

Catalogue of Surveillance Systems

Researchers studying childhood obesity have long depended on surveillance systems to track and measure the epidemic and to explain individual-level determinants.

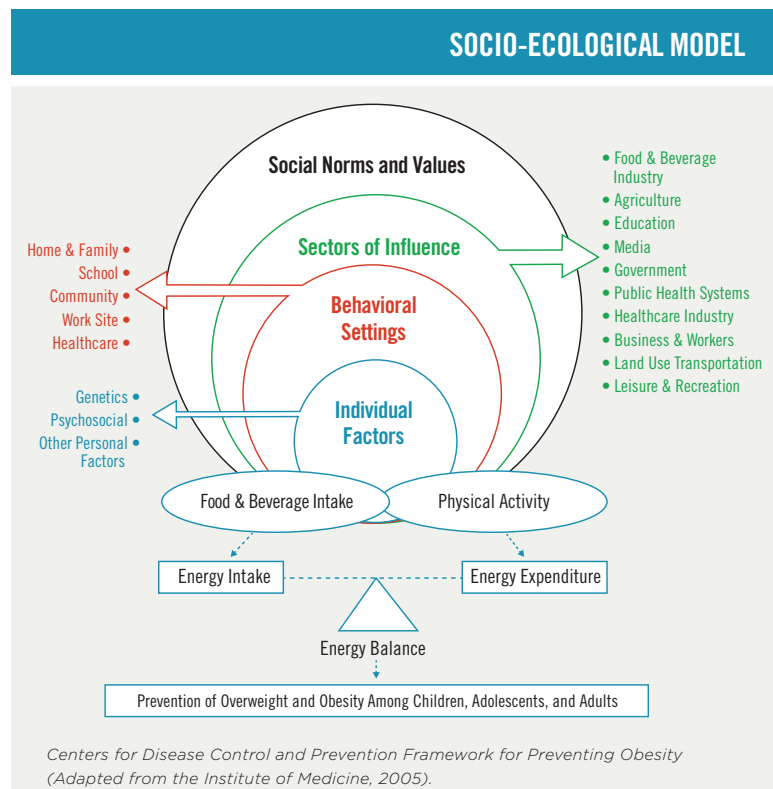
As the field has matured, researchers have turned to surveillance systems and other data resources to also understand how environmental, social, and policy factors influence children's eating and physical activity behaviors. Some publicly available data systems are well known, but knowledge about many other valuable resources is limited, especially for those new to the field. Few investigators, therefore, take full advantage of available resources. When deciding which data systems to use, researchers often limit their investigations to systems with which they are already familiar, or they ask their colleagues for advice, or search the Internet. These informal methods are inefficient and do not necessarily provide a comprehensive list of possible systems. They also do not allow researchers to compare systems objectively, which is critical in determining whether a particular system is appropriate for a research study.

Addressing one of NCCOR's five goal areas,ⁱ the Catalogue of Surveillance Systems addresses this gap by providing investigators with one-stop access to a diverse array of publically available surveillance systems maintained by federal, state, academic, and private sector institutions. In developing the Catalogue, NCCOR has helped increase the efficiency and effectiveness of obesity research.

NCCOR Takes Action

Work on the Catalogue of Surveillance Systems began in 2009 with NCCOR's approval of the project and the formation of a workgroup. The workgroup compiled a list of surveillance systems and developed a template to capture system characteristics. The template was pilot tested with a subset of systems across the socio-ecological model, which revealed surveillance gaps, and assessed whether the template met users' goals. Investigators were interviewed to identify content and layout needs.

The catalog, launched in 2011, provides a comprehensive, one-stop web-based tool to help investigators review, sort, and compare publicly available surveillance systems that provide



data related to health behaviors, outcomes, and determinants of obesity. It also contains systems that track environmental and policy factors. The Catalogue now includes about 100 systems, and new sources are continually added. Each system includes data that are relevant to childhood obesity, collected within the past 10 years, and gathered in the United States.

A variety of promotional activities have made the Catalogue of Surveillance Systems a well-known and valued tool among obesity researchers. NCCOR promotes the catalog through its website, blog, and Twitter page, at professional and scientific conferences, as well as in a widely distributed, animated demonstration video housed on the NCCOR site and on NCCOR's YouTube channel. Links to the catalog can be found on nutrition, public health, and childhood obesity websites, as well as those of NCCOR's funders, state agencies, and universities. An article about its development, published in the April 2012 issue of the *American Journal of Preventive Medicine*,ⁱⁱⁱ helped to broaden its reach in the research community.

The catalog provides a seven-part profile for each system, including a summary and information on sampling design, key variables, data access and cost, geocoding and other linkage variables, selected publications, and resources. The catalog is a flexible tool that allows users to:

- Identify and locate surveillance systems
- Search by topic
- Easily and objectively compare systems
- Access detailed information on each system
- Access non-surveillance system resources, such as the Child Trends Data Bank, USDA Food Environment Atlas, and federal nutrition program information and legislative databases

LEVERAGING COLLECTIVE CAPITAL

The Catalogue of Surveillance Systems leveraged NCCOR partners' "capital" i.e., time, resources, assets, and abilities to create a high-value product. The National Institutes of Health (NIH) and the Coordinating Center contributed financial capital; NIH provided managerial capital by overseeing the whole process. NIH, the Robert Wood Johnson Foundation (RWJF), and the Centers for Disease Control and Prevention (CDC) also contributed intellectual capital to the project, ensuring that the tool was easy to use, sufficiently detailed, comprehensive, and sustainable.ⁱ

i NCCOR Goal 3: Improve the ability of investigators and program evaluators to conduct research and program evaluation.

ii The U.S. Department of Agriculture joined NCCOR after the Measures Registry project was planned and underway.

iii McKinnon RA, Reedy J, Berrigan D, Krebs-Smith SM. "The National Collaborative on Childhood Obesity Research catalogue of surveillance systems and measures registry: new tools to spur innovation and increase productivity in childhood obesity research." *Am J Prev Med.* 2012 Apr;42(4):433-5.

NCCOR Makes an Impact

The response to the Catalogue of Surveillance Systems was immediate and overwhelmingly positive. The catalog averages more than 1,200 unique visitors a month, and has had more than a million hits since launch. Professors even use it in their nutrition and research methods classes.

Starting Point

"The Catalogue [of Surveillance Systems] provides a great starting point for researchers interested in examining the effects of multiple levels of influence on student obesity and other outcomes."

RWJF-funded Investigator

Academic

"I [used] it for a graduate class I teach on nutrition assessment in which I cover national survey data."

NIH-funded Investigator

Efficient

"I found the information I was looking for in 10 minutes! Without this resource, it would have taken me days to contact people responsible for each survey and review and download multiple surveys and accompanying documentation online to find the information."

National Cancer Institute Investigator

The development of the catalog has given researchers and practitioners, for the first time, a tool that allows them to assess the range of childhood obesity resources and see possible gaps. For example, it is clear that many more individual-level data systems exist than do systems at outer rings of the socio-ecological framework. Knowing the gaps will allow the research community to begin to fill them. In addition, NCCOR hopes that the catalogue will encourage multilevel research by providing increased awareness of linkage variables, and this in turn, will contribute to efforts to increase knowledge and lower rates of childhood obesity.

Next Steps

NCCOR continues to update the Catalogue of Surveillance Systems with new surveillance systems as data are released and made public. NIH also periodically evaluates the tool's usability in an effort to ensure that investigators are able to quickly and easily find the information they need.