# NCCOR MEASURES REGISTRY & USER GUIDES HIGHLIGHTS AND REACH

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### **ABSTRACT**

There are many types of physical activity and food intake measures. These measures often lack validity and reliability, making it difficult to compare findings across childhood obesity research and evaluation studies.

Purpose: The National Collaborative on Childhood Obesity Research's (NCCOR) Measures Registry (nccor.org/measures) promotes consistent use of high-quality, comparable measures and methods across childhood obesity studies. The Measures Registry User Guides (nccor.org/mruserguides) extend the reach and usefulness of these resources. Herein we describe the Registry and User Guides and examine their reach to nutrition, physical activity, and obesity researchers and practitioners.

Methods: A search of peer-reviewed literature published 1999–2009 was conducted. Measurement experts reviewed and abstracted articles meeting inclusion criteria in four domains: physical activity, diet, physical activity environment, and food environment. The Registry was launched in 2011 and has been updated on an ongoing basis since August 2015. In 2017, subject matter experts authored four User Guides for the measurement domains. The Guides include case studies to help users select appropriate measures. The number of web visitors to the Registry and Guides was tracked (through April 2018), providing an indicator of reach.

**Results:** The Registry contains 1,207 published studies of validation research using measures of physical activity (n=403), diet (n=330), physical activity environment (n=273), and food environment (n=331). Measures include GIS (n=127); 24-hour dietary recall (n=52); food frequency (n=69); electronic monitor (n=121); environmental observation (n=153); questionnaire (n=498); record or log (n=97), and other (n=207). Over 18,300 unique visitors have accessed the Registry since its launch, including visitors from 41 countries. Since their release there have been over 9,000 page views of the User Guides from nearly 3,000 unique visitors.

Conclusion: The NCCOR Measures Registry and User Guides can assist researchers and practitioners conducting childhood obesity prevention research and evaluation to select high-quality, comparable measures of physical activity, diet, and the environments in which these behaviors occur. Website traffic reflecting access to the materials indicates a large reach.

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## BACKGROUND

The National Collaborative on Childhood Obesity Research (NCCOR) is a partnership among 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), established in 2009 to accelerate progress in reducing childhood obesity in the United States.

A key priority for NCCOR is promoting the use of common measures and methods for researchers and practitioners working toward preventing childhood obesity. Standard measures are needed to describe and evaluate interventions to prevent childhood obesity, particularly those projects that address policies and environments.

#### PURPOSE

To increase awareness and promote use of the NCCOR Measures Registry and User Guides, and examine their reach to nutrition, physical activity, and obesity researchers and practitioners

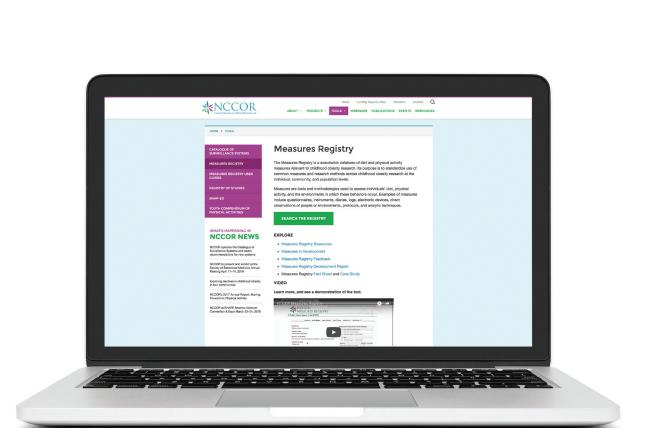
#### METHODS — MEASURES REGISTRY

#### Literature Review

A search of peer reviewed literature published from 1999-2009 was conducted.

#### Database Launch

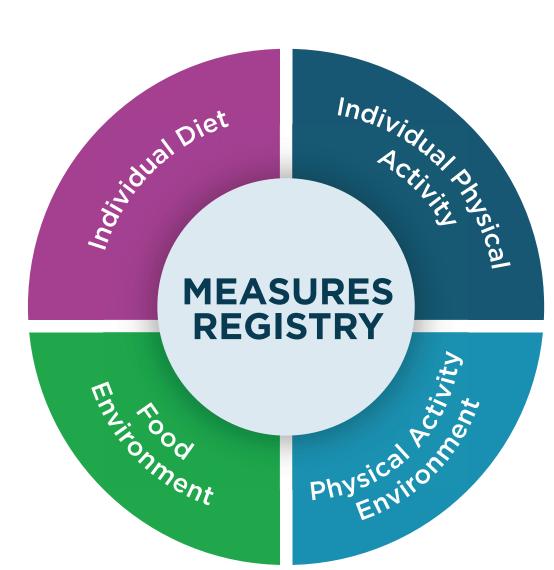
In 2011, NCCOR
launched the
Measures Registry,
a searchable
database of
measures relevant
to childhood
obesity research.



NCCOR.ORG/MEASURES

#### Data Abstraction

Measurement
experts reviewed
and abstracted
articles meeting
inclusion criteria
in four measurement
domains relevant to
childhood obesity.



