Youth Compendium of Physical Activities for PE teachers
These guides help practitioners and PE teachers determine which Youth Compendium tools are best for their goals.

Measures Registry booklet
This booklet educates the public on what the Measures Registry is and how to use it.
Moving Forward

From developing new tools for researchers to building knowledge on key topics to engaging experts and disseminating research findings, NCCOR has had a successful year—and a successful decade. Given persistent high rates of childhood obesity, though, it’s clear that more remains to be done. The need to accelerate progress in reducing childhood obesity is as great as ever. By creating synergies across the four largest funders of childhood obesity research in the United States, NCCOR is well positioned to continue to make a difference.
NCCOR’s successes in the past decade would not have been possible without the time and dedication of NCCOR members, past and current, who have helped to make NCCOR the robust collaborative that it is today.
**E-NEWSLETTER SUBSCRIBERS**

- **TOTAL SUBSCRIBERS**: 4,688
- Increase from 2017: 17.3%

**SOCIAL MEDIA**

- **TWITTER**: 2,124 followers, 16.5% increase
- **LINKEDIN**: 584 followers, 30.6% increase
- **FACEBOOK**: 433 followers, 91.5% increase
- **FACEBOOK LIVE**: 435 reaches, 240 views, 109 engagements

**CONNECT & EXPLORE**

- **CONNECT & EXPLORE ATTENDEES**: 763
- **VIEWS ON YOUTUBE VIDEOS**: 314

**CONFERENCES**

1. **Active Living Research Annual Conference**
   - Banff, Alberta, Canada
2. **Society of Health and Physical Educators America National Convention**
   - Nashville, TN
3. **Society of Behavioral Medicine Annual Meeting**
   - New Orleans, LA
4. **Society for Prevention Research Annual Meeting**
   - Washington, DC
5. **American College of Sports Medicine Annual Meeting**
   - Minneapolis, MN
6. **American Public Health Association Annual Meeting**
   - San Diego, CA
7. **Obesity Society Annual Scientific Meeting**
   - Nashville, TN

**OUTSIDE EXPERTS**

- **workgroup participants**: 29
- **Connect & Explore presenters**: 11
- **meeting & conference speakers**: 15