## Standardize Use of Measures and Methods

The Measures Registry's purpose is to standardize use of common measures and research methods across childhood obesity research at the individual, community, and population levels. The Measures Registry includes:



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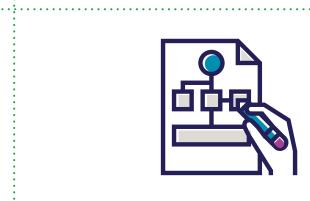
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ROTOCOLS

ANALYTIC TECHNIQUES

## The Registry has been updated on an ongoing basis since its 2011 launch.

#### METHODS — MEASURES REGISTRY USER GUIDES

## Addressing a Need

Even with the Measures Registry, it can be challenging for users to choose the most appropriate measures for their work. To address this need, subject matter experts authored four Measures Registry User Guides for each measurement domain.

### **Expert Review**

NCCOR created expert panels to review and provide subject matter input on each Guide.

#### **Case Studies**

Organized by the same four domains, the User Guides present case studies that walk users through the process of using the Measures Registry to select appropriate measures, and direct researchers and practitioners to additional useful information and resources.

#### User Guides Launch

NCCOR launched the Measures Registry User Guides in 2017.

#### RESULTS — USAGE FROM AROUND THE WORLD

Measures Registry

PAGE VIEWS
UNIQUE PAGE
100 201

18,30/

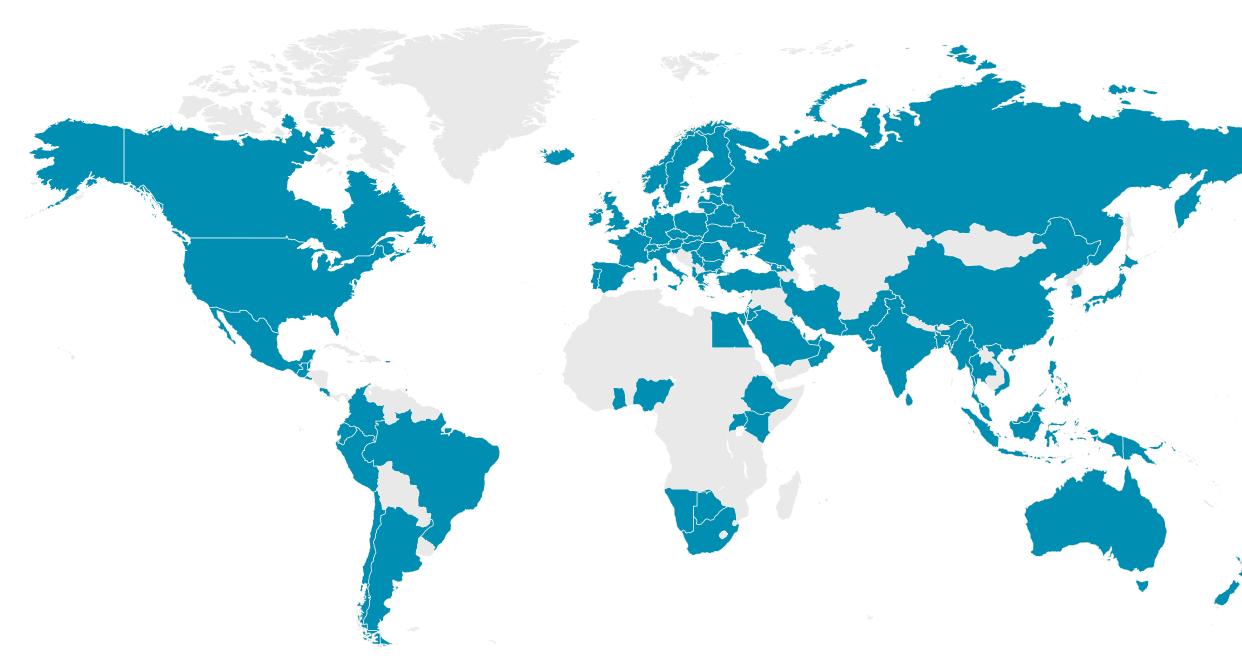
released 2011



PAGE VIEWS UNIQUE PAGE VIEWS

9,758 2,993

released 2017



41
COUNTRIES ACCESSED
MEASURES REGISTRY

38
COUNTRIES ACCESSED
USER GUIDES

## TOP 5 MEASURES ACCESSED SINCE 2011

21-item dietary fat screener for adolescents

2 Child Nutrition Questionnaire

3 24-hour activity diary

4 Willet Food Frequency
Questionnaire for
4 to 5 Year Olds

New Lifestyles NL-1000
Accelerometer for 3 to 4
Year Olds

## CONCLUSIONS

#### Use

The NCCOR Measures Registry and User Guides are resources to assist in conducting childhood obesity prevention research, practice, and evaluation by selecting high-quality and comparable measures of physical activity and dietary behaviors and the environments in which these behaviors occur.

#### Reach

It is unknown what volume of visitors to a website—hits, views, and downloads—constitute high reach in terms of awareness and use. However, we believe the number of unique visitors accessing the Measures Registry (n = 18,307) and User Guides (n = 2,993) since their release indicates a high reach.



